



Working conditions and sustainable work
**European Working Conditions
Telephone Survey 2021:
Technical report**

[Working conditions in the time of COVID-19:
Implications for the future](#)

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1. Introduction

This report covers the European Working Conditions Telephone Survey (EWCTS) 2021 which replaced the EWCS 2020 – a face-to-face survey which was unable to be completed due to the rapid spread of COVID-19 in early 2020. The EWCTS 2021 was prepared and implemented between 2020 and 2021 utilising a Computer Assisted Telephone Interviewing (CATI) methodology. All data provided in this report covers this period and therefore should be considered in this context.

In terms of structure, the first section of this report - the technical report - provides a detailed overview of the various elements of the EWCTS 2021 preparation and implementation, namely the project management, sampling, questionnaire development (including the pilot stage) and interviewing. The second section - the fieldwork report - describes the fieldwork process and provides an overview of the data.

Survey objectives

Since 1991, Eurofound has carried out a European Working Conditions Survey which monitors working conditions in Europe. It provides key time series measures on working conditions, job quality and the quality of working lives across Europe and allows analysis of the relationships between different aspects of working conditions. It also provides Eurofound and the European Commission with the data it needs to assess progress and to monitor particular vulnerable groups at risk or issues of concern in the labour market over time.

Eurofound aims to contribute towards better informed policies for upward convergence of living and working conditions in Europe. In relation to this, Eurofound's activities concentrate on the following strategic topic areas:

- working conditions and sustainable work
- industrial relations
- labour market change
- quality of life and public services
- the digital age: opportunities and challenges for work and employment
- monitoring convergence in the European Union

The EWCTS 2021 covers the three main categories of the 'European Pillar of Social Rights' set out in 2017, namely:

1. equal opportunities and access to the labour market
2. fair working conditions
3. social protection and inclusion

EWCS data

The EWCS data contributes to monitoring job quality within and outside Europe, as well as gender equality at work. It is used to assess developments in employment policy, as well as individual dimensions of job quality. For example, it contributes to a better understanding of issues around working time (duration and organisation), the use of skills at work, opportunities for career development and access to work resources. At the same time, it also examines job insecurity, exposure to physical and psychosocial risks, the extent and forms of violence at work and harassment and discrimination.

Seven editions of the EWCS using face-to-face interviewing have taken place so far: in 1991, 1995, 2000/2001, 2005, 2010, 2015 and 2020. Ipsos was commissioned to implement the seventh edition of the EWCS in 2020 and although face-to-face fieldwork started in February of that year, unfortunately it was prematurely terminated after nine weeks due to the spread of COVID-19.

Following this, Eurofound commissioned Ipsos to undertake an exercise to assess the feasibility of transitioning the methodology from Computer Assisted Personal interviewing (CAPI) to Computer Assisted Telephone Interviewing (CATI). This transition phase is described below, as well as the subsequent two phases covering the preparation and implementation of the EWCTS 2021.

The Transition Phase

The aim of the transition phase was to finalise the CAPI exercise and set key parameters for the restart using a CATI methodology. This has been divided into two parts:

Part 1: all tasks linked to the culmination of the CAPI data collection.

Part 2: a full programme of work where the main parameters for the EWCTS 2021 restart were investigated, discussed and trade-offs explored. The Transition Report formed the main deliverable for this work, outlining the transition from CAPI interviewing to CATI and the implications of such a mode change.

The Preparation Phase

During this phase the questionnaire, related materials and actions were adapted to a CATI methodology. This phase included a pilot test in all countries covered by the survey.

The Implementation Phase

This phase consisted of the pilot fieldwork and production of a pilot report, training of interviewers, mainstage fieldwork, fieldwork reporting, quality control of interviews, post editing and data validation, weighting and the production of datasets and all the methodological reports.

The EWCTS 2021 was carried out in 36 countries, comprising the European Union Member States, six candidate and potential candidate countries (Albania, Bosnia and Herzegovina, Kosovo North Macedonia, Montenegro and Serbia) as well as Norway, Switzerland and the United Kingdom (UK). Interviews were conducted using a Computer Assisted Telephone Interviewing (CATI) methodology.

2. Project Management

This chapter provides an overview of the various teams and partners involved in delivering the EWCTS 2021, as well as their respective roles and responsibilities.

Organisation structure

The Ipsos Central Coordination Team was led by a Project Director, with support from a Project Manager. In terms of coordination, three international coordination managers were involved in the project. The quality of the project was jointly monitored and evaluated by the Project Director and the Project Manager.

National partners

The national partners were fundamental in collecting robust, comparable data in all the surveyed countries. For this study, the partner agencies comprised of local Ipsos' offices, as well as third party agencies from Ipsos' wider network. The table below lists the national partners in each country which carried out the mainstage fieldwork. It denotes new agencies that were commissioned for the EWCTS 2021, i.e. they had not carried out the fieldwork for the EWCS CAPI mainstage in 2020.

Table 1: Network partners

Country	Agency
EU Member States	
Austria	DT&P*
Belgium	Ipsos NV
Bulgaria	Ipsos
Croatia	Ipsos
Cyprus	Pulse Market Research*
Czechia	Ipsos*
Denmark	Norstat*
Estonia	Norstat*
Finland	Norstat*
France	Ipsos Observer
Germany	DT&P*/ T.I.P. BIEHL & PARTNER*
Greece	Ipsos
Hungary	Ipsos
Ireland	Ipsos*
Italy	Ipsos
Latvia	Norstat*
Lithuania	Norstat*
Luxembourg	T.I.P. BIEHL & PARTNER*
Malta	MISCO International Ltd.

Country	Agency
Netherlands	Desan*
Poland	Ipsos
Portugal	Ipsos Apeme
Romania	Ipsos SRL
Slovenia	Ipsos
Slovakia	Ipsos*
Spain	Ipsos Iberia
Sweden	Ipsos AB
Candidate and Potential Candidate (CPC) Countries	
Albania	Ipsos Albania
Bosnia and Herzegovina	Ipsos Bosnia
Kosovo	Ipsos Kosovo
Montenegro	Ipsos Montenegro
North Macedonia	Ipsos Macedonia
Serbia	Ipsos Serbia
Other countries	
Norway	Ipsos Norway
Switzerland	Gfs-Zurich
United Kingdom	Ipsos UK

*Denotes a change in supplier agency from the CAPI to the CATI fieldwork (i.e. from 2020 to 2021).

Source: Ipsos

Each country team was headed by a Project Manager whose role was as follows:

- Overall responsibility for the coordination and delivery of the data collection in their own country (or set of countries) following the agreed work programme;
- Attendance at a train-the-trainer session (2 hours) and a subsequent training session (2 hours) for their fieldwork teams on the data collection protocols;
- Monitoring quality of the CATI interviewing;
- Ongoing liaison with the CCT;
- Conducting a debriefing sessions with the interviewers (via webinar); and
- Provision of the deliverables requested for the project to the timetable specified, including a two page report on the key findings and any issues identified.

During the preparation and implementation of the survey, the Ipsos CCT was in close contact with the agencies to ensure that all information and materials could be communicated in a timely manner, that progress and quality control could be monitored, and any issues could be resolved quickly to prevent delays.

Timetable

At the start of the project, Ipsos provided a provisional timetable, outlining the key dates required by the tender specifications. In summary, this allowed a transition period over the summer of 2020,

with the preparation stage running from the autumn of 2020. Pilot fieldwork was launched in December and then mainstage fieldwork was launched at the beginning of March 2021, with staggered deadlines from mid-June to July.

Overall, many of these dates were met, however some delays were incurred at various stages of the project¹. Minor delays were encountered for some elements of the project, e.g. sampling, questionnaire sign-off and the pilot fieldwork period, although these only had small implications for the overall timetable. Delays in fieldwork completion were encountered in some countries due to quality control issues meaning that the timetable, particularly for the deliverables, was impacted. Some of these are flagged in the table below, with full details of these issues discussed in Chapter 11 (Fieldwork Report – Issues identified and actions taken).

Table 2: Timetable agreed at the start of the project

Phase	Deliverables	Action	Estimated end dates	Responsibility	Comments
Preparation		Final revision of the questionnaire content	23/09/2020	Ipsos	Minor delays experienced.
		Sign-off the final questionnaire by Eurofound	25/09/2020	EF	
		Sign off modularisation	25/09/2020	EF	
		Scripting - Set up for RDD survey	02/10/2020	Ipsos	
		Script testing (master version)	10/11/2020	Ipsos	
		Script testing and EF approval (master version)	16/11/2020	EF	
	Deliverable 4:	Quality assurance plan (Excel)	23/09/2020	Ipsos	
		Sign-off by Eurofound of deliverable 4	30/09/2020	EF	
	Deliverable 5a:	Sampling strategy (pilot & mainstage²)	25/09/2020	Ipsos	Minor delays experienced.
		Sign-off by Eurofound of deliverable 5	06/11/2020	EF	
	Deliverable 5b:	Country specific sampling plans (pilot & mainstage³)	23/10/2020	Ipsos	
		Sign-off by Eurofound of the country sampling plans	06/11/2020	EF	

¹ Additional discussions relating to timings can also be found in the Quality Report (Chapter 15 – Punctuality).

² Strategy/sampling plans to be updated in January 2021 to reflect pilot test outcomes

³ Ibidem

Phase	Deliverables	Action	Estimated end dates	Responsibility	Comments
		Sample selection for the pilot test	13/11/2020	Ipsos	
	Deliverable 6:	Revision of the contact strategy	18/09/2020	Ipsos	
		Sign-off by Eurofound of deliverable 6	25/09/2020	EF	
	Deliverable 7	Translation strategy	23/09/2020	Ipsos	
		Sign-off by Eurofound of deliverable 7	30/09/2020	EF	
	Deliverable 8	Monitoring strategy	01/10/2020	Ipsos	
		Sign-off by Eurofound of deliverable 8	08/10/2020	EF	
	Deliverable 9	Quality Control Strategy	30/11/2020	Ipsos	
		Sign-off by Eurofound of deliverable 9	09/12/2020	EF	
	Deliverable 11:	Translation of the questionnaire	13/11/2020	Ipsos	
		Sign-off by Eurofound of deliverable 11	20/11/2020	EF	
	Deliverable 12a:	Translation report⁴	11/12/2020	Ipsos	
		Sign-off by Eurofound of deliverable 12a	23/12/2020	EF	
		Overwriting and testing of master scripts in local languages	27/11/2020	Ipsos	
	Deliverable 13:	Updates in the fieldwork documents and the training slides (master version)	02/10/2020	Ipsos	
		Sign-off by Eurofound of deliverable 13	06/10/2020	EF	
	Deliverable 14:	Updates in translations of the fieldwork documents and the	18/11/2020-23/11/2020	Ipsos	

⁴ Report to be updated during Q1 2021 to reflect pilot test outcomes

Phase	Deliverables	Action	Estimated end dates	Responsibility	Comments	
		training slides (local versions)				
		Sign-off by Eurofound of deliverable 14	20/11/2020 – 25/11/2020	EF		
	Deliverable 15:	Pilot strategy	09/10/2020	Ipsos		
		Sign-off by Eurofound of deliverable 15	13/11/2020	EF		
	Deliverable 16:	Data validation strategy	13/11/2020	Ipsos		
		Sign-off by Eurofound of deliverable 16	27/11/2020	EF		
	Deliverable 17:	Coding strategy	13/11/2020	Ipsos		
		Sign-off by Eurofound of deliverable 17	17/11/2020	EF		
Implementation		Briefings with project managers	25/11/2020	Ipsos		
		Pilot fieldwork	31/12/2020	Ipsos	Minor delays experienced.	
		Interactive debrief in each country	15/01/2020	Ipsos		
		Deliverable 18:	Pilot test report and dataset	22/01/2021	Ipsos	
		Sign-off by Eurofound of deliverable 18	29/01/2021	EF		
		Online meeting between Eurofound and CCT to debrief on the pilot and finalise fieldwork plans for the mainstage	29/01/2021	Ipsos/EF		
		Update and sign-off master questionnaire/support materials and source CATI script based on pilot feedback	05/02/2021	Ipsos/EF		
		Deliverable 19:	Final translated questionnaires (if necessary)	12/02/2021	Ipsos	Minor delays experienced.

Phase	Deliverables	Action	Estimated end dates	Responsibility	Comments
		Sign-off by Eurofound of deliverable 19	19/02/2021	EF	
	Deliverable 20:	Final fieldwork documents and training slides (local versions)	12/02/2021	Ipsos/EF	
		Sign-off by Eurofound of deliverable 20	19/02/2021		
	Deliverable 21:	Final script	26/02/2021	Ipsos	
		Sign-off by Eurofound of deliverable 21	05/03/2021	EF	
	Deliverable 22:	Finalisation of weighting strategy	26/02/2021	Ipsos	
		Sign-off by Eurofound of deliverable 22	12/03/2021	EF	
		Mainstage fieldwork ⁵	From: 01/03/2021	Ipsos	
		10% fieldwork completion	Group 1 ⁶ : 24/03/2021 Group 2 ⁷ : 29/03/2021 Group 3 ⁸ : 05/04/2021	Ipsos	
	Deliverable 22a:	Interim dataset (coded) - 10% (SPSS)	16/04/2021	Ipsos	
		Sign-off by Eurofound of deliverable 22a	26/04/2021	EF	
		50% fieldwork completion	Group 1: 16/04/2021 Group 2: 26/04/2021 Group 3: 07/05/2021	Ipsos	Minor issues encountered.
	Deliverable 22b:	Interim dataset (coded) - 50% (SPSS)	21/05/2021	Ipsos	

⁵ Due to increased sample size for Belgium, 3,000 interviews to be completed there by mid-July with remainder between September – Mid November 2021.

⁶ Group 1 countries: Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Hungary, Malta, Netherlands, Portugal, Romania, Slovakia, Sweden, Albania, Bosnia-Herzegovina, North Macedonia, Kosovo, Montenegro, Serbia, Switzerland.

⁷ Group 2 countries: Belgium, Germany, Italy, Luxembourg, Poland, United Kingdom.

⁸ Group 3 countries: France, Ireland, Slovenia, Spain, Norway.

Phase	Deliverables	Action	Estimated end dates	Responsibility	Comments
		Sign-off by Eurofound of deliverable 22b	31/05/2021	EF	
		100% fieldwork completion	Group 1: 15/06/2021 Group 2: 30/06/2021 Group 3: 15/07/2021	EF	Significant delays encountered (in Albania, Austria, Cyprus, Czechia, Germany, Slovakia, Slovenia and Portugal). This impacted all subsequent deliverables.
		Data processing	30/07/2021	Ipsos	
	Deliverable 23:	Delivery of draft dataset (SPSS)⁹	30/07/2021	Ipsos	
		Comments by Eurofound of deliverable 23	20/09/2020	EF	
	Deliverable 24:	Delivery of draft reports - sampling, weighting, data editing, data coding, Quality Control and Technical and Fieldwork	20/08/2021	Ipsos	
		Comments by Eurofound of deliverable 24	20/09/2021	EF	
	Deliverable 25	Delivery of final datasets and syntax files	01/10/2021	Ipsos	
		Sign-off by Eurofound of deliverable 25	22/11/2021	EF	
	Deliverable 26	Delivery of final reports	04/10/2021	Ipsos	
		Sign-off by Eurofound of deliverable 26	29/11/2021	EF	

⁹ Draft dataset including all interviews for Belgium: 30/11/2021; Eurofound to sign off 13/12/2021. All reports to be updated by Ipsos following completion of the Belgian top-up.

Changes relating to fieldwork agencies during fieldwork

Some changes occurred during the fieldwork period and are listed by country below.

Austria/Germany: due to some discrepancies in the data¹⁰, 730 interviews were replaced (309 in Austria and 421 in Germany). DT&P replaced 309 interviews in Austria and 48 interviews in Germany. Due to capacity issues in DT&P, Ipsos contacted T.I.P. (their supplier in Luxembourg) who were able to achieve 373 of the replacement interviews required in Germany.

Cyprus: the original agency, Cypronetwork, was replaced by Pulse Market Research in August 2021 due to large-scale discrepancies in the data which led to all interviews being declared as invalid¹¹. Pulse worked quickly and diligently to complete the re-fielding of all 1,300 interviews by the end of October.

Meetings held between Eurofound, Ipsos and the national partners

During the course of the project, COVID-19 restrictions relating to travel and social distancing meant that no meetings or training sessions could be held face-to-face. As an alternative, video conferencing software allowed the teams to hold webinar meetings and deliver training. The key dates for these are outlined below:

23rd/25th November 2021 – Two 2.5 hour “Train the Trainer” sessions to deliver a full briefing of the EWCTS 2021 pilot to the national partners (project and fieldwork managers).

28th/29th January 2021 – Two half-day meetings to discuss the success and challenges of the pilot as well as the revisions required for the mainstage. Day one topics included the revision of the introduction, translations, the pilot briefing, sampling, paradata and quality control. Day two topics included the ISCO¹²/NACE¹³ classification, geo-classification, reductions in the questionnaire length, the SPSS data, the pilot report and mainstage preparations.

26th February/1st March 2021 – Two “Train the Trainer” sessions of 2.5 hour each to deliver a full briefing of the EWCTS 2021 mainstage to the national partners (project and fieldwork managers). Full details of these sessions, including the content can be found within Chapter 7 (Mainstage Fieldwork - Mainstage “Train the Trainer sessions).

Aside from the above, 1.5 hour **weekly conference calls** were scheduled between Eurofound and the Ipsos CCT every Friday to discuss all aspects of the project. These calls were typically supplemented during fieldwork with a weekly call on Thursdays to discuss fieldwork monitoring and country specific progress and issues.

¹⁰ See Chapter 7 (Fieldwork Report – Issues encountered and actions taken) for more details.

¹¹ Idem

¹² International Standard Classification of Occupations

¹³ Nomenclature of Economic Activities

3. Sampling and Weighting

Sampling

Introduction and overview of requirements

This chapter outlines the sampling approach for EWCTS 2021. The sections which follow provide an overview of the survey requirements, the sampling frames and coverage, the sampling approach and an analysis of the achieved sample profile.

The target population was all individuals aged 16 and over, whose usual place of residence was in the territory of the country and who did at least one hour of work for pay, profit or family gain – for money or other payment in kind in the last week. As noted earlier, the survey covered 36 countries (see Table 1). Random probability sampling using telephones was used to generate nationally representative samples of each country.

Telephone surveys provide high population coverage across Europe due to the prevalence of mobile phones. Given the increased use of mobile phones in the years prior to the survey, some countries had started using a mobile only approach for social surveys. In others, landline telephone use continued to be widespread, and landlines were at that time recommended for a part of the sample for social surveys covering the general public. However, as the survey targeted the working population, a mobile-only approach was used in all but one country given the high coverage provided (see Table 3). It is only in Sweden that both landline and mobile numbers were used to contact individuals, as these were available from a population register.

Sampling frames and coverage

This section outlines the sampling frames and coverage assumed for this survey. It also provides a discussion on the mobile only approach used in all countries except Sweden which used a population register.

Sampling frames

The highest quality sampling frames for CATI surveys were sought in each country. The following options were investigated during the development of the survey:

Individual level registers were considered where available (within the appropriate time frame and within the assumed costs), and when of sufficient quality. As noted above this was only possible in Sweden. Telephone registers (e.g. phone books) that were of sufficient quality were considered as an alternative.

If neither of these were available, then Random Digit Dialling (RDD) was considered (this ended up being the option selected for all other countries once the other two possibilities had been reviewed).

Moving from CAPI to CATI

Registers of individuals were available for the face-to-face component of EWCS 2020 in 10 countries (Denmark, Finland, Estonia, Hungary, Italy, Malta, Slovenia, Sweden, Norway and Switzerland). However, none of these sampling frames included telephone numbers for the full sample and so it was necessary to use external telephone number sources and match telephone numbers to the sampled register records. In four countries it was not possible to match telephone numbers to

sample records at all: Hungary, Italy, Malta and Slovenia. Even though various sources (telephone books of different providers) are used for matching in the other countries, telephone numbers usually cannot be found for a part of the sample.

In Estonia and Switzerland, telephone numbers could be matched for only around 30% of the random sample selected for the EWCS 2020 CAPI survey, hence these population registers were not considered for sampling in the CATI survey. In Finland and Norway, telephone numbers could be found for around 70% of the sampled individuals. Although it was felt that this was a good starting point for the EWCS7 (CAPI survey) as the telephone recruitment could be supplemented with face-to-face recruitment for the remainder of the sample, these population registers were not considered suitable for the CATI survey since 30% of the population could not be covered.

The proportion of the sample for which telephone numbers could be identified was substantially higher in Denmark (85%) and Sweden (98%) and using the population register in these two countries was considered. The population register (SPAR) in Sweden was able to meet Eurofound's high coverage target and is regularly used as a sampling frame for CATI surveys in this country. Therefore, SPAR was selected as the sampling frame for the EWCTS 2021.

In Denmark, telephone numbers could not be found for 15% of individuals sampled from the population register (CPR). In order to assess whether this non-coverage would introduce a bias if a sample of persons with matched telephone numbers was used, the demographic profile of this group was compared with the profile of persons whose telephone numbers could not be identified. The following variables were used in the analyses: age, gender, region (NUTS2) and urbanity (DEGURBA). They showed that the younger population (below 35 years of age) and those living in DEGURBA level 1 were underrepresented in the group of individuals with matched telephone numbers. Considering that the target population for this survey are employed persons, using the Danish population register for the CATI approach would insufficiently cover important groups of this population, and was hence ruled out.

Telephone registers were identified in Denmark, Finland, Norway and Serbia. The register in Denmark is used for providing telephone numbers to complement the CPR data in the matching process mentioned above. It is, hence, not able to provide an unbiased sample for a CATI survey. The coverage of the registers in Finland and Norway is no greater than 70%, and as discussed above, this is not perceived as a satisfactory coverage level for this survey.

The telephone register in Serbia provides over 90% population coverage. This is a register of mobile telephones containing 7.2 million numbers compared to the total of 8.3 existing numbers in Serbia (while the total population count is 7 million). The local agency uses this register for all their CATI surveys, and given the high coverage, and a higher proportion of valid numbers that this frame could provide compared to an RDD sample, it was the agency's preference to use it for this survey. However, as the register is compiled and owned by the local agency, RDD sample was selected as the choice of sampling frame.

In the end, all countries used RDD with the exception of Sweden where a population register was used. An external sample provider, Sample Solutions, was responsible for generating the samples in these countries (see 'Sample approach and procedures'). All RDD sample frames are able to provide full coverage (100%) of mobile phone users in each country, and hence the survey coverage depends

on the level of mobile phone use and the proportions excluded when matching to the Home Location Register¹⁴ to improve sample eligibility rates.

Eurofound requested that all sampling frames were up-to-date (the most recent update being no longer than a year prior to the start of fieldwork), and this was fulfilled in each country. The RDD samples were generated using the most recent lists of prefixes allocated in each country; and the population register in Sweden is continuously updated. In other words, the samples were up-to-date on the day they were drawn (March 2021).

Mobile only approach

The proportion of mobile and landline telephones to be used in countries without a suitable population register was carefully considered when formulating the final designs. For each country included in the survey, Ipsos considered the characteristics and habits of telephone use of the general public, as well as of the working population. Besides relying on available statistics, Ipsos also took into account the opinions and recommendations of survey experts in the countries.

Ipsos looked into possible sources of the data on mobile and landline telephone use. Eurostat stopped publishing this information in 2005, when the number of mobile phones per capita started exceeding 1. The only source that could be identified, that provides up-to-date statistics comparable across European countries, was Eurobarometer.

The table below shows the latest Eurobarometer data on mobile and landline telephone use among the employed population, across 33 out of the 37 potential countries covered by this survey.

Table 3: Mobile and landline use among employed population

Country	Mobile only	Landline only	Landline and mobile	No telephone	No mobile phone
EU Member States					
Austria	78%	1%	21%	0%	1%
Belgium	60%	1%	39%	0%	1%
Bulgaria	86%	1%	12%	1%	2%
Croatia	42%	1%	57%	1%	1%
Cyprus	59%	0%	41%	0%	0%
Czechia	94%	0%	4%	2%	2%
Denmark	87%	1%	12%	0%	1%
Estonia	83%	0%	16%	1%	1%
Finland	95%	0%	5%	1%	1%
France	39%	2%	58%	1%	3%
Germany	21%	1%	77%	0%	1%
Greece	14%	1%	85%	1%	1%
Hungary	71%	0%	26%	2%	2%
Ireland	57%	1%	40%	2%	3%
Italy	53%	2%	43%	3%	4%
Latvia	95%	0%	5%	0%	0%

¹⁴ A central database that contains details of each mobile phone subscriber that is authorised to use the GSM network, see later section ‘Using the Home Location Register to identify active numbers’ for details

Country	Mobile only	Landline only	Landline and mobile	No telephone	No mobile phone
Lithuania	90%	0%	10%	0%	0%
Luxembourg	47%	1%	53%	0%	1%
Malta	16%	1%	83%	0%	1%
Netherlands*	1%	1%	98%	0%	1%
Poland	92%	1%	4%	3%	4%
Portugal	36%	1%	62%	1%	2%
Romania	89%	0%	6%	4%	5%
Slovenia	60%	1%	38%	1%	2%
Slovakia	91%	0%	8%	0%	1%
Spain	38%	1%	60%	1%	1%
Sweden	79%	1%	19%	1%	1%
Candidates and Potential Candidates (CPC)					
Albania	82%	0%	18%	0%	0%
Bosnia and Herzegovina	N/A	N/A	N/A	N/A	N/A
Kosovo	N/A	N/A	N/A	N/A	N/A
Montenegro	60%	1%	38%	0%	1%
North Macedonia	68%	2%	28%	2%	3%
Serbia	33%	2%	64%	0%	2%
Other Countries					
Norway	N/A	N/A	N/A	N/A	N/A
Switzerland	N/A	N/A	N/A	N/A	N/A
United Kingdom	37%	1%	63%	0%	1%

* The data for the Netherlands may be inaccurate, since telephone pre-recruitment is used in Eurobarometer fieldwork

Source: Standard Eurobarometer 92

The data do not cover Bosnia and Herzegovina, Kosovo, Norway and Switzerland.

- A comparable table is not available for Bosnia and Herzegovina, however the latest official data shows that the use of landlines is declining, while the use of mobile phones is widespread. Ipsos Bosnia's national face-to-face surveys on random probability samples find that the proportion of employed persons without a mobile phone is 1%, which is significantly lower than what is observed among the general public aged 15 years and above (9% do not have a mobile phone).
- The latest available official statistics for Kosovo are based on the 2011 Census, and show that mobile phone use is widespread, with only 5% of general public households not having a mobile phone. A more recent survey, conducted in 2019 on a nationally representative sample of the population aged 15 and above, identified only 2% of people without a mobile phone.
- The official 2019 data for Norway show that only 1% of the general public do not have a mobile phone.

- No official information could be found for Switzerland, however a study conducted in 2018 reported that 8% of the general public do not use a smartphone. It is expected that the proportion of people without a mobile phone is lower.

In Kosovo, Norway and Switzerland, the data is only available for the general public, however based on the results in other countries, it can be assumed that the proportion of people without a mobile phone is even lower among the working population.

The Eurobarometer data show that telephone coverage among the employed population is now very high across Europe, and that most of the population could be reached via mobile phones. Romania had the highest proportion of workers without a mobile phone, at 5%. The proportion was smaller in all other countries and was also estimated to be smaller in the four countries not included in the Eurobarometer data (as discussed above).

Landline telephone use continued to be widespread in some countries at the time of the survey (Germany, Greece, Malta), and Ipsos considered using a dual frame approach there, meaning using both mobile and landline telephones to reach respondents. Ipsos looked at results of recent random probability CATI surveys conducted among the general public in these countries, which used a dual frame approach. This showed that most respondents reached via landline telephone were unemployed or inactive, while the proportion of employed persons was significantly higher among respondents contacted via mobile phones. The “landline population” also proved to be significantly older than the mobile one.

Given the high coverage of mobile phones among the working population in all countries, and the tendency of samples contacted via landline to be less likely to be eligible for this survey, a mobile only approach was selected for all countries not using a population register for sampling. This approach could also provide a more efficient sample design than a dual mode approach (which would require additional weighting corrections for unequal probabilities of selection).

Coverage

The initial objective was to select sampling frames that covered at least 95% of the target population. The coverage for CATI surveys was considered through several parameters. The following population groups cannot be covered by the survey: persons who do not own a mobile phone (or any telephone in Sweden, given landlines were also used); persons not covered by the sampling frame; persons who asked to be excluded from telephone research studies (so called ‘do not call’ numbers); and persons in Sweden for whom a telephone number could not be accurately looked up.

Additionally, coverage losses could result due to excluding some active numbers from the sampling frame to improve fieldwork efficiency (see the following section for further detail). Expected levels of coverage loss due to this process are provided for France, Germany, Netherlands and Germany, based on previous research. For other countries, levels are not known but are thought to be around 5% and this proportion is factored into the total coverage estimates provided.

The table below provides the details on coverage losses due to each of these parameters and gives the final estimate of coverage for the employed population.

Table 4: Coverage losses by factor and final coverage

Country	Employed population without a mobile phone	Sampling frame non-coverage due to Home Location Register/matching	Do not call numbers	Total coverage ¹⁵
EU Member States				
Austria	1%	Not known, 5% assumed	-	~94%
Belgium	1%	Not known, 5% assumed	<1%	~93%
Bulgaria	2%	Not known, 5% assumed	-	~92%
Croatia	1%	Not known, 5% assumed	<1%	~93%
Cyprus	0%	Not known, 5% assumed	<1%	~95%
Czechia	2%	Not known, 5% assumed	1%	~92%
Denmark	1%	Not known, 5% assumed	<1%	~94%
Estonia	1%	Not known, 5% assumed	<1%	~90%
Finland	1%	Not known, 5% assumed	<1%	~93%
France	3%	8%	-	~89%
Germany	1%	5%	-	~93%
Greece	1%	Not known, 5% assumed	-	~92%
Hungary	2%	Not known, 5% assumed	<1%	~92%
Ireland	3%	Not known, 5% assumed	-	~91%
Italy	4%	Not known, 5% assumed	-	~91%
Latvia	0%	Not known, 5% assumed	<1%	~94%
Lithuania	0%	Not known, 5% assumed	<1%	~92%
Luxembourg	1%	Not known, 5% assumed	-	~93%
Malta	1%	Not known, 5% assumed	<1%	~93%
Netherlands	1%	9%	-	~89%
Poland	4%	Not known, 5% assumed	-	~90%
Portugal	2%	Not known, 5% assumed	<1%	~92%
Romania	5%	Not known, 5% assumed	<1%	~89%
Slovenia	2%	Not known, 5% assumed	<1%	~91%
Slovakia	1%	Not known, 5% assumed	<1%	~93%
Spain	1%	Not known, 5% assumed	-	~93%
Sweden	1% (no telephone)	2% + wrong numbers 14%	-	~84%
Candidates and Potential Candidates (CPC)				
Albania	0%	Not known, 5% assumed	-	~95%
Bosnia and Herzegovina	1%	Not known, 5% assumed	-	~94%
Kosovo	<2%	Not known, 5% assumed	<1%	~93%
Montenegro	1%	Not known, 5% assumed	-	~94%
North Macedonia	3%	Not known, 5% assumed	-	~92%
Serbia	2%	Not known, 5% assumed	-	~93%

¹⁵ 100% less column B (employed population without a mobile phone) less column C (non-coverage due to home location register matching) less column D (do not call numbers).

Country	Employed population without a mobile phone	Sampling frame non-coverage due to Home Location Register/matching	Do not call numbers	Total coverage ¹⁵
Other Countries				
Norway	<1%	Not known, 5% assumed	1%	~93%
Switzerland*	<8%	Not known, 5% assumed	<1%	~86%
United Kingdom	1%	5%	<1%	~93%

* The data refer to the population without a smartphone. The coverage assuming mobile phones is expected to be above 95%

Source: Ipsos

The information collected suggests that the proposed sampling frames covered at least 95% of the target population in Albania and Cyprus. The majority of countries covered at least 90%, with the exception of France, Netherlands, Romania, Switzerland and Sweden. The Sweden coverage estimates are made worse by the level of wrong numbers of 14%.

A large proportion of the coverage losses were due to using the home location register (see section of this title below) to improve sample efficiency, which, as described below, was not expected to be biasing. As noted above, the proportion of the working population without a mobile phone in Switzerland was expected to be lower than the percentage reported for the population without a smartphone and is highly likely to be above 90% given this is achieved in other countries.

Sample approach and procedures

This section outlines the sampling approach, describing the selection procedures and measures taken to ensure a high-quality implementation of a random probability approach.

Generating RDD samples

The RDD generation of mobile numbers involved the following steps:

- All eligible prefixes were identified and the correct number of digits of each number specified. Sample Solutions provided initial country lists and these were checked by the local teams, consulting the latest telecommunications allocations. This resulted in a list of confirmed prefixes for each country.
- A sample of numbers was drawn by Sample Solutions with equal probability from all possible numbers attached to these eligible prefixes (such that all numbers per eligible prefix would have a chance of being included in the sample).
- Sample Solutions screened the selected sample using a provider lookup query (see note below) to identify active numbers. Sample Solutions then provided a sample of active numbers to the Ipsos sampling team, which included the telephone number, country, expected telecommunications provider (based on the prefix assigned) and ported telecommunications provider (in cases where the person had moved providers but kept their original telephone number).
- The central team checked the sample, primarily by comparing the provider proportions on the sample with external market share figures. This confirmed that, as expected, the generated samples were a close match to the expected proportions.

- The local teams then checked that the sample met their expectations and flagged 'do not call' numbers (i.e. those who have opted out of research) and returned the sample to the central team. The proportions of 'do not call' numbers are provided in Table 4 above.
- The central team randomly allocated the sample into a "first batch", based on the estimated size of the gross sample. Further sample was randomly sorted so that it could be easily allocated if required

Using the Home Location Register to identify active numbers

The RDD approach guarantees full coverage of all mobile phones. However, a large part of the sample created in this way will be ineligible telephone numbers, i.e. numbers that are not activated. A provider lookup query was therefore used, which was able to accurately determine if the telephone number was working (i.e., in use by a mobile phone subscriber).

Using this approach has been shown in previous research conducted in the Europe and the US to result in small losses in coverage of probably around 5%, as the lookup is not perfectly accurate and will flag some active numbers as inactive (false negatives). However, these studies have recommended that the approach is used in telephone surveys given substantial productivity increases and non-existent or minimal levels of bias (since non-coverage appears to occur at random). Additionally, Sample Solutions excluded telephone numbers that were outside of the country (in roaming). These numbers were considered to be ineligible for the survey in the country they would be called from. In addition, calling these numbers could incur additional fieldwork costs.

The exception here was Kosovo, where it was understood that around 5% of the working population were Serbian migrant workers at the time of the survey, who may continue to use their Serbian-registered mobile phones. In this country, roaming numbers were not excluded, although in practice negligible such numbers were identified. For the mainstage, the local team set up a process to enable Serbian language interviews to be conducted with respondents living in Kosovo (which resulted in six interviews).

The approach described gives every working number an equal probability of being selected. Consequently, persons with multiple working mobile phones/SIM cards will have a higher chance of being selected. To allow for calculating the probabilities of selection, the information about the number of mobile phone numbers each respondent could be reached on was collected during the survey. The weighting procedures were then able to correct for the unequal probabilities of selection.

Selecting the sample from registers

In Sweden the sample was selected randomly from the full register by the register owner following specifications provided by the CCT. The sample was proportionally stratified by LAU2, gender and age. Upon receiving the sample, telephone matching procedures were applied, resulting in a 99% match rate.

Respondent selection procedures

Mobile phones are considered single-person use devices in telephone surveys, hence the person who answers the telephone is the selected respondent. They only need to be asked to confirm if they are eligible for the survey. In Sweden, where the population register was used, only the person named on the sampling frame was permitted to do the interview.

Sample usage and quality

To achieve the targets for the main stage, the yield from the pilot stage was used as a basis for the estimation of the gross sample. In general, the pilot predictions were more optimistic than the main stage reality, since on average the sample that was needed was 26% higher than the estimations based on Ipsos' experiences from the pilot. The biggest difference in numerical value was in Germany where the drop to a 1% success rate from 2% in the pilot led to an additional 176,550 numbers needed to achieve the target number of interviews.

Besides a difference in yield between the pilot and mainstage, other factors also contributed to an increase in the size of the actual gross samples. This included the additional interviews that had to be achieved in Slovakia, Czechia, Portugal and Cyprus due to quality issues and the additional interviews that were required due to the modularisation fix, which is discussed in the section "Additional released sample for modularisation".

Table 5: Target, pilot and mainstage yield, predicted and actual gross sample

Country	Target	Yield from the pilot	Actual yield	Predicted gross sample	Actual gross sample
EU Member States					
Austria	1800	3%	2%	60697	107016
Belgium	4200	7%	9%	45214	61905
Bulgaria	1800	14%	12%	12884	15461
Croatia	1800	7%	6%	26865	31792
Cyprus	1300	13%	20%	10014	77716
Czechia	1800	3%	4%	58014	96998
Denmark	1800	5%	3%	38838	57952
Estonia	1800	10%	12%	18031	17339
Finland	1800	3%	4%	69265	51556
France	3200	5%	7%	70565	47605
Germany	4100	2%	1%	182748	433685
Greece	1800	6%	6%	28098	29935
Hungary	1800	9%	7%	20272	27557
Ireland	1800	5%	6%	33440	34914
Italy	3100	4%	4%	79748	84498
Latvia	1800	5%	6%	34255	32705
Lithuania	1800	3%	8%	65231	26093
Luxembourg	1300	5%	3%	28004	68871
Malta	1300	11%	11%	11789	14142
Netherlands	1800	6%	10%	31814	20707
Poland	2900	2%	3%	189956	116535
Portugal	1800	7%	11%	26903	32686

Country	Target	Yield from the pilot	Actual yield	Predicted gross sample	Actual gross sample
Romania	1800	8%	7%	22500	26984
Slovakia	1800	3%	4%	53490	72428
Slovenia	2622	6%	6%	40358	48718
Spain	2900	4%	3%	82317	92504
Sweden	1800	3%	2%	60740	89166
Candidates and Potential Candidates (CPC)					
Albania	1000	20%	9%	5000	11293
Bosnia and Herzegovina	1000	7%	10%	14406	10278
Kosovo	1000	18%	9%	5670	11736
Montenegro	1000	3%	3%	28597	34316
North Macedonia	1000	5%	4%	21471	25766
Serbia	1000	4%	4%	27255	26785
Other Countries					
Norway	3295	6%	6%	56514	61283
Switzerland	1100	2%	2%	68422	61344
United Kingdom	2100	4%	5%	59395	42246

Source: Ipsos

Lessons learned and recommendations

Although more sample than expected was required for the mainstage, much of this was due to the modularisation and quality issues which required additional interviews to be completed. In most countries the estimates were close to the reality.

On the whole, this suggests that the strategy of using the pilot to estimate mainstage yield rates¹⁶ was effective. One notable exception is Lithuania, where the pilot success rate was only 3%, but during the mainstage fieldwork it increased to 8%, which led to overachieving the target with the first batch, which was initially estimated to achieve 40% of the target. This could have been resolved if the first batch was smaller than 40%, however this most likely would have slowed the fieldwork in other countries, potentially compromising the 50% interview completion deadline. Given this applied to just one country, Ipsos do not believe this strategy should be adjusted in this way (smaller initial batches) in future.

Target and achieved sample sizes and sample management

The targets set were achieved by all countries prior to the quality checks. However, following these extra checks, a number of interviews were flagged and removed, before having to be replaced.

¹⁶ Yield rates refer to the percentage of respondents that agree to be interviewed out of the total number of contacted respondents.

In Cyprus, all 1,461 interviews were removed due to concerns regarding the sample source, which was the target achieved by the initial supplier for the country. All interviews were subsequently replaced by a new supplier.

In Czechia and Slovakia, the local teams accidentally used another database of sample for both countries which led to the removal of 1,048 interviews in Czechia and 524 interviews in Slovakia. In both countries the local teams conducted additional interviews to reach the original targets. In Portugal, 265 interviews were removed for the same reason and the local team also completed additional interviews to achieve the initial target.

In addition to the above, a total of 1,390 interviews were removed due to quality reasons: these being 412 in Slovenia, 391 in Germany, 323 in Austria and 264 in Albania. Following this, all four countries completed additional interviews in order to make up this shortfall and achieve the set targets. Other issues included the following:

- 264 interviews (across all countries) failed quality control checks by Eurofound, an average of 7 per country.
- 69 interviews (across all countries) were removed due to the length of interview being below the threshold of half of the median length.
- 21 partial interviews were removed (20 in Belgium and 1 in Albania).
- 5 interviews (across all countries) were removed due to issues with the call history.

Table 6: Target, achieved interviews and final number of interviews

Country	Number of interviews foreseen prior to fieldwork (target sample size)	Number of interviews achieved	Final number of interviews achieved after all quality checks
EU Member States			
Austria	1800	2113	1779
Belgium	4200	4260	4233
Bulgaria	1800	1809	1796
Croatia	1800	1801	1800
Cyprus	1300	2833	1365
Czechia	1800	3046	1990
Denmark	1800	1826	1820
Estonia	1800	1817	1804
Finland	1800	1909	1903
France	3200	3215	3213
Germany	4100	4527	4131
Greece	1800	1803	1798
Hungary	1800	1804	1792
Ireland	1800	1801	1785
Italy	3100	3137	3131
Latvia	1800	1810	1799
Lithuania	1800	1894	1871

Country	Number of interviews foreseen prior to fieldwork (target sample size)	Number of interviews achieved	Final number of interviews achieved after all quality checks
Luxembourg	1300	1377	1363
Malta	1300	1479	1472
Netherlands	1800	1818	1816
Poland	2900	2914	2900
Portugal	1800	2148	1880
Romania	1800	1831	1808
Slovakia	1800	2332	1794
Slovenia	2622	3074	2631
Spain	2900	2908	2903
Sweden	1800	1833	1826
Total EU	57522	63119	58408
Candidates and Potential Candidates (CPC)			
Albania	1000	1268	988
Bosnia and Herzegovina	1000	1154	1140
Kosovo	1000	1143	1134
Montenegro	1000	1152	1148
North Macedonia	1000	1141	1137
Serbia	1000	1153	1149
Total CPC	6000	7011	6697
Other Countries			
Norway	3295	3307	3301
Switzerland	1100	1232	1224
United Kingdom	2100	2136	2134
Total Other Countries	6495	6675	6659
TOTAL ALL COUNTRIES	70017	76805	71758

Gross sample

The gross sample that was used for the mainstage was calculated using the yield from the pilot stage. The gross sample together with 20% reserve sample was ordered from Sample Solutions and these numbers were used for the mainstage fieldwork. The exception is Sweden, where the gross sample together with the 20% reserve sample was ordered from the national register. The below table provides an overview of the predicted sample that the countries would require, the actual sample delivered and the total number of sample records that were used for the project.

Table 7: Predicted, actual gross and used sample

Country	Predicted gross sample	Actual gross sample	Used sample
EU Member States			
Austria	60697	107016	107007
Belgium	45214	61905	51024
Bulgaria	12884	15461	14683
Croatia	26865	31792	31793
Cyprus	10014	77716	59834
Czechia	58014	96998	89657
Denmark	38838	57952	57912
Estonia	18031	17339	17337
Finland	69265	51556	47714
France	70565	47605	46486
Germany	182748	433685	398420
Greece	28098	29935	29935
Hungary	20272	27557	26557
Ireland	33440	34914	34914
Italy	79748	84498	84494
Latvia	34255	32705	32692
Lithuania	65231	26093	24587
Luxembourg	28004	68871	43931
Malta	11789	14142	13237
Netherlands	31814	20707	20251
Poland	189956	116535	116456
Portugal	26903	32686	21263
Romania	22500	26984	26385
Slovakia	53490	72428	69128
Slovenia	40358	48718	48073
Spain	82317	92504	92504
Sweden	60740	89166	89138
Candidates and Potential Candidates (CPC)			
Albania	5000	11293	10556
Bosnia and Herzegovina	14406	10278	9337
Kosovo	5670	11736	9533
Montenegro	28597	34316	29873
North Macedonia	21471	25766	20025
Serbia	27255	26785	24194
Other Countries			

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Predicted gross sample	Actual gross sample	Used sample
Norway	56514	61283	60088
Switzerland	68422	61344	60064
United Kingdom	59395	42246	42245

Source: Ipsos

Before the start of fieldwork, the size of the predicted gross sample was estimated based on the findings from the pilot. The final sample size that was used during fieldwork was lower for most countries than the actual gross sample, because towards the end of fieldwork most countries needed less sample to achieve their target.

The fieldwork rule of two weeks between the first and last call meant that there was a risk of underachieving the target. Because of this, it was agreed between Ipsos and Eurofound that the local teams that required more sample would receive larger batches. The local teams were instructed to use as many numbers as they deemed necessary. However, as all numbers had to be fully worked (including those that were only called once), some numbers remained in the system and were left unused.

The release strategy for the sample that was agreed between Ipsos and Eurofound was to release three batches. The first batch included 40% of the numbers that were estimated to be needed for the achievement of the total target number of interviews. The second batch included 40% of the numbers needed to achieve the target. The third batch was planned to include the last 20% of the required sample, but during the fieldwork the yield rates changed several times, which led to the release of more batches per country than initially planned. All countries required at least three batches to be released except for Lithuania, where the target was achieved with the first batch.

Table 8: Sample release batch dates (all 2021)

Country	Batch1	Batch2	Batch3	Batch4	Batch5	Batch6	Batch7	Batch8
EU Member States								
Austria	04-03	29-03	07-04	13-04	05-05			
Belgium	05-03	24-03	22-04	14-06-	07-07	01-09		
Bulgaria	05-03	02-04	12-0	18-05	08-06	10-06	14-06	
Croatia	04-03	26-03	13-04	14-05	01-06			
Cyprus	05-03	05-05	16-06					
Czechia	08-03	09-04						
Denmark	04-03	31-03	19-04	07-05	14-05	10-06		
Estonia	04-03	19-04	26-04	14-05	28-05	10-06	12-07	
Finland	04-03	19-04	28-05	10-06				
France	04-03	19-04	02-06	17-06	28-06			
Germany	04-03	07-04	21-04	26-04	27-05	07-06	21-06	28-06
Greece	04-03	29-03	14-05	09-06				
Hungary	04-03	24-03	30-03	12-05	26-05	02-06	14-06	
Ireland	04-03	29-03	20-04	29-04	21-05	14-06	28-06	19-07

Country	Batch1	Batch2	Batch3	Batch4	Batch5	Batch6	Batch7	Batch8
Italy	04-03	23-04	11-06	17-06	16-07			
Latvia	04-03	08-04	07-05	14-05	28-05			
Lithuania	04-03							
Luxembourg	04-03	20-04	18-05	27-05	02-06	18-06	07-01	09-07
Malta	05-03	09-04	11-05	20-05	26-05	07-07	19-07	
Netherlands	04-03	20-04	17-05	15-06				
Poland	05-03	14-05	08-06	30-06				
Portugal	04-03	21-04	26-05	06-08	25-08			
Romania	04-03	02-04	29-04	21-05	31-05	08-06	15-06	16-06
Slovakia	08-03	09-04	29-04					
Slovenia	04-03	21-04	27-05	30-06	07-07	12-07	15-07	12-08
Sweden	05-03	29-03	19-04	27-04	05-05	09-06	17-06	23-07

Candidates and Potential Candidates (CPC)

Albania	04-03	01-04	28-04	27-05	04-06	10-06	07-07	15-07
Bosnia and Herzegovina	04-03	27-04	18-05	08-06	07-07	23-07		
Kosovo	04-03	01-04	28-04	26-05	04-06	10-06	07-07	15-07
Montenegro	04-03	22-04	18-05	10-06	16-06	07-07	15-07	
North Macedonia	04-03	28-04	26-05	04-06	07-07	15-07		
Serbia	04-03	22-04	21-05	04-06	10-06	07-07	15-07	

Other Countries

Norway	05-03	07-05	11-06	21-06	24-06	01-07		
Switzerland	04-03	01-04	07-07	26-07				
United Kingdom	05-03	22-04	20-05	04-06	07-06			

Source: Ipsos

The first batch of sample was loaded in the system prior to the start of the fieldwork and all other batches were loaded depending on the fieldwork progress. This is visible in Table 82 in the Fieldwork report which illustrates the breakdown of the sample that was initially loaded and the total sample size loaded by the end of the fieldwork period.

After the first batch was released, the yield rates of the main fieldwork could be estimated after the teams had worked most of this sample. The data gathered from the fieldwork on the first batch was used to better estimate the size of the samples required to reach the target.

The estimation took into account the success rate from the sample used, the expected success rate from appointments, and the expected success rate from other types of recalls. The expected success rate from the recalls and appointments was calculated based on the yields from the recalls and appointments during fieldwork. This allowed for more accurate estimation of the subsequent batches, and this estimation became more accurate as the fieldwork progressed.

A weakness of this estimation approach was that as the sample was worked more heavily the success rate for the recalls tended to be overestimated, given that at this stage most of the numbers only required 1 or 2 recalls, where conversion rates are at their lowest. To compensate for this, a lower success rate was assumed for the 4th and 5th call attempts.

This estimation process facilitated accurate decision making on the size of subsequent sample batches. For example, the Swiss team repeatedly requested additional sample after the second batch. However, based on the estimations it was decided that the sample that the local team already had should be sufficient. At the end of the fieldwork the local team achieved the target with the two batches of numbers provided.

Table 9: Sample release batch sizes

Country	Batch1	Batch2	Batch3	Batch4	Batch5	Batch6	Batch7	Batch8
EU Member States								
Austria	24279	10000	14279	10000	14279	10000	4179	
Belgium	25319	7234	11852	4000	500	13000		
Bulgaria	5154	3912	1180	2090	587	830	1708	
Croatia	10746	6466	6466	6466	1648			
Cyprus	4006	4006	500					
Czechia	23205	23205						
Denmark	15535	8690	8690	1000	12667	5592	5778	
Estonia	7212	3632	1000	2495	1000	1500	500	
Finland	27706	18350	1000	4500				
France	28226	13879	1500	2000	2000			
Germany	73099	73099	30000	43100	30000	50000	40000	20000
Greece	11239	11848	5848	1000				
Hungary	8109	5464	5464	2928	2170	2422	1000	
Ireland	13376	5549	5549	3440	2000	2000	2000	1000
Italy	31899	31899	10000	10000	700			
Latvia	13702	13891	1000	3112	1000			
Lithuania	26093							
Luxembourg	11202	11202	11202	2000	7186	4000	4287	17792
Malta	4715	1974	912	1848	1699	1085	1909	
Netherlands	12726	1467	5214	300	1000			
Poland	75983	23370	14182	3000				
Portugal	10761	3878	1855	692	15500			
Romania	9000	6276	1459	4587	1070	1000	1000	2592
Slovakia	21396	23881	5000					
Slovenia	16143	11205	7093	2000	4000	2000	4477	1500
Spain	32927	33697	15386	4494	4000	2000		
Sweden	24296	10000	14296	8552	10000	10000	10000	2022

Country	Batch1	Batch2	Batch3	Batch4	Batch5	Batch6	Batch7	Batch8
Candidates and Potential Candidates (CPC)								
Albania	2000	2000	2000	1151	900	1604	919	719
Bosnia and Herzegovina	5762	527	851	1500	819	819		
Kosovo	2268	2268	2269	2232	900	793	867	139
Montenegro	11439	3690	4484	1500	3000	3000	2680	4523
North Macedonia	8589	8133	6334	2268	442			
Serbia	10902	5731	2066	1500	1000	2186	3400	
Other Countries								
Norway	22606	15535	4142	7000	5000	7000		
Switzerland	27369	26462	6013	1500				
United Kingdom	23758	4539	4000	2000	6949	1000		

Source: Ipsos

Towards the end of the fieldwork the estimation of the size of the batches became even more important, because there was a risk of over or under-achieving against the targets.

Additionally, the expectations were that with the upcoming summer and holiday period the success rates would drop, and the local teams would not have enough sample to achieve the target. For that reason, it was agreed between Ipsos and Eurofound to release slightly larger sample batches than estimated and the local team would not have to work numbers that were not started at all from these batches. This was undertaken for the last batches for 22 countries. The local teams had to fully work any number that was called at least once.

Release of additional sample after fieldwork start

Modularisation

Additional sample was released in several countries to achieve additional completes due to an issue in the modularisation design and allocations. The size of these batches is included in the total sample of the countries, but they can be also found in the table below.

Table 10: Additional sample released to resolve the modularisation issues

Country	Batch1	Batch2	Batch3	Date1	Date2	Date3
Albania	919	719		07-07-2021	15-07-2021	
Bosnia and Herzegovina	819	819		07-07-2021	23-07-2021	
Kosovo	867	139		07-07-2021	15-07-2021	
Luxembourg	4287	17792		07-01-2021	09-07-2021	
Malta	1085	1909		07-07-2021	19-07-2021	
Montenegro	2680	4523		07-07-2021	15-07-2021	
North Macedonia	2268	442		07-07-2021	15-07-2021	

Country	Batch1	Batch2	Batch3	Date1	Date2	Date3
Serbia	2186	3400		07-07-2021	15-07-2021	
Slovenia	2000	4000	4470	07-07-2021	12-07-2021	15-07-2021
Switzerland	6013	1500		07-07-2021	26-07-2021	

Source: Ipsos

Sample released for re-field

Additional sample releases were made to re-field some of the interviews due to some issues which were resolved relating to sample, fieldwork or quality control, as follows:,. A full explanation of these issues can be found in Chapter 11 (Fieldwork Report – Issues encountered and actions taken). These are as follows for each country:

Albania: The local team only required an extra 700 numbers to achieve the additional completes, as they already had unused sample from the mainstage.

Austria: 20,000 extra numbers had to be released to achieve the additional interviews.

Cyprus: The last three batches of the sample were released to Pulse – the new suppliers in Cyprus. In total, the provider received 69,204 numbers.

Czechia: The local team received an additional 50,588 numbers to achieve the extra completes required.

Germany: An additional 74,387 numbers were released to achieve the additional completes.

Portugal: The local team received an additional 15,550 numbers to achieve extra completes.

Slovakia: An additional 22,151 numbers were released to achieve the additional completes.

Slovenia: An additional 8,277 numbers were released to achieve the additional completes.

Table 11: Sample released for the re-field

Country	Additional Batch1	Additional Batch2	Additional Batch3	Additional Batch4	Additional Batch5	Total
EU 27 Member States						
Austria	16000	4000				20000
Cyprus	5806	2798	15600	25000	20000	69204
Czechia	10588	10000	10000	20000		50588
Germany	35000	15387	24000			74387
Slovakia	4151	8000	3000	7000		22151
Portugal	15550					15550
Slovenia	2000	4477	1500	300		8277
Candidates and Potential Candidates (CPC)						
Albania	500	200				700

Source: Ipsos

The table below details the dates that the additional batches of sample were released to each of the countries.

Table 12: Dates of release of the additional sample for the re-field

Country	Additional Batch1	Additional Batch2	Additional Batch3	Additional Batch4	Additional Batch5
EU 27 Member States					
Austria	19-10-2021	02-11-2021			
Croatia	14-05-2021	01-06-2021			
Cyprus	13-09-2021	20-09-2021	21-09-2021	01-10-2021	07-10-2021
Czechia	18-08-2021	24-08-2021	31-08-2021	15-09-2021	
Germany	18-10-2021	20-10-2021	03-11-2021		
Portugal	25-08-2021				
Slovakia	18-08-2021	24-08-2021	13-09-2021	15-09-2021	
Slovenia	12-07-2021	15-07-2021	12-08-2021	23-08-2021	
Candidates and Potential Candidates (CPC)					
Albania	25-10-2021	05-11-2021			

Source: Ipsos

Analysis of the sample profile

The general sample composition achieved during the mainstage was evaluated on gender, age groups and education levels. In the table below, groupings are made based on an age variable (scr_age and Q92b). The education groupings appear for three levels:

- EDU_0_2 (comprising ISCED 0, ISCED 1 and ISCED 2)
- EDU_3_4 (comprising ISCED levels 3 and 4)
- EDU_5_8 (comprising ISCED 5, ISCED 6, ISCED 7 and ISCED 8).

Table 13: Achieved base demographic indicators (on valid completes)

Country	Completed Interviews	Male	Female	Other	Age [15-24]	Age [25-49]	Age [50-74]	EDU_0_2	EDU_3_4	EDU_5_8
EU Member States										
Austria	1779	954	819	6	141	969	667	109	1010	646
Belgium	4233	2211	1993	29	281	2512	1432	426	1349	2433
Bulgaria	1796	942	839	15	114	1227	452	52	701	1038
Croatia	1800	802	989	9	166	1180	454	29	874	890
Cyprus	1365	748	616	1	94	1024	243	46	295	1023
Czechia	1990	951	1037	2	127	1336	523	61	1077	850
Denmark	1820	978	833	9	254	939	621	167	558	1070
Estonia	1804	734	1070	0	82	1106	608	131	720	952

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed Interviews	Male	Female	Other	Age [15-24]	Age [25-49]	Age [50-74]	EDU_0_2	EDU_3_4	EDU_5_8
Finland	1903	934	967	2	104	1073	720	65	616	1221
France	3213	1605	1598	10	299	1982	929	92	818	2294
Germany	4131	2311	1804	16	474	2458	1191	460	1843	1815
Greece	1798	1094	703	1	79	1294	424	105	366	1311
Hungary	1792	906	883	3	96	1170	517	54	660	1076
Ireland	1790	1005	779	6	156	1056	559	72	430	1280
Italy	3131	1810	1318	3	133	1785	1203	352	1418	1353
Latvia	1799	783	1009	7	96	1152	548	56	675	1058
Lithuania	1871	775	1094	2	101	1229	539	13	380	1472
Luxembourg	1363	731	623	9	72	922	366	152	415	757
Malta	1472	772	698	2	164	987	320	217	564	675
Netherlands	1816	957	849	10	207	903	702	221	621	953
Poland	2900	1470	1428	2	148	1996	740	23	864	2005
Portugal	1880	929	949	2	147	1194	535	430	681	763
Romania	1808	943	862	3	166	1213	428	144	784	878
Slovenia	2631	1242	1385	4	245	1729	656	96	1130	1399
Slovakia	1794	851	943	0	120	1233	438	20	794	978
Spain	2903	1521	1373	9	152	1894	854	356	1093	1444
Sweden	1826	947	876	3	75	877	842	95	672	1039
Candidates and Potential Candidates (CPC)										
Albania	989	590	398	1	124	614	251	202	310	475
Bosnia and Herzegovina	1140	696	444	0	166	737	237	250	445	443
Kosovo	1134	787	346	1	258	669	207	117	494	521
Montenegro	1148	632	516	0	118	820	210	31	491	623
North Macedonia	1137	658	449	30	85	768	282	153	425	555
Serbia	1149	607	536	6	151	777	221	35	545	568
Other Countries										
Norway	3301	1753	1544	4	223	1865	1202	93	809	2394
Switzerland	1224	649	575	0	75	686	453	81	433	702
United Kingdom	2134	1170	956	8	159	1138	808	346	319	1414
Total¹⁷	71764	37448	34101	215	5652	44514	21382	5352	25679	40368

Source: Ipsos

¹⁷ Total figures per age and education exclude unclassified cases due to a refusal to disclose information (such as education) or not providing sufficiently accurate information (i.e., age answered in the age band of 45-54 years old)

The achieved sample profile was compared to the reference statistics obtained from Eurostat – Employment by sex, age and professional status [1000] [lfsa_egaps] year 2019¹⁸. For the gender comparison, the category “Other Gender” was excluded given a lack of reference statistics for comparison.

Table 14: Comparison with reference statistics on gender (on valid completes)

Country	Completed Interviews	Achieved			Expected*		Difference*	
		Male	Female	Other Gender	Male	Female	Male	Female
Austria	1779	53.63%	46.04%	0.34%	53.22%	46.78%	0.41%	-0.74%
Belgium	4233	52.23%	47.08%	0.69%	53.01%	46.99%	-0.78%	0.09%
Bulgaria	1796	52.45%	46.71%	0.84%	54.06%	45.94%	-1.61%	0.77%
Croatia	1800	44.56%	54.94%	0.50%	53.52%	46.48%	-8.96%	8.46%
Cyprus	1365	54.80%	45.13%	0.07%	52.86%	47.14%	1.94%	-2.01%
Czechia	1990	47.79%	52.11%	0.10%	55.65%	44.35%	-7.86%	7.76%
Denmark	1820	53.74%	45.77%	0.49%	53.18%	46.82%	0.56%	-1.05%
Estonia	1804	40.69%	59.31%	0.00%	51.22%	48.78%	-10.53%	10.53%
Finland	1903	49.08%	50.81%	0.11%	51.57%	48.43%	-2.49%	2.38%
France	3213	49.95%	49.74%	0.31%	51.38%	48.62%	-1.43%	1.12%
Germany	4131	55.94%	43.67%	0.39%	53.38%	46.62%	2.56%	-2.95%
Greece	1798	60.85%	39.10%	0.06%	57.91%	42.09%	2.94%	-2.99%
Hungary	1792	50.56%	49.27%	0.17%	55.04%	44.96%	-4.48%	4.31%
Ireland	1790	56.15%	43.52%	0.34%	53.92%	46.08%	2.23%	-2.56%
Italy	3131	57.81%	42.10%	0.10%	57.84%	42.16%	-0.03%	-0.06%
Latvia	1799	43.52%	56.09%	0.39%	49.68%	50.32%	-6.16%	5.77%
Lithuania	1871	41.42%	58.47%	0.11%	49.25%	50.75%	-7.83%	7.72%
Luxembourg	1363	53.63%	45.71%	0.66%	54.03%	45.97%	-0.40%	-0.26%
Malta	1472	52.45%	47.42%	0.14%	60.09%	39.91%	-7.64%	7.51%
Netherlands	1816	52.70%	46.75%	0.55%	53.23%	46.77%	-0.53%	-0.02%
Poland	2900	50.69%	49.24%	0.07%	55.69%	44.31%	-5.00%	4.93%
Portugal	1880	49.41%	50.48%	0.11%	50.88%	49.12%	-1.47%	1.36%
Romania	1808	52.16%	47.68%	0.17%	57.35%	42.65%	-5.19%	5.03%
Slovenia	2631	47.21%	52.64%	0.15%	53.54%	46.46%	-6.33%	6.18%
Slovakia	1794	47.44%	52.56%	0.00%	54.84%	45.16%	-7.40%	7.40%
Spain	2903	52.39%	47.30%	0.31%	54.13%	45.87%	-1.74%	1.43%
Sweden	1826	51.86%	47.97%	0.16%	52.38%	47.62%	-0.52%	0.35%

¹⁸ http://appsso.eurostat.ec.europa.eu/nui/show.do?wai=true&dataset=lfsa_egaps

Country	Completed Interviews	Achieved			Expected*		Difference*	
		Male	Female	Other Gender	Male	Female	Male	Female
Albania	989	59.66%	40.24%	0.10%	52.40%	47.60%	7.26%	-7.36%
Bosnia and Herzegovina	1140	61.05%	38.95%	0.00%	56.80%	43.20%	4.25%	-4.25%
Kosovo	1134	69.40%	30.51%	0.09%	75.87%	24.13%	-6.47%	6.38%
Montenegro	1148	55.05%	44.95%	0.00%	54.81%	45.19%	0.24%	-0.24%
North Macedonia	1137	57.87%	39.49%	2.64%	59.36%	40.64%	-1.49%	-1.15%
Serbia	1149	52.83%	46.65%	0.52%	55.85%	44.15%	-3.02%	2.50%
Norway	3301	53.11%	46.77%	0.12%	52.94%	47.06%	0.17%	-0.29%
Switzerland	1224	53.02%	46.98%	0.00%	53.16%	46.84%	-0.14%	0.14%
United Kingdom	2134	54.83%	44.80%	0.37%	52.67%	47.33%	2.16%	-2.53%
Total	71764	52.18%	47.52%	0.30%	-	-	-	-

*No reference statistics available for other genders

Source: Ipsos

Focusing on these figures, females were over-represented in some counties such as Estonia (+10.53%), Croatia (+8.6%), Lithuania (+7.72%), Czechia (+7.56%), Malta (+7.51%) and Kosovo (+6.38). Males were over-represented in Albania (+7.26%) and Bosnia (+4.25%).

Table 15: Comparison with reference statistics on age (on valid completes)

Country	Completed Interviews	Achieved			Expected			Difference		
		Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]
EU Member States										
Austria	1779	7.93%	54.47%	37.49%	11.92%	59.97%	28.11%	-3.99%	-5.50%	9.38%
Belgium	4233	6.64%	59.34%	33.83%	7.95%	63.39%	28.65%	-1.31%	-4.05%	5.18%
Bulgaria	1796	6.35%	68.32%	25.17%	4.49%	62.21%	33.30%	1.86%	6.11%	-8.13%
Croatia	1800	9.22%	65.56%	25.22%	7.65%	65.30%	27.05%	1.57%	0.26%	-1.83%
Cyprus	1365	6.89%	75.02%	17.80%	8.08%	66.41%	25.51%	-1.19%	8.61%	-7.71%
Czechia	1990	6.38%	67.14%	26.28%	5.61%	64.52%	29.67%	0.77%	2.62%	-3.39%
Denmark	1820	13.96%	51.59%	34.12%	14.84%	53.08%	32.09%	-0.88%	-1.49%	2.03%
Estonia	1804	4.55%	61.31%	33.70%	7.80%	57.49%	34.71%	-3.25%	3.82%	-1.01%
Finland	1903	5.47%	56.38%	37.83%	10.38%	57.58%	32.04%	-4.91%	-1.20%	5.79%
France	3213	9.31%	61.69%	28.91%	9.11%	61.46%	29.44%	0.20%	0.23%	-0.53%
Germany	4131	11.47%	59.50%	28.83%	10.59%	52.80%	36.38%	0.88%	6.70%	-7.55%
Greece	1798	4.39%	71.97%	23.58%	4.73%	68.69%	26.58%	-0.34%	3.28%	-3.00%
Hungary	1792	5.36%	65.29%	28.85%	6.80%	64.62%	28.58%	-1.44%	0.67%	0.27%
Ireland	1790	8.72%	58.99%	31.23%	12.66%	63.16%	24.18%	-3.94%	-4.17%	7.05%
Italy	3131	4.25%	57.01%	38.42%	5.37%	59.29%	35.30%	-1.12%	-2.28%	3.12%
Latvia	1799	5.34%	64.04%	30.46%	6.39%	58.16%	35.45%	-1.05%	5.88%	-4.99%
Lithuania	1871	5.40%	65.69%	28.81%	6.84%	56.94%	36.23%	-1.44%	8.75%	-7.42%
Luxembourg	1363	5.28%	67.64%	26.85%	6.36%	70.24%	23.40%	-1.08%	-2.60%	3.45%
Malta	1472	11.14%	67.05%	21.74%	12.11%	66.20%	21.69%	-0.97%	0.85%	0.05%
Netherlands	1816	11.40%	49.72%	38.66%	17.52%	51.93%	30.32%	-6.12%	-2.21%	8.34%
Poland	2900	5.10%	68.83%	25.52%	7.86%	66.95%	25.11%	-2.76%	1.88%	0.41%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed Interviews	Achieved			Expected			Difference		
		Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]
Portugal	1880	7.82%	63.51%	28.46%	7.14%	62.14%	30.72%	0.68%	1.37%	-2.26%
Romania	1808	9.18%	67.09%	23.67%	4.96%	69.39%	25.65%	4.22%	-2.30%	-1.98%
Slovenia	2631	9.31%	65.72%	24.93%	6.62%	65.58%	27.80%	2.69%	0.14%	-2.87%
Slovakia	1794	6.69%	68.73%	24.41%	5.83%	65.60%	28.57%	0.86%	3.13%	-4.16%
Spain	2903	5.24%	65.24%	29.42%	5.90%	64.64%	29.44%	-0.66%	0.60%	-0.02%
Sweden	1826	4.11%	48.03%	46.11%	10.22%	58.36%	31.42%	-6.11%	-10.33%	14.69%
Candidates and Potential Candidates (CPC)										
Albania	989	12.54%	62.08%	25.38%	21.46%	73.79%	NA	-8.92%	-11.71%	NA
Bosnia and Herzegovina	1140	14.56%	64.65%	20.79%	10.10%	63.20%	26.70%	4.46%	1.45%	-5.91%
Kosovo	1134	22.75%	58.99%	18.25%	11.67%	49.20%	39.13%	11.08%	9.79%	-20.88%
Montenegro	1148	10.28%	71.43%	18.29%	8.92%	63.46%	27.62%	1.36%	7.97%	-9.33%
North Macedonia	1137	7.48%	67.55%	24.80%	7.18%	68.11%	24.71%	0.30%	-0.56%	0.09%
Serbia	1149	13.14%	67.62%	19.23%	6.17%	66.42%	27.41%	6.97%	1.20%	-8.18%
Other Countries										
Norway	3301	6.76%	56.50%	36.41%	12.64%	56.34%	31.02%	-5.88%	0.16%	5.39%
Switzerland	1224	6.13%	56.05%	37.01%	13.25%	57.07%	29.48%	-7.12%	-1.02%	7.53%
United Kingdom	2134	7.45%	53.33%	37.86%	12.71%	57.45%	29.60%	-5.26%	-4.12%	8.26%
Total	71764	7.88%	62.03%	29.79%	N/A	N/A	N/A	N/A	N/A	N/A

Source: Ipsos

Countries that managed to achieve an age distribution within +/-1% compared to the reference statistic are France, Spain, North Macedonia and Malta. The highest over-representation of people younger than 25 was reported in Kosovo (+11.08%), followed by Serbia (+6.97%) and Bosnia and Herzegovina (+4.46%). The highest under-representation of young people was reported in Albania (-8.92%), Switzerland (-7.12%) and the Netherlands (-6.12%).

Countries where the older population (50-74 years old) is most represented is in Sweden (+14.69%), Austria (+9.38%), the Netherlands (+8.34%), and the United Kingdom (+8.26%).

The lowest representation for the older population is observed in Kosovo (-20.88%). This can be explained by two factors. Firstly, the unemployment rate for women (which is 15.8% according to the Labour Force Survey¹⁹ 2020 Q4) and the fact that they are under-represented by 6% in the data collected. The other factor is the impact of COVID in Kosovo, examined in the paper "Pandemic Impact on Employment in Kosovo"²⁰. According to the paper there is a 12% increase in unemployment among the 55+ age group and 13% in the age group 45 to 54 years.

There is also the regionality effect of COVID-19. For example, Pristina has a 15% employment status change (loss of employment) and 33% representation in the sample. Prizren has a 23% employment change (loss of employment) and 10% share in the sample of the survey.

¹⁹ See: <https://ask.rks-gov.net/en/kosovo-agency-of-statistics/add-news/labour-force-survey-q4-2020>

²⁰ https://www.researchgate.net/publication/350022302_COVID-19_Pandemic_Impact_on_Employment_in_Kosovo#pdf

Table 16: Comparison with reference statistics on education level (on valid completes)

Country	Completed Interviews	Achieved			Expected			Difference		
		EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8
EU Member States										
Austria	1779	6.13%	56.77%	36.31%	12.33%	51.79%	35.88%	-6.20%	4.98%	0.43%
Belgium	4233	10.06%	31.87%	57.48%	14.33%	39.40%	46.27%	-4.27%	-7.53%	11.21%
Bulgaria	1796	2.90%	39.03%	57.80%	12.10%	56.69%	31.22%	-9.20%	-17.66%	26.58%
Croatia	1800	1.61%	48.56%	49.44%	8.05%	62.81%	29.14%	-6.44%	-14.25%	20.30%
Cyprus	1365	3.37%	21.61%	74.95%	14.77%	38.38%	46.85%	-11.40%	-16.77%	28.10%
Czechia	1990	3.07%	54.12%	42.71%	4.59%	70.82%	24.59%	-1.52%	-16.70%	18.12%
Denmark	1820	9.18%	30.66%	58.79%	18.51%	42.98%	38.52%	-9.33%	-12.32%	20.27%
Estonia	1804	7.26%	39.91%	52.77%	8.85%	48.89%	42.26%	-1.59%	-8.98%	10.51%
Finland	1903	3.42%	32.37%	64.16%	9.48%	45.13%	45.39%	-6.06%	-12.76%	18.77%
France	3213	2.86%	25.46%	71.40%	14.00%	43.20%	42.80%	-11.14%	-17.74%	28.60%
Germany	4131	11.14%	44.61%	43.94%	12.52%	57.20%	30.29%	-1.38%	-12.59%	13.65%
Greece	1798	5.84%	20.36%	72.91%	18.61%	44.66%	36.73%	-12.77%	-24.30%	36.18%
Hungary	1792	3.01%	36.83%	60.04%	11.18%	61.27%	27.56%	-8.17%	-24.44%	32.48%
Ireland	1790	4.02%	24.02%	71.51%	12.39%	38.51%	49.10%	-8.37%	-14.49%	22.41%
Italy	3131	11.24%	45.29%	43.21%	29.95%	46.64%	23.41%	-18.71%	-1.35%	19.80%
Latvia	1799	3.11%	37.52%	58.81%	7.43%	53.83%	38.74%	-4.32%	-16.31%	20.07%
Lithuania	1871	0.69%	20.31%	78.67%	3.56%	49.48%	46.96%	-2.87%	-29.17%	31.71%
Luxembourg	1363	11.15%	30.45%	55.54%	17.34%	31.56%	51.10%	-6.19%	-1.11%	4.44%
Malta	1472	14.74%	38.32%	45.86%	36.20%	32.06%	31.74%	-21.46%	6.26%	14.12%
Netherlands	1816	12.17%	34.20%	52.48%	20.29%	40.54%	39.17%	-8.12%	-6.34%	13.31%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed Interviews	Achieved			Expected			Difference		
		EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8
Poland	2900	0.79%	29.79%	69.14%	4.88%	58.76%	36.36%	-4.09%	-28.97%	32.78%
Portugal	1880	22.87%	36.22%	40.59%	42.81%	28.94%	28.25%	-19.94%	7.28%	12.34%
Romania	1808	7.96%	43.36%	48.56%	18.33%	60.48%	21.20%	-10.37%	-17.12%	27.36%
Slovenia	2631	3.65%	42.95%	53.17%	7.75%	55.76%	36.49%	-4.10%	-12.81%	16.68%
Slovakia	1794	1.11%	44.26%	54.52%	4.40%	68.12%	27.47%	-3.29%	-23.86%	27.05%
Spain	2903	12.26%	37.65%	49.74%	32.30%	23.91%	43.79%	-20.04%	13.74%	5.95%
Sweden	1826	5.20%	36.80%	56.90%	12.65%	44.00%	43.35%	-7.45%	-7.20%	13.55%
Candidates and Potential Candidates (CPC)										
Albania	989	20.42%	31.34%	48.03%	NA	NA	NA	NA	NA	NA
Bosnia and Herzegovina	1140	21.93%	39.04%	38.86%	10.80%	67.30%	21.90%	11.13%	-28.26%	16.96%
Kosovo	1134	10.32%	43.56%	45.94%	14.01%	55.74%	30.25%	-3.69%	-12.18%	15.69%
Montenegro	1148	2.70%	42.77%	54.27%	7.77%	61.92%	30.30%	-5.07%	-19.15%	23.97%
North Macedonia	1137	13.46%	37.38%	48.81%	17.51%	56.58%	25.91%	-4.05%	-19.20%	22.90%
Serbia	1149	3.05%	47.43%	49.43%	16.04%	57.39%	26.58%	-12.99%	-9.96%	22.85%
Other Countries										
Norway	3301	2.82%	24.51%	72.52%	15.72%	40.08%	44.20%	-12.90%	-15.57%	28.32%
Switzerland	1224	6.62%	35.38%	57.35%	12.45%	44.90%	42.65%	-5.83%	-9.52%	14.70%
United Kingdom	2134	16.21%	14.95%	66.26%	15.40%	39.46%	45.14%	0.81%	-24.51%	21.12%
Total	71764	7.46%	35.78%	56.25%	-	-	-	-	-	-

Source: Ipsos

As highlighted in the table above, respondents with a lower education (ISCED0 to ISCED2) were generally more difficult to reach or convince to participate in the survey, with 34 countries showing an under-representation, with the highest being in Malta (-21%). The only exception here is Bosnia and Herzegovina (+11.13%) and the United Kingdom (+0.81%). The same situation can be observed for the middle group (ISCED3 and ISCED4) where only Spain, Portugal, Malta and Austria interviewed more respondents than expected in terms of country representativity. The last group of more educated respondents (ISCED5 to ISCED4) were over-represented in all countries. This may be related to different factors such as those with higher education being able continue working under COVID-19 restrictions (e.g., working from home instead of in an office) or an observed tendency for respondents to exaggerate education level in surveys.

As an additional analysis point, Ipsos conducted an examination of the sample profile of respondents completing the survey at the first contact attempt. If they primarily represented certain types of group then the observed sample skews can be linked to those. The analysis was carried out by selecting the completed interviews with one contact attempt and calculating the represented share of completes in certain demographic groups. For example, with a base target of 1,800, if there are 900 completes on first contact and 200 of them are females, then the result for females is 200/1800 = 11%. This is then compared with the country skew to see if there is any correlation.

Table 17: Evaluation of skew from first call completion – age

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call			Sample skew		
			Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]
EU Member States								
Austria	1779	476	2.59%	14.45%	9.72%	-3.99%	-5.50%	9.38%
Belgium	4233	1216	2.41%	15.73%	10.47%	-1.31%	-4.05%	5.18%
Bulgaria	1796	441	1.67%	16.65%	6.12%	1.86%	6.11%	-8.13%
Croatia	1800	739	3.83%	25.56%	11.67%	1.57%	0.26%	-1.83%
Cyprus	1365	488	2.20%	26.45%	6.96%	-1.19%	8.61%	-7.71%
Czechia	1990	629	2.01%	20.20%	9.30%	0.77%	2.62%	-3.39%
Denmark	1820	704	5.38%	20.38%	12.86%	-0.88%	-1.49%	2.03%
Estonia	1804	628	1.55%	20.68%	12.36%	-3.25%	3.82%	-1.01%
Finland	1903	468	1.84%	13.35%	9.35%	-4.91%	-1.20%	5.79%
France	3213	504	1.53%	8.87%	5.26%	0.20%	0.23%	-0.53%
Germany	4131	959	3.05%	13.70%	6.44%	0.88%	6.70%	-7.55%
Greece	1798	676	2.17%	25.75%	9.68%	-0.34%	3.28%	-3.00%
Hungary	1792	527	2.12%	17.91%	9.21%	-1.44%	0.67%	0.27%
Ireland	1790	551	2.57%	17.93%	10.00%	-3.94%	-4.17%	7.05%
Italy	3131	929	1.41%	16.13%	12.04%	-1.12%	-2.28%	3.12%
Latvia	1799	587	2.22%	18.79%	11.62%	-1.05%	5.88%	-4.99%
Lithuania	1871	616	1.98%	19.72%	11.12%	-1.44%	8.75%	-7.42%
Luxembourg	1363	396	1.47%	19.88%	7.63%	-1.08%	-2.60%	3.45%

			Share of completes from first call			Sample skew		
Country	Completed Interviews, validated	Completed Interviews 1 st call	Age [15-24]	Age [25-49]	Age [50-74]	Age [15-24]	Age [25-49]	Age [50-74]
Malta	1472	783	6.11%	34.04%	12.98%	-0.97%	0.85%	0.05%
Netherlands	1816	464	3.47%	12.33%	9.64%	-6.12%	-2.21%	8.34%
Poland	2900	626	1.34%	14.38%	5.79%	-2.76%	1.88%	0.41%
Portugal	1880	800	3.88%	26.76%	11.81%	0.68%	1.37%	-2.26%
Romania	1808	448	2.21%	16.21%	6.31%	4.22%	-2.30%	-1.98%
Slovenia	2631	931	3.84%	21.93%	9.58%	2.69%	0.14%	-2.87%
Slovakia	1794	670	2.51%	25.75%	9.03%	0.86%	3.13%	-4.16%
Spain	2903	631	1.48%	14.19%	6.06%	-0.66%	0.60%	-0.02%
Sweden	1826	459	1.10%	11.17%	12.54%	-6.11%	-10.33%	14.69%
Candidates and Potential Candidates (CPC)								
Albania	989	453	5.16%	28.01%	12.64%	-8.92%	-11.71%	NA
Bosnia and Herzegovina	1140	352	5.35%	20.09%	5.44%	4.46%	1.45%	-5.91%
Kosovo	1134	448	8.82%	22.66%	8.02%	11.08%	9.79%	-20.88%
Montenegro	1148	413	3.92%	25.78%	6.27%	1.36%	7.97%	-9.33%
North Macedonia	1137	465	2.73%	26.21%	11.87%	0.30%	-0.56%	0.09%
Serbia	1149	470	5.57%	25.85%	9.49%	6.97%	1.20%	-8.18%
Other Countries								
Norway	3301	803	2.27%	13.18%	8.79%	-5.88%	0.16%	5.39%
Switzerland	1224	158	0.90%	7.27%	4.74%	-7.12%	-1.02%	7.53%
United Kingdom	2134	537	2.20%	13.50%	9.23%	-5.26%	-4.12%	8.26%
Total	71764	21445	-	-	-	-	-	-

Source: Ipsos

In summary, there is no observable relationship between the first call attempt completion and the sample skew, with the isolated exceptions (i.e. Sweden and age group 50-74).

Table 18: Evaluation of skew from first call completion – Gender

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call		Sample skew	
			Male	Female	Male	Female
EU Member States						
Austria	1779	476	13.21%	13.55%	0.41%	-0.74%
Belgium	4233	1216	14.41%	14.13%	-0.78%	0.09%

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call		Sample skew	
			Male	Female	Male	Female
Bulgaria	1796	441	12.53%	11.86%	-1.61%	0.77%
Croatia	1800	739	17.22%	23.61%	-8.96%	8.46%
Cyprus	1365	488	19.85%	15.82%	1.94%	-2.01%
Czechia	1990	629	14.57%	17.04%	-7.86%	7.76%
Denmark	1820	704	19.95%	18.46%	0.56%	-1.05%
Estonia	1804	628	13.53%	21.29%	-10.53%	10.53%
Finland	1903	468	11.14%	13.45%	-2.49%	2.38%
France	3213	504	7.31%	8.25%	-1.43%	1.12%
Germany	4131	959	12.08%	10.94%	2.56%	-2.95%
Greece	1798	676	22.19%	15.41%	2.94%	-2.99%
Hungary	1792	527	14.96%	14.45%	-4.48%	4.31%
Ireland	1790	551	17.32%	13.41%	2.23%	-2.56%
Italy	3131	929	17.25%	12.36%	-0.03%	-0.06%
Latvia	1799	587	13.29%	19.29%	-6.16%	5.77%
Lithuania	1871	616	12.35%	20.47%	-7.83%	7.72%
Luxembourg	1363	396	14.75%	14.16%	-0.40%	-0.26%
Malta	1472	783	27.99%	25.20%	-7.64%	7.51%
Netherlands	1816	464	12.67%	12.67%	-0.53%	-0.02%
Poland	2900	626	10.45%	11.10%	-5.00%	4.93%
Portugal	1880	800	21.38%	21.17%	-1.47%	1.36%
Romania	1808	448	12.28%	12.44%	-5.19%	5.03%
Slovenia	2631	931	16.12%	19.27%	-6.33%	6.18%
Slovakia	1794	670	17.34%	20.01%	-7.40%	7.40%
Spain	2903	631	10.89%	10.78%	-1.74%	1.43%
Sweden	1826	459	12.60%	12.49%	-0.52%	0.35%
Candidates and Potential Candidates (CPC)						
Albania	989	453	27.81%	18.00%	7.26%	-7.36%
Bosnia and Herzegovina	1140	352	19.04%	11.84%	4.25%	-4.25%
Kosovo	1134	448	28.84%	10.67%	-6.47%	6.38%
Montenegro	1148	413	20.82%	15.16%	0.24%	-0.24%
North Macedonia	1137	465	24.10%	15.74%	-1.49%	-1.15%
Serbia	1149	470	20.80%	19.84%	-3.02%	2.50%

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call		Sample skew	
			Male	Female	Male	Female
Other Countries						
Norway	3301	803	12.63%	11.66%	0.17%	-0.29%
Switzerland	1224	158	7.43%	5.47%	-0.14%	0.14%
United Kingdom	2134	537	13.26%	11.81%	2.16%	-2.53%
Total	71764	21445	-	-	-	-

Source: Ipsos

Here, there is no overall tendency of a relationship between the first call attempt completion and gender sample skew, with isolated cases of a relationship between certain groups and over-representation.

Table 19: Evaluation of skew from first call completion – Education Level

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call			Sample skew		
			EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8
EU Member States								
Austria	1779	476	1.74%	15.35%	9.50%	-6.20%	4.98%	0.43%
Belgium	4233	1216	3.21%	9.59%	15.71%	-4.27%	-7.53%	11.21%
Bulgaria	1796	441	0.78%	9.86%	13.92%	-9.20%	-17.66%	26.58%
Croatia	1800	739	1.00%	20.06%	19.83%	-6.44%	-14.25%	20.30%
Cyprus	1365	488	1.47%	7.11%	27.11%	-11.40%	-16.77%	28.10%
Czechia	1990	629	0.85%	18.59%	12.16%	-1.52%	-16.70%	18.12%
Denmark	1820	704	4.18%	11.37%	22.64%	-9.33%	-12.32%	20.27%
Estonia	1804	628	2.16%	13.08%	19.51%	-1.59%	-8.98%	10.51%
Finland	1903	468	0.68%	8.36%	15.55%	-6.06%	-12.76%	18.77%
France	3213	504	0.65%	4.05%	10.92%	-11.14%	-17.74%	28.60%
Germany	4131	959	2.54%	10.51%	10.07%	-1.38%	-12.59%	13.65%
Greece	1798	676	2.34%	8.34%	26.47%	-12.77%	-24.30%	36.18%
Hungary	1792	527	0.95%	11.83%	16.57%	-8.17%	-24.44%	32.48%
Ireland	1790	551	1.12%	7.71%	21.79%	-8.37%	-14.49%	22.41%
Italy	3131	929	3.74%	13.64%	12.26%	-18.71%	-1.35%	19.80%
Latvia	1799	587	1.11%	12.34%	19.07%	-4.32%	-16.31%	20.07%
Lithuania	1871	616	0.05%	7.32%	25.39%	-2.87%	-29.17%	31.71%
Luxembourg	1363	396	3.23%	9.61%	14.75%	-6.19%	-1.11%	4.44%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed Interviews, validated	Completed Interviews 1 st call	Share of completes from first call			Sample skew		
			EDU_0_2	EDU_3_4	EDU_5_8	EDU_0_2	EDU_3_4	EDU_5_8
Malta	1472	783	8.36%	21.06%	22.96%	-21.46%	6.26%	14.12%
Netherlands	1816	464	3.63%	9.09%	12.56%	-8.12%	-6.34%	13.31%
Poland	2900	626	0.14%	6.83%	14.59%	-4.09%	-28.97%	32.78%
Portugal	1880	800	9.10%	16.60%	16.70%	-19.94%	7.28%	12.34%
Romania	1808	448	2.54%	10.62%	11.56%	-10.37%	-17.12%	27.36%
Slovenia	2631	931	1.75%	15.05%	18.43%	-4.10%	-12.81%	16.68%
Slovakia	1794	670	0.39%	15.55%	21.35%	-3.29%	-23.86%	27.05%
Spain	2903	631	2.76%	8.54%	10.44%	-20.04%	13.74%	5.95%
Sweden	1826	459	1.37%	8.87%	14.62%	-7.45%	-7.20%	13.55%
Candidates and Potential Candidates (CPC)								
Albania	989	453	11.02%	15.27%	19.51%	NA	NA	NA
Bosnia and Herzegovina	1140	352	6.32%	12.54%	11.93%	11.13%	-28.26%	16.96%
Kosovo	1134	448	4.76%	17.20%	17.46%	-3.69%	-12.18%	15.69%
Montenegro	1148	413	1.05%	16.20%	18.73%	-5.07%	-19.15%	23.97%
North Macedonia	1137	465	5.98%	15.74%	19.00%	-4.05%	-19.20%	22.90%
Serbia	1149	470	1.39%	19.84%	19.67%	-12.99%	-9.96%	22.85%
Other Countries								
Norway	3301	803	0.88%	6.30%	17.12%	-12.90%	-15.57%	28.32%
Switzerland	1224	158	0.65%	4.58%	7.60%	-5.83%	-9.52%	14.70%
United Kingdom	2134	537	4.22%	4.55%	16.03%	0.81%	-24.51%	21.12%
Total	71764	21445	-	-	-	-	-	-

Source: Ipsos

The average results show that at project level the first contact attempt was successful for 2.73% of the people in ISCED0 to ISCED2, 11.75% for people in ISCED3 and 4 and for 16.76% of people in ISCED5 to 8. In Cyprus, the highest share of ISCED5 to ISCED8 completes was on the first contact attempt (27.11%), followed by Greece (26.47%) and Lithuania (25.39%). The highest share of first contact completes from ISCED0 to 2 was recorded in Albania (11.02%), followed by Portugal (9.10%) and Bosnia and Herzegovina (6.32%).

Weighting

Following the completion of the data editing and validation process, the valid complete cases were weighted to external reference statistics.

The principal purpose of the weighting was to attempt to remove non-response bias. If the non-respondents had a systematically different profile than respondents, there is potential risk in that survey estimates would be biased. The bias being defined as the difference between an estimate of a statistic from the sample and the statistic if the whole sample had responded to the survey.

This potential impact of non-response bias increases with the proportion of non-response. For a linear statistic such as mean or total this can be expressed as the product of the response rate (RR) and the difference in the statistic between the respondents (R) and non-respondents (NR).

$$\text{Bias} = \text{RR} (R - \text{NR})$$

Given that in the EWCTS 2021, the overall the response rate was 5%, in other words that 95% of the gross sample did not respond and is not represented in the net sample, the potential size of non-response bias is quite high.

The general approach to weighting used corresponded to the approach described in the weighting strategy and to best practice. The following sources were consulted:

- Lohr, S.L. (2009) Sampling: Design and Analysis, 2nd Edition. Pacific Grove: Duxbury Press
- Sarndal, C.E., Swensson, B. and Wretman, J. (1991) Model Assisted Survey Sampling. New York: Springer
- Sarndal, C.E, Lundstrom, S. (2005) Estimation in Surveys with Nonresponse. Wiley
- Groves, Biemer, Lyberg, Massey, Nicholls & Waksberg (1989) Telephone Survey Methodology. Wiley
- Eurostat (2017) Handbook on Methodology of Modern Business Statistics (Memobust).
- United Nations. (2008). Designing household survey samples: Practical guidelines. New York: United Nations.

The weighting process was divided into a number of successive steps:

- identification of variables to use in weighting
- selection of complete cases, cleaning and recoding of survey auxiliary variables needed for weighting
- obtaining references statistics (population variables), cleaning and recoding
- calculation of design weights
- calibration of survey auxiliary variables to population variables
- checking and analysis of the weights

Identification of weighting variables

Eurofound began with identifying the variables in the survey dataset which would be used in the weighting, known as auxiliary variables. Each auxiliary variable (in the survey data) must have a corresponding population variable in reference statistics (also referred to as population totals).

The list of variables that could be used were found by comparing the survey variables with the available reference statistics and identifying those which in principle should be comparable.

Eurofound further categorised these variables into a minimum and additional sets of variables. The minimum variables were those which are most straightforward, and which Eurofound included for weighting in previous EWCS surveys. The additional variables were those which should in principle reflect the same concepts in both sources but may not be as comparable due to differences in definitions – Eurofound planned to use these as monitoring indicators.

<u>Minimum set (used in weighting)</u>	<u>Additional variables (used as monitoring indicators)</u>
<ul style="list-style-type: none"> • Age and sex • Region • Occupation • Economic sector 	<ul style="list-style-type: none"> • Employment status (employee or self-employed) • Urbanity (urban, rural or intermediate) • European socio-economic group • Seniority in job (number of years) • Hours worked per week • Having a supervisory role (for employees) • Having employees (for self-employed) • Size of the workplace (number of workers at workplace) • Number of jobs held • Educational attainment • Household composition (number of adults, number of adults working, presence of children, number of children and age of the children) • Vaccination status (no LFS equivalent) • Ability to make ends meet easily (no LFS equivalent) • Difficult to achieve work-life balance (no LFS equivalent) • Experience of discrimination (no LFS equivalent)

Selection of complete cases to weight

Before beginning the weighting, it was necessary to determine the exact set of complete cases which would be used and therefore receive weights.

To receive a weight, a case must have a complete set of auxiliary variables – this is because missing, don't know or refused answers would not match to any total in reference statistics.

Some valid cases needed to be excluded which did not have values for the minimum set of auxiliary variables. In other words, Eurofound removed cases which did not have complete information for age, gender, region, occupation or sector.

Incomplete information could include responses that were entirely missing (e.g. a refusal to provide detailed geographic information), or insufficient for the level of detail required (e.g. verbatim answers which were too ambiguous to code at the 1st digit level of ISCO or NACE).

After excluding these cases, the number of complete cases was 71,758, broken down by country as follows:

Table 16: Sample sizes used in the weighting

Country	Number of cases
EU Member States	
Austria	1779
Belgium	4233
Bulgaria	1796
Croatia	1800
Cyprus	1365
Czechia	1990
Denmark	1820
Estonia	1804
Finland	1903
France	3213
Germany	4131
Greece	1798
Hungary	1792
Ireland	1785
Italy	3131
Latvia	1799
Lithuania	1871
Luxembourg	1363
Malta	1472
Netherlands	1816
Poland	2900
Portugal	1880
Romania	1808
Slovakia	1794
Slovenia	2631
Spain	2903
Sweden	1826
Candidate and Potential Candidate (CPC) Countries	
Albania	989
Bosnia & Herzegovina	1140
Kosovo	1134
Montenegro	1148
North Macedonia	1137
Serbia	1149

Country	Number of cases
Other countries	
Norway	3300
Switzerland	1224
United Kingdom	2134

Preparation (cleaning and recoding) of auxiliary variables to match population variables

Where necessary, the auxiliary variables were recoded to correspond with the reference statistics. For the minimum set of auxiliary variables, these were recoded as follows.

Table 17: Weighting categories

Age and sex	Male or Female by different age bands (in 15 year bands)	M16-29, F16-29, M30-44, F30-44, M45-59, F45-59, M60+, F60+
Region	NUTS1, NUTS2, NUTS3 or below as appropriate depending on country	Country-specific
Occupation	The 1 st digit of the ISCO-08 code	Managers, Professionals, Technicians and Armed Forces, Clerks, Service and Sales, Skilled Agricultural, Skilled Crafts, Plant and Machine Operators, Elementary Occupations (numbered 1 to 9, 0 included with 3)
Sector	The 1 st level (corresponding to letters) of the NACE code	A-B, C, D-E, F, G, H, I, J, K-L, M, N, O, P, R, S-U

This was used as the general scheme and wherever possible countries were coded accordingly. Any changes required are noted in the report.

For the age and sex variables, a small number of cases declined to give their exact age, but answered in age bands, or defined their sex in a different way (neither male nor female). These cases would not correspond exactly to any reference statistics. Rather than dropping the cases they were recoded. When detailed age was not available, a temporary variable was created by randomly choosing a year within the range given. For 'other' sex, they were recoded to male.

These temporarily recoded variables were only used for the purpose of weighting and therefore only affect the weights and would not appear in the analysis or dataset. For example, estimates by sex in analysis and data would be based on the real answer given for sex, and not on the temporary variable.

Given the very small number of cases affected, the overall impact on the weights and on weighted estimates was insignificant.

Preparation (obtaining, cleaning and recoding) of population variables

Reference statistics corresponding to the chosen auxiliary variables were requested from national statistical institutes. The reference statistics were based on the Labour Force Surveys (LFS).

For the EU Member States, all of the statistics were obtained from Eurostat. Where available they were downloaded from the Eurostat database²¹ and where they were not publicly available or not in the structure required (different age bands, or lower geographic levels) Eurofound obtained these via a special request to Eurostat.

The Labour Force reference statistics used for weighting were from the 2021 annual statistics in all countries except in Kosovo – at the time of analysis the 2021 were not available – therefore for Kosovo 2020 statistics were used.

On receiving the data, Eurofound cleaned and recoded the reference statistics to match the auxiliary variables.

Occasionally estimates were not available at the requested level of detail for smaller cells – in this case cells were merged. For some variables in some countries there was non-response (where the amount of non-response was relatively small, i.e. less than 3%) then this non-response was assumed to be at random, and the non-respondents were reallocated proportionally between valid responses.

Statistics for non-EU countries were also available from Eurostat, for some, but not all variables. Most of North Macedonia's, but only some of Serbia and Montenegro's variables were included in the Eurostat data.

Albania, Bosnia and Kosovo were not covered by Eurostat and were requested directly from the relevant national statistical institutes. Where data was incomplete, for North Macedonia, Serbia and Montenegro, it was also requested.

Some variables in some of the countries could not be coded in exactly the same way as for EU countries. This is a matter of the level of detail available rather than being unavailable. The data were recoded to be as similar as possible, for example aiming to still have younger, middle aged and older groups, even if the bands did not exactly correspond. In addition, no regional breakdown was available for Bosnia & Herzegovina at the time of writing.

UK statistics were no longer available from Eurostat from Quarter 4 of 2020 – the 2021 statistics were downloaded via queries on the official NOMIS website²², or from reports published on the ONS website.

As a result of Brexit, the UK Labour Force Survey variables are no longer harmonised with Eurostat variables. In the publicly accessible data, age bands are different than the EU age bands. Economic sector groups correspond to UK SIC rather than NACE – fortunately at the first level this did not matter, as both correspond to the ISIC top level.

A more difficult issue was that occupation is no longer reported by ISIC, but instead uses the UK SOC system. This appeared to be broadly similar to ISIC at the first digit, with groups numbered from 1 to 9, but there are many differences – some groups are nearly the same, but others are composed of quite different jobs. Using a correspondence table prepared by the Warwick University Institute of

²¹

<https://ec.europa.eu/eurostat/databrowser/explore/all/popul?lang=en&subtheme=labour.employ&display=list&sort=category>

²² <https://www.nomisweb.co.uk/>

Employment Research ²³, Eurofound manually recoded the UK's 4-digit ISIC survey codes into 1st level SOC codes. For some codes there was no one-to-one match, or the job does not exist in the UK system, meaning that a subjective judgment and manual code allocation needed to be made. For the UK it appears the situation with divergent classifications will continue for the foreseeable future.

Calculation of design weights

The design weight for each case was calculated as the inverse of the probability of selection.

Given that the survey design was random digit dialling with no clusters or strata (within countries), the calculation was straightforward and follows the design weight for a simple random sample. All probabilities of selection (of a telephone number) are equal within a country. Probabilities of selection for different countries are proportional to the relative sample sizes and relative population sizes in each country.

The initial design weight for each case is:

$$w_{initial} = \frac{N \text{ (number of employed persons)}}{n \text{ (gross sample size)}}$$

This is calculated for each country separately.

Two further adjustments are made to the design weights.

Adjustment for the number of mobile phones

Although every telephone number has an equal chance of selection, some individuals have more than one telephone number. These people would therefore have multiple chances of selection and would be over-represented in the sample. A correction needs to be made to the design weight to account for the number of mobile phones. The number of mobile phones is asked at the end of the questionnaire.

The formula for the adjustment factor is:

$$\text{adjustment factor (phones)} = (\min(\text{number of mobile phones}, 3))^{-1}$$

This factor is multiplied by the initial design weight to obtain the adjusted design weight.

The adjustment factor was capped at 4 mobile phones. There were few respondents with more than 4 mobile phones.

As a result of this adjustment, within a country the possible design weights can vary at most by a factor of 4, with all cases having one of 4 different values – the majority of the sample will have the same design weight corresponding to having a single mobile phone.

$$w_{gross} = w_{initial} * \text{adjustment factor (phones)}$$

²³

<https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2020/classifyingthestandardoccupationalclassification2020soc2020totheinternationalstandardclassificationofoccupationsisco08>

Rescaling weights of the net sample

Design weights have been calculated for every case in the gross sample (including non-respondents) – however only the weights of respondents were used for estimation, and for calibration it is desirable for the weights to add up to the same population totals before and after the non-response adjustment.

A scaling factor was applied to each gross design weight:

$$\text{adjustment factor (scaling)} = \frac{N \text{ (number of employed persons)}}{\sum w_{gross}}$$

The scaling factor was calculated and applied for each country separately.

It does not affect the distribution of weights in any country – the ratio between any two cases is unchanged.

The design weight was then multiplied by this additional factor to get the final design weight.

$$w_{design} = w_{gross} * \text{adjustment factor (scaling)}$$

Design weights in Sweden

There was one exception where the design weight could be calculated differently. In Sweden the sample was drawn from the person register and the sample allocation was stratified by age and gender. It would be possible to calculate design weights for each stratum. It is unlikely the design weights would be different, and any effect would be marginal.

For sake of simplicity, the design weight in Sweden was calculated the same way as for the other countries, with the exception of the adjustment for the number of mobile phones – the sampling frame in Sweden was based on the individuals rather than telephone numbers.

Non-response weighting adjustments approach

The design weights were adjusted to account for differential non-response. In social surveys it is expected that some groups are more likely to respond (whether easier to reach or more likely to cooperate) – for example younger or older people, or urban or rural residents. These cases will be over-represented in the sample, with other cases being under-represented.

Different techniques to account for non-response are possible including cell weighting, iterative proportional fitting (also known as raking), or calibration methods. The latter was chosen which allows many variables to be adjusted at the same time. An overview of these methods can be found in Eurostat's Handbook on Methodology of Modern Business Statistics (memobust)²⁴. An overview of the approaches used for survey estimation can be found in Davies²⁵.

²⁴ https://ec.europa.eu/eurostat/cros/content/calibration-method_en

²⁵ <https://orca.cardiff.ac.uk/109727/>

The software used was Calif²⁶ tool developed in R by the Statistical Office of the Slovak Republic. It includes an accessible graphical user interface, low system requirements, and clear documentation. Version 4.0 of this software was used.

For the weighting, Eurofound chose the linear bounded method and the calib solver. The linear method uses what is known as the quadratic distance function, proposed by Deville and Sarndal. It appears to be the default method in many statistical programs (Davies, 2018), and used by several National Statistical Institutes including in the UK and Canada.

Bounds were set where needed – this avoided the possibility of negative weights which are not intuitive to use, while simultaneously serving the purpose of subsequent ‘trimming’, which is used to avoid excessive variation in the weights, which increase standard errors of estimates. Limiting the weights by bounding is preferable to trimming, as it can be done in a single step, weighted estimates remain consistent with the population totals, and manual adjustments to rescale weights are not needed.

The bounds are set on the changes in the design weights rather than on the weights themselves. These changes in weights, which are defined as the ratio of the calibrated weights and the design weights, are known as g-weights. A g-weight is calculated for each case, with a g-weight larger than 1 indicating that it was under-represented and received an upward adjustment, and g-weights below 1 indicating a downward adjustment in the weights. A g-weight of exactly 1 signifies that the weight was completely unchanged.

As a default rule, the g-weights were limited to a minimum of 0.15 and at most 6. The bounds were loosened in some countries where there was a greater degree of bias (and therefore larger changes in the weights were necessary), where the auxiliary and population variables did not converge, where the Average Difference Feasibility was significantly reduced, or where the histogram showed a large number of identical weights concentrated at the bounds. The lowest g-weight assigned in any country was 0.05, but was usually 0.15.

Respondents were weighted separately on a country-by-country basis.

The process of weighting is a trade-off between reducing bias (increasing accuracy of estimates) while avoiding unnecessarily increasing standard errors (which decrease precision of estimates). This was assessed by checking the convergence of totals, examining histograms and box-plots of the g-weights and calibrated weights, the Average Difference Feasibility statistic, and the variance of the weights. Unexpected results were investigated in more depth.

Small cell sizes were avoided, in particular if they were associated with high g-weights. These cells were merged with other small cells which could be considered a priori to be most similar in their characteristics. Most often adjacent age groups were merged, occupations 6 and 7 (described as skilled agricultural workers and artisans), or sectors A-B with D-E – primary industries and utilities, such as water and power supply.

Countries were weighted in steps, with a few variables added first – the calibration was then run and the results examined, before any further variables were added. Age and sex categories were added to the weighting model first, followed by region, and occupation and sector in the final and third step.

²⁶ <https://github.com/SO-SR/Calif>

Deviations from the standard weighting variables are listed below.

The first table shows the calibration bounds (lower and upper bounds, if set), and notes on where any changes to the default coding of age-sex, occupation and sectors needed to be made.

Table 18: Calibration bounds and collapsed weighting categories

Country	Calibration bounds	Age-sex notes	Occupation notes	Sector notes
EU Member States				
Austria	0.2 – 5			
Belgium	0.1 – 5			
Bulgaria	0.15 – 5			
Croatia	0.15 – 5			
Cyprus	0.15 – 5			
Czechia	0.15 – 5			
Denmark	0.1 – 5			
Estonia	0.15 – 5			
Finland	0.2 – 5			
France	0.1 – 5			
Germany	0.1 – 5			
Greece	0.08 – 7			
Hungary	0.1 – 5			
Ireland	0.2 – 5			
Italy	0.1 – 5			
Latvia	0.2 – 5			
Lithuania	0.2 – 5			
Luxembourg	0.15 – 5			
Malta	0.2 – 5		merged (6 7)	
Netherlands	0.2 – 5			
Poland	0.1 - 7		merged (6 7)	
Portugal	0.2 -5			
Romania	0.15 – 6		merged (6 7)	
Slovakia	0.05 – 5		merged (6 7)	merged (A-B D-E) & (R S-U)
Slovenia	0.2 – 5			
Spain	0.15 – 5			
Sweden	0.2 – 5			
Candidate and Potential Candidate (CPC) Countries				
Albania	0.08 – 5	merged (M60+ F60+)		merged (O P)
Bosnia & Herzegovina	0.05 - 5			

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Calibration bounds	Age-sex notes	Occupation notes	Sector notes
Kosovo	0.08 – 5	merged (M60+ F60+)		merged (R SU)
Montenegro	0.08 - 6	merged (M60+ F60+)	merged (6 7)	merged (R SU)
North Macedonia	0.08 – 5			merged (R SU)
Serbia	0.08 – 7	merged (M60+/F60+)	merged (6 7)	merged (R SU)
Other Countries				
Norway	0.1 - 5			
Switzerland	0.15 – 5		merged (6 7)	merged (A-B D-E) & (R S-U)
United Kingdom	0.15 – 5		SOC codes used	merged (R S-U)

The second table lists the level of regional classification used and any adjustments (such as the merging of two regions) that were made. These adjustments were made when there was a small sample number of respondents in a region, which could inflate variance of the weights or render calibration more difficult. The approach chosen for merging regions was to choose adjacent regions which were expected to have similar social and economic characteristics.

Table 19: Region weighting categories

Country	Region notes	Level of regional classification (NUTS-equivalent)
EU Member States		
Austria		NUTS2
Belgium		NUTS2
Bulgaria	Split BG411 (Sofia City)	NUTS2
Croatia		NUTS2
Cyprus		LAU/NUTS4
Czechia		NUTS2
Denmark		NUTS2
Estonia	merged EE006, EE007 (Kesk-Eesti and Kirde-Eesti)	NUTS3
Finland	merged FI1C, FI20 (Aland Islands with West Finland)	NUTS3
France	merged FRL, FRM (Corsica with Provence-Alpes-Cote d'Azur), FR1 split in 3	NUTS1
Germany	DE1 split (Stuttgart), DE2 split (Bayern), DEA split (Koln, Dusseldorf)	NUTS1
Greece	merged all EL6 (Central Greece), merged EL51, EL53, EL54 (all Northern Greece, except Central Macedonia), merged EL41, EL42 (North + South Aegean)	NUTS2
Hungary		NUTS2
Ireland		NUTS3

Country	Region notes	Level of regional classification (NUTS-equivalent)
Italy	NUTS3: Province Milano, Torino, Napoli, Roma. NUTS2: Veneto, Emilia-Romagna, NUTS1: all remaining	NUTS1
Latvia		NUTS3
Lithuania		NUTS3
Luxembourg	5 areas: Diekirch District, Grevenmacher District, Capellen-Mersch, Esch-sur-Alzette, Luxembourg City	LAU/NUTS4
Malta	6 districts	LAU/NUTS4
Netherlands		NUTS2
Poland	Split PL91 (Warsaw)	NUTS1
Portugal		NUTS2
Romania		NUTS2
Slovakia		NUTS3
Slovenia		NUTS3
Spain	Split ES511 (Barcelona)	NUTS1
Sweden		NUTS2
Candidate and Potential Candidate (CPC) Countries		
Albania	Tirana, Durres, North + Elbasan, South	NUTS2
Bosnia & Herzegovina	3 entities	no subdivision
Kosovo	7 districts of Kosovo	national classification
Montenegro	3 statistical regions: Coastal, Central, Northern regions	national classification
North Macedonia		NUTS3
Serbia		NUTS2
Other Countries		
Switzerland		NUTS2
Norway		NUTS2
United Kingdom	12 Government Office Regions/International Territorial Levels	national classification/former NUTS1

The change in Estonia was necessary because of recent small changes in the boundaries at NUTS3 level in the 2021 NUTS classification. The survey used the 2021 classification, but the LFS used the 2016 classification.

The NUTS classification was not used for some countries – in Cyprus, Luxembourg, Malta, Montenegro and Kosovo NUTS regions have either not been defined, or the country is too small, the whole country belonging to the same NUTS3 region. In these countries lower level administrative geographies were used, equivalent to LAU (former NUTS level 4). The UK no longer uses the NUTS system, but still publishes estimates for a geography, called the ‘International Territorial Level’ which is identical to the previously used NUTS1.

For a few countries some regions were further sub-divided to distinguish between the largest cities which are believed to have different profiles and response rates. For example in Italy where the NUTS1 level is very broad the provinces containing the 4 largest cities were distinguished at NUTS3 level.

Quality assurance and analysis of weights

Summary statistics of the calibrated weights

The first check was on the distribution of the calibrated weights by examining summary statistics. Summary statistics of the calibrated weights showed considerable variance and positive skew – indicating that there is a very wide range in the weights, and that most of the weights are small and considerably below the overall mean.

Table 20: Calibrated weights: summary statistics

Count	71,758	Max	51,077.2	Skew	2.77
Sum	244,804,936	3 rd Quartile	4,258.4	Kurtosis	10.91
Mean	3,411.4	Median	1,517.6		
Standard deviation	4,732.9	1 st Quartile	533.5		
Coefficient of variation	139%	Min	9.2		

However, a large part of the variance and skew of the weights would be caused by the design of the survey - by the large differences between the sampling rates and sizes in the countries covered (as an example Germany and Malta at the two extremes). This factor can be taken out either by examining the weights for each country separately or by making an appropriate adjustment for the country sizes.

An adjusted relative weight can be calculated by dividing the weight of each case by the mean weight in the country it belongs to.

$$W_{adjusted,calib} = W_{calib} * (\overline{W_{calib}})^{-1}$$

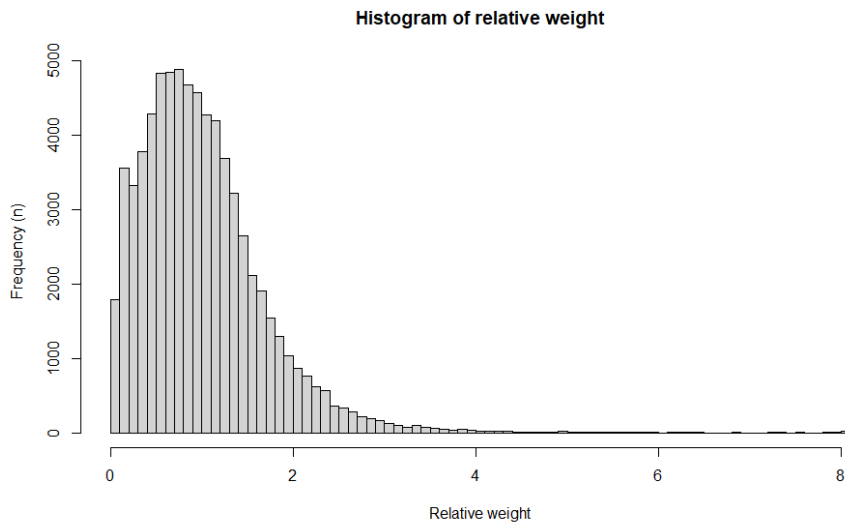
After this adjustment for country, the summary statistics are as follows:

Table 21: Scaled calibrated weights: summary statistics

Count	71,758	Max	8.06	Skew	1.75
Sum	71,758	3 rd Quartile	1.33	Kurtosis	8.04
Mean	1	Median	0.90		
Standard deviation	0.67	1 st Quartile	0.53		
Coefficient of variation	67%	Min	0.03		

By definition, the average weight is 1, and the sum of the weights matches the number of cases. The coefficient of variation is nearly halved, and the skew and kurtosis reduced. The range of the weights is from 0.03 to 8.06 times the mean weight, with an interquartile range of 0.53 to 1.33.

The distribution of these adjusted weights can be visualised as a histogram:

Figure 1: Distribution of scaled weights

Histograms of the unadjusted weights for each country can be found in the appendix of this report (Figure 2: Histograms of the weights by country)

Checks on total weights

The weights were applied to the auxiliary variables and compared with the population totals. A discrepancy would indicate the calibration had not worked at its primary purpose, convergence or consistency of the weighting variables with the reference statistics. No significant deviations of more than a few percentage points were found in any country, confirming that calibration had worked as intended.

Several additional quality assurance checks were done on the weights, the full details of which can be found in the Sampling and Weighting Report, along with summary statistics and the design effects.

4. Outcome Codes and Fieldwork Rules

This chapter examines the development, evolution and distribution of outcomes during fieldwork. It also examines the fieldwork rules and levels of adherence to them.

Initial structure and evolution of outcome codes

The outcome structure for the CATI fieldwork was pre-defined by Ipsos and distributed to all local teams. It included the main interviewer selected outcome codes, which are presented in the tables below. Outcomes have been generally divided in two groups – final and interim. Final outcomes indicated that the record could not be dialled again (i.e., completion, refusal). Interim outcomes indicated possible follow up calls until a final outcome is obtained.

Based on the type of fieldwork management software and hardware, countries have been split in to two groups:

- Nine²⁷ agencies with fieldwork managed by an Ipsos office, using Ipsos-owned dialler²⁸ hardware: for brevity these will be called “CATI Direct countries”. For these countries, the data collection is undertaken end to end in the Dimensions data collection server, which is part of the Ipsos IT infrastructure. Outcome definitions were pre-loaded into the dialling system by the CCT.
- All other countries used dialler hardware external to Ipsos: for brevity these will be called “CATI Link countries”. For these countries the data collection was split between the local and Ipsos owned IT infrastructure. Here, the only way to store data on Ipsos servers was the usage of web links to access the survey. For these countries, the local outcome code definitions were adapted to correspond with Ipsos’ and the project requirements.

During the actual fieldwork, outcomes were added that corresponded to the needs of the fieldwork. Several agencies used local outcomes, which were then recoded into the Ipsos outcome list.

Table 27: initial structure of outcome codes

Outcome code	Outcome Label	Outcome Description	Shown to interviewer	Final/ Interim
1	Completed	Completed interview.	N	F
2	Stopped	Stopped/Interrupted interview.	Y	I
8	Abandoned	Respondent refused to complete interview and terminated the call.	Y	F
11	Appointment	Respondent made an appointment.	Y	I
12	No Answer	No answer.	Y	I
13	Answering Machine	Answered by an answering machine.	Y	I

²⁷ Bulgaria, Spain, Norway, Sweden, United Kingdom, Slovenia, Croatia, Romania and France.

²⁸ Dialler – an electronic device that is connected to a telephone line to monitor the dialled numbers and displays numbers for dialling.

Outcome code	Outcome Label	Outcome Description	Shown to interviewer	Final/ Interim
14	Busy	Respondent's telephone is busy.	Y	I
16	Reject	Call rejected. This may be a mobile phone set to "Do not ring", or a home telephone that requires the caller to identify themselves before it will ring.	Y	I
17	Network Busy	Call could not be made because the telephone network was busy. The first appointment time is set for one minute's time. Thereafter, the appointment time is based on the standard "No Answer" delay.	N	I
18	FastBusy	Call resulted in an in-band fast busy (reorder) tone. This is used for network congestion. The record is scheduled to be recalled in one minute's time. If the same result is obtained on that call, the number is assumed to be unallocated and is moved to the 'unusable' queue. The number of call attempts is not incremented because the record has not been called.	N	I
19	DiallerBusy	The call could not be made because the auto-dialler was busy.	N	I
21	Fax	Fax answered.	Y	F
22	Wrong Number	Telephone number is incorrect for respondent.	Y	F
25	BusinessNumber	Telephone number invalid.	Y	F
31	Refused	Refused to participate.	Y	F
32	LanguageBarrier	The interviewer does not speak the respondent's language and the respondent's language is not a survey language.	Y	F
33	LanguageRecall	The interviewer does not speak the respondent's language, which is available in the country. An appointment with an appropriately qualified interviewer is allocated (with a request to call the individual as soon as possible).	Y	I
34	RejectedByReviewer	Interview marked as invalid by a quality control representative.	N	F
153	Communication Difficulty		Y	F
164	Soft Appointment	Unspecified appointment. Respondent requests a call back without explicitly stating a time for this.	Y	I

Outcome codes introduced during fieldwork

The outcome codes list was expanded during fieldwork, to increase the level of detail captured. Newly introduced outcomes, by type of introduction, are described in the below table.

Table 28: Newly introduced outcome codes

Outcome	Description
[45] – Not assigned to any outcome	Interim outcome, used to indicate cases for which there is insufficient information
[46] – Already interviewed	Specific outcome for Poland, indicating previous interviewing of the same respondent
[47] – Not eligible for survey (specific reason missing)	Interim outcome, used to indicate cases for which currently there is insufficient information in the local call history files
[122] – UserDefTerm210	Deceased
[123] – UserDefTerm171	No time/interview too long
[124] – UserDefTerm172	Not interested
[125] – UserDefTerm173	Up-front refusal, used in Estonia

Source: Ipsos

Outcome codes – uniformity across countries

For the EWCTS 2021 pilot and main stage, the CCT defined an outcome code list that could be used throughout the survey. Due to the variety of local systems involved in the project, Ipsos found that there was a wide variety in the outcome codes used or available for the local teams, which had the same reporting meaning. This is illustrated in Table 28, where all interim and final outcome codes per country are accounted for. Overall, the local teams used 52 outcome codes for the interim/final groups, with up to 36 used in a single country.

Table 29: Outcome code difference in usage across countries

Country	Data Collection method	Outcomes used overall	Final outcome used	Interim outcome used
EU Member States				
Austria	CATI Links	16	9	7
Belgium	CATI Links	15	11	4
Bulgaria	CATI Direct	30	19	11
Croatia	CATI Direct	29	18	11
Cyprus	CATI Links	22	15	7
Czechia	CATI Links	11	7	4
Denmark	CATI Links	29	20	9
Estonia	CATI Links	29	20	9
Finland	CATI Links	25	16	9
France	CATI Direct	34	20	14
Germany	CATI Links	17	10	7
Greece	CATI Links	20	13	7
Hungary	CATI Links	21	14	7
Ireland	CATI Direct	33	20	13

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Data Collection method	Outcomes used overall	Final outcome used	Interim outcome used
Italy	CATI Direct	36	20	16
Latvia	CATI Links	17	11	6
Lithuania	CATI Links	24	16	8
Luxembourg	CATI Links	16	11	5
Malta	CATI Links	18	11	7
Netherlands	CATI Links	17	10	7
Poland	CATI Links	20	15	5
Portugal	CATI Links	18	11	7
Romania	CATI Direct	29	19	10
Slovenia	CATI Direct	28	18	10
Slovakia	CATI Links	11	7	4
Spain	CATI Direct	35	19	16
Sweden	CATI Direct	34	20	14
Candidates and Potential Candidates (CPC)				
Albania	CATI Links	12	8	4
Bosnia and Herzegovina	CATI Links	11	7	4
Kosovo	CATI Links	12	8	4
Montenegro	CATI Links	12	8	4
North Macedonia	CATI Links	12	8	4
Serbia	CATI Links	12	8	4
Other Countries				
Norway	CATI Direct	33	20	13
Switzerland	CATI Links	19	11	8
United Kingdom	CATI Direct	35	20	15

Source: Ipsos

Outcome reporting grouping

Following the pilot fieldwork, the Ipsos CCT and Eurofound agreed on general grouping principles for the outcome codes, effectively recoding the outcome results into AAPOR²⁹ disposition groups. Whilst fieldwork progressed, Eurofound and the Ipsos CCT once again gathered and reviewed the results of the recoding and the rationale for it. Through these discussions the Ipsos CCT proposed certain changes to the reporting groups, allowing distinction for the up-front refusals from the UO³⁰ AAAPOR group. Changes enacted allowed for improved cross country comparisons and a clear distinction of call outcome scenarios, which were previously hidden and clustered into different outcome groups.

²⁹ AAPOR – American Association for Public Opinion Research - <https://www.aapor.org/>

³⁰ Unknown/refusal prior eligibility confirmation

The table below shows the final recoding rules for the AAPOR reporting groups.

Table 30: Revised outcome groupings for reporting

Outcome	Description	Eligibility Confirmed	AAPOR Reporting Group
SoftAppointment	Unspecified appointment	N/A	-
Appointment	Hard appointment	N/A	-
AnswerMachine	Unspecified appointment	N/A	-
CallbackToComplete	Unspecified appointment	N/A	-
Busy	Unspecified appointment	N/A	-
PossibleWrongNumber		No	Unallocated telephone number
Completed	Completed interview	Yes	I
(null)	Non-contacted records, (released but never used)	N/A	-
NoAnswer		N/A	NC
AnswerMachine		N/A	NC
Cancelled		N/A	NC
Busy		N/A	NC
Disconnected		N/A	Unallocated telephone Number
CommunicationDifficulty		N/A	NC
CallbackAnotherTime		N/A	NC
FastBusy		N/A	Unallocated telephone Number
NoAnswer	Blocked cases by local teams, call attempts > 1	N/A	-
Busy	Blocked cases by local teams, call attempts > 1	N/A	-
AnswerMachine	Blocked cases by local teams, call attempts > 1	N/A	-
AnswerMachine		N/A	-
NoAnswer		N/A	-
Cancelled		N/A	-
CallbackAnotherTime		N/A	-
Busy		N/A	-
NetworkBusy		N/A	Technical dialling problems
Appointment		N/A	-
CallbackToComplete		N/A	-
FastBusy		N/A	Unallocated telephone number
SoftAppointment		N/A	-

Outcome	Description	Eligibility Confirmed	AAPOR Reporting Group
QualifiedAbandoned	Respondent abandoned survey after the screening process	Yes	R – Eligible
Unknown		N/A	Unallocated telephone number
CommunicationDifficulty		N/A	-
DialerFailed		N/A	Technical dialling problems
Rejected	First rejection is counted as an open call, second rejection moves this to Queue = “UNUSABLE”	No	Refusal – unknown eligibility
Refused		Yes	Refusal – Eligible
Refused		No	Refusal – unknown eligibility
AddToDNCList	Request to not be called again	No	Refusal – unknown eligibility
AddToDNCList	Request to not be called again	Yes	Refusal – Eligible
CommunicationDifficulty		Yes	O
CommunicationDifficulty		No	UO
LanguageBarrier		No	UO
Fax		No	Unallocated telephone number
UserDefTerm204	SCR_Work termination	Yes	NE
WrongNumber		No	Unallocated telephone number
Abandoned		Yes	Refusal – Eligible
Abandoned		No	Refusal – unknown eligibility
BusinessNumber		No	NE
UserDefTerm201	Not willing to participate	No	Refusal – unknown eligibility
UserDefTerm205	Q92b termination	Yes	NE
NotAvailable		No	Refusal – unknown eligibility
QualifiedAbandoned		Yes	Refusal – Eligible
Disconnected		No	Unallocated telephone number
UserDefTerm203	SCR_Age termination	Yes	NE
Rejected	Upfront rejection to pick up the telephone	No	Refusal – unknown eligibility
UserDefTerm171	No time/interview too long	No	Refusal – unknown eligibility
UserDefTerm172	Not interested	No	Refusal – unknown eligibility

Outcome	Description	Eligibility Confirmed	AAPOR Reporting Group
UserDefTerm173	Up-front refusal	No	Refusal – unknown eligibility
UserDefTerm201	Termination on introduction screen. Not willing to participate.	Yes	Refusal – unknown eligibility
UserDefTerm205	Termination on Q92b – not specified age	Yes	UO
RejectededByReviewer			P
PossibleWrongNumber		No	NE
UnallocatedNumber		No	Unallocated telephone number
FastBusy	Possibly unallocated number	No	Unallocated telephone number
UserDefTerm209	Commuters, not living in country	No	NE

Source: Ipsos

Outcome results and country comparisons

Ipsos used a set of disposition codes for the outcomes of the calls, which were listed in the previous table. The AAPOR grouping and the results of it are displayed in the following table.

I = Complete interview

R – eligibility confirmed = Refusal and break-off (after confirming eligibility)

R – eligibility not confirmed = Refusal and break-off before confirming eligibility

NC = Non-contact, compliant with fieldwork rules

NC – Non-contact, not fully worked

P = Partial

UO = unknown / refusal prior eligibility confirmation

NE = Non-eligible

e = Estimated proportion of cases of unknown eligibility that are eligible

Formulae $e = (I + R + NC + O) / (I + R + NC + O + NE)$.

Table 31: AAPOR call outcome distribution*

Country/territory	NE	I	NC	NC – not fully worked	R – Eligibility confirmed	R – Unknown eligibility	UO	Unallocated telephone number	Not Classified	e
EU MEMBER STATES										
Austria	790	2113	51163	4757	1	44692	1317	2174	0	0.99
Belgium	6319	4400	14889	1649	0	16972	1834	4961	0	0.87
Bulgaria	2158	1810	1852	865	0	6136	229	1633	0	0.85
Croatia	4073	1804	6652	1365	0	15146	84	2669	0	0.87
Cyprus	2784	2906	7945	2900	25	19488	12103	11683	0	0.95
Czechia	2959	3052	18518	1898	1	57286	4842	1101	0	0.97
Denmark	3379	1926	35213	2105	4	13549	967	769	0	0.94
Estonia	3085	1838	41	2802	10	8854	171	536	0	0.82
Finland	16500	1957	7103	1093	18	19467	1099	477	0	0.65
France	6665	3215	21262	1029	1	10627	862	2825	0	0.85
Germany	3585	4545	198563	15920	0	158446	6778	10583	0	0.99
Greece	1490	1812	6148	5	0	14075	1206	5199	0	0.95
Hungary	2904	1804	7713	124	0	12276	750	986	0	0.89
Ireland	1901	1803	10614	2205	0	8156	435	9797	3	0.94
Italy	9783	3137	29400	2686	0	20829	997	17662	0	0.88
Latvia	9237	1811	8	1	3	21604	0	28	0	0.72
Lithuania	5685	1895	0	139	0	16604	240	24	0	0.77
Luxembourg	6371	1423	12592	11026	0	10253	548	1718	0	0.85
Malta	2189	1486	1834	366	1	7187	129	45	0	0.83
Netherlands	2591	1836	5642	1550	0	7978	654	0	0	0.87
Poland	10910	2925	48072	1445	0	49921	2	3181	0	0.91
Portugal	2861	2150	2948	1206	0	7452	215	4431	0	0.86
Romania	3198	1922	7331	2102	0	10606	113	1113	0	0.88
Slovakia	998	2332	21161	2480	1	39243	1486	1427	0	0.99

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country/territory	NE	I	NC	NC – not fully worked	R – Eligibility confirmed	R – Unknown eligibility	UO	Unallocated telephone number	Not Classified	e
Slovenia	4265	3079	7894	663	0	28820	1319	2033	0	0.91
Spain	16617	2909	36876	3195	0	19773	912	12222	0	0.82
Sweden	9918	1833	50710	2276	0	9671	1152	13550	28	0.89
CANDIDATES AND POTENTIAL CANDIDATES (CPC)										
Albania	3207	1302	1126	762	0	3061	0	1098	0	0.70
Bosnia & Herzegovina	2185	1157	2136	649	1	2851	0	358	0	0.77
North Macedonia	3142	1154	3258	645	3	10561	0	1262	0	0.84
Kosovo	3050	1176	1868	793	14	2544	0	88	0	0.68
Montenegro	5739	1157	7115	1076	0	13757	0	1029	0	0.81
Serbia	3800	1160	2909	1045	2	14274	0	1004	0	0.84
OTHER COUNTRIES										
Norway	2895	3309	23701	3023	0	18254	5659	3244	3	0.95
Switzerland	3127	1236	31720	585	10	21036	2167	183	0	0.95
United Kingdom	2926	2145	15612	4628	1	10914	300	5719	0	0.93
Total	173286	77519	701589	81058	96	752363	48570	126812	34	N/A

**Interim outcomes are not included in the calculations.*

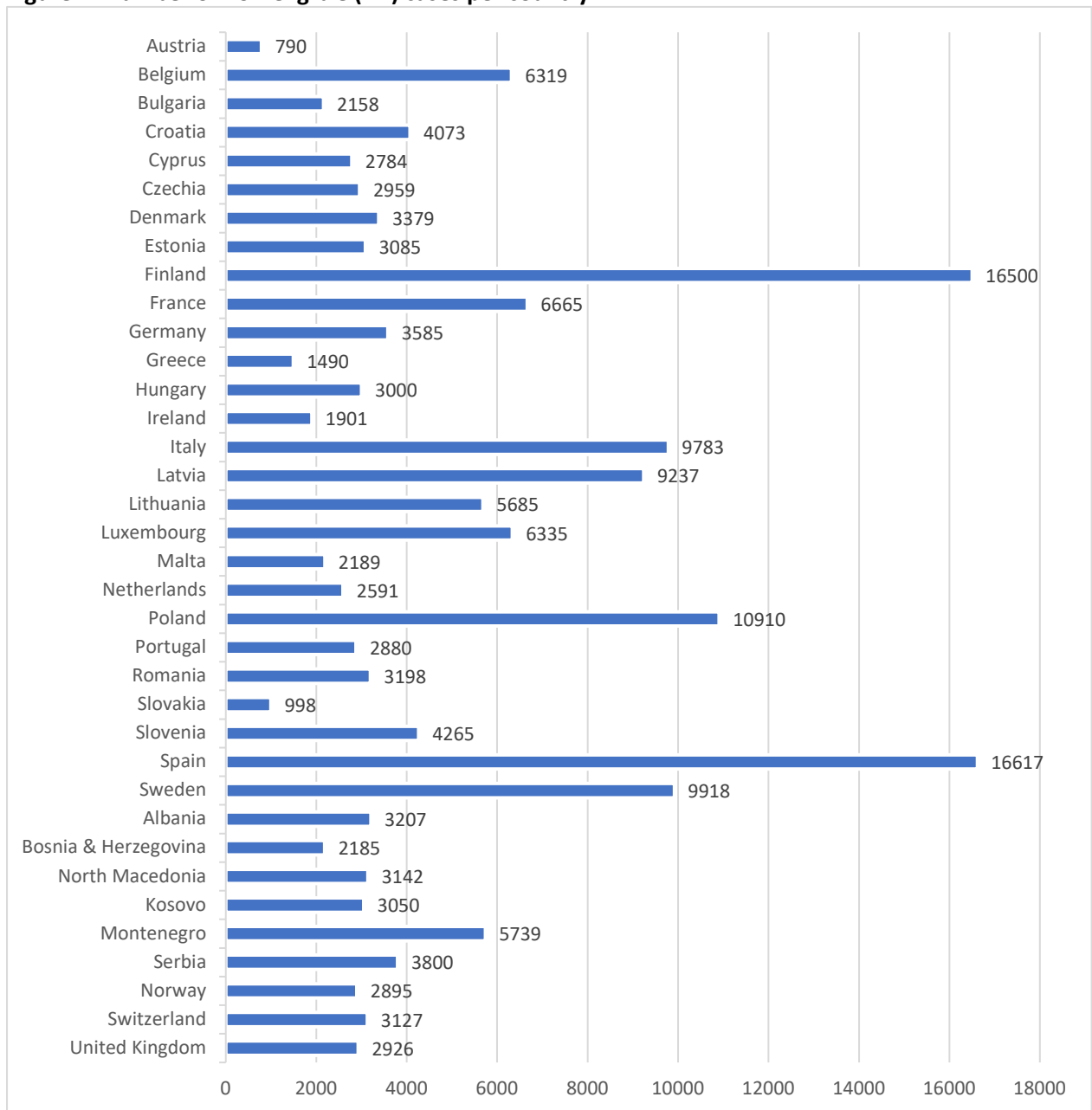
Source : Ipsos

Non-eligible numbers (NE)

Non-eligible (NE) cases are those in which the telephone number is either not suitable for the purposes of the survey (e.g., business, disconnected, or fax numbers) or cases which are confirmed to be non-eligible. Due to the specific criteria of the survey, only respondents who had worked during the previous week and are aged 16 years and older were eligible to take part. All other individuals are not eligible for the survey. The interviewer Training Manual and associated briefing slides contained comprehensive information on eligibility, including eligible workers on leave (maternity, sick leave) and COVID-19 circumstances such as furlough and short-time working. It also examined wider eligibility such as self-employed people who are currently inactive and subsistence workers. As all interviewers were fully trained on these scenarios, they were able to make fully informed judgements on the respondent’s eligibility in line with the screening questions.

The figure below contains information about the share of non-eligible cases per country.

Figure 2: Number of non-eligible (NE) cases per country



Source: Ipsos

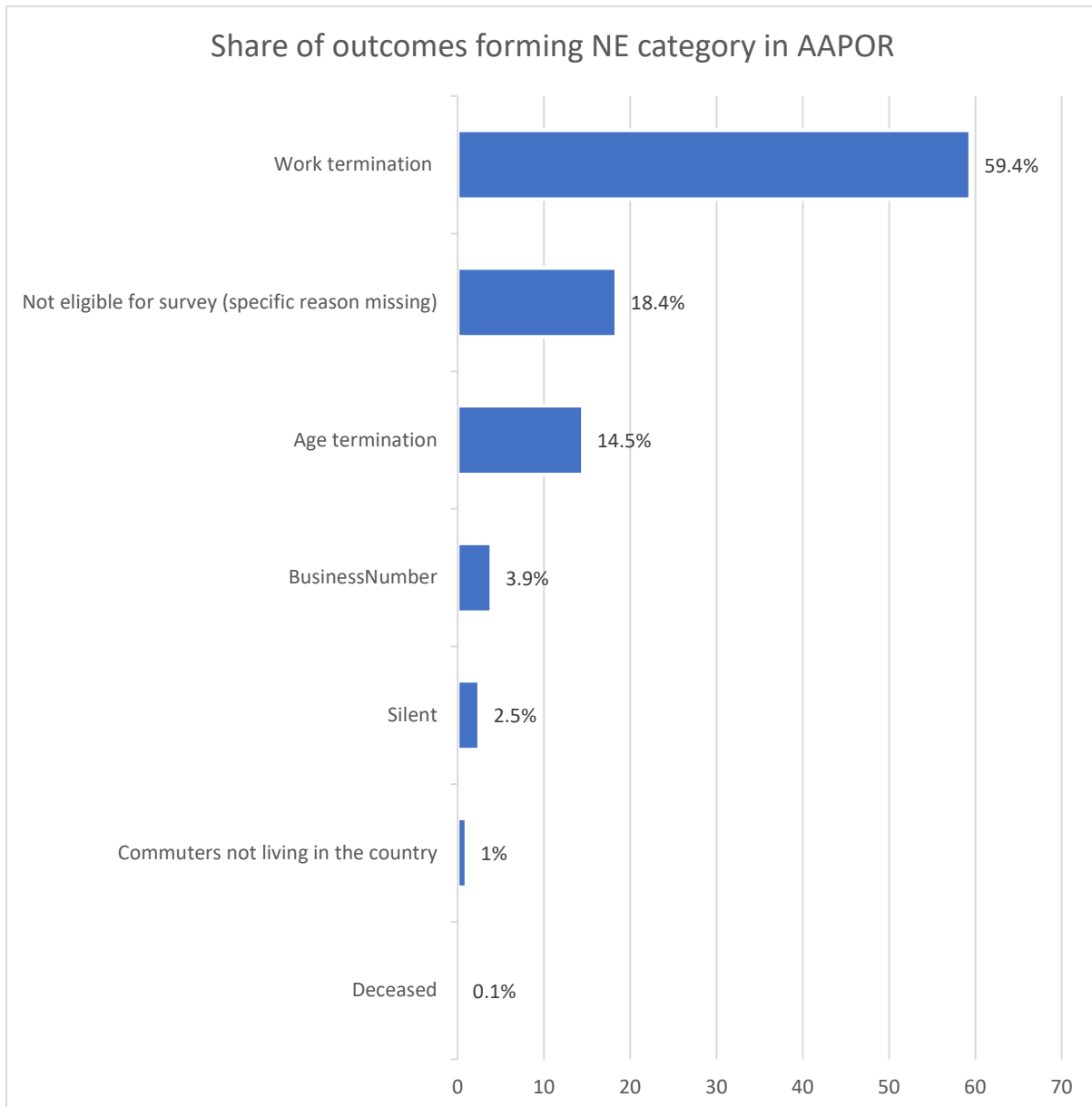
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An average of 4,815 cases were placed in the non-eligible category (NE). Within this category there are cases with outcomes such as “Business number” and all termination outcomes. The highest number of non-eligible cases was observed in Spain, which came from the highest share of silent numbers and a larger share of respondents who were not eligible due to their working status. The share of non-eligible cases is also high in Finland and Poland but lower across the Candidate and Potential Candidate (CPC) countries.

The highest share of non-eligible respondents was those who were not working: 59.4% of all cases which fall within the NE AAPOR category. The other termination outcomes – age termination, termination without a specific reason³¹ and business numbers are also included in the NE category.

The figure below shows the average share for each outcome within the NE category.

³¹ This outcome was used mainly in Norstat countries and usually indicates respondents who were not eligible because of their working status

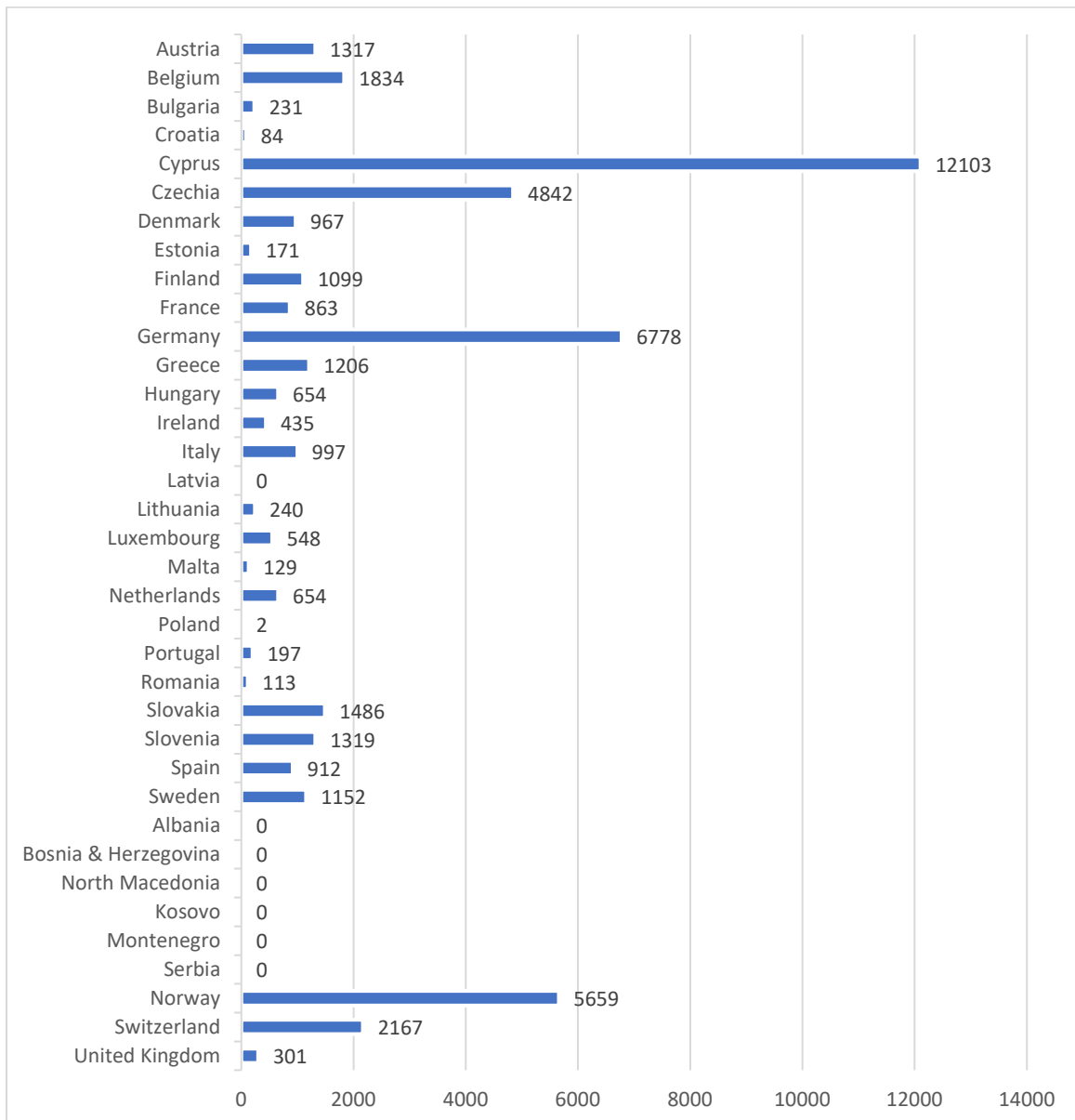
Figure 3: Share of outcomes forming NE Category in AAPOR

Source: Ipsos

Unknown eligibility (Uos)

With the additional amendments Ipsos proposed to Eurofound related to AAPOR grouping, the cases in the “unknown eligibility” (UO) category changed significantly. With the amendments of refusal groupings (shared in the sub-chapter below), the only outcome which is included in the unknown eligibility category is the “Language barrier” outcome. A high number of cases classified as unknowns (Uos) relate to the large volume of language barriers. In all such cases, although there is a successful contact (i.e., someone answers the telephone), the interviewer cannot evaluate whether the respondent is eligible. For the purposes of the survey, Ipsos considered eligible respondents to be those who are older than 16 years of age and have worked for at least one hour during the previous week.

The reasons for the higher number of Uos is likely to differ across countries.

Figure 4: Number of UO per country

Source: Ipsos

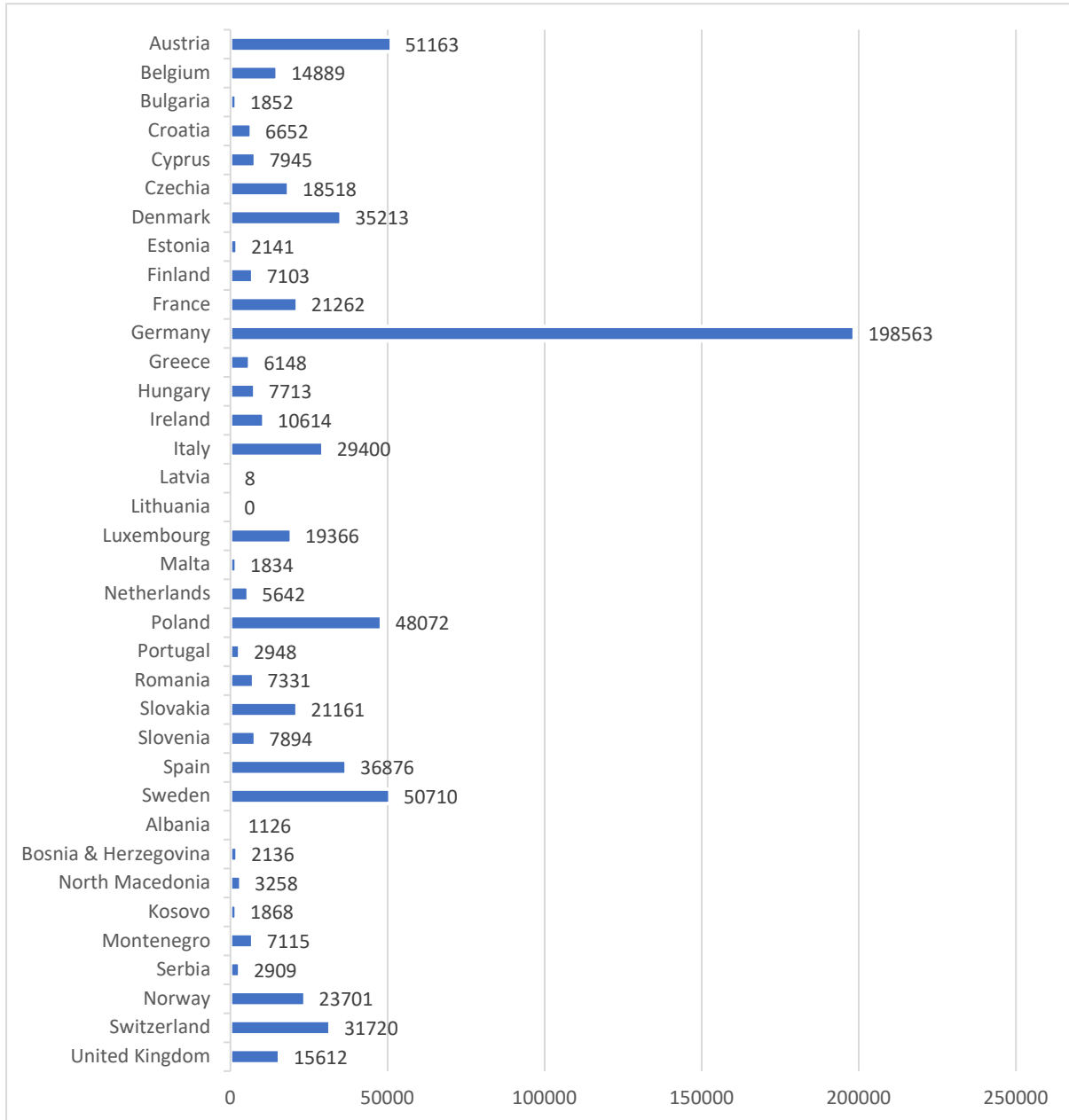
The highest number of language barrier outcomes is in Cyprus and the team explained that there are a lot of people in the country who do not speak Greek or English. There is a low share of UO outcomes across many countries and this is mainly because the EWCTS 2021 covers the main languages of each country.

Non-contact (NC)

The non-contact category includes outcomes such as answer machine, busy and NoAnswer. Ipsos divided the category into two groups: one which includes closed cases and the other which includes non-closed cases. All such contacts are working numbers, but no contact was made with the respondent and the contact is considered to be closed. An average of 19,735 cases were marked in the NC category. The number of cases varies by country, from a couple of cases in Norstat countries

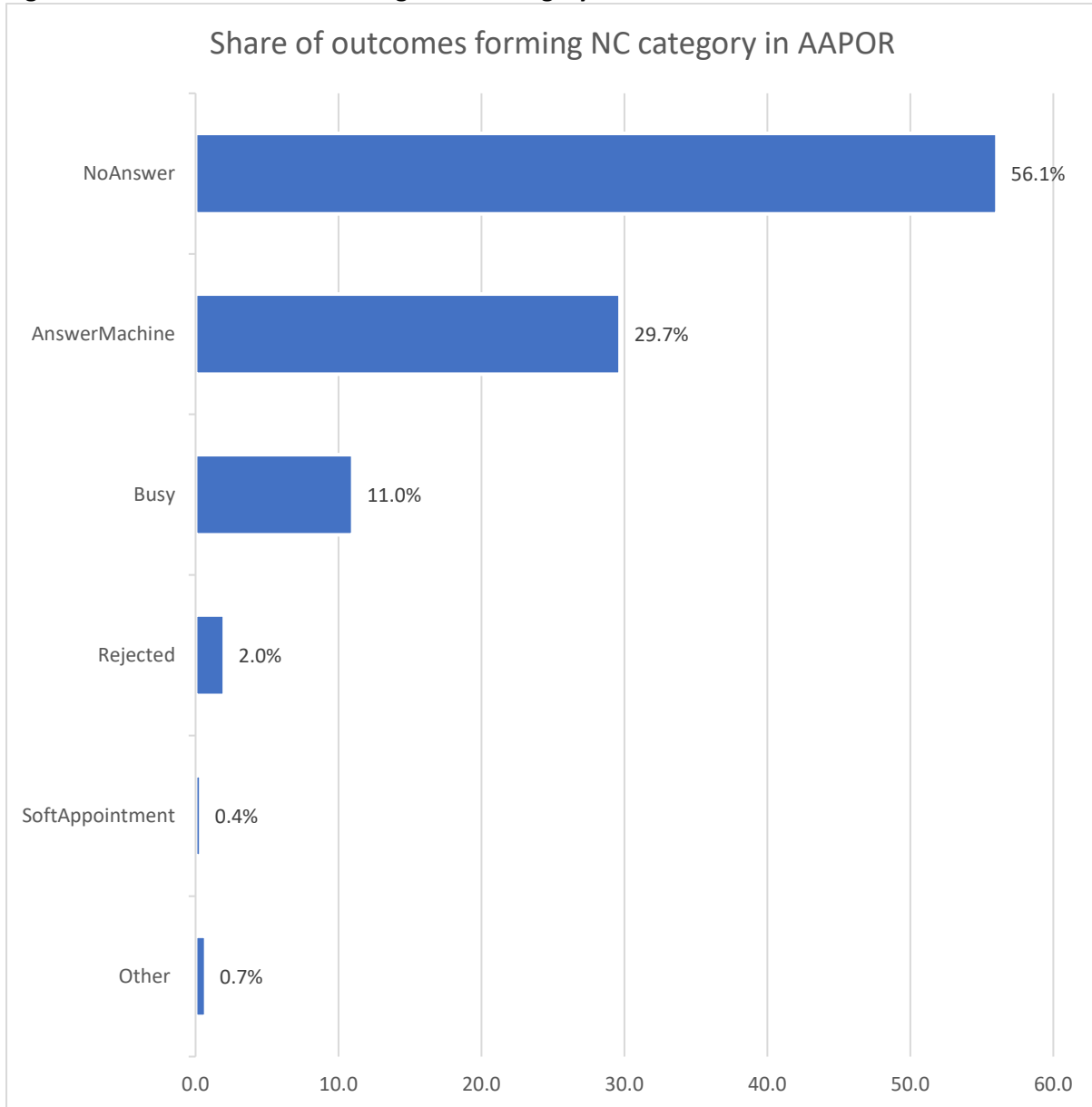
to more than 50,000 in Sweden and Austria and over 190,000 in Germany. The lower numbers of cases within this category in the Norstat countries may be explained by the share of cases which are not closed and other final outcomes being marked.

Figure 5: Number of NC outcomes per country



Source: Ipsos

As expected, the most popular outcome in the NC category is “NoAnswer” which accounts for more than half of the outcomes in the category. Answer machine is another frequently coded outcome, alongside the busy outcomes. Figure 6 includes the outcomes which are included in the NC category.

Figure 6: Share of outcomes forming the NC category

Source: Ipsos

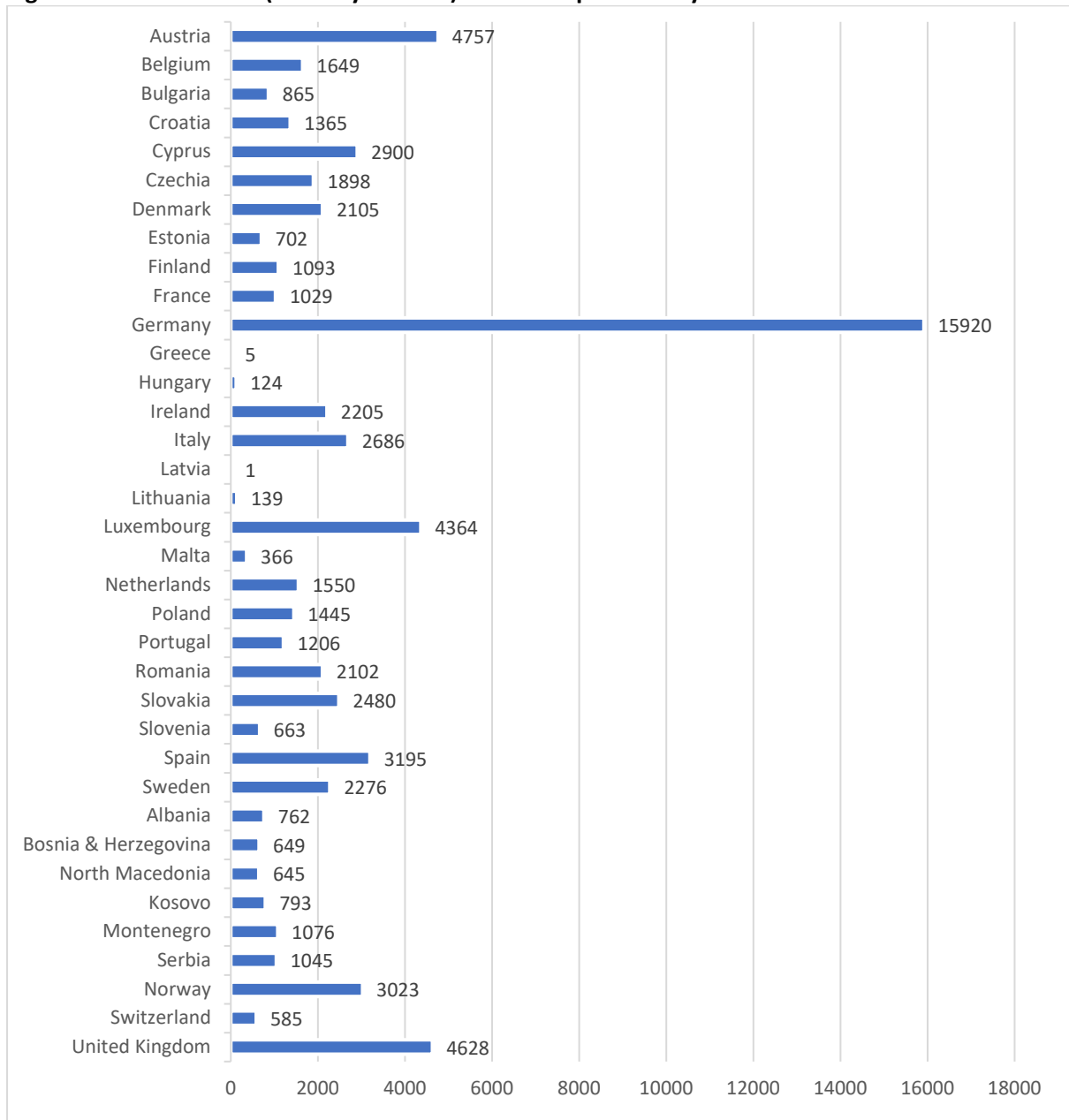
NC (not fully worked)

Ipsos added a separate category for “Non-contact” cases which were not fully worked. These are cases that were not fully closed, meaning that the fieldwork rules may not have been followed accurately or the case had less than five call attempts. The share of non-contacts which were not fully worked is highest in Germany, Luxembourg and the United Kingdom, but much smaller in countries which closed the majority of their sample.

The non-contact cases that were not fully closed were a key focus for the CCT and these were strictly monitored during the fieldwork. The main reasons for the differences between countries was typically due to the overall number of contacts used and the local fieldwork management. Also, the progress of the fieldwork had a significant impact on the number of open cases. When progress was lower than expected, the local teams asked for additional sample to be released. The open cases with more than 3 or 4 call attempts and no successful contacts did not lead to a successful interview and did not help achieving the targets. The CCT believe that if the countries followed a different

strategy – to try and close all contacts closer to the date when the contact is open, the share of open cases would be lower.

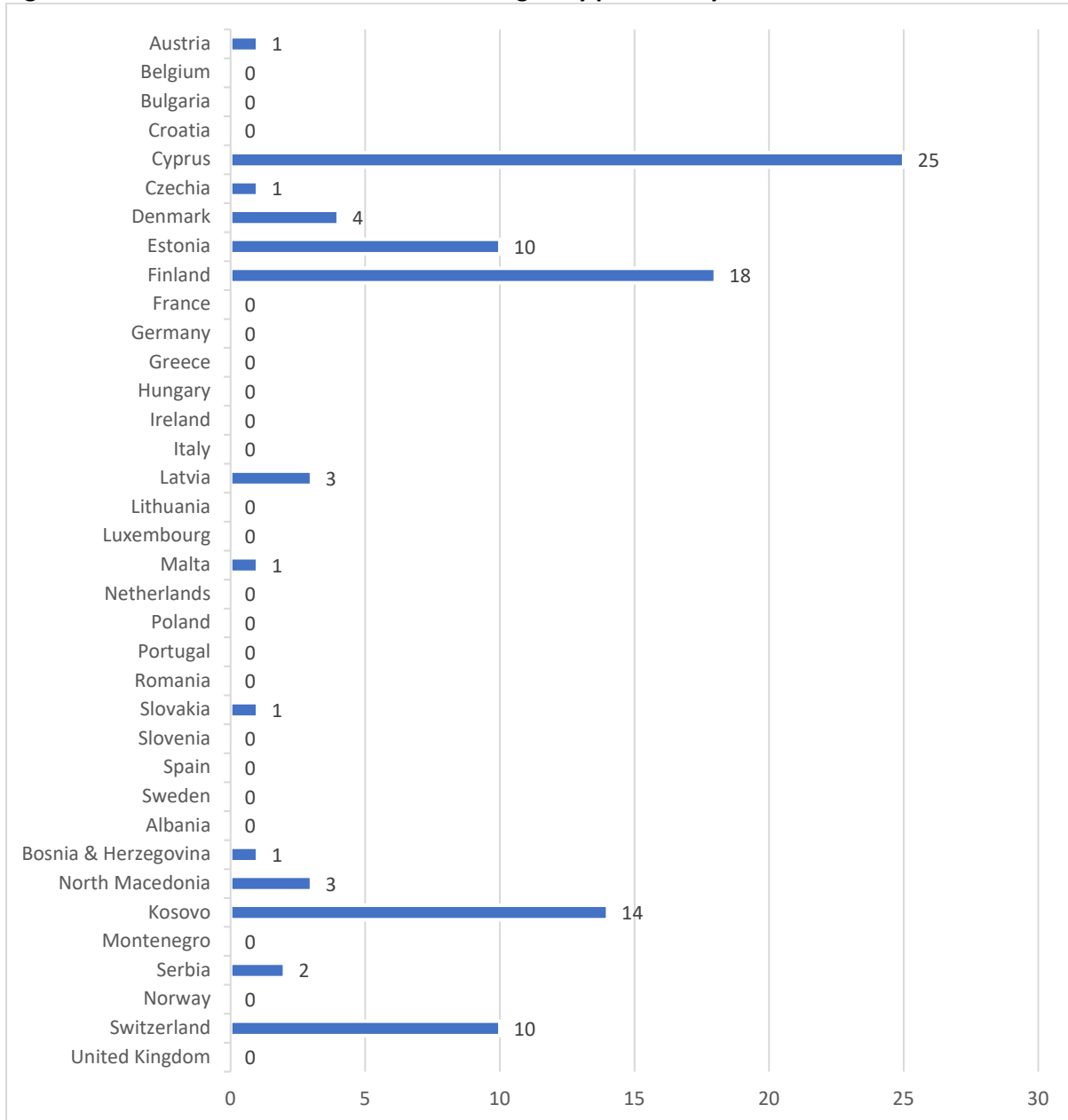
Figure 7: Number of NC (not fully worked) outcomes per country



Source: Ipsos

Refusal

The refusal category was also monitored during fieldwork. Overall, refusals were classified into two major groups: refusals with unknown eligibility and refusals from respondents who were confirmed to be eligible.

Figure 8: Number of refusals with confirmed eligibility per country

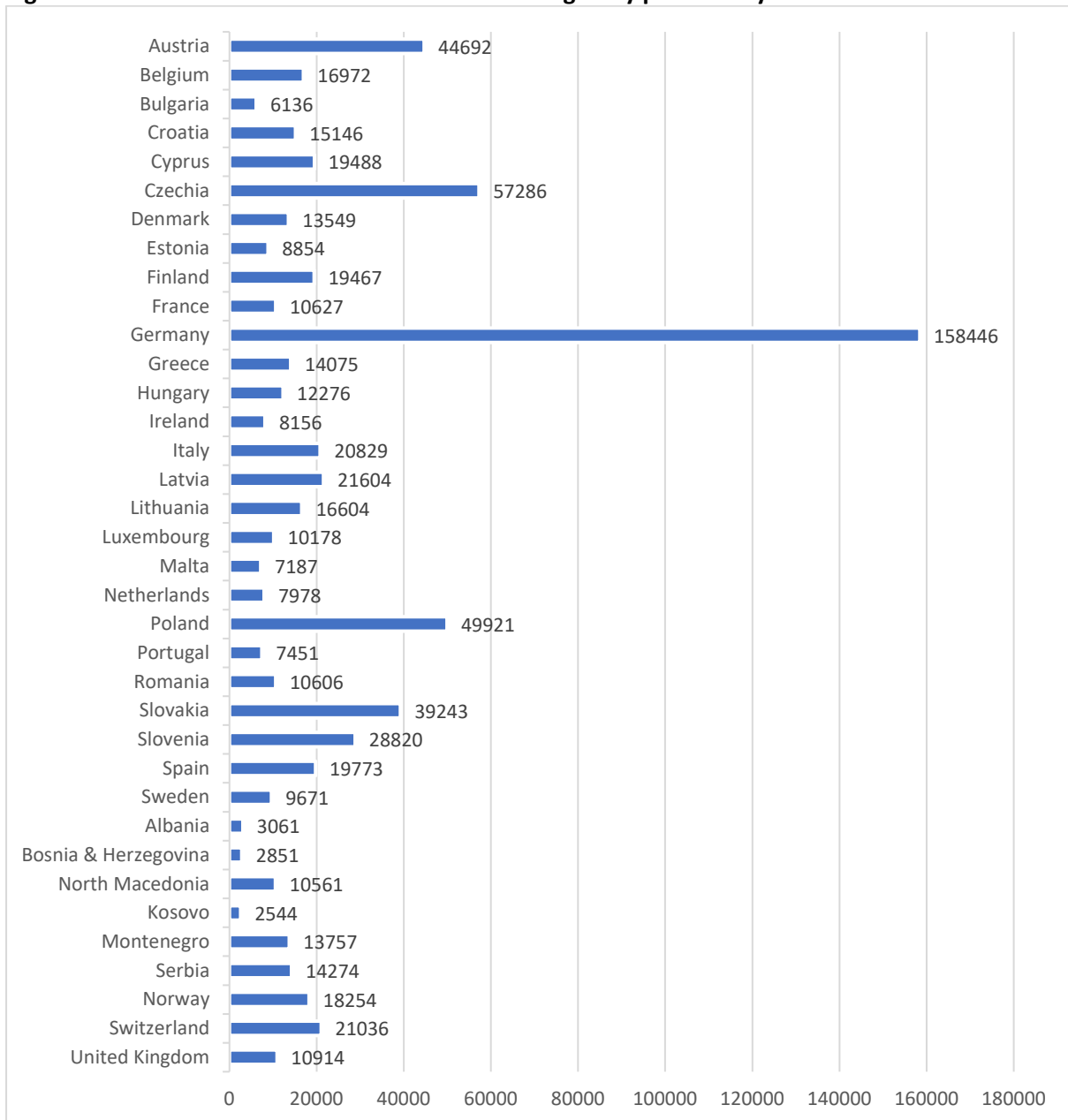
Source: Ipsos

Overall, the highest share of cases was observed in Cyprus. In contrast, there were a number of countries in which there were no refusals and terminations (after confirming eligibility) and this may be explained by two factors.

Firstly, some respondents tended to refuse to take part before it could be established whether or not they were eligible and they were therefore coded as refusals at the very first screen. Secondly, the share of respondents who refused to continue the interview with a hard refusal was low. The highest share of respondents who did not wish to proceed with the interview either made multiple appointments that they did not commit to, or those that ended the telephone call and refused to answer afterwards.

In contrast to the refusals with confirmed eligibility, the share of refusals prior to establishing eligibility was typically very high.

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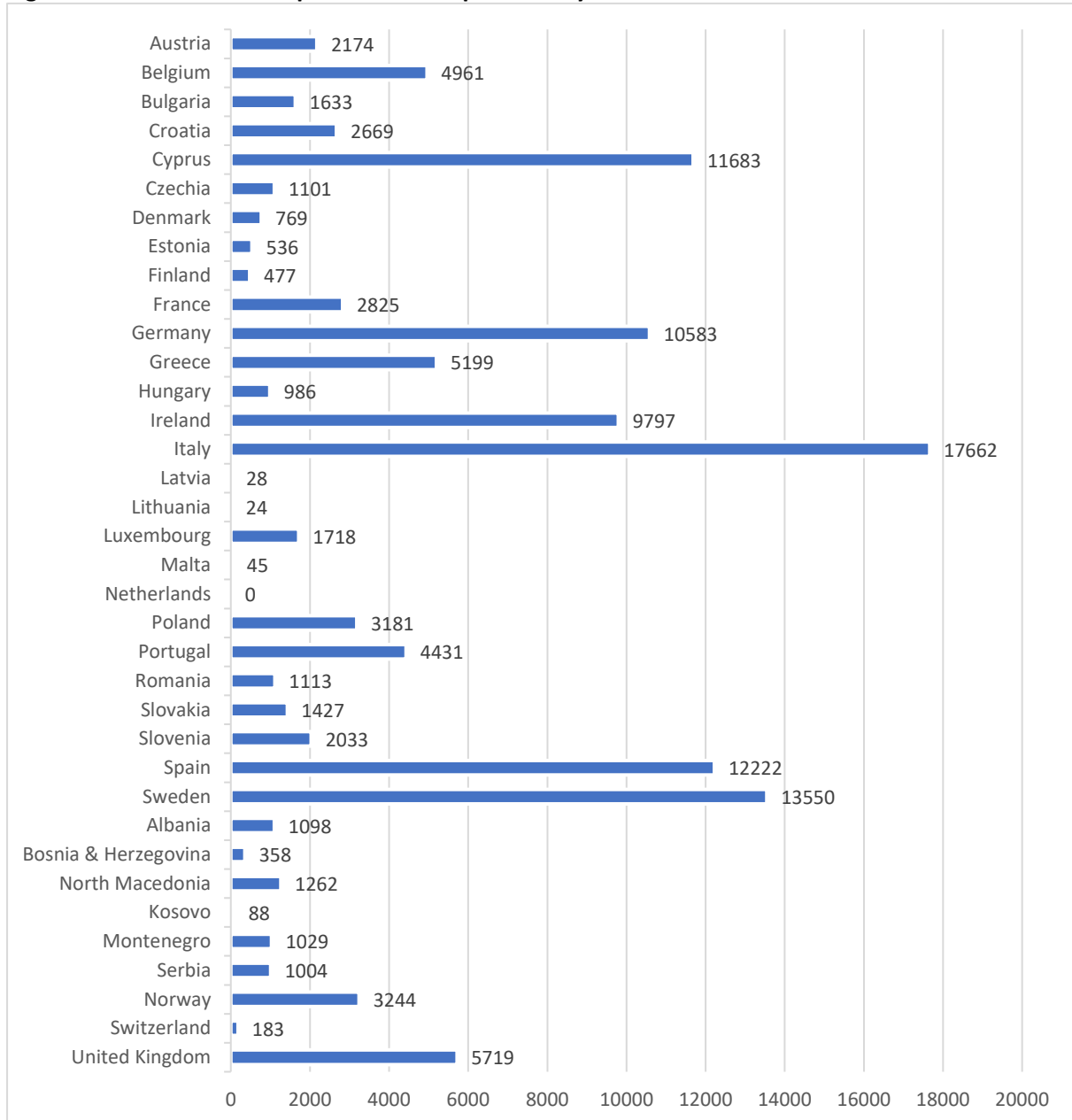
Figure 9: Number of refusals with non-confirmed eligibility per country

Source: Ipsos

The highest number of refusals prior to establishing eligibility was observed in Germany, Czechia, Austria, and Poland. In the CPC countries, the counts are generally lower.

Ipsos classified outcomes such as Disconnected, Fax, Wrong number, Unallocated Number and Unknown number as another subcategory; this being “Unallocated telephone number”. This category accounts for cases in which the telephone number is wrong, is not working or there are technical problems with the call. The share of these numbers varies across countries. This indicator relates to the quality of the sample itself, but also to the dialling system. Some of the Ipsos countries faced issues with outcomes marked as “Unknown” from the dialler, which in theory should have been working numbers. This was the case in Italy, Ireland, Sweden and Spain.

Figure 10: Unallocated telephone number per country



Source: Ipsos

Interviewer feedback on outcome codes

No specific interviewer feedback was received for the outcome structure. Ipsos defined the base outcomes in accordance with the standard CATI practices, so all of these will have been familiar to CATI interviewers.

Considerations for future improvement

A number of issues were encountered during fieldwork in relation to monitoring and reporting, the data delivery from local teams, and the correct processing of outcome codes. Following multiple meetings with each local team conducting the pilot survey it was agreed that new outcomes were required to avoid the misuse of outcomes codes. A swift solution for both issues would be the use of a centralised dialling system in which the dialler settings, outcomes and reporting are managed by

the CCT. This would lead to data transfers being simplified and increased uniformity of outcomes between vendors.

Having said this, such a solution, as simple as it may sound, is actually more difficult to implement in practice and comes with a number of downsides. On the one hand, there is an issue with network security – for external vendors (i.e. national partners which do not belong to the Ipsos network) to receive access to a private company, network security procedures must be undertaken with legally binding documents signed by both parties. This is something that requires a significant investment of time and can be viewed by some vendors as counter productive. Another issue for local vendors is the fieldwork management and interviewer training for a new platform, which would be different to the one used for regular fieldwork. This most definitely comes at a cost and loss of productivity during the first few weeks of fieldwork. Again, this is something viewed as counterproductive by vendors, especially if such commissioned jobs are infrequent.

Indeed, complete uniformity for outcome codes in international projects is always difficult to achieve at the lowest level, even with a centralised dialling system. Local practices, along with unforeseen scenarios during the interviewing, will always lead to anomalies and the CCT will always have to oversee and correct such issues and disparities.

Fieldwork rules

Adherence to fieldwork rules

Strict fieldwork rules were developed and monitored during the main stage of the survey. The interviewers had to make at least five call attempts at different times of the day, with at least 14 days between the first and last call attempt. For the CATI links countries, the adherence to fieldwork rules was managed by the country's own data collection platform. For CATI direct countries, the technical setup was undertaken at a central level and distributed at local project level. The rules were defined as follows:

- A maximum of 5 call attempts without an answer.
- Calls at different times of the day – one weekend call between 8am and 10pm, two weekday evening calls after 5pm, one daytime call between 8am and 4pm.
- Recall time delay – the time that needs to be allowed before the sample record is dialled back.

The CCT revised the recall time for “no answer”, “answer machine” and “reject” to 5,040 minutes, which is 3.5 days. This was set to ensure better compliance with the fieldwork rules.

The delay time works according to the schedule below, with the assumption that the first contact is made on a Monday morning.

If the first call is made at 9am on a Monday morning, the next call is scheduled after 84 hours, which is at 9pm on Thursday. If there is an auto-dialler or an interviewer available to take the call, it will be made as an evening call. When the call is made, if it is again no-contact then the next available call attempt is after 84 hours during the weekend. If there is no contact on that call, the next call will again be set as an evening call for Wednesday. Once the call pattern for one particular time slot (for example, evening calls) is fulfilled, the system will search for the next free call which was not made – for example, a morning or afternoon call and the call will then be returned to the interviewers. This scheme is not always perfect as a period of 3.5 days between the calls is required. However, it ensured that the required numbers of day/evening/weekend calls were made. It also ensured at least 14 days between the first and last call attempts.

Table 32: Calling schedule

Call serial	Call times
1	Monday 09:00
2	Thursday 21:00
3	Sunday 9:00
4	Wednesday 21:00
5	Monday 9:00

Source: Ipsos

The above schedule worked well, but in case of appointments or if other outcomes occurred then the pattern was restarted. Also, if there were no interviewers or an auto-dialler available then the call pattern may have been skewed. The CCT monitored the fieldwork rule compliance levels by developing a reporting system to monitor the number of day/evening/weekend calls and by liaising with the local agencies. Initial fieldwork rule compliance was communicated to the local fieldwork teams, with gradual feedback being provided by the CCT over the course of fieldwork.

Share of compliant records

Overall, for a project of such complexity, the level of compliance was high due to the intensive and timely checking during fieldwork.

The CCT developed a reporting system which helped monitor the number of calls made in each time slot. Since the whole process of collecting call history files, recoding it, preparing all the exports and analysing them took a couple of weeks, the CCT focused on fieldwork compliance rules at the end of March and the beginning of April. The CCT undertook extensive monitoring of fieldwork compliance in these countries and others. During fieldwork the share of cases not following fieldwork rules varied greatly. The table below includes the number of open cases (with less than five call attempts) and more than five call attempts (that had not met all of the rules).

Table 33: Share of open cases with less than 5 calls and those with more than 5 calls

Country/territory	Total sample [Open]	Open records (1-4 call attempts)	% open records (1-4 call attempts)	Open records (5+ call attempts)	% open records (5+ call attempts)
EU MEMBER STATES					
Austria	5265	886	0.17	4379	0.83
Belgium	1660	742	0.45	918	0.55
Bulgaria	892	268	0.30	624	0.70
Croatia	1376	587	0.43	789	0.57
Cyprus	3138	2592	0.83	546	0.17
Czechia	1913	86	0.04	1827	0.96
Denmark	2105	589	0.28	1516	0.72
Estonia	710	37	0.05	673	0.95
Finland	1094	505	0.46	589	0.54

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Country/territory	Total sample [Open]	Open records (1-4 call attempts)	% open records (1-4 call attempts)	Open records (5+ call attempts)	% open records (5+ call attempts)
France	1039	76	0.07	963	0.93
Germany	16255	7241	0.45	9014	0.55
Greece	5	0	0.00	5	1.00
Hungary	127	79	0.62	48	0.38
Ireland	2235	678	0.30	1557	0.70
Italy	2834	1614	0.57	1220	0.43
Latvia	1	0	0.00	1	1.00
Lithuania	139	104	0.75	35	0.25
Luxembourg	4044	1688	0.42	2356	0.58
Malta	366	366	1.00	0	0.00
Netherlands	1594	247	0.15	1347	0.85
Poland	1453	133	0.09	1320	0.91
Portugal	1229	723	0.59	506	0.41
Romania	2104	54	0.03	2050	0.97
Slovakia	2480	4	0.00	2476	1.00
Slovenia	783	149	0.19	634	0.81
Spain	3816	1323	0.35	2493	0.65
Sweden	2304	152	0.07	2152	0.93
CANDIDATES AND POTENTIAL CANDIDATES (CPC)					
Albania	769	386	0.50	383	0.50
Bosnia & Herzegovina	654	188	0.29	466	0.71
North Macedonia	685	313	0.46	372	0.54
Kosovo	817	531	0.65	286	0.35
Montenegro	1304	449	0.34	855	0.66
Serbia	1054	201	0.19	853	0.81
OTHER COUNTRIES					
Norway	3089	30	0.01	3059	0.99
Switzerland	592	38	0.06	554	0.94
United Kingdom	4660	133	0.03	4527	0.97

Source: Ipsos

The average share of cases with less than five call attempts is 61.4% across countries but it is important to note that this includes closed cases such as completion (6.5%), not eligible (12.8%), refusal (63%) etc. A few countries had a higher share of open cases (with more than five calls) that

did not adhere to the fieldwork rules. That said, Ipsos would note that the numbers are not high in comparison to the total number of sample records accessed.

In the table below, additional information is provided for the types of fieldwork rule violations. There are a number of cases that violate more than one fieldwork rule and therefore the total number of records (without a certain type of call) might be slightly higher than the total number of open records.

Countries with noticeable fieldwork non-compliance (above 5 per cent) were Kosovo, Luxembourg, Albania and Portugal.

For Kosovo, Ipsos identified an issue in the internal interim reports used for fieldwork rule violation estimates. The issue affected cases with one to four contact attempts that were still open and these were excluded from the interim reports. This was originally applied for CATI Direct countries, since such cases without contact attempts had a specific status on the data collection server (“Fresh”) and excluding them provided accurate figures for cases that had not been fully worked.

However, when applying the same filter for CATI link countries (e.g. Kosovo) the CCT overlooked cases which had been contacted, but the survey link had not been opened. From Table 34 below, it is evident that Kosovo, Albania, Montenegro and North Macedonia have a higher number of cases with one to four contact attempts. This is particularly the case in Kosovo where this contributes to an overall fieldwork rule violation of more than 5%.

For Luxembourg, the CCT found multiple issues when processing the data received by the local teams, initially resulting in multiple errors. The first issue identified was the same erroneous filter applied for Kosovo, misleading the CCT that there were far less cases with less than five contacts attempts and an interim outcome. The second identified issue related to internal Ipsos sample management reporting that was delivered to the local agency. The CCT counted daytime calls made on the weekend as weekday daytime calls as well. As a result, a number of cases were considered to be properly closed when they were missing a weekday daytime call (3.99% of identified violations in Luxembourg).

For Portugal and Albania’s additional replacement cases, Ipsos notified Eurofound that there was an expectation for exceeding the 5% fieldwork rule compliance due to fieldwork constraints. For Portugal, the main driver for violations was the release of additional sample towards the end of fieldwork, resulting in more cases that did not meet the 14 day rule and required evening calls. For Albania, the missing weekend calls occurred in combination with the issue previously described for Kosovo, which increased non-compliance to more than 5%.

Ipsos would conclude that the extensive efforts in monitoring and following the fieldwork rules resulted in very positive outcomes, particularly given the number of calls made. Most countries completed fieldwork with less than 5% of cases that did not adhere to all of the fieldwork rules. One of the most important lessons from the pilot was the need to adhere to the fieldwork rules in full, therefore for the mainstage fieldwork additional efforts from the CCT and local teams has produced a high level of compliance. In addition, further vigilance on internal reporting was required to avoid technical errors in fieldwork violation calculations.

Due to the large number of calls made during the mainstage and the quick progress, the dynamics relating to the fieldwork rules had a significant impact on the monitoring. Some countries underestimated the fieldwork rules at the beginning of the fieldwork but noted that they would correctly close the open cases in the following weeks of the fieldwork. The large share of cases not

following the fieldwork rules affected the progress rate, because these were usually contacts that had been called multiple times with no successful contact made. This was also considered by both local partners and Ipsos when monitoring the fieldwork rules. The rules were checked on a weekly basis by the Ipsos CCT (and more frequently for countries with a higher share of issues). The reports were then sent to the local teams, which helped them to achieve the high level of compliance.

Table 34: Open records with more than five calls not respecting fieldwork rules

Country/territory	Total Sample dialled	Open records [1-4 call attempts]	Open records [5+ call attempts]	# records without evening call	# records without weekend call	# records without day call	# records without 14 days in fieldwork	Share of records without evening call	Share of records without weekend call	Share of records without day call	Share of records without 14 days in fieldwork	Overall level of violations [%]
EU MEMBER STATES												
Austria	107007	886	4379	1252	43	167	1779	1.17%	0.04%	0.16%	1.66%	3.86%
Belgium	51024	742	918	172	611	0	18	0.34%	1.20%	0.00%	0.04%	3.02%
Bulgaria	14683	268	624	18	1	1	0	0.12%	0.01%	0.01%	0.00%	1.96%
Croatia	31793	587	789	125	70	0	121	0.39%	0.22%	0.00%	0.38%	2.84%
Cyprus	59834	2358	546	26	91	389	13	0.04%	0.15%	0.65%	0.02%	4.81%
Czechia	89657	86	1827	3	2	0	0	0.00%	0.00%	0.00%	0.00%	0.10%
Denmark	57912	589	1516	569	38	292	0	0.98%	0.07%	0.50%	0.00%	2.57%
Estonia	17337	37	673	0	607	33	21	0.00%	3.50%	0.19%	0.12%	4.03%
Finland	47714	505	589	110	0	275	1	0.23%	0.00%	0.58%	0.00%	1.87%
France	46486	76	963	14	1	0	21	0.03%	0.00%	0.00%	0.05%	0.24%
Germany	398420	7241	9014	979	1838	533	5542	0.25%	0.46%	0.13%	1.39%	4.05%
Greece	29935	0	5	0	0	3	0	0.00%	0.00%	0.01%	0.00%	0.01%
Hungary	26557	79	48	4	0	0	0	0.02%	0.00%	0.00%	0.00%	0.31%
Ireland	34914	678	1557	41	24	49	348	0.12%	0.07%	0.14%	1.00%	3.27%
Italy	84494	1614	1220	122	60	0	205	0.14%	0.07%	0.00%	0.24%	2.37%
Latvia	32692	0	1	1	0	0	0	0.00%	0.00%	0.00%	0.00%	0.00%
Lithuania	24587	104	35	0	0	0	1	0.00%	0.00%	0.00%	0.00%	0.43%
Luxembourg	43931	1688	2356	243	0	1433	0	0.55%	0.00%	3.26%	0.00%	7.66%
Malta	13237	366	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%	2.76%
Netherlands	20251	247	1347	6	105	162	19	0.03%	0.52%	0.80%	0.09%	2.66%

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Country/territory	Total Sample dialled	Open records [1-4 call attempts]	Open records [5+ call attempts]	# records without evening call	# records without weekend call	# records without day call	# records without 14 days in fieldwork	Share of records without evening call	Share of records without weekend call	Share of records without day call	Share of records without 14 days in fieldwork	Overall level of violations [%]
Poland	116456	133	1320	3	300	222	13	0.00%	0.26%	0.19%	0.01%	0.58%
Portugal	21263	723	506	171	3	10	226	0.80%	0.01%	0.05%	1.06%	5.33%
Romania	26385	54	2050	122	1	0	1	0.46%	0.00%	0.00%	0.00%	0.67%
Slovakia	69128	4	2476	43	1	0	1	0.06%	0.00%	0.00%	0.00%	0.07%
Slovenia	48073	149	634	1	13	0	218	0.00%	0.03%	0.00%	0.45%	0.79%
Spain	92504	1323	2493	21	605	47	1292	0.02%	0.65%	0.05%	1.40%	3.55%
Sweden	89138	152	2152	382	1	0	1201	0.43%	0.00%	0.00%	1.35%	1.95%
CANDIDATES AND POTENTIAL CANDIDATES (CPC)												
Albania	10556	386	769	65	104	0	64	0.62%	0.99%	0.00%	0.61%	5.86%
Bosnia & Herzegovina	9337	188	654	0	0	3	2	0.00%	0.00%	0.03%	0.02%	2.07%
North Macedonia	20025	313	685	30	5	4	72	0.15%	0.02%	0.02%	0.36%	2.12%
Kosovo	9533	531	817	7	4	0	66	0.07%	0.04%	0.00%	0.69%	6.38%
Montenegro	29873	449	1304	23	1	0	269	0.08%	0.00%	0.00%	0.90%	2.48%
Serbia	24194	201	1054	23	15	12	588	0.10%	0.06%	0.05%	2.43%	3.47%
OTHER COUNTRIES												
Norway	60088	30	3089	4	0	0	13	0.01%	0.00%	0.00%	0.02%	0.08%
Switzerland	60064	38	592	2	4	10	331	0.00%	0.01%	0.02%	0.55%	0.64%
United Kingdom	42245	133	4660	599	20	199	214	1.42%	0.05%	0.47%	0.51%	2.76%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

5. Questionnaire Development and Translation

Introduction

This section of the report presents the EWCTS 2021 questionnaire development and modularisation. It also details the simplified TRAPD³² approach utilised for the translation process.

Questionnaire development

As mentioned previously, the spread of COVID-19 and associated lockdowns across Europe halted the EWCS 2020 CAPI fieldwork. Moving forward, Eurofound and Ipsos worked in partnership to transition the methodology to a CATI approach. This would allow more individuals to be reached whilst ensuring that there was no personal contact between interviewers and respondents. A CATI approach also had a benefit of allowing interviews in some countries to work from home (CATI@Home) whilst following all official requirements and limitations. Furthermore, it aimed to allow fieldwork to be conducted in a shorter time period which was imperative given the time already spent conducting the previous phase.

One of the key requirements for the EWCTS 2021 was to convert the existing questionnaire to suit a telephone methodology, therefore the following amendments were made:

- The overall interview duration was shortened
- The visual and supporting materials were removed
- Some of the sensitive questions were adapted in order to better suit the revised methodology
- The order of some questions was rearranged to accommodate the shorter duration
- The introduction and final questions were amended

This work was led by Eurofound with a primary focus on reducing the length of the interview, alongside text and scale revisions and a re-ordering of the questions. The work included selecting key policy and research relevant questions and assessing the questionnaire, which had already been developed for the EWCS 2020 fieldwork and subjected to high quality standards in terms of testing and translation, with a view to using it in the context of the telephone data collection exercise.

As the review was carried out, it very quickly became apparent that cutting the questionnaire by more than half would be very challenging and likely result in insufficient information being provided to policy makers in light of the acute need for information on job quality and individuals' experiences of working life in the context of the COVID-19 pandemic.

The main solution to this challenge was the modularisation of the questionnaire and the adaptation of the OECD's guidelines on Measuring the Quality of the Working Environment (OECD 2017), to measure job quality and to provide a policy and research relevant framework for selecting key dimensions pertaining to job quality of relevance and interest. As such, the solution allowed Eurofound to test the modularisation to a level not previously undertaken for a multinational, multi-regional and multi-cultural survey (3MC), with imputation by design on job quality indicators, which ensured a coherent and quality contribution to the policy agenda on work. This was facilitated by the fact that more interviews (than in the original planned face-to-face survey) were envisaged.

³² TRAPD is an acronym for Translation, Review, Adjudication, Pre-Testing and Documentation

As a result, this meant that the questionnaire was organised into three successive modules as illustrated by the table below (EWCTS Questionnaire structure) where one module was fixed and mandatory for all respondents, and two were modularised, i.e. not delivered to every single respondent and allocated at random. In more detail:

- A core questionnaire was administered to all respondents.
- A first modularised part (M1) with 3 variants, containing additional questions on 6 dimensions of job quality, was administered – this is the section where imputation was performed.
- A second modularised part (M2) with 2 thematic variants was administered: the first variant dealt with the collective experience of work and the second one, with the individual experience of the quality of working life.

Table 35: EWCTS questionnaire structure

C	Core Questionnaire			100%	12 mins
	Job and establishment characteristics				
	Socio-demographic characteristics				
	Work (activity) characteristics: place of work, customer work				
	“Condensed” OECD job quality question				
	Key “work-related outcomes” (WHO-5 wellbeing indicator, health and safety at risk, work life balance)				
M1	Modularised Job Quality component				4 mins
	M1A	M1B	M1C	67%	
	Extended OECD job quality questions				
M2	Thematic modules			50%	4 mins
	Module “collective”:		Module “individual” “quality of working life”		
	Work organisation, job resources and wellbeing at work, work family conflicts		Paid and unpaid work, health and well-being, making ends meet		

The M1 part of the questionnaire consisted of approximately 17 questions relating to quality of work. These questions were organised into topical blocks. Each of the M1 variants received some, but not all, of the topic blocks. It was designed so that each topic was asked in two of the variants. It was also designed so that each variant was of similar duration (some topics are lengthier than others).

Table 36: Design of M1 part of the questionnaire

	core	physical/social environment	job tasks	organisational characteristics	worktime arrangements	job prospects	intrinsic aspects
M1A							
M1B							
M1C							

This resulted in two thirds of respondents answering the full set of questions for each topic. For each topic, one third of the respondents were skipped.

The M2 part of the questionnaire was also modularised but no imputation was considered for these modules which substantively addressed two different facets of the working life: the collective experience of working together in companies and organisations, and the individual perspectives on working lives.

[The EWCTS source questionnaire is available on Eurofound's website.](#)

Questionnaire introduction

One of the key findings from the pilot fieldwork was the need to fully revise the introduction text due to concerns regarding the length and content. Feedback from almost all agencies noted that the introduction was too long, meaning that potential respondents were immediately dissuaded from taking part. Many also believed that the text was too formal and some of the terms used were problematic. This included the term “policy makers” which had negative associations with politics and political polls (particularly in countries such as Albania where elections were soon to take place) and “personal data” which made individuals wary of the potential questions that they would be asked.

In light of the above, the introduction text was completely re-written to be more concise, friendly, and reassuring. The before and after text appears in the chart below.

Figure 11: Introduction text: pilot and revised for the mainstage

INTRODUCTION: ORIGINAL PILOT TEXT	INTRODUCTION: REVISED MAINSTAGE TEXT
<p><i>Good morning/afternoon/evening. My name is < your name > and I am calling from (ADD COMPANY NAME). We are carrying out research about how people feel about their work. This to allow policy makers to help improve the quality of work and the working conditions for all people at work.</i></p> <p><i>We would be grateful if you could spare a few moments to share your experiences with us. The interview will take 20 minutes at most. Your gender, postcode and age will be collected, as well as personal data from your replies to the interview questions. All of the information you provide will remain confidential, and no personal data will be shared in any way, unless you give your consent for this at the end of the survey.</i></p> <p><i>For quality assurance, this phone call may be monitored and recorded.</i></p> <p><i>Before we start, I just want to clarify that participation in the survey is voluntary and you can change your mind at any time.</i></p> <p><i>Are you happy to proceed with the interview?</i></p>	<p><i>Good morning/afternoon/evening. My name is < your name > and I am calling from (ADD COMPANY NAME). We are carrying out research on how people feel about their work in 36 countries. Your answers will be used to show the changes since the outbreak of COVID-19 and help improve working conditions for all workers</i></p> <p><i>The interview should take 20 minutes at most. Taking part is voluntary and you can change your mind at any time.</i></p> <p><i>All of your answers will remain confidential. For quality assurance, this phone call may be monitored and recorded.</i></p> <p><i>Are you happy to proceed with the interview?</i></p>

Source: Ipsos

Establishing eligibility

One other key finding that emerged during the pilot fieldwork was the challenge of determining the eligibility of the respondent in relation to their work status. At first glance, the eligibility question (“Let me first ask you did you work – even if minimally, like for only an hour – for money or other payment in kind last week?”) appears to be straight-forward. In reality however, there are numerous considerations and scenarios to bear in mind and the decision to proceed to the full interview has to be made quickly. Following feedback from the pilot, Eurofound and Ipsos worked together to formulate an additional interviewer instruction to be displayed below the question in the screener.

This extra text acted as a reminder, or prompt to the interviewers to assist the process. For example, it clarifies that people on different types of leave (e.g. maternity or sick leave) may still be eligible, as well as those who are furloughed due to COVID-19.

Figure 12: Additional eligibility text for interviewers

“Let me first ask you did you work – even if minimally, like for only an hour – for money or other payment in kind last week?”

[INTERVIEWER INSTRUCTION] It also includes people temporarily absent from work due to holiday, strikes, leaves but who have a job or business and furlough

Reminder: the following people are eligible for the survey -

People who are sick/quarantined/self-isolating because of COVID-19 and those who are furloughed, or on short-time working.

People on maternity/paternity/parental leave.

People on sick leave for up to 3 months (if more than 3 months they should receive at least 50% of their salary from their employer).

Self-employed people who are setting up a business.

Self-employed people who are absent from work – as long as they own/rent a business premises, have advertised their business, or own equipment/machinery of significant value.

Source: Ipsos

Open-end review page

Based on the pilot fieldwork in 2020 and local teams’ feedback in relation to the interview length analysis, the CCT noted that some of the local teams had used the “back” button to review Q5, Q6 or Q13 and clear up any typos/errors, or write in full abbreviations etc. To smooth this process, Ipsos introduced an additional system screen at the end of the survey, where interviewers were able to revise verbatims that had previously been recorded. This feature was intended for the revision of typos, replacement of abbreviations or other small adjustments, that did not change the answer originally provided by respondents. The revisions, if any, were made after the survey was completed, so all interviewer actions were independent of the respondent. To mitigate any quality risks, the CCT performed manual checks on all verbatims that were edited in this way. All local teams were informed that any deviations from the expected usage would result in disabling the revision page for the remainder of fieldwork. However, no such action was required as the edits were all made in a careful and considered way.

This feature was enabled in the following countries: Albania, Austria, Belgium, Bosnia & Herzegovina, Bulgaria, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Norway, Poland, Romania and Spain.

Modularisation:

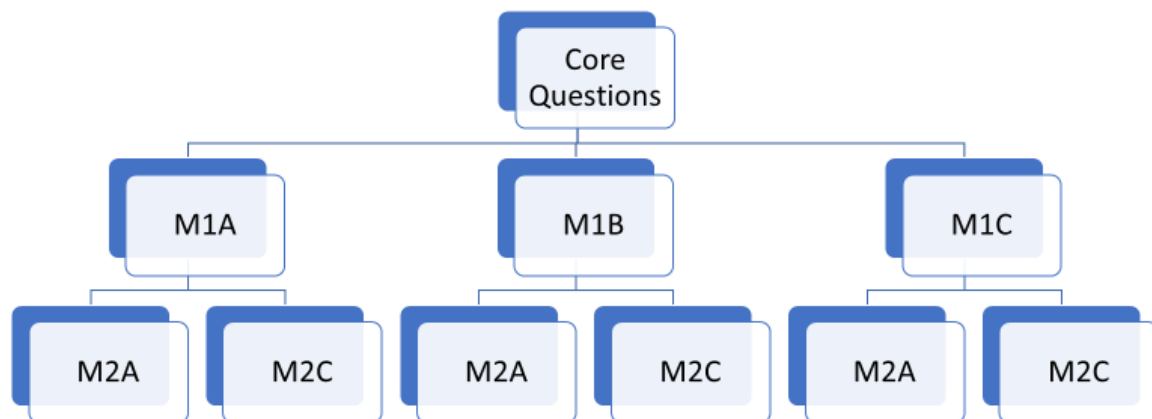
As mentioned previously, modularisation in the area of 3MC³³ surveys is uncommon and the experience of the EWCTS 2021 was both unique and innovative. The introduction of this technique was in a response to the need for a shorter questionnaire suitable for telephone interviewing and overall the objectives were achieved with modularisation providing more and better quality data than if it had not been applied, although its concrete implementation brought some challenges and lessons have been learnt for the future.

The modularised design created six main survey paths that were designed with one core section and two subsections called the 'M1 module' (comprised of M1A, M1B and M1C sub-modules) and the 'M2 module' (comprised of M2A and M2C sub-modules). At the start of the survey each respondent was assigned the core section³⁴, plus one of the sub-modules in M1 and then M2. As respondents were allocated different modules from different groups, it ensured that a minimum number of respondents were asked certain sets of questions.

The following chart provides an overview of this structure:

Figure 13: The modularisation structure

Questionnaire Modules



Source: Ipsos

In order to design a modularisation analysis, Ipsos engaged consultants with extensive experience of telephone-based fieldwork to advise on the questionnaire design propositions.

The design implemented by Ipsos consisted of 1 balanced cell selection between the M1 modules (M1A/M1B/M1C) and 1 balanced cell selection between the M2 modules (M2A/M2C). In theory, this

³³ Multinational, multiregional, and multicultural

³⁴ This comprised of the key questions, e.g. employment type and the open-ended questions for coding occupation and sector of economic activity of the respondent's company or business.

design aimed to ensure that 33% of respondents received an allocation of the M1 module and 50% of the sample receive an allocation of the M2 options. In light of this expectation, Ipsos attempted to implement a balanced cell selection design to ensure this.

In combination with this design, an additional requirement from Eurofound was the reverse scale order switch implemented for half of the sample. Ipsos' understanding of the requirement was to ensure an equal distribution between the reverse and normal scale order at project level.

Table 37: Example of a normal and reversed scale order

Normal scale order read out to the respondent	Reversed scale order read out to the respondent
Strongly agree	Strongly disagree
Tend to agree	Tend to disagree
Neither agree nor disagree	Neither agree nor disagree
Tend to disagree	Tend to agree
Strongly disagree	Strongly agree

Source: Ipsos

A “least full cell selection” process was used for balancing out the allocation between different targets, with the goal of ensuring a certain distribution between cells. The allocation essentially started at random. Following this, if there was one cell with the smallest number, then this cell was selected automatically. If there was more than one cell with the same smallest number then once again, a random selection was carried out. Full details of this process and its intricacies can be found in the associated paper on request to Eurofound.

Table 38: Module combination shares per country

Country	M1A+M2A	M1A+M2C	M1B+M2A	M1B+M2C	M1C+M2A	M1C+M2C
EU Member States						
Austria	17.59%	15.96%	16.19%	16.19%	16.08%	17.99%
Belgium	20.95%	12.50%	16.18%	17.20%	12.90%	20.27%
Bulgaria	22.05%	11.36%	17.20%	15.92%	10.80%	22.66%
Croatia	22.67%	10.72%	16.17%	17.22%	11.17%	22.06%
Cyprus	16.63%	16.78%	16.63%	16.70%	16.63%	16.63%
Czechia	17.24%	16.38%	16.48%	16.88%	16.13%	16.88%
Denmark	11.81%	21.65%	21.65%	11.59%	16.76%	16.54%
Estonia	22.51%	10.98%	16.08%	17.35%	11.47%	21.62%
Finland	21.18%	12.14%	16.66%	16.45%	11.98%	21.60%
France	21.51%	11.80%	16.74%	16.59%	11.70%	21.66%
Germany	19.46%	14.43%	16.34%	16.03%	14.23%	19.51%
Greece	21.02%	12.35%	17.07%	16.18%	11.85%	21.52%
Hungary	21.88%	11.33%	16.07%	17.30%	12.11%	21.32%
Ireland	22.07%	11.51%	16.76%	16.42%	11.34%	21.90%

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Country	M1A+M2A	M1A+M2C	M1B+M2A	M1B+M2C	M1C+M2A	M1C+M2C
Italy	22.45%	10.89%	17.09%	16.16%	10.51%	22.90%
Latvia	21.62%	11.56%	16.45%	16.90%	11.90%	21.57%
Lithuania	21.17%	12.03%	16.94%	16.14%	11.81%	21.91%
Luxembourg	21.50%	12.91%	14.97%	16.65%	13.43%	20.54%
Malta	19.43%	15.69%	14.88%	14.61%	15.83%	19.57%
Netherlands	22.36%	11.01%	16.63%	16.69%	11.01%	22.30%
Poland	21.76%	11.52%	16.55%	16.79%	11.66%	21.72%
Portugal	17.87%	16.17%	15.90%	15.96%	16.01%	18.09%
Romania	21.46%	11.89%	17.26%	16.04%	10.95%	22.40%
Slovakia	17.39%	16.39%	16.50%	16.44%	16.16%	17.11%
Slovenia	16.65%	16.61%	16.69%	16.72%	16.76%	16.57%
Spain	22.22%	11.06%	16.47%	16.91%	11.26%	22.08%
Sweden	22.45%	10.95%	16.98%	16.43%	10.73%	22.45%
Candidate and Potential Candidate (CPC) Countries						
Albania	16.48%	16.58%	16.08%	16.18%	16.68%	18.00%
Bosnia and Herzegovina	19.30%	15.53%	15.35%	14.21%	15.53%	20.09%
Kosovo	20.81%	14.29%	13.67%	16.93%	14.90%	19.40%
Montenegro	19.77%	15.42%	14.90%	14.90%	15.42%	19.60%
North Macedonia	19.09%	15.83%	15.30%	14.25%	15.83%	19.70%
Serbia	19.50%	16.01%	15.32%	14.19%	15.23%	19.76%
Other Countries						
Norway	21.66%	11.69%	17.06%	16.27%	11.33%	21.99%
Switzerland	20.26%	15.36%	14.05%	15.69%	15.11%	19.53%
United Kingdom	22.73%	10.64%	16.31%	17.01%	10.87%	22.45%

Source: Ipsos

Languages covered

A total of [55³⁵ target language versions](#) were used for the EWCTS 2021. Some countries (e.g. Belgium and Spain) used more than one language, whilst others used adapted versions of base translation texts (e.g. Russian in Latvia). Table 39 below details the range of languages used for the survey.

³⁵ 53 language versions were used during the pilot stage with an English version added in Luxembourg and in Cyprus for the mainstage. Following feedback from the pilot, the Luxembourg partner suggested including an English version of the questionnaire for mainstage fieldwork. In Cyprus, due to the change of agency, it became possible to field an English language version of the questionnaire after fieldwork had already started.

Table 39: Language versions used in the EWCTS 2021 questionnaire

Country	Language (version)	Separate translation process required?	Adapted from (if country/territory shares a language[s] with another)	Harmonisation
EU Member States				
Austria	German	Yes		Harmonised with Germany and Switzerland
Belgium	Dutch	Yes		Harmonised with Netherlands
	French	Yes		Harmonised with France, Luxembourg and Switzerland
Bulgaria	Bulgarian	Yes		
Croatia	Croatian	Yes		
Cyprus	Greek	Yes		Harmonised with Greece
	English	No	Source (English)	
Czechia	Czechia	Yes		
Denmark	Danish	Yes		
Estonia	Estonian	Yes		
	Russian	Yes		
Finland	Finnish	Yes		
	Swedish	No	Sweden (Swedish)	
France	French	Yes		Harmonised with Belgium, Luxembourg and Switzerland
Germany	German	Yes		Harmonised with Austria and Switzerland
Greece	Greece	Yes		Harmonised with Cyprus
Hungary	Hungarian	Yes		
Ireland	English	No	Source (English)	
Italy	Italian	Yes		
	German	No	Austria (German)	
Latvia	Latvian	Yes		
	Russian	No	Estonia (Russian)	
Lithuania	Lithuanian	Yes		
Luxembourg	English	No	Source (English)	
	French	Yes		Harmonised with Belgium, France, and Switzerland
	German	No	Germany (German)	
	Luxembourgish	Yes		
Malta	Maltese	Yes		

Country	Language (version)	Separate translation process required?	Adapted from (if country/territory shares a language[s] with another)	Harmonisation
	English	No	Source (English)	
Netherlands	Dutch	Yes		Harmonised with Belgium
Poland	Polish	Yes		
Portugal	Portuguese	Yes		
Romania	Romanian	Yes		
Slovakia	Slovak	Yes		
Slovenia	Slovenian	Yes		
Spain	Catalan	Yes		
	Spanish	Yes		
Sweden	Swedish	Yes		
Candidates and Potential Candidates (CPC)				
Albania	Albanian	Yes		
Bosnia and Herzegovina	Bosnian	Yes		
	Croatian	No	Croatia (Croatian)	
	Serbian	No	Serbia (Serbian)	
Kosovo	Albanian	No	Albania (Albanian)	
	Serbian	No	Serbia (Serbian)	
Montenegro	Montenegrin	No	Serbia (Serbian)	
	Serbian	No	Serbia (Serbian)	
North Macedonia	Albanian	No	Albania (Albanian)	
	Macedonian	Yes		
Serbia	Hungarian	No	Hungary (Hungarian)	
	Serbian	Yes		
Other Countries				
Norway	Norwegian	Yes		
Switzerland	French	Yes		Harmonised with Austria, Germany And Luxembourg.
	German	Yes		
	Italian	No	Italy (Italian)	
United Kingdom	English	No	Source (English)	

Source: Ipsos

Table 40: Number of completed interviews per language (mainstage, valid completes)

Country	Achieved sample sizes	Number of completed interviews per language
EU Member States		
Austria	1779	German
Belgium	2433	Dutch
	1800	French
Bulgaria	1796	Bulgarian
Croatia	1912	Croatian

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Achieved sample sizes	Number of completed interviews per language
Cyprus	1348 17	Greek English
Czechia	1990	Czech
Denmark	1820	Danish
Estonia	1411 393	Estonian Russian
Finland	1895 8	Finnish Swedish
France	3213	French
Germany	4131	German
Greece	1798	Greece
Hungary	1792	Hungary
Ireland	1790	English
Italy	3131 0	Italian German
Latvia	1447 352	Russian Latvian
Lithuania	1871	Lithuanian
Luxembourg	199 448 227 489	English French German Luxembourgish
Malta	1238 234	Maltese English
Netherlands	1816	Dutch
Poland	2900	Polish
Portugal	1880	Portuguese
Romania	1808	Romanian
Slovakia	1794	Slovak
Slovenia	2631	Slovenian
Spain	2876 27	Spanish Catalan
Sweden	1826	Swedish
Candidates and Potential Candidates (CPC)		
Albania	989	Albanian
Bosnia & Herzegovina	823 0 205	Bosnian Croatian Serbian
Kosovo	1121 13	Albanian Serbian
Montenegro	1142 6	Montenegrin Serbian
North Macedonia	16 1121	Albanian Macedonian
Serbia	0 1149	Hungarian Serbian
Other Countries		

Country	Achieved sample sizes	Number of completed interviews per language
Norway	3301	Norwegian
Switzerland	314	French
	783	German
	127	Italian
United Kingdom	2134	English

Source: Ipsos

Translation team and coordination

The translation process for EWCTS 2021 was managed centrally by the Ipsos CCT. The team were responsible for the preparation of the briefing materials for the linguists and project managers, coordinating the translation of the questionnaire (as well as other fieldwork materials), collecting feedback, making recommendations, and the overall documentation of the translation process.

Language Connect (Ipsos' translation partner) was responsible for coordinating the translation process locally, distributing all translation materials to the translators, providing direct assistance and feedback to their translators, and collating the translations. The project manager from Language Connect liaised with the Ipsos CCT when they encountered difficulties or had any queries.

Aside from the Ipsos CCT, the following people were involved in the translation process of the questionnaire:

- One translator (T1) from Language Connect – a native speaker of the target language and fluent in English (C2 level) with extensive experience in translating survey questionnaires and other materials for market and social research purposes. This person was responsible for producing the first translation.
- One adjudicator appointed by Language Connect on the basis of being a native or equivalent level (C2) speaker of the target language and fluent in English (C2 level) and having also professional experience in survey translation, as well as other services linked to the market research sector. The adjudicator was responsible for reviewing the translation produced, leading the review discussion and producing the final translation based on the discussions.
- The country project manager was responsible for reviewing the final translation produced by the adjudicator. For countries with multiple languages, the final review was performed by another researcher at the local agency when the country project manager was not a native speaker of the language.

The Translation Process

Three slightly different translation processes were used for EWCTS 2021. The one that was employed for each target language depended on whether a separate translation process was required for a target language (i.e. where a translation was made directly from the English language source text), if the independent versions of a translation were harmonised or finally, if a target language version was adapted (for a specific country) from another version of that same language. All translations generated from these three processes were required to maintain **semantic, conceptual and normative** equivalence across all surveyed countries.

The following three sub-sections provide an overview of each of these three translation processes.

Main Translation Process

The EWCTS 2021 questionnaire was adapted from the EWCS 2020 questionnaire version which underwent a rigorous, state of the art TRAPD³⁶ process. TRAPD is an acronym for Translation, Review, Adjudication, Pre-Testing and Documentation, which are the five interrelated procedures involved in producing a final translated version of the questionnaire.

For the EWCS 2020, two independent translations were made for each language in parallel and all new questions were fully translated. The translators were required to simultaneously review the existing questions from previous waves to ensure coherence between the translation of the new and the trend questions. This involved one translator from the local research agency in each country and one translator from the external linguistic company.

The adjudicator reviewed and analysed the two translations produced (including trend questions) to prepare for the review meeting. The adjudicator and the two translators met in a review meeting held via webinar. The aim of this meeting was to review the two translations of the questionnaire between the three parties and agree on a merged version through discussion and resolution of all doubts or controversies. After the review meeting, the adjudicator prepared the final merged version of the translation, based on the discussion, and agreed solutions from the review meeting.

Each finalised target questionnaire was proofread by the country project manager or someone from the research team³⁷ responsible for conducting the fieldwork.

Three types of questions needed to be reviewed:

- **New questions** (i.e. questions not asked in previous waves). These questions have to be fully translated. The objective of the translation was to be comparable and consistent across the newly translated items, as well as with the text from the previous wave of the survey. When translating, translators had to check consistency with translations already available.
- **Modified trend questions** (i.e. part of a question already asked in previous wave has been changed). Existing translations (trend) from the previous wave were provided. Translators were asked to modify/adapt the translation, using the one used for the previous wave. The new words or items were to be translated while the accuracy of the trend words or items (already translated) needed to be checked.
- **Trend questions** (i.e. questions already asked in previous waves). Translations of trend questions that have already been used in previous wave and that have not been modified were not to be retranslated but were made available in the translation file. The objective was to retain the same translations that were used in the past wave as much as possible. The review of the trend questions was assigned to adjudicators who reviewed those and checked their accuracy, e.g. ensuring that day-to-day terms were up to date with modern language terms. Changes to trend questions were only to be made if major issues on translations were identified and suggestion for changes had to be clearly justified and had to be submitted to Eurofound for approval.

³⁶ <http://ccsg.isr.umich.edu/index.php/chapters/translation-chapter/translation-overview>

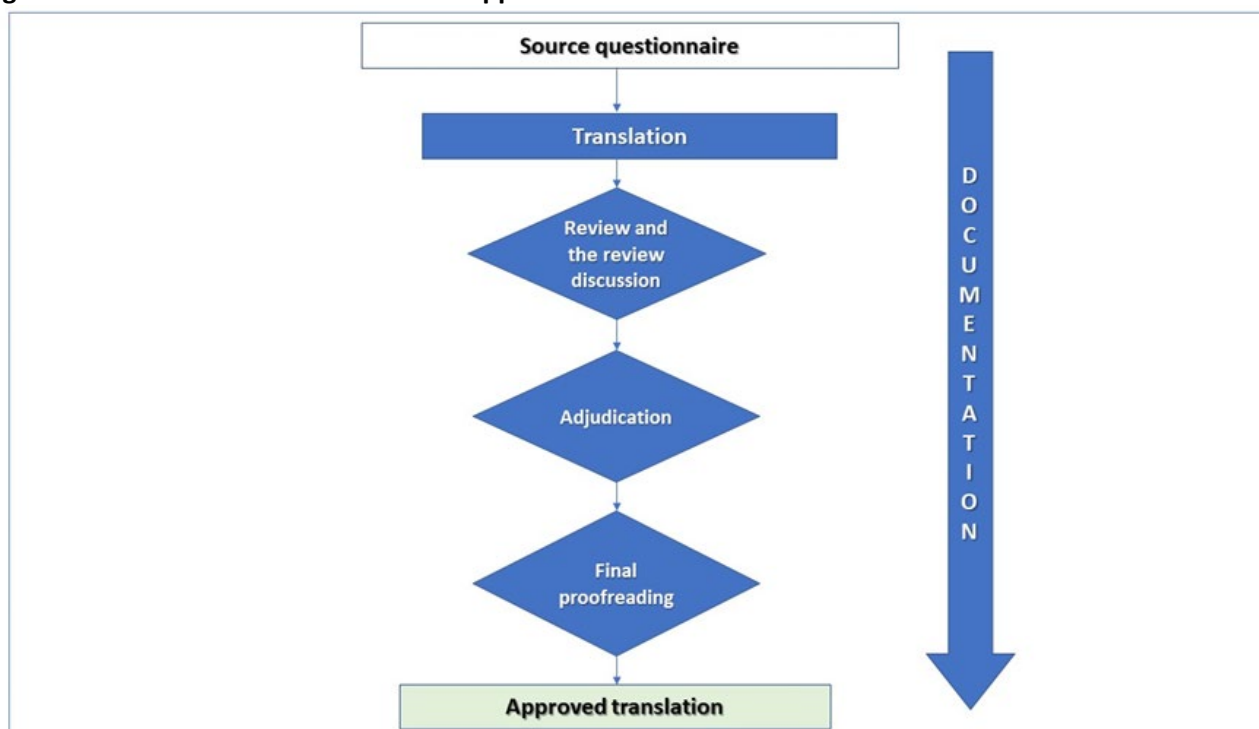
³⁷ For countries with multiple languages, and if the country project manager was not a native speaker of the target language, the final proofreading was performed by another researcher from the local research team.

Full details on the translation process for the EWCS 2020 questionnaire can be found within the EWCS 2020 translation report (available on request from Eurofound).

Since there were only minor changes implemented for the EWCTS 2021 questionnaire, it was decided that a simplified TRAPD model would be applied, which involved only one translator and one adjudicator in each country.

As noted in Table 39, this translation approach was used for the majority of target languages.

Figure 14: Illustration of the translation approach used in the EWCTS 2021



Source: Ipsos

The main steps involved in this approach were:

- The source English version was closely proofread to check for minor errors in grammar and spelling by the CCT.
- One translator (Translator 1) for each language undertook the translation of the source English questionnaire into the target language versions. They translated the new and modified questions/answers scales ensuring coherence between the translation of the new and the existing questions.
- The adjudicator reviewed the T1 translation and flagged up any issues which were then communicated to T1 (e.g. grammar, punctuation, word order, typos, spelling errors, mistranslations, inappropriate word choice, idiomatic expressions). The adjudicator included a description of the issues in the translation file. In the case of any disagreements, both linguists discussed the issue via emails to agree on a final version of the translation. The aim of this review discussion was to agree on a final version through discussion and resolution of all doubts or controversies. The decision process was thoroughly documented by the adjudicator.
- Each finalised target questionnaire was checked by the research team from the local agency. They conducted a final proofread of the newly translated items and existing

questions, and also made sure that key terms were translated consistently across items and within items. Please note that the whole questionnaire was also double-checked and validated by the project managers during the script checking process.

- The translation process was expanded for languages spoken in more than one country. Depending on how similar the languages spoken in the different countries are, the translation went through either a *harmonisation* or *adaption process*. A harmonisation process was used for those countries/languages where significant differences exist in the dialects used (e.g. different vocabulary, differences in language) and separate translations were made for each country (using the translation approach described above). These local versions were then harmonised to optimise comparability whilst at the same time maintaining the national dimension. An adaption process was used for countries that share a language that is extremely similar to each other or where it is spoken by a minority. The finalised translation was prepared by the country where there is a greater number of speakers of the language, and this was used as a basis and adapted for local use. Further detail on this process and the countries and languages involved can be found later in this report.
- The final version was sent to Eurofound for approval.

During the translation process, no major issues were encountered. Overall, the Excel translation file showed that the simplified TRAPD method had been applied correctly and those involved had, where required, argued their cases well, in sufficient detail. Furthermore, reviewing languages they did not speak was not a problem.

Additional detail on the individual steps in this process can be found in the [EWCTS 2021 Translation Report](#).

Harmonisation translation approach

For languages that are spoken in two or more countries, but where there are differences in the dialect (for example, French spoken in France, Belgium, Luxembourg and Switzerland), a different translation process was followed.

Separate translations were made for each country in the manner described for the main translation approach. Once the adjudicated version was prepared for those countries, a process of harmonisation was implemented. The different translations were shared between the adjudicators for each country responsible for producing them with a view to ensuring that the best possible translation was used for the language in question, in the context of the country that it was to be used in. The adjudicators discussed their comments via emails or during the online meeting and made recommendations for adjustments.

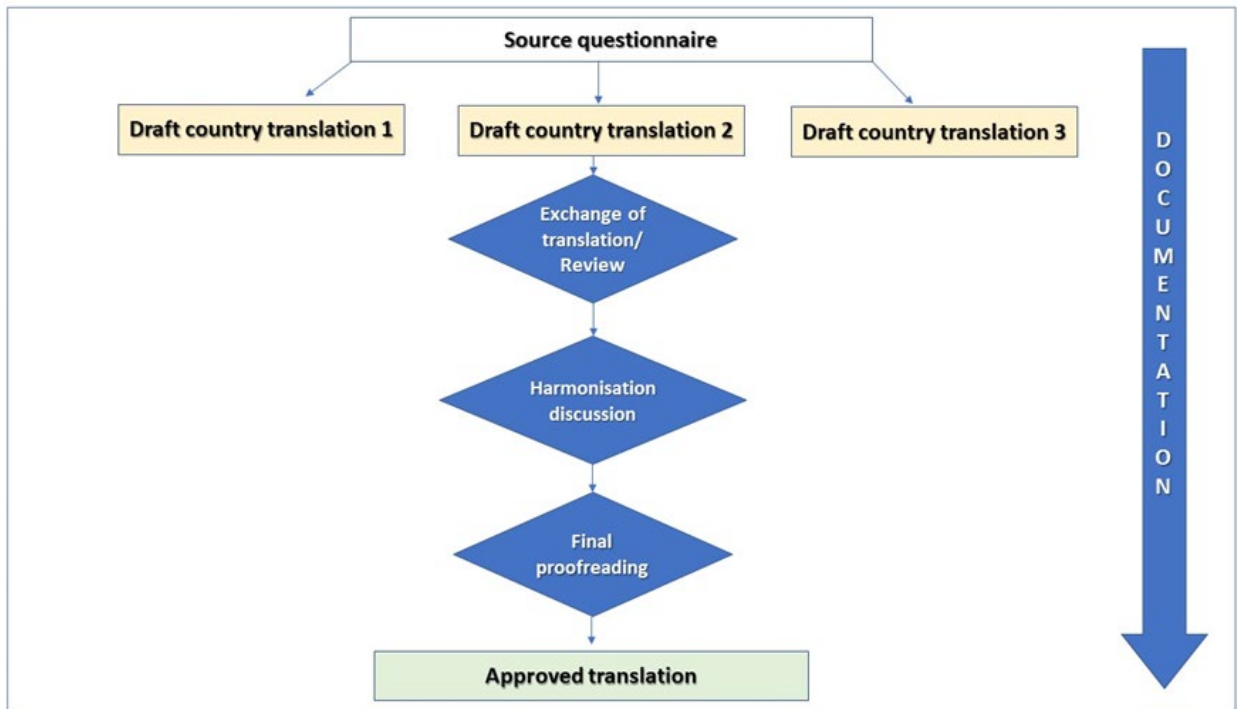
This harmonisation/cross-national adjudication process had two main objectives:

- 1) to 'harmonise' the language versions, and
- 2) to add an additional layer of quality control to the translations.

The aim of the exercise was one of **harmonisation**, however, two distinctions must be made:

- *general style of the language*: the translations should be harmonised as much as necessary (**not as much as possible**), so that the particular local colour of the individual translations is preserved.
- *key terms or other specific terms*: harmonisation is possible, but not at the expense of losing the local style, or what is more commonly used in local languages.

Figure 15: Illustration of the harmonisation approach



Source: Ipsos

Additional detail on the harmonisation process can be found in the EWCTS 2021 Translation Report. As noted in Table 41 below, this approach was used in nine countries for four languages.

Table 41: Countries/languages with harmonisation

Country	Language
Belgium, France, Luxembourg and Switzerland	French
Belgium and Netherlands	Dutch
Austria, Germany and Switzerland	German
Cyprus and Greece	Greek

Source: Ipsos

The harmonisation process took place between 22nd October and 3rd November 2020 and the calls lasted between 1 and 1.5 hours (depending on the number of language versions that were discussed).

Table 42: Dates of the harmonisation online sessions and participants

Country	Language	Date of the review meeting	Participants
Belgium (BE), France (FR), Luxembourg (LU) and Switzerland (CH)	French	27 th October	Adjudicator BE FR, Adjudicator FR, Adjudicator LU FR, Adjudicator CH R
Austria (AT), Germany (DE) and Switzerland (CH)	German	27 th October	Adjudicator AT, Adjudicator DE, Adjudicator CH DE

Source: Ipsos

Table 43: Dates of the harmonisation discussions via emails and participants

Country	Language	Discussion via emails	Participants
Belgium (BE) and Netherlands (NL)	Dutch	23 rd October	Adjudicator BE NL, Adjudicator NL
Cyprus (CY) and Greece (EL)	Greek	26 th October	Adjudicator CY EL, Adjudicator EL

Source: Ipsos

During the harmonisation process, no major issues were detected. The adjudicators were able to discuss all their comments and harmonised their translations where possible.

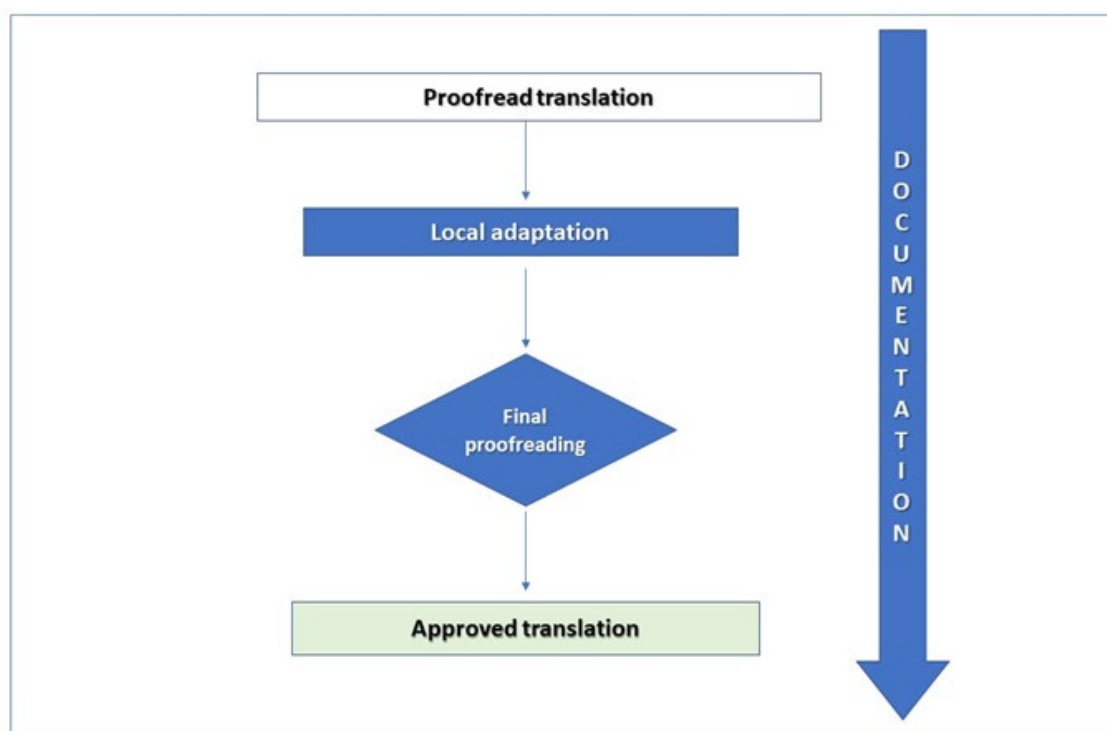
The initial Belgian French adjudicator had to withdraw from the project before the planned harmonisation meeting for the French language and Language Connect were unable to find a replacement at such short notice. Given the short time frame before launching the pilot, Ipsos took the decision to involve a new adjudicator from the Belgian agency who is head of the Belgian translation team. That person was already involved in the translation process of the previous EWCS 2020 as T1. Her CV as a new adjudicator for Belgium was approved by Eurofound. The Ipsos CCT provided her with all the required instructions and briefing materials. She joined the harmonisation meeting with other French adjudicators, and she was able to successfully complete the adjudicated file for Belgium.

Adaptation translation approach

For countries that share a language that is extremely similar to each other (e.g. Italian in Italy and in Switzerland) or where it is spoken by a minority, an initial translation (following the approach described previously) was prepared by the country where there is a greater number of speakers of the language (in this example, Italy). This was used as a basis and adapted for local use.

For Ireland, Luxembourg, Malta and the United Kingdom which were using the source (English) version of the questionnaire as their starting point, it was first reviewed by a native English speaker who has extensive market research experience in editing and localising questionnaires. This version was then adapted to more appropriate English for each country and concise explanations were recorded on the changes applied to the English source text.

Figure 16: Illustration of the adaptation approach



Source: Ipsos

The following languages and countries used the adaptation approach:

Table 44: Countries/languages with adaptation

Country	Language(s)	Adapted from:
Cyprus ³⁸	English	Translation adapted from English Source
Finland	Swedish	Translation adapted from Sweden
Ireland	English	Translation adapted from English Source
Italy	German	Translation adapted from Austria
Latvia	Russian	Translation adapted from Estonia
Luxembourg ³⁹	English	Translation adapted from English Source
Luxembourg	German	Translation adapted from Germany
Malta	English	Translation adapted from English Source
Bosnia & Herzegovina	Croatian	Translation adapted from Croatia
Bosnia & Herzegovina	Serbian	Translation adapted from Serbia
Kosovo	Albanian	Translation adapted from Albania
Kosovo	Serbian	Translation adapted from Serbia
North Macedonia	Albanian	Translation adapted from Albania
Montenegro	Montenegrin	Translation adapted from Serbia
Montenegro	Serbian	Translation adapted from Serbia
Serbia	Hungarian	Translation adapted from Hungary

³⁸ Due to the change of fieldwork agency, it became possible to field an English language version of the questionnaire after fieldwork had already started.

³⁹ An English version of the questionnaire in Luxembourg was added after the pilot stage.

Country	Language(s)	Adapted from:
Switzerland	Italian	Translation adapted from Italy
United Kingdom	English	Translation adapted from English Source

Source:

Ipsos

Additional details on the adaptation process can be found in the EWCTS 2021 Translation Report; no major issues were detected during the adaptation process.

Other translated fieldwork materials

The EWCS fieldwork materials were created jointly by Ipsos and Eurofound to aid the implementation of the project. As these documents were to be used by the local teams (interviewers, project managers), they all needed to be translated from English into the local languages.

Ipsos was responsible for coordinating the translation of all the research tools into the target languages of each country.

For survey instruments other than the questionnaire, a single-translation approach with no adjudication was implemented for efficiency reasons. These translations were undertaken by the translators from Language Connect with proof-reading undertaken by the country project managers in each country – given their extensive research experience.

The table below lists all fieldwork materials that were translated:

Table 45: List of the translated fieldwork materials

Material	Document format	Translation carried out by	Translation reviewed by
Data Protection Notice	Word	Language Connect	Local agency
Interviewer training manual (incl. annotated questionnaire)	PowerPoint	Language Connect	Local agency

Source: Ipsos

For consistency with the EWCS 2020 translations and for time efficiency reasons, translations of some fieldwork materials from the EWCS 2020 phase were used when available. Only the dates and the footnote were updated in these documents to correspond with the EWCTS 2021. These changes were undertaken directly by the Ipsos CCT.

The following translated EWCS 2020 documents were made available:

Table 46: List of the available fieldwork materials from the EWCS 2020

Material	Document format
Guidance note for interviewers on probing	Word
Interviewer Training Attendance Sheet	Word
Interviewer Confidentiality Agreement	Word

Source: Ipsos

6. Pilot Testing Process

This section of the reports provides an overview of the pilot testing process and its findings related to sampling, the questionnaire and coding.

Pilot process

The pilot exercise acted as a “full dress rehearsal”, as it aimed to test all aspects of the sampling, fieldwork implementation and data processing, together with the new CATI methodology selected for the survey and the revised survey materials.

The main objectives of the pilot were to enable the testing of:

- The functioning of the new sampling approach.
- The administration of the revised questionnaire, i.e. to understand any practical flaws that may become evident.
- The CATI script (all aspects, including routing).
- The new questions included in the questionnaire on the topic of COVID-19.
- Methods for making contact with respondents, encouraging participation and maximising response rates.
- The screening process – including dealing with different types of respondents in terms of the type of work contract they may have, the number of hours they work, and the specific COVID-19 consequences with a higher occurrence of people at work in furlough etc.
- Interviewer training materials – the pilot enabled the identification of any gaps in interviewer training and allowed the CCT and country managers to improve the quality of the training sessions and briefing materials prior to the mainstage survey.
- The interviewer and fieldwork monitoring strategies.
- The quality control process.
- The overall attitudes of respondents related to their willingness to provide information on working conditions and changes after the first wave of COVID-19 in the spring of 2020.
- The length of interview for different employment situations, language versions and routes.
- The quality of the data collected on ISCO and NACE and its suitability for coding.

Pilot fieldwork in all 36 countries ran from the 30th November until the 30th December 2020. This was followed by the implementation of coding and back-checking procedures.

The table below outlines the samples sizes achieved for the pilot, the interview, the fieldwork start and end dates and the number of interviewers used for each country.

Table 47: Pilot interviews by country

Country	Number of interviews completed (target = 40)	Languages (number of interviews completed in each)	Fieldwork start date	Fieldwork end date	Number of interviewers used
EU Member States					
Austria	40	German (Austria): 40	01-12-20	19-12-20	3
Belgium	48	Dutch (Belgium): 36 French (Belgium): 12	01-12-20	10-12-20	3
Bulgaria	47	Bulgarian: 47	02-12-20	11-12-20	5
Croatia	54	Croatian: 54	30-11-20	19-12-20	5

Country	Number of interviews completed (target = 40)	Languages (number of interviews completed in each)	Fieldwork start date	Fieldwork end date	Number of interviewers used
Cyprus	41	Greek (Cyprus): 41	30-11-20	22-12-20	11
Czechia	45	Czech: 45	02-12-20	16-12-20	7
Denmark	43	Danish: 43	30-11-20	16-12-20	4
Estonia	45	Estonian: 36 Russian (Estonia): 9	30-11-20	17-12-20	5
Finland	40	Finnish: 40	30-11-20	29-12-20	8
France	40	French: 40	01-12-20	21-12-20	2
Germany	40	German: 40	01-12-20	21-12-20	5
Greece	43	Greek: 43	01-12-20	13-12-20	9
Hungary	42	Hungarian: 42	01-12-20	15-12-20	2
Ireland	40	English (Ireland): 40	01-12-20	16-12-20	5
Italy	40	Italian: 40	30-11-20	23-12-20	3
Latvia	40	Latvian: 36 Russian (Latvia): 4	01-12-20	30-12-20	4
Lithuania	40	Lithuanian: 40	01-12-20	29-12-20	6
Luxembourg	40	French (Lux): 19 Luxembourgish: 11 German (Lux): 10	01-12-20	17-12-20	7
Malta	40	English (Malta): 32 Maltese: 8	01-12-20	10-12-20	4
Netherlands	43	Dutch: 43	30-11-20	23-12-20	2
Poland	42	Polish: 42	04-12-20	22-12-20	4
Portugal	41	Portuguese: 41	30-11-20	30-12-20	4
Romania	62	Romanian: 62	02-12-20	17-12-20	7
Slovakia	44	Slovak: 44	02-12-20	16-12-20	6
Slovenia	41	Slovenian: 41	01-12-20	17-12-20	5
Spain	40	Spanish: 40	02-12-20	17-12-20	5
Sweden	41	Swedish: 41	30-11-20	30-12-20	9
Candidates and Potential Candidates (CPC)					
Albania	40	Albanian: 40	02-12-20	15-12-20	3
Bosnia and Herzegovina	40	Bosnian: 19 Croatian (B&H): 11 Serbian (B&H): 10	30-11-20	14-12-20	2
Kosovo	40	Albanian (Kosovo): 29 Serbian (Kosovo): 11	02-12-20	20-12-20	5
Montenegro	45	Montenegrin: 44 Serbian (Monte): 1	02-12-20	17-12-20	2
North Macedonia	42	Macedonian: 38 Albanian (N. Mace): 4	02-12-20	21-12-20	4
Serbia	42	Serbian: 42	30-11-20	15-12-20	2

Country	Number of interviews completed (target = 40)	Languages (number of interviews completed in each)	Fieldwork start date	Fieldwork end date	Number of interviewers used
Other Countries					
Norway	40	Norwegian: 40	30-11-20	22-12-20	3
Switzerland	44	German (Switz): 32 French (Switz): 9 Italian (Switz): 3	01-12-20	21-12-20	8
United Kingdom	40	English: 40	30-11-20	22-12-20	9

Source: Ipsos

Pilot findings, issues and recommendations

The following section provides an overview of the main findings and actions taken for main stage in relation to the sampling, questionnaire and coding.

Pilot findings – sampling

The pilot sampling followed the mainstage procedures (outlined in Chapter 3: Sampling and Weighting) to provide a full test of the approach. In all countries except Sweden, samples were drawn by Sample Solutions, based on a random digit dialling (RDD) approach using mobile phone sample. In Sweden the sample was drawn from the population register, SPAR.

Overall, the sampling process worked well, although some specific issues occurred in relation to sample selection and the amount of sample issued.

Sample selection issues

During fieldwork, the Finnish agency detected a problem with the sample when eligibility rates were lower than expected, slow fieldwork progress was observed and very few interviews achieved. The cause of this was attributed to missing prefixes. After investigation it was discovered that 99% of the sample released by Sample Solutions contained a specific prefix which was typically for pre-paid numbers, which were mostly owned by elderly or very young people. The market share comparisons conducted during the preparation phase did not pick up an issue with the sample in Finland, because the market shares were as expected. However, this check did not pick up the fact that the most common pre-fixes for the three major providers were not included in the sample, and the corrections simply boosted those that had been included (i.e. only numbers starting with 45 were included, which are used by all three providers). This issue was corrected by ordering additional sample.

Sample Solutions investigated and confirmed the sample mostly contained one set of prefixes. This was due to an error in the stems length, resulting in output of active numbers with just these prefixes, and while the other prefixes were represented in the pre-screened sample, because of the length error, none came out as active and so were removed. Sample Solutions provided further sample for the remaining period of fieldwork to rectify this and updated their processes for the mainstage to avoid a repeat of the error.

Broadly the sample selection process worked well, although some changes were recommended for the mainstage:

1. The comparisons by market share should be continued for the mainstage to ensure that major deviations were corrected.

2. Ipsos should centrally check the sample proportions based on prefix, not just provider. This should be done by comparing back to the original agreed set of prefixes. This simple check would have picked up a further issue in Finland that occurred during the pilot. The prefix check was undertaken for all countries, but for Finland it did not pick up the issue, because of the length of the checked prefixes and not knowing which prefixes are mainly used for prepaid numbers.
3. Ipsos should check the numbers of users who have ported their mobile numbers to a different provider, to make sure this looks reasonable (i.e. that Ipsos sees this happening for most prefixes, and the proportions are not too high). This can be done by comparing the current provider (which is ascertained during the screening for active numbers) against the provider the prefix is allocated to. Sense checks were completed for the ported numbers, by inspecting the percentages for each country and discussing the results with Eurofound.
4. Ipsos also requested additional information from Sample Solutions to have additional stages that they could sense-check. Having this information meant that Ipsos could double-check the selection probabilities are as intended and the proportions of active numbers looked sensible.

Gross vs. actual issues sample sizes

The yield rate was lower than expected in 18 of the 36 survey countries and additional sample had to be issued. In 9 countries the predicted gross sample was sufficient to achieve the target of 40 interviews for the pilot and in 9 others the volume was more than was required. Notable issues were detected in the following countries:

- In **Switzerland** the yield rate was lower than expected, with Switzerland requiring nearly five times the volume of sample initially predicted. They therefore received a much larger volume of sample for the mainstage. It was also discovered that interviewers were calling until 6:30pm instead of 8:30pm. Once the calling hours were extended the overall response rate for the pilot increased.
- For **Finland**, the problems related to the sample issue explained above and the holiday period. The Finnish team expected to have an improved response rate for the main fieldwork.
- The **Lithuanian** and **Danish** teams also encountered very low response rates, requiring around three times the amount of sample that was originally estimated.
- **Sweden** also saw a large difference. The local team did not report any major issues noting that they expected the response rate to be similar for the mainstage fieldwork. This is also in line with the overall response rate in the Scandinavian countries where it has been dropping in recent years.
- **Luxembourg**: the length of the questionnaire was an issue, although the local agency noted that there are a lot of English speakers who do not speak any of the survey languages (German, French and Luxemburgish). The national partner recommended adding English as an additional language, which would help to reach people working in the EU institutions and other global organisations stationed in the country.

Pilot findings – the questionnaire and associated materials

Feedback received from the agencies revealed that the questionnaire worked well and, aside from the overall length, there were no real issues that impacted on the survey or compromised the overall quality of the data. This was in part due to the fact that the questionnaire had been tested previously for the EWCS 2020 pilot in 2019 and for a limited number of interviews for the mainstage in early 2020 (before fieldwork was halted due to the spread of COVID-19).

Based on the feedback received from the local partners, and considering the pilot findings, Ipsos recommended that the following steps be considered prior to the main stage fieldwork:

- Reducing the survey length. As mentioned by all countries, the survey was long for a CATI project and was one of the main reasons for refusals or drop-outs. As the length should be a maximum of 20 minutes, there was a requirement for the questionnaire to be reduced by around 5-7 minutes.
- Several countries mentioned that the wording of the gender question caused confusion as the formulation did not suit a CATI methodology. The local teams in Romania, Austria, Germany, Bosnia & Herzegovina, Hungary, Latvia, Lithuania and the Netherlands mentioned that the question was slightly surprising for some respondents because they believed that the interviewer would be able to identify their gender via the telephone without asking. Ipsos recommended keeping the question, but to slightly revise the wording as follows: “In order to select your gender correctly in the questionnaire, could you please let me know if you are ...”. Following this change, Ipsos believed that the question would be less confusing for the respondents.
- As mentioned previously, revising the introduction text was a key recommendation from almost all the local agencies. Most believed that the text was too formal, overly long and complex. Issues were also raised regarding the expression “policy makers” which was in the introduction. They pointed out that the respondents tended to link the phrase with politics and assumed it may be more of a political poll as opposed to a working conditions survey. The terms “personal data” also made individuals wary. All such comments were taken into account when re-writing the introduction and making it more concise and clearer.
- Other pilot recommendations included a suggestion to further emphasise the eligibility of the respondents (with more examples) during the training in order to avoid misunderstandings from the field team. One example was to make a clearer distinction between eligible individuals who work on their own agricultural farm (producing goods that sustain their household and count towards national production), and ineligible individuals who grow some vegetables in their garden. Also, placing more emphasis on the probing questions for ISCO/NACE during the training session was advised.

Pilot findings – outcome codes

During the early stages of fieldwork, Ipsos had difficulties identifying and implementing the correct outcome groupings when preparing the reports. The experience from the pilot of the EWCS 2020 CAPI phase was identical in this regard. Outcome reporting at this level of detail is always challenging. There are two components which need to be considered, these being data transfer schedules and outcome recoding. To resolve both of these, and where possible, Ipsos pushed local teams to deliver call history information in raw format on a daily basis, which was then coded at a central level to reporting outcomes.

During the first weeks of fieldwork for the pilot, the quality of the outcome reporting was unsatisfactory. The main issues were the lack of clear separation of respondents between reporting groups, which led to double or triple counting of respondents, when reporting groups overlapped.

Following the pilot, the Ipsos CCT and Eurofound agreed on new groupings (including those for AAPOR) and a reporting structure, based on the pilot experience. This agreement also served as a basis for the outcome structure in the final data set delivered for the pilot and was used by Ipsos to restructure the weekly fieldwork report. More information on the final agreed groupings can be found earlier in this report (see Table 31).

Pilot findings – fieldwork processes

Although the pilot's main objective was to serve as a "full-dress rehearsal" for the mainstage, the short fieldwork period prior to Christmas 2020 meant that some exceptions had to be made. One of these was allowing 7 days between the first and last contact (as opposed to the fieldwork rule of 14 days for the mainstage).

Some of the internal processes during the pilot also required amendments for the main stage. Some local partners using CATI links had formatting issues when following the Ipsos layout which led to increased levels of communications between them and the Ipsos CCT to finalise the file. A new approach was introduced for the mainstage whereby local partners provided Ipsos with the call history files on a daily basis in the local layout, which were then recoded by the Ipsos data processing team. This significantly improved the fieldwork monitoring process for the mainstage.

It should also be mentioned that the number of calls made for the mainstage was significantly higher than in the pilot, and so a higher rate of fieldwork rule violations was permitted. Alongside this, the effort put into monitoring and amending the fieldwork rules was greatly increased. That said, almost all countries managed to achieve less than 5% of cases with fieldwork violations during the mainstage.

Pilot findings – coding

Overall, the coding process worked well although the following issues were identified:

- A lack of sufficient probing during fieldwork. As mentioned previously, this was something indicated by local teams as being problematic and was addressed by placing more emphasis on this during the interviewer training for the mainstage.
- Delays in the adjudication process and conclusions from it – the Ascribe data uploads to the local teams were regular, whilst the adjudication process and the analysis of it was delayed due to a lack of automation.
- An imbalance in the coding teams. It was decided that teams with major issues identified during the pilot would be subject to a different monitoring system during the mainstage fieldwork, with a base value for quality control set at 25%, instead of 10%.

7. Mainstage Fieldwork

This chapter provides an overview of the key elements of the mainstage fieldwork. This includes a description of the Dimensions and Ascribe software, information on the interviewer selection and briefing process, overall interview length and the associated fieldwork support materials.

Software and IT systems

Dimensions software was the data collection platform used for the EWCTS 2021 mainstage fieldwork. It was previously used for the pilot stage, as well as the telephone-based pre-recruitment in Denmark, Norway, Finland and Sweden during the EWCS CAPI fieldwork in 2020.

The software was used by all local partners, with the only difference being the way in which the platform was accessed.

- All external vendors for Ipsos accessed the survey via web links. Using this approach, the screening component and sample management was undertaken in the local vendor's system, with the main survey data collection carried out in Dimensions.
- Among the Ipsos countries, some used a local interviewing system and then accessed the data collection platform via web links.
- For the remaining countries, Dimensions was used for sample management and the capture of call paradata (outcome, timestamp of call attempt etc.).

The primary data format for the data processing of the survey was Dimensions, meaning that the data collection and processing stages were fully compatible.

During fieldwork there were no data collection or fieldwork issues related to the platform itself. All issues reported related to the dialler settings (software or hardware) on the local team's side.

Testing of the CATI script

Once the questionnaire was signed off by Eurofound, the English version of the questionnaire was delivered to the scripting team by the CCT.

The scripting team performed internal validation to ensure the survey was delivered according to the specifications.

Once the first draft of the CATI script was developed, the CCT started to test it and sent feedback to the scripting team. The following checks were undertaken:

- Checks that all questions and answer codes were in the scripts
- Checks that questions were correctly coded as single or multicode
- Checks that any 'Other specify' answers had enough space for the answer to be typed in
- Checks that the relevant interviewer instructions were present
- Checks that "Don't Know"/ "Refused" codes were included as necessary
- Checks that numeric questions had appropriate ranges/digits allowed
- Checks that the modules, randomisation and scale order were correct
- Checks that the routing for all questions using pre-determined scenarios was correct

Any errors identified were communicated back to the scripting team, who made the necessary revisions. The final version of the script was checked and validated by a senior member of the CCT.

Once the script was signed off it was sent to Eurofound who tested it and shared feedback. Any changes were then implemented by the scripting team prior to the start of fieldwork.

Once the final script was signed off, the CCT proceeded with the overlay of the translations and checked whether the languages appeared correctly. The Ipsos scripting team developed two versions of the script for testing purposes. The so called 'flat link' which contains all questions on one page, without any logic implemented, and then the actual link, which was a full copy of the actual script which would be visible for the respondents.

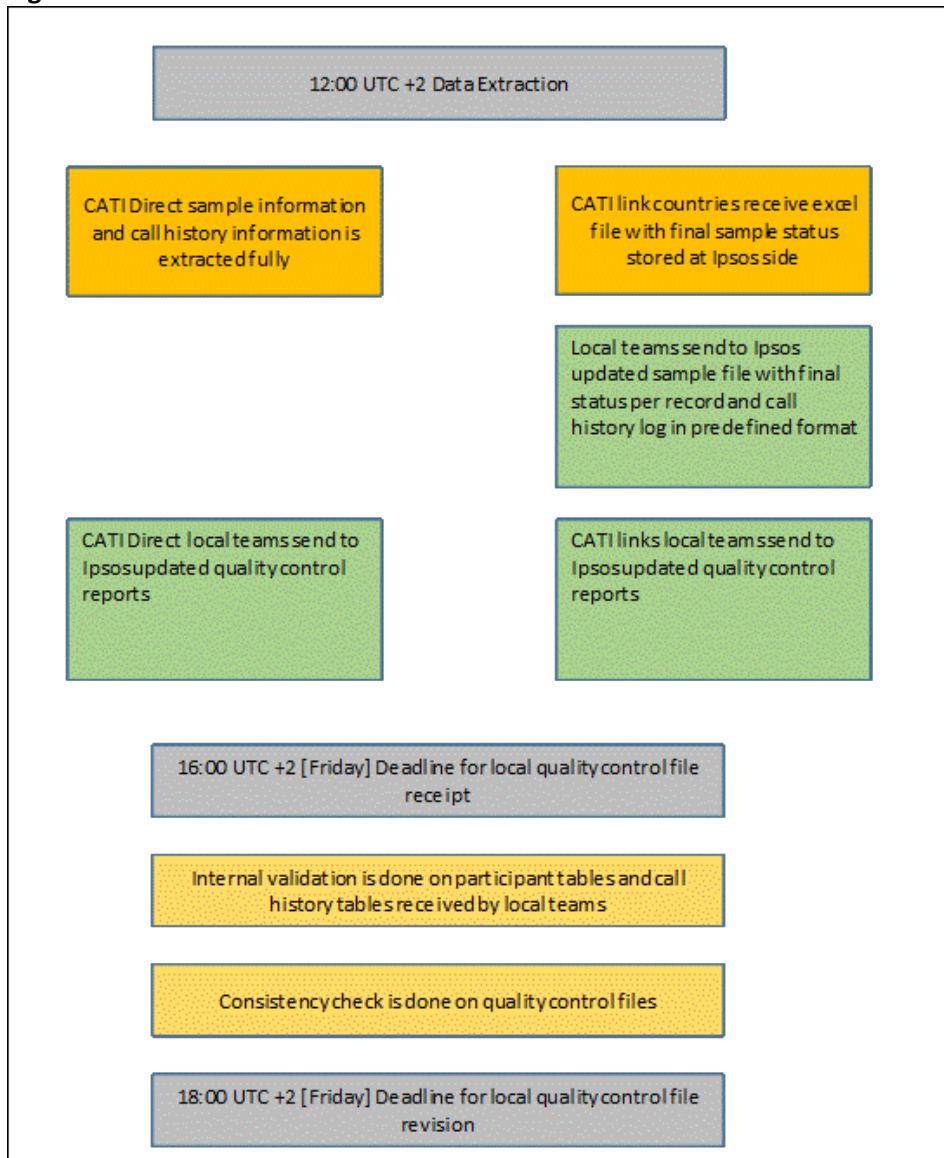
The flat link was only used for checking the translations. It was provided to the local teams who could easily work through all of the questions and check whether the translations were correct, comparing them to the master version of the questionnaire. Once the flat link was approved by the local country, the Ipsos CCT sent the link (with the implemented logic) for training and testing purposes prior to the fieldwork. Each local team had tested both the flat link and the test link with the implemented logic.

Following the pilot test, the Ipsos team developed a separate logic which enabled the local countries to test both the flat link and the link with the implemented logic at once, via one question in which both options are available. Ipsos believed that this would be the most appropriate approach, as it made the testing of the translation overlay much easier. This meant that the local partners were able to check the script logic without any communication/addition steps required from the CCT or the scripting team.

CATI Direct and the consolidation of CATI Links processes

The data flow for the consolidation of the local data files is depicted in the chart below.

Figure 17: Consolidation of the local data files



Source: Ipsos

On a weekly basis the CCT received the following from the local teams:

- 36 quality control Excel files – one file per country
- 14 sample status⁴⁰ Excel files – one file per network partner outside of Ipsos
- 14 call history⁴¹ Excel files – one file per network partner outside of Ipsos
- 12 data sets with sample status file (CATI Direct)
- 12 data sets with call history information (CATI Direct)

⁴⁰ Sample status file: a data file containing the last status of the sample record, before the file preparation. The data of interest for reporting is case ID, interviewer ID of the last contact attempt and the outcome of the last contact attempt.

⁴¹ Call history file: a data file containing information for all contacts attempts made. The data of interest is case ID, a timestamp of the contact attempt, the outcome of the contact attempt and the interviewer ID of the contact attempt.

- 26 data sets containing the survey data – with countries managed by a common vendor clustered in separate projects. For reference, countries managed by Norstat (Lithuania, Denmark, Finland, Latvia, Estonia), DT&P (Austria, Germany) and Ipsos Serbia (Albania, Kosovo, Montenegro, North Macedonia) were combined in separate projects thus reducing the overall number of data sets.

All the above was validated, cross checked for correspondence between files, processed and aggregated for the weekly reports. Any inconsistencies or formatting issues that prevented the CCT or data processing team using the files were returned to the local teams for revisions. This process became smoother over the fieldwork period as the local teams adjusted their own processes to the project requirements. However, clarifications between the local teams and the CCT at the start of fieldwork were extensive.

Mainstage “Train the Trainer” (TTT) sessions

Prior to the launch of the mainstage fieldwork, the CCT conduct a 2-2.5 hour “Train the Trainer (TTT) briefing session with the local agencies. Due to COVID-19 restrictions these sessions were conducted via webinar.

The structure of the training was based on the interviewer training manual and was as follows:

- Overview of the mainstage
- Interviewer selection and training
- Project history/significance
- Who do we interview/Quiz
- Sampling/Contact strategy/Outcomes
- Fieldwork monitoring/Quality control
- Consent/Data Protection Notice
- Deliverables
- Survey Materials/Questionnaire
- ISCO/NACE coding

The TTT briefing sessions for the project/field managers went well and there were no issues recorded. Three sessions were organised and delivered to the local agency project/field managers before their own interviewer training sessions were conducted. The table below outlines the dates of the sessions and the countries that attended.

Table 48: Train the Trainer sessions

Date of the session	List of participants
26/02/2021	Austria, Croatia, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Portugal, Spain, Sweden, Bosnia & Herzegovina, Montenegro, North Macedonia, Serbia
01/03/2021	Belgium, Bulgaria, Czechia, France, Latvia, Netherlands, Poland, Romania, Slovakia, Slovenia, Albania, Kosovo, Norway, Switzerland, United Kingdom
13/09/2021 14/09/2021	Cyprus (Pulse)

Source: Ipsos

The overall feedback from the ‘Train the Trainer’ sessions was very positive. The agencies mentioned that lots of detailed and useful information was provided. However, a few countries suggested some improvements for the future:

- Greece recommended including more information on the fieldwork rules and the definitions of morning/afternoon/evening for the calling times.
- Italy and Slovenia recommended including information on the operational aspects regarding the survey management, e.g. the Dimensions platform and its settings, recall management and fieldwork monitoring.
- Luxembourg and the UK recommended shortening the PowerPoint charts since they are very lengthy. The UK suggested focusing mostly on eligibility and coding.
- The local agency in Luxembourg also mentioned that the questions regarding who is eligible should be covered via programming.

These suggestions were not implemented for the mainstage as feedback was received after the interviewer training sessions had been delivered, and once the local agencies had digested the information and reflected on the success of the sessions. Having said this, all of the above could be considered for future waves.

Selected quotations (from local agency feedback forms)

“All was very clear and useful. It was good to hear all the rules and regulations once more to understand what we had to do and pay attention to. We have no particular recommendations at the moment.” (Belgium)

*“The training was very thorough and definitely necessary. Well organised!”
(Denmark)*

“Very useful as it was very detailed and to the point. In terms of improvements it would be very helpful to have more info from the beginning on the calling rules and definitions of morning/afternoon/evening in terms of the calling hours as these may vary from country to country.” (Greece)

*“The training was effective but was missing operational aspects about the survey management such as the Dimensions platform and settings, recall management.”
(Italy)*

*“It was useful. In general, the PowerPoint charts for briefings – especially those for interviewers - should be shorter and with less text per chart. Respectively, questions regarding who is eligible should be covered via programming.”
(Luxembourg)*

“The Train-the-Trainer session provided a good overview of the project and allowed us to understand in detail the most relevant issues of the project. It was very useful.” (Portugal)

“It was a good TTT. The only recommendation would be to include a part in the training about Dimensions and fieldwork monitoring – what is expected and how to monitor things using exports from Dimensions. Not all countries are at the same experience level, because we are using different systems for CATI interviewing.” (Slovenia)

“It was very useful and it helped us to prepare the fieldwork managers and interviewers for the fieldwork process.” (Serbia)

“Very, very useful, great documentation, great presentation, very helpful as a live session and with the recordings. Also the support is really good.” (Switzerland)

Source: Ipsos

Other staff involved in the survey (e.g. coding staff who were new to the project) attended specific training sessions relevant to their work. To accompany this, a training manual was produced for the coders. Refreshment coding training was provided to the teams who worked on the EWCS 2020.

Interviewer selection and briefings

All agencies used experienced interviewers with a background in survey research. In addition to this, all interviewers possess excellent language skills and are native speakers of the language(s) in their country. In countries with more than one official language, and regions with predominant minority languages,⁴² the local agencies used interviewers who were fluent in the appropriate language(s) in order to ensure that respondents were able to be interviewed in the language they are most comfortable with (i.e. that there were no artificial communication barriers). If the interviewer was not fluent in the respondent’s language during the initial contact (e.g. a Hungarian speaking respondent was contacted by a Serbian speaking interviewer), then the respondent was contacted again by an interviewer who was fluent in the respondent’s language (in this case by a Hungarian speaking interviewer). The local agencies ensured that they had sufficient numbers of interviewers in all languages covered by the survey.

All the assigned interviewers were fully trained by the project/field managers before the start of the fieldwork, with the session lasting a minimum of two hours. Most of the agencies briefed their staff via web conference (webinar) due to safety issues (e.g. social distancing) related to the current pandemic situation.

The following tables provide a full breakdown of the number of briefings held in each country, including the number of interviewers trained at the briefings, the number who worked on the CATI phase, the dates of the briefings and the format, e.g. face-to-face, web conference etc.

⁴² See Table 39: Language versions used in the EWCTS 2021 questionnaire.

Table 49: National briefings in each country

Country	No. of national briefings held	No. of interviewers trained at national briefings	No. of interviewers with completes	Number of interviewers per language
EU Member States				
Austria	6	55	52	German (52)
Belgium	6	72	62	Dutch (50) French (38)
Bulgaria	2	28	26	Bulgarian (26)
Croatia	24	36	36	Croatian (36)
Cyprus	3	22	19	Greek (19) English (3)
Czechia	2	110	99	Czech (99)
Denmark	58	148	126	Danish (126)
Estonia	15	35	24	Estonian (24) Russian (15)
Finland	26	57	44	Finnish (44) Swedish (4)
France	9	43	43	French (43)
Germany	16	93	93	German (93)
Greece	9	31	29	Greek (29)
Hungary	8	45	44	Hungarian (44)
Ireland	8	54	49	English (49)
Italy	3	31	31	Italian (31) German (3)
Latvia	8	28	19	Latvian (19) Russian (19)
Lithuania	8	42	35	Lithuanian (35)
Luxembourg	11	38	36	English (25) French (34) German (36) Luxembourgish (20)
Malta	3	44	39	Maltese (39) English (39)
Netherlands	8	53	42	Dutch (42)
Poland	4	58	57	Polish (57)
Portugal	5	22	18	Portuguese (18)
Romania	3	23	21	Romanian (21)
Slovenia	2	38	24	Slovene (24)
Slovakia	2	61	59	Slovak (59)
Spain	2	20	20	Spanish (4) Catalan (16)
Sweden	5	80	71	Swedish (71)

Country	No. of national briefings held	No. of interviewers trained at national briefings	No. of interviewers with completes	Number of interviewers per language
Candidates and Potential Candidates (CPC)				
Albania	2	28	20	Albanian (20)
Bosnia and Herzegovina	2	13	13	Bosnian (7) Croatian (3) Serbian (3)
Kosovo	3	12	9	Albanian (8) Serbian (4)
Montenegro	1	7	7	Montenegrin (7) Serbian (7)
North Macedonia	3	16	14	Albanian (4) Macedonian (11)
Serbia	2	18	15	Serbian (1) Hungarian (15)
Other Countries				
Norway	5	31	30	Norwegian (30)
Switzerland	3	34	29	French (8) German (22) Italian (3)
United Kingdom	6	39	33	English (33)

Source: Ipsos

The training sessions covered the following topics:

- 1. Context: An introduction to Eurofound, the project history and its significance (5 minutes)
- 2. Who do we interview/Who is eligible for the survey? (15 minutes)
 - 2.1. Special cases
 - 2.2. Special contracts
 - 2.3. Workers on leave
 - 2.4. COVID-19 circumstances
- QUIZ
- 3. Respondent consent and the Data Protection Notice (5 minutes)
- 4. Call outcome codes (5 minutes)
- 5. Questionnaire review (20 minutes)
- SHORT BREAK (10 minutes)
- 6. ISCO and NACE (30 minutes)
- SELF-PRACTICE INTERVIEW 20 minutes)
- Question and Answer (Q&A) session (10 minutes)

Focusing on interviewer training materials for the mainstage, Ipsos and Eurofound developed a number of documents that provided comprehensive information for interviewers across all aspects of the study.

The training materials provided consisted of the following:

- A PowerPoint **interviewer training manual** that provided background information on the survey, project history and significance, information on who is eligible for the study, consent,

the Data Protection Notice, call outcome codes, a questionnaire review and ISCO and NACE questions.

- An additional **annotated questionnaire** (a glossary document) was included in the interviewer training manual. It comprised of all questions in the survey (translated into the local language[s] for each country), with notes/clarifications after each question that provides specific guidance to interviewers. It also explains why the question is being asked, its intended use or meaning, and definitions of any words or phrases that might be unclear.
- The **guidance note on probing** helps interviewers understand the need to collect detailed information for the three open-ended questions that code respondents' occupation and the economic sector of activity in which they work.
- The **Data Protection Notice** is a statement available to the respondent (data subject) that describes how the organisation collects, uses, retains and discloses personal information.
- **Coding instructions** (English version) contain probing guidelines for interviewers to ensure that the verbatim responses they enter contain all the necessary information for coders to code respondents' answers regarding occupation, economic activity and education. This helps interviewers understand the level of detail required and provides them with a process to follow when clarifying respondents' job titles and activities.

The pilot did not identify any gaps in the training materials or interviewer briefing. Following a comprehensive review of the project manager and interviewer feedback, it can be concluded that no/very few changes had to be applied to the supporting fieldwork materials after the pilot stage.

In order to improve the training process for the mainstage, Ipsos placed more focus on the ISCO/NACE section and the eligibility of the respondents during the training presentations. More information on the feedback for the supporting fieldwork materials can be found in Chapter 7 (Mainstage Fieldwork - Feedback on the fieldwork support materials).

As noted previously, all interviewers who conducted interviews in both Austria and Germany were required to review the German briefing manual and then the Austrian slides were presented to those who were also allocated to work for Austria. The differences between both versions of the German questionnaires were clearly outlined to the interviewers during the training session.

Feedback from the local agencies on the national briefings

The local agencies were asked about their own training sessions delivered to their interviewers. The overall feedback was very positive. The sessions went well, and the interviewers were engaged. However, several agencies have suggested some improvements for the future.

Firstly, the sessions were perceived as being too long in some countries and some examples became a bit repetitive. It took more effort to maintain focus on the important issues that interviewers need to undertake correctly during an interview. This feedback was mentioned by Austria, Belgium, Bulgaria, Czechia, Finland, Germany, Ireland, Luxembourg, Netherlands, Slovakia and the UK.

The Netherlands reported that there were quite a lot of examples with the questions that are asked in the survey which made the training sessions quite long. In their opinion, these could be reduced somewhat for future waves. The UK recommended focusing most attention on the eligibility section

and open-ended questions relating to the ISCO and NACE classifications. Other comments included the following:

- France reported that the training sessions were much longer than anticipated due to the volume of training slides.
- Czechia and Slovakia mentioned that it was more difficult to keep the interviewers' engaged, especially when the training was conducted online during the lockdown.
- Online sessions sometimes proved difficult for Estonia because they had quite a few older interviewers who were not that familiar with the online training. Therefore it was more time consuming for them to participate in the sessions.
- For interviewers in Finland there was too much information on ISCO and NACE (although most of the agencies emphasised that this section was crucial).
- Lithuania suggested extending the eligibility quiz with more diverse situations regarding respondents' suitability to take part in the survey.
- Portugal suggested including a chapter dedicated to the pilot stage, including the sharing of results, interviewers' experiences of fieldwork, difficulties faced and how to overcome them.

Selected quotations (from local agency feedback forms):

"The training sessions were very detailed and very useful for training our interviewers. It was very thorough, and our interviewers were very much engaged in this session. They understood everything immediately when we did a little test afterwards. If we can make a tiny remark, the duration was a bit long, there were many examples that became a bit repetitive. But our interviewers learned a lot from these sessions." (Belgium)

"Everything was ok, the training was delivered via Microsoft Teams, and test links were used to help interviewers' practice, both by themselves and with supervisor/other interviewers present via the share screen." (Croatia)

"Training sessions were more involved than normal. A two-hour length will sap the attention span of interviewers and it takes more effort to keep the focus on the important issues that the interviewers need to do correctly during the interview. Examples on occupations were good as they showed directly what were acceptable. The ISCO and NACE examples were too much information for the interviewers." (Finland)

"It was indeed very interesting for our interviewers as we went through the whole questionnaire and process." (Greece)

"The training went smoothly. Interviewers asked when they had questions, they were active during the quiz questions. The training material was quite detailed, there are no suggestions for improvement." (Hungary)

"The Interviewers were very involved during the training sessions and took part in answering the quiz. Although, maybe it would be even more useful to prepare an

even longer quiz, with more diverse situations about the respondent's suitability to take part in the survey." (Lithuania)

"When the interviewers see the PowerPoint charts with all the text, they are initially overwhelmed. Especially because of the huge number of charts. For us as trainers, it means spreading a lot of motivation and positive optimism and, above all, taking away the interviewers' fear that they are thinking of everything during the interview." (Luxembourg)

"Since the agenda for training was very long, the training took much more time than usual and it was more difficult to maintain their concentration, especially when it was conducted online during lockdown." (Slovakia)

"Interviewers understood the information received during the training session, they engaged well with the session and asked some questions. There are no recommendations for improvement." (Spain)

"The training sessions were very helpful and clear on the content and structure. Interviewers were clear enough to start working after the training." (Kosovo)

"The respective training sessions are long, but they are necessary in order to deliver a smooth interviewing job. The recommendation is not to shorten such training sessions." (Switzerland)

"Too long and too much information. We need to focus on what is most important i.e. Identifying if the participant qualifies and gathering enough information for their job role and industry sector." (UK)

Source: Ipsos

Interview length and modularisation

This section outlines the process of capturing interview length and the calculations involved in reporting it, implemented by Ipsos.

The process of capturing of interview length

The process of calculating interview length was developed specifically for the project. Each survey event (clicking buttons such as "next", "back", starting and ending the survey) was captured in a separate database with a specific category label, the current question, a previous question and a time stamp (in a specific UTC⁴³ time zone). An algorithm calculated the exact time spent on each screen either going backwards or forwards, resulting in a question length calculated in seconds.

⁴³ Coordinated Universal Time

Calculation of interview length

Interview length was calculated by totalling all separate question lengths captured by the timestamp module developed for the project. The module stored information for all system questions displayed to the interviewer, so certain variables were excluded from the analysis.

Table 50: Variables excluded from interview length

Question Name	Description
Intro_page_1_1	Introduction screen and the initial question capturing refusal
SCR_Age	Screening question on the age of the respondent
Q92b	Follow up question on SCR_Age, in case the respondent refuses to state their exact age
P5	System question related to respondent cooperation
P5A	System question related to the need for clarification from the respondent
GR_Interviewer	System question capturing interviewer ID, applicable only to Greece
OpenEnds_Reviews	Open end review page
OpenEnds_Reviews_IT	Open end review page used only in Italy

Source: Ipsos

Results of the interview length calculation

The summary table below provides an overview of the average interview length, minimum and maximums, as well as the median length for each country.

Table 51: Interview length for valid interviews

Country	Number of interviews (valid)	Minimum interview length	Maximum interview length	Median interview length
EU Member States				
Austria	1779	11.83	70.00	21.98
Belgium	4233	6.75	71.52	23.20
Bulgaria	1796	10.87	74.88	20.48
Croatia	1800	11.45	44.82	20.32
Cyprus	1365	8.93	45.43	21.78
Czechia	1990	11.25	62.20	23.27
Denmark	1820	12.18	52.90	21.97
Estonia	1804	11.05	70.40	21.74
Finland	1903	11.77	70.63	23.00
France	3213	13.43	55.87	23.78
Germany	4131	11.97	80.57	22.38
Greece	1798	7.90	42.97	18.23
Hungary	1792	12.40	48.93	22.07
Ireland	1790	12.02	54.17	20.28
Italy	3131	10.67	58.17	21.22

Country	Number of interviews (valid)	Minimum interview length	Maximum interview length	Median interview length
Latvia	1799	14.32	71.53	23.68
Lithuania	1871	11.85	46.87	21.53
Luxembourg	1363	12.17	61.85	24.75
Malta	1472	10.75	65.48	20.38
Netherlands	1816	10.45	47.22	20.73
Poland	2900	11.47	55.45	22.85
Portugal	1880	9.85	55.18	19.30
Romania	1808	14.72	60.95	23.19
Slovenia	2631	10.12	57.65	20.08
Slovakia	1794	14.80	57.02	23.75
Spain	2903	11.67	57.35	19.72
Sweden	1826	15.70	79.72	27.04
Candidates and Potential Candidates (CPC)				
Albania	989	8.68	53.43	17.48
Bosnia and Herzegovina	1140	10.40	55.48	20.68
Kosovo	1127	8.63	62.38	16.47
Montenegro	1148	12.78	47.27	22.78
North Macedonia	1137	12.28	54.90	22.53
Serbia	1156	13.85	53.13	22.70
Other Countries				
Norway	3301	12.23	78.48	23.03
Switzerland	1224	16.57	55.93	26.17
United Kingdom	2134	13.17	61.17	21.50

Source: Ipsos

The below table provides an overview of the average interview length per module route for each country.

Table 52: Interview length for valid interviews, distributed per route

Country	M1A M2A	M1A M2B	M1B M2A	M1B M2B	M1C M2A	M1C M2B
EU Member States						
Austria	23.54	22.70	22.99	22.16	23.23	22.25
Belgium	24.71	24.50	24.98	23.72	24.42	24.33
Bulgaria	21.79	21.46	20.70	21.04	22.03	21.15
Croatia	21.34	21.04	20.52	20.69	21.69	20.98
Cyprus	23.01	21.45	22.96	22.03	22.67	22.11
Czechia	24.27	23.93	24.28	23.13	24.90	23.36
Denmark	22.37	22.40	23.09	21.99	23.40	22.51
Estonia	22.79	22.68	22.21	22.46	23.20	22.42

Country	M1A M2A	M1A M2B	M1B M2A	M1B M2B	M1C M2A	M1C M2B
Finland	24.26	23.94	24.41	23.45	24.52	24.06
France	24.87	24.89	25.20	24.64	24.87	24.57
Germany	23.62	23.96	23.61	22.08	25.21	22.38
Greece	18.93	18.50	18.78	18.92	19.13	18.94
Hungary	23.17	22.20	22.94	21.75	23.19	22.62
Ireland	21.96	21.02	21.01	20.38	21.82	20.77
Italy	22.15	21.59	22.13	21.42	22.11	21.84
Latvia	24.59	24.19	24.98	23.49	24.64	24.00
Lithuania	22.80	21.77	22.78	21.66	23.16	22.02
Luxembourg	26.10	24.99	26.17	25.00	26.42	25.95
Malta	21.87	21.96	21.24	20.72	22.66	20.99
Netherlands	21.85	21.00	22.42	20.98	22.17	21.66
Poland	24.03	23.35	23.62	23.00	23.65	23.38
Portugal	21.35	20.41	20.95	20.66	20.18	20.92
Romania	24.68	23.70	24.92	23.65	24.59	23.82
Slovenia	21.78	21.04	21.46	20.58	21.28	20.31
Slovakia	25.04	24.40	25.14	24.20	24.99	24.20
Spain	21.18	19.91	20.57	20.49	21.08	20.57
Sweden	28.75	28.39	28.48	27.97	28.18	28.07
Candidates and Potential Candidates (CPC)						
Albania	19.75	16.95	19.24	17.88	18.00	18.11
Bosnia and Herzegovina	21.92	21.04	22.45	22.13	20.89	22.61
Kosovo	17.95	16.98	18.44	17.17	16.91	18.24
Montenegro	23.61	22.81	22.80	22.89	24.02	23.18
North Macedonia	24.11	23.59	23.86	23.09	22.70	23.99
Serbia	23.59	22.54	23.84	22.95	23.37	23.15
Other Countries						
Norway	24.73	24.38	24.09	23.56	24.08	24.04
Switzerland	27.73	26.46	27.28	26.76	27.31	26.76
United Kingdom	22.30	22.14	23.05	22.02	22.53	22.18
TOTAL [Average]	23.12	22.45	22.99	22.24	23.03	22.57

Source: Ipsos

Possible reasons for the observed extreme cases (short or long interviews).

Records subjected to analysis were those interviews that lasted 45 minutes or more. Overall, 365 such interviews were identified across 34 countries. To exclude any coincidental results related to external factors, only countries with ten or more such interviews were analysed further.

Table 53: Long interviews identified (45+ minutes)

Country	Interviews found	Minimum interview length (seconds)	Maximum interview length (seconds)	Median interview length (seconds)
EU Member States				
Austria	3	2,829	4,200	3,703
Belgium	57	2,717	4,291	3,032
Bulgaria	4	2,784	4,493	2,939
Croatia	0	0	0	0
Cyprus	1	2,726	2,726	2,726
Czechia	7	2,720	3,732	2,916
Denmark	5	2,840	3,174	2,933
Estonia	9	2,714	4,224	2,886
Finland	17	2,720	4,238	3,049
France	26	2,700	3,352	2,899
Germany	20	2,707	4,834	2,843
Greece	0	0	0	0
Hungary	2	2,716	2,936	2,826
Ireland	7	2,721	3,250	2,925
Italy	8	2,815	3,490	3,105
Latvia	3	3,024	4,292	3,150
Lithuania	1	2,812	2,812	2,812
Luxembourg	38	2,704	3,711	2,853
Malta	5	2,702	3,929	2,969
Netherlands	3	2,703	2,833	2,746
Poland	9	2,708	3,327	2,808
Portugal	13	2,725	3,311	2,910
Romania	9	2,735	3,657	3,038
Slovenia	6	2,754	3,459	3,174
Slovakia	13	2,729	3,421	2,901
Spain	11	2,769	3,441	3,039
Sweden	37	2,702	4,783	2,949

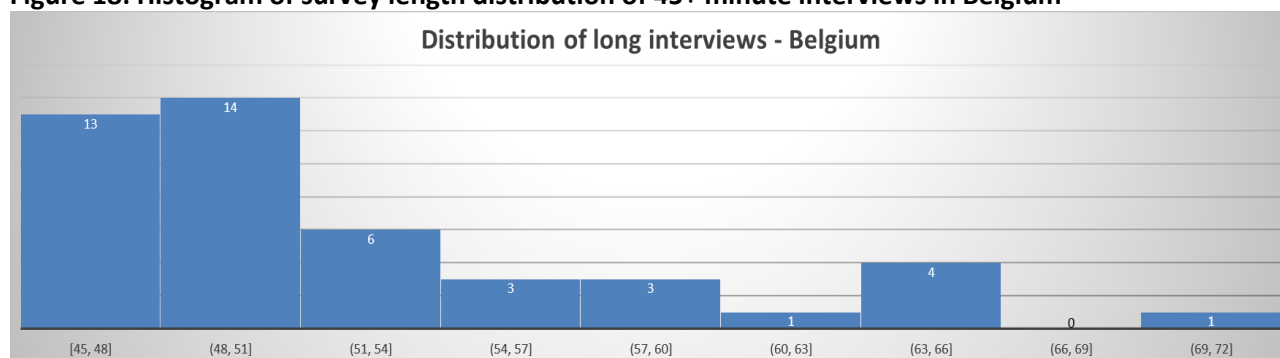
Country	Interviews found	Minimum interview length (seconds)	Maximum interview length (seconds)	Median interview length (seconds)
Candidates and Potential Candidates (CPC)				
Albania	4	2,768	3,206	3,012
Bosnia & Herzegovina	7	2,844	3,329	2,989
Kosovo	3	2,994	3,743	3,035
Montenegro	2	2,732	2,836	2,784
North Macedonia	11	2,726	3,294	2,901
Serbia	2	2,832	3,188	3,010
Other Countries				
Norway	28	2,706	4,709	2,979
Switzerland	9	2,700	3,356	2,765
United Kingdom	8	2,775	3,670	3,073

Source: Ipsos

For analysis purposes, Ipsos proceeded to analyse 271 interviews across 11 countries. These being: Belgium, Luxembourg, Sweden, Norway, France, Germany, Portugal, Slovakia, North Macedonia, Spain and Switzerland.

Belgium – 57 interviews were examined. For five of the interviews, the usage of the back button was a key factor in the longer interview length. For the remaining 45 cases, the average back button usage was 1.4 times, which did not impact the overall length. For those interviews the distribution of the interview length is as follows:

Figure 18: Histogram of survey length distribution of 45+ minute interviews in Belgium⁴⁴



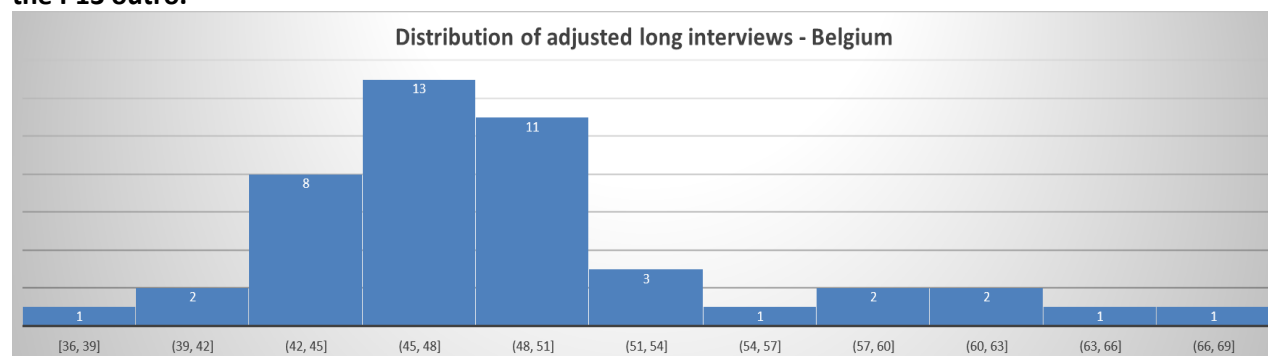
Source: Ipsos

Ipsos checked which specific questions were primarily driving the interview length and identified that most of these respondents agreed to be recontacted when asked at the end of the interview (P13). Following this, a significant amount of time was spent time on the follow up questions (an

⁴⁴ Histogram data represents column bars with the number of interviews in the range [X,Y] where X is the minimum length of interview for the group and Y is the maximum interview length for the group.

average of 153 seconds and a median of 138 seconds). A sizable amount of time was also spent on the closing “outro” question at the end of the survey (an average of 93 seconds, with a median of 46 seconds). Those two questions add up to a significant proportion of interview length, which shifts 14 cases to 45 minutes or below.

Figure 19: Histogram of survey length distribution of 45+ minute interviews in Belgium, excluding the P13 outro.



Source: Ipsos

For the remaining 31 interviews with a longer interview length, Ipsos examined cooperation levels against the LanguageID. Here Ipsos noted that no clarifications were required (in relation to questionnaire content from respondents) for half of the cases in Dutch and only in 28% in French.

Table 54: Clarification needed per language

Language	Always	Most of the time	Sometimes	Rarely	Never	Total
Dutch	1	1	2	1	5	10
French	1	0	6	8	6	21

Source: Ipsos

Table 55: Cooperation per language

Language	Very Good	Good	Fair	Poor	Total
Dutch	1	1	1	5	8
French	8	0	1	6	15

Source: Ipsos

Table 56: Average non-response rate related to language

Language	Always	Most of the time	Sometimes	Rarely	Never
Dutch	13.0%	1.0%	0.5%	0.0%	0.2%
French	5.0%		3.3%	5.5%	1.5%

Source: Ipsos

The information above suggests that the longer interview length is influenced by a combination of factors – namely poor engagement in the survey, clarifications required and a tendency for this to occur with older respondents (around 50 years old).

Luxembourg – 38 interviews were examined. Here interviews were conducted in four different languages (20 in French, 8 in German, 5 in English and 4 in Luxembourgish). In all languages significant time was spent on the open-ended questions, with no real overuse of the back button. French speaking respondents required more clarification during the interview, with 10 asking questions “most of the time” and 3 “sometimes”.

The overall median length for the four languages is 24 minutes, and with the general threshold of twice the median length there are 16 interviews above 48 minutes. From those, significant clarifications regarding questions were required in French for 7 interviews and in 9 cases overall. Clarification was provided to 8 German-speaking respondents and predominantly for younger respondents (with an average age of 39).

Sweden – 37 interviews were examined. Here the overall median survey length was the highest for all countries, so Ipsos expected to have more interviews of a longer length. In 6 of the cases examined, the back button had been used repeatedly to review the questions, thus increasing the interview length. Respondents’ need for clarification in that group was also higher, with ten people asking question most of the time and 10 sometimes. The respondents’ age was also at the older end of the spectrum (up to 80 years old with most of respondents above 50 years of age). A combination of slower survey delivery due to language and clarifications required explains the longer length of the interviews. If a more precise threshold is established of twice the median survey length (resulting in a 54-minute threshold) then the longer interviews total 6 from 1,800.

Norway – 28 interviews were examined. There was higher usage of back button for the re-adjustment of open-ended questions – with the average overall time spent being 440 seconds. The back button was used 550 times for such cases, whilst the back button had been used for those cases with a verbatim time of 300+ seconds.

France – 26 interviews were examined. As in other countries, the open-ended questions usually took more than a minute and a half, and on average they are around 400 seconds in length. Even with such an effect from these question, seven respondents had an interview length only slightly above 45 minutes and can therefore be excluded from further examination. From the remaining 19, six had a high usage of the back button for the purpose of reviewing answers, which drives the interview length to higher values. In the group of the remaining 13 respondents, there were no stand-out characteristics that can serve as a group explanation for a longer interview length. The conclusion here is that respondents had been cooperative, and the questionnaire has been clear for them, they just needed more time to answer the survey.

Germany – 20 interviews were examined. The longest interview examined was of 80 minutes, with average length for the examined group of 52.8 minutes. For the longest interview there has been higher usage of the back button (21 times). Outside of the effect of back button usage, the interviews in Germany also have more complex question sequence related to education levels. The module, comprising of up to 3 questions, took on average 131 seconds. The effect of removing those questions from length of interview is significant, with 9 interviews no longer being above 45 minutes from the examined group. Another prolonged question sequence has been consent for recontact, which has been viewed as a sensitive topic. For the respondents examined, the question took on average 50 seconds to answer, and for the follow up sequence (QP14, QP15, QP16 – name, email and phone number) another 138 seconds (on average).

Portugal – 13 interviews were examined. As for Switzerland, Ipsos identified a large amount of time spent on the open-ended questions. Again, the back button had been frequently used (581 times in

total) ranging from 6 to 65 times. As a low non-response rate was evident (0-5%), Ipsos concluded that the interview length was inflated by interviewer activity on a small scale and did not relate to respondent cooperation or the questionnaire quality and understanding of it.

Slovakia – 13 interviews were examined. In 3 of the cases the back button had been used extensively to review the answer, which increased the interview length significantly. From the remaining eight interviews, two were borderline cases with an interview length of 45 minutes. The remaining 6 interviews had a minimum of two minutes spent on the open-ended questions, were in the range of 45 to 50 minutes and were conducted with older respondents (at least 52 years old). Clarifications were rarely required on the questionnaire content, so the conclusion is that the specific respondents needed a little bit more time to answer the questions.

North Macedonia – 11 interviews were examined. The back button usage was limited, however the open-ended questions took around 200 seconds (the median) to be completed for these respondents. Cooperation levels were primarily good, with only two respondents not asking for any clarification. The age group represented here was primarily 50+ years.

Spain – 11 interviews were examined. The back-button usage was insignificant and did not drive the length of the interview up. Once again, the open-ended questions took longer with a total average time of 200 seconds. The sample profile for these respondents showed a skew towards older people, with four respondents being over 60 years old and accounting for the longest interviews in the group.

Switzerland – 9 interviews were examined, for which Ipsos identified a large amount of time spent on the open-ended questions (Q5, Q6, Q13). Carefully checking the behaviour of the interviewers during the interview, Ipsos noted that the back button has been used 685 times for those interviews, ranging from 14 to 114 times during the interview. Information on the cooperation level of respondents and requests for clarification revealed no correlation between the back button usage and requests for clarifications. This led Ipsos to the conclusion that the back button has been used for quality purposes and reviewing of data typed in for the open-ended questions. In addition, Switzerland was one of the countries that did not implement a review page for verbatims at the end of the survey.

Very short interview detection

Short interviews were detected by calculating the median interview length and an estimation threshold based on half the median length.

Table 57: Short interviews identified

Country	Median length [secs]	Speedster threshold [secs]	Identified cases
EU Member States			
Austria	1,319.0	659.5	0
Belgium	1,412.5	706.3	1
Bulgaria	1,229.0	614.5	0
Croatia	1,219.0	609.5	0
Cyprus	800.0	400.0	28
Czechia	1,334.0	667.0	2
Denmark	1,318.0	659.0	0
Estonia	1,304.0	652.0	1

Country	Median length [secs]	Speedster threshold [secs]	Identified cases
Finland	1,380.0	690.0	0
France	1,427.0	713.5	0
Germany	1,314.0	657.0	0
Greece	1,093.0	546.5	9
Hungary	1,324.0	662.0	1
Ireland	1,217.0	608.5	0
Italy	1,273.0	636.5	1
Latvia	1,421.0	710.5	0
Lithuania	1,292.0	646.0	0
Luxembourg	1,459.0	729.5	6
Malta	1,223.0	611.5	1
Netherlands	1,243.0	621.5	1
Poland	1,371.0	685.5	4
Portugal	1,148.0	574.0	4
Romania	1,391.0	695.5	0
Slovenia	1,166.5	583.3	231
Slovakia	1,390.0	695.0	1
Spain	1,183.0	591.5	0
Sweden	1,621.0	810.5	0
Candidates and Potential Candidates (CPC)			
Albania	969	484.5	7
Bosnia and Herzegovina	1,234	617	11
Kosovo	984	492	6
Montenegro	1,367	683.5	0
North Macedonia	1,352	676	0
Serbia	1,362	681	0
Other Countries			
Norway	1,382	691	0
Switzerland	1,572.5	786.25	0
United Kingdom	1,290	645	0

Source: Ipsos

Actions taken for resolving short interviews are described in the below table.

Table 58: Action taken

Country	Identified cases	Action taken
EU Member States		
Belgium	1	Interview classified as invalid in data set
Czechia	2	Interview classified as invalid in data set
Estonia	1	Interview classified as invalid in data set
Greece	9	Analysed case by case in table 59

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Identified cases	Action taken
Hungary	1	Interview classified as invalid in data set
Italy	1	Interview classified as invalid in data set
Luxembourg	6	Interview classified as invalid in data set with additional replacement interviews completed by the local team to substitute the ones removed.
Malta	1	Interview classified as invalid in data set
Netherlands	1	Interview classified as invalid in data set
Poland	4	Interview classified as invalid in data set
Portugal	4	Interview classified as invalid in data set
Slovenia	231	Interview classified as invalid in data set. This primarily affected the work of two interviewers who were removed from project. Additional replacement interviews were undertaken by the local team to substitute the short interviews and all interviews completed by the two interviewers. 436 interviews were replaced in total.
Slovakia	1	Interview classified as invalid in data set
Candidates and Potential Candidates (CPC)		
Albania	7	Interview classified as invalid in data set
Bosnia and Herzegovina	11	Interview classified as invalid in data set
Kosovo	6	Interview classified as invalid in data set

Due to the variety of issues, a separate table for Greece is provided below with detailed comments.

Table 59: Status and action per case for short interviews in Greece

ID	Length of Interview [s]	Comment	Action
109003460	344	Test complete by the local team	Flagged as invalid in the data set
109004725	546	Borderline case with length of interview equal to the median threshold. Quality controlled interview.	Remains in the data set
109007258	503	There is no indication of fraudulent behaviour. There is enough data for coding. The interview is quality controlled. Item non-response is in range 0 to 4%.	Remains in the data set
109010358	539		Remains in the data set

ID	Length of Interview [s]	Comment	Action
109019293	503		Remains in the data set
109023003	495		Remains in the data set
109024441	474		Remains in the data set
109027266	424	No indication of fraudulent behaviour. The interview length introduces quality concerns.	Flagged as invalid in the data set
109029275	433	No indication of fraudulent behaviour. The interview length introduces quality concerns.	Flagged as invalid in data set

Source: Ipsos

Fieldwork support materials

This section provides an overview of the fieldwork guidance and support materials provided to the local agencies for the EWCTS 2021. All materials were reviewed and signed off by Eurofound prior to use. The materials include the following:

- Data Protection Notice
- Interviewer Manual/training slides, including the annotated questionnaire
- Guidance note for interviewers on probing
- Interviewer Confidentiality Agreement
- Interviewer Training Attendance Sheet
- Pilot interviewer feedback form

Following the pilot testing phase, it was determined that very few changes to the materials were required given that much had been previously tested during the EWCS 2020. Where applicable, most of the updates reflected deletions (of questions/phrases/words) and small amendments.

The **Data Protection Notice** is a statement for the respondent (the data subject) that describes how the organisation collects, uses, retains and discloses personal information. It is required by the EUDPR⁴⁵ that such a notice is available to respondents. It answers some frequently asked questions (FAQs) from previous respondents with regards to data protection and privacy. It also provides contact details for Eurofound should respondents have any further questions, concerns or complaints regarding the collection and use of their personal data. It was available to all respondents in an electronic format via a short online link..

The creation of the **Interviewer Manual** was based on the slides from the EWCS 2020 and was updated according to the specifications of the new project. It contains a variety of information on the survey, including: the background information, project history and significance, eligibility, consent, the Data Protection Notice, call outcome codes, a review of the questionnaire and ISCO/NACE classification coding. The manual also contains a section which details the **annotated**

⁴⁵ The EU Data Protection Regulation.

questionnaire. This includes the most important questions with notes after each question giving specific guidance to interviewers, explaining why the question is being asked, its intended use or meaning, and definitions of any words or phrases that may be unclear.

Slides that were no longer or less relevant were deleted and additional information was added (i.e. regarding the questionnaire modularisation, COVID-19 circumstances and new terms in the questionnaire annotation). In particular, new slides were added which gave more clarity regarding eligibility, e.g. workers on furlough, short-time working and on sick leave due to COVID-19. Following feedback, the section of the training related to the ISCO and NACE classifications was extended with more examples taken from the original Word document used during the face-to-face project.

A master set of **interviewer training slides** (largely based on the Interviewer Manual) were created by the CCT together with Eurofound for national partners to translate and adapt for their own local use. Several slides were hidden and removed after the pilot phase in order to focus on more relevant parts such as the ISCO and NACE section, information on who is eligible for the study and the reasons to take part in the survey. These slides were used for the ‘Train the Trainer’ sessions during which members of the CCT delivered training to the national project managers. This was shortly followed by interviewer training in each country, delivered by the national leads.

In addition to the Interviewer Manual and annotated questionnaire, a **guidance note on probing** document was shared with all agencies. The version from the EWCS 2020 survey (which was translated into all languages) was used for the EWCTS 2021 survey as no further changes were required to this document. The guidance note is a 20-page document to help interviewers understand the need to collect detailed information during the open-ended questions. This helped ensure the accurate coding of respondents’ occupation (the ISCO classification) and the economic sector of activity in which they work (the NACE classification).

Each interviewer was also required to sign a **confidentiality agreement**, and details of all interviewers who attended the training were captured in **training attendance sheets** as part of the briefings.

Following the pilot, an **interviewer feedback form** was provided. This prompted and encouraged interviewers to record the details of their experiences during the pilot interviewing phase. This included their views on all survey processes, ranging from the briefing and interviewer materials, through to initial contact with respondents (including reasons for non-participation), the screener questionnaire and overall reflections. Where appropriate and feasible, these findings were used to compile recommendations for changes to the mainstage.

Feedback on the fieldwork support materials

The overall feedback on the fieldwork materials was very positive. Most of the agencies stated that the materials were very useful and helpful to guide and train the interviewers. No further amendments were required.

Having said this, a few recommendations were made by a small number of local agencies:

- Croatia and Finland recommended that the guidance note on probing be made more concise as it is currently too detailed. A few countries suggested the same for the Interviewer Manual.
- France and Luxembourg mentioned that the training manual was more useful for the supervisors during the fieldwork than for the interviewers given that there is a large number

of pages. They recommended keeping the information as concise as possible in one document. Switzerland also recommended having a more concise manual.

- Portugal recommended including further interviewer instructions and/or guidance on the screen for the most complex questions, especially for the open-ended questions.

Selected quotations (from local agency feedback forms):

“They were very detailed, and it helped us to indicate what should be done in different situations. Again, it helped our interviewers to understand the importance of what should be done.” (Belgium)

“The guidance note on probing could be more concise in the future, most of the content is related to coding considerations. It should be more tailored to the interviewing context, since in its current form the guidance on probing is too detailed.” (Croatia)

“The training manual and especially the guidance on probing was very useful for our interviewers.” (Czechia)

“Examples of probing were good to show the interviewers the details they needed to achieve. An improvement would be to keep the main points and shorten the document to two pages. The ISCO and NACE lists were not necessary and would benefit from just showing an example of how the 4 and 3 digit codes are formed from responses.” (Finland)

“The training manual was more useful for the supervisors during the fieldwork than for the interviewers. As it was really big it was not easy for the interviewers to use it during the fieldwork except for checking something after an interview for example. During an interview they don’t have time to look into the guide and during the briefing they were a little bit afraid of the number of pages. The guidance note on probing was of course very useful.” (France)

“The additional materials prepared for the interviewers were also very useful. They actively used the given materials, which made it easier for them to collect as much information as they could, about the respondent’s duty and roles at work, and so on.” (Lithuania)

“For us trainers it is good background information. But for interviewers, it is important to keep the information as short as possible in one document.” (Luxembourg)

“The additional documents was useful throughout the fieldwork period as a document for referral.” (Malta)

“The additional materials are useful to clarify queries and doubts throughout the project. Nevertheless, it would be very helpful to include further interviewer instructions and/or guidance on the screen for the most complex questions,

namely for the open-ended [questions] about respondent occupation and economic activity.” (Portugal)

“The training materials were very useful because the interviewers could be reminded of the rules for this research.” (North Macedonia)

“In the beginning of the fieldwork, it meant a lot to the interviewers that they had manual and the guidance note, as well as a video recording of the training session. Interviewers believe that the training session was more useful because they had the opportunity to immediately ask if they had any questions and to actively participate.” (Serbia)

“All additional training materials were well made, great in detail and explanation. My request: a condensed “quick manual” with the most important issues for the interviewer.” (Switzerland)

Source: Ipsos

8. Coding

This chapter covers the coding tasks and processes implemented during the EWCTS 2021 mainstage, the results of the coding and the challenges that emerged.

General approach and processes

During the transition from the EWCS 2020 to the EWCTS 2021, it was agreed that the core principles of the coding process would remain unchanged. As with the face-to-face fieldwork, information regarding occupation and economic activity was recorded as open-ended questions. Following this, the open-ended questions were once again manually coded into 3 and 4 digit NACE⁴⁶ and ISCO⁴⁷ codes for the mainstage.

Information on occupation was obtained from two open ended questions – Q5 “What is the title of your main paid job? By main paid job, we mean the one where you spend most hours” and Q6 “What do you mainly do in your job?”. Q5 was used to obtain the respondent’s job title, whereas Q6 collected sufficient additional information that allowed Ipsos to code occupation at 4-digit level, according to the ISCO 08 code book.

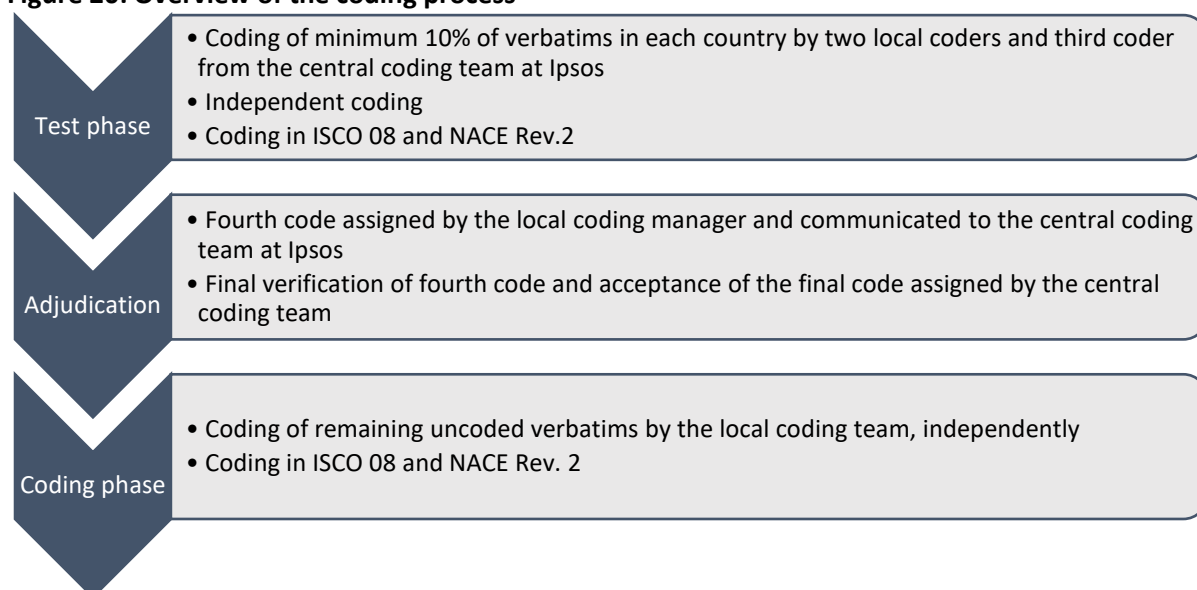
Information regarding the economic activity of the employer was obtained through Q13 “What is the main activity of the company or organisation where you work?” and was coded at 3-digit level following NACE Rev.2.

The coding process was built on the EWCS 2015 and EWCS 2020 face-to-face principles and was divided into three stages, these being: test, adjudication, and coding.

The test phase was the initial stage of coding used to independently collect three codes per verbatim: two codes from the independent local coders and one from the centralised coding team on the Ipsos side. Verbatims used by the local coders were in the language of completion of the survey and were automatically translated by the coding platform for the central coding team (discussed in more detail later). Following the test phase, the adjudication process was utilised where required.

⁴⁶ International Standard Classification of Occupations

⁴⁷ Nomenclature of Economic Activities

Figure 20: Overview of the coding process

Source: Ipsos

This process was used for the face-to-face fieldwork for the EWCS pilot in 2019 and mainstage in 2020. However, the fieldwork pace and the coding teams' availability frequently created bottlenecks and stoppages, which led to delays in the delivery schedule to Eurofound. To address this organisational issue, Ipsos proposed a different schedule for the phases for the pilot EWCTS 2021, consisting of a weekly upload of test phase verbatims, occurring each Friday morning. Friday, Saturday, and Sunday were then used for the majority of the work on these verbatims.

From Monday morning onwards, an automated script was used to verify the completion of the work by all teams and start the adjudication process. In parallel with the adjudication phase, the local team could already begin the coding phase to ensure optimal timings and make it easier to plan the work of the coding contractors at their end.

The coding and adjudication phases were expected to be completed by the following Friday, when the new batch was scheduled to be uploaded. These timings ensured frequent and short batches of weekly work, which drastically improved the administrative work required for the organisation and booking of resources for all local teams.

Figure 21: Cycle of coding phases within one batch (Friday to Friday)

Friday	<ul style="list-style-type: none"> • Upload verbatims for 10% of completed interviews in the current week (previous Friday to this Friday)
Saturday	<ul style="list-style-type: none"> • Local and central coding teams work on the uploaded verbatims [part of the Test Phase]
Sunday	<ul style="list-style-type: none"> • Local and central coding teams work on the uploaded verbatims [part of the Test Phase]
Monday	<ul style="list-style-type: none"> • Coding is completed by all teams by the end of the day
Tuesday	<ul style="list-style-type: none"> • Adjudication phase starts • Local team can start the coding phase
Wednesday	<ul style="list-style-type: none"> • Adjudication phase is completed • Local team can work on the coding phase
Thursday	<ul style="list-style-type: none"> • Local team works on the coding phase
Friday	<ul style="list-style-type: none"> • Upload verbatims for 10% of completed interviews in the current week (previous Friday to this Friday)

Source: Ipsos

During the pilot fieldwork, three batches of coding were planned, starting from the 30th November and ending on the 20th December 2020. The first two weeks of January were designated as a “buffer” for the completion of any outstanding coding tasks, before delivery of the pilot results in mid-January 2021.

For the mainstage fieldwork, starting from the 8th March 2021, Ipsos originally proposed 18 batches of coding, which were further extended due to the additional fieldwork conducted and the top-up fieldwork requirements. The weekly coding schedule proved useful for the local teams and provided the required flexibility for continuing the coding process without delays, even when unforeseen fieldwork stages were required.

In relation to training, the table below contains details for the specific session attendance by each country team during the pilot set-up.

Table 60: Coding training attendance by country – Pilot preparation

Country	Training Session	Training Date
EU MEMBER STATES		
Austria	Session 03	24/11/2020 11:00
Belgium	Session 03	24/11/2020 11:00
Bulgaria	Session 01	23/11/2020 11:00
Croatia	Session 01	23/11/2020 11:00
Cyprus	Session 03	24/11/2020 11:00
Czechia	Session 01	23/11/2020 11:00
Denmark	Session 01	23/11/2020 11:00

Country	Training Session	Training Date
Estonia	Session 01	23/11/2020 11:00
Finland	Session 01	23/11/2020 11:00
France	Session 05	26/11/2020 15:00
Germany	Session 03	24/11/2020 11:00
Greece	Session 05	26/11/2020 15:00
Hungary	Session 05	26/11/2020 15:00
Ireland	Session 04	24/11/2020 15:00
Italy	Session 05	26/11/2020 15:00
Latvia	Session 01	23/11/2020 11:00
Lithuania	Session 01	23/11/2020 11:00
Luxembourg	Session 03	23/11/2020 11:00
Malta	Session 05	26/11/2020 15:00
Netherlands	Session 05	26/11/2020 15:00
Poland	Session 02	23/11/2020 15:00
Portugal	Session 02	23/11/2020 15:00
Romania	Session 05	26/11/2020 15:00
Slovakia	Session 01	23/11/2020 11:00
Slovenia	Session 05	26/11/2020 15:00
Spain	Session 04	24/11/2020 15:00
Sweden	Session 04	24/11/2020 15:00
CANDIDATES AND POTENTIAL CANDIDATES (CPC)		
Albania	Session 02	23/11/2020 15:00
Bosnia & Herzegovina	Session 04	24/11/2020 15:00
North Macedonia	Session 02	23/11/2020 15:00
Kosovo	Session 02	23/11/2020 15:00
Montenegro	Session 02	23/11/2020 15:00
Serbia	Session 02	23/11/2020 15:00
OTHER COUNTRIES		
Norway	Session 02	23/11/2020 15:00
Switzerland	Session 02	23/11/2020 15:00
United Kingdom	Session 04	24/11/2020 15:00

Source: Ipsos

While all national teams had experience of coding, prior to the pilot a small number of them did not have experience of the centralised coding platform, Ascribe. However, by the time mainstage started all of the coding teams had sufficient knowledge of the coding platform and processes, obtained through training sessions and practical experience during the pilot stage.

For Cyprus, during the main stage fieldwork a number of quality issues were identified which resulted in a change of agency and a full replacement of all interviews⁴⁸. Pulse Market Research were subsequently commissioned with the fieldwork and since they did not have prior experience with Ascribe or coding ISCO to such a detailed level, the agency received comprehensive, one-on-

⁴⁸ See Chapter 11 (Fieldwork Report – Issues encountered and actions taken) for more details.

one briefings in relation to the survey, the coding platform, and the coding requirements. During fieldwork the country performed well and had no issues with the coding platform or the required timelines.

Ipsos understands that the coding results are crucial for analysing the data collection in relation to the economic sectors or occupation groups. To ensure accuracy and quality, a number of different processes and solutions were implemented:

- Guidance documentation for interviewers
- Guidance documentation for coders
- Training for local coding teams, delivered by the CCT
- Localised coding books
- A minimum number of characters typed in at Q5 - to successfully move forward with the data collection, interviewers had to type in a minimum of ten characters and a minimum of two words.
- A Minimum number of characters typed in at Q6 – to successfully move forward with the data collection, interviewers had to type in a minimum of eighteen characters and a minimum of four words.
- A minimum number of characters typed in at Q13- to successfully move forward with the data collection, interviewers had to type in a minimum of twenty characters and a minimum of four words.
- Additional interviewer instructions related to probing and developed for Q5. Before the pilot fieldwork, the Ipsos CCT proposed further improvements to the questionnaire instructions, incorporating elements from the guidance document for coders. The exact interviewer instruction added was the following:

(INTERVIEWER NOTE: WRITE IN FULL DETAILS - PROBE FOR AS MUCH INFORMATION AS POSSIBLE)

Whenever the job title contains an adjective or verb, e.g. "administrative", "assistant", "manager", "farming", "nursing" or "teaching", extra probing will be needed to understand what that adjective/verb means."

- Additional interviewer instructions related to probing were developed for Q6. Before the pilot fieldwork, the Ipsos CCT proposed further improvements to the questionnaire instructions, incorporating elements from the guidance document for coders. The exact interviewer instruction added was the following:

(INTERVIEWER NOTE: WRITE IN FULL DETAILS - PROBE FOR AS MUCH INFORMATION AS POSSIBLE)

Remember that we are asking about the respondent's job function, and not their work tasks which might be more general. The tasks however if they are mentioned can help you assess:

- *The level of supervision over other employees*
- *The complexity of their work*
- *The field in which they are operating*
- *The types of products and services they contribute to*
- *The type of care they are providing (social or health, to vulnerable people, healthy people or not)*

- Additional interviewer instructions related to probing and developed for Q13. Before the pilot fieldwork the Ipsos CCT proposed further improvements to the questionnaire instructions, incorporating elements from the guidance document for coders. The exact interviewer instruction added was the following:

(ASK AND WRITE IN FULL DETAILS – PROBE FOR AS MUCH INFORMATION AS POSSIBLE!

Please clarify with the respondent the exact industry or sector s/he is talking about, and within that industry what exactly the organisation does.

“Construction” - What do you build?

“Agriculture” - What do you produce?

“It is a shop” - What do you sell?

- Open-end review page: Based on the pilot fieldwork in 2020 and local teams’ feedback in relation to the interview length analysis, the CCT noted that some of the local teams had used the “back” button to review Q5, Q6 or Q13 and clear up any typos/errors, write in full abbreviations etc. As noted previously in Chapter 5 (Questionnaire Development), Ipsos introduced an additional system screen at the end of the survey, where interviewers were able to revise verbatims that had previously been recorded. All such edits were made in a careful and considered way.

The table below contains information as to which countries had this option enabled.

Table 61: Countries with confirmed usage of the open and review page

Country:
Albania
Austria
Belgium
Bosnia & Herzegovina
Bulgaria
Cyprus
Denmark
Estonia
Finland
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Norway
Poland
Romania
Spain

Source: Ipsos

- Quality control monitoring relating to the type of coder disagreement. This was a new quality control measure implemented for the pilot and mainstage fieldwork of the EWCTS 2021. A previous issue relating to this topic was a perceived lack of clarity as to what was driving the disagreement rate between coders and how severe these disagreements actually were. Some differences during the face-to-face EWCS 2020 originated from mis-clicks in the coding platform or from mistakenly assigning multiple codes to the same verbatim in the coding platform.

To correct for this, Ipsos kept track of the types of differences encountered and defined the below quality frame.

Table 62: Quality frame for coding

Code frame	Level difference (calculated at digit)	Origin of issue	Issue severity (a low number is preferable)	Actions, after the final correct code is selected
ISCO	1	Unclear verbatim, use of local abbreviations/jargon, insufficient information collected	4	Internal check by the local coding team. It is not unusual to have mis-clicks. In the case of a valid issue the local coding manager will check the local coders' work and make corrections in Ascribe. The local coder will be re-trained in the coding specifics of the project.
ISCO	1	Unclear verbatim, after translation in English	4	No action needed
ISCO	2	Unclear verbatim, use of local abbreviations/jargon, insufficient information collected	3	Internal check by the local coding team. It is not unusual to have mis-clicks. In the case of a valid issue the local coding manager will check the local coders' work and make corrections in Ascribe. The local coder will be re-trained in the coding specifics of the project.
ISCO	2	Unclear verbatim, after translation in English	3	No action needed
ISCO	3	Unclear verbatim, use of local abbreviations/jargon, insufficient information collected	2	Internal check by the local coding team. The local coder is de-briefed on the ISCO classification. Coding from the current batch is checked by the local coding manager.
ISCO	3	Unclear verbatim, after translation in English	2	No action needed
ISCO	4	Unclear verbatim, use of local abbreviations/jargon, insufficient information collected	1	No action needed
ISCO	4	Unclear verbatim, after translation in English	1	No action needed

Source: Ipsos

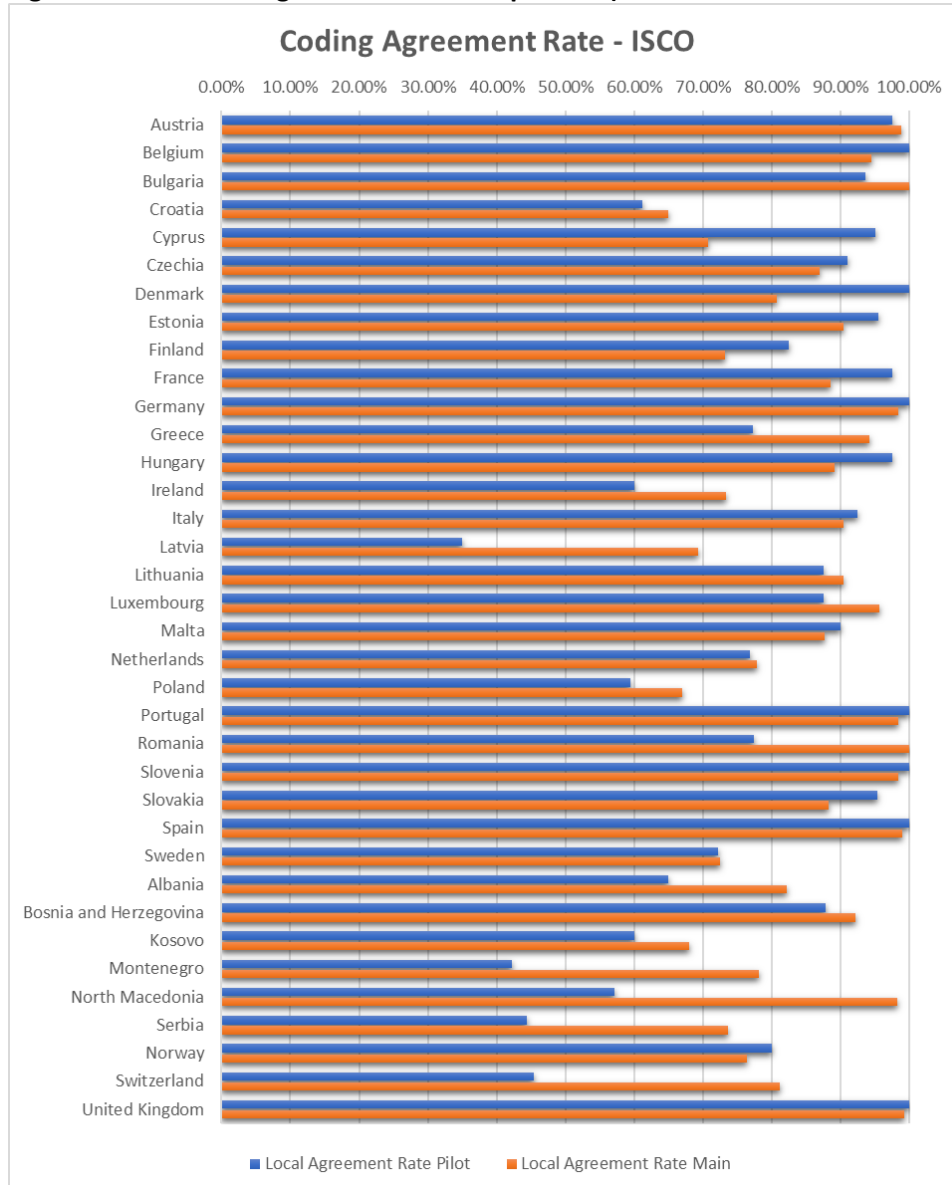
- Based on these differences and their severity, the volumes for the weekly triple coding (test and adjudication phases) were increased by 5% for the next batch of verbatims to be uploaded.

Evaluation of the efficacy and accuracy of the ISCO4/NACE3 classification

For the mainstage fieldwork in 2021 the key coding indicators that were monitored remained the same as for the pilot. Ipsos began the evaluation by calculating the agreement rate between the local coders for each of the code frames separately.

From this, Ipsos noted an 85.81% overall agreement rate for ISCO-08, which was higher than the pilot observation of 80% and at the same level of the EWCS 2020 face-to-face coding figure of 85%.

Figure 22: ISCO local agreement rate comparison (EWCTS 2021 Pilot vs. EWCTS 2021 Mainstage)



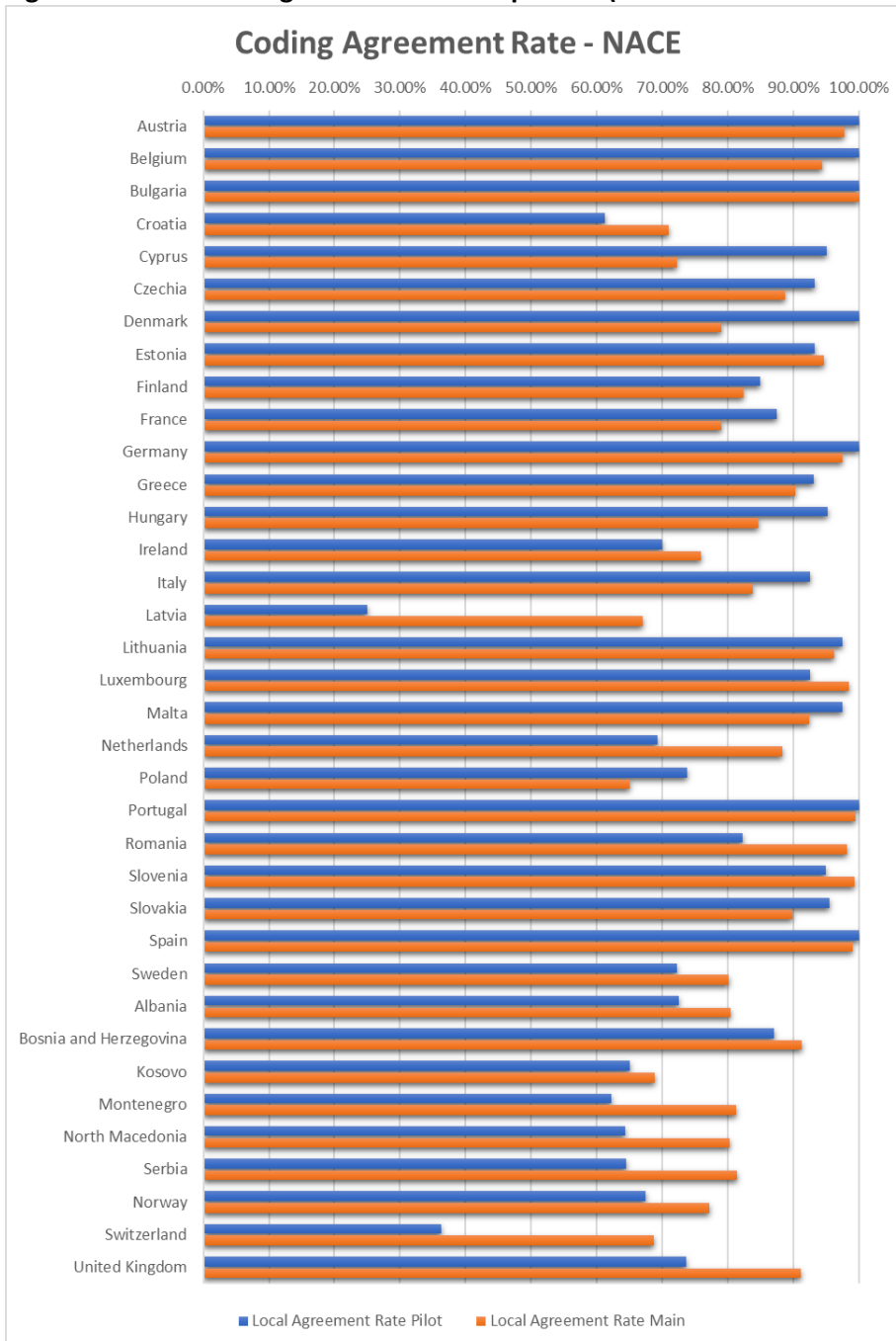
Source: Ipsos

From this figure it is evident that any issues identified during the pilot were successfully resolved in most cases, with increases in the agreement rate in Candidate and Potential Candidate (CPC) countries and in Latvia. For Cyprus, the results observed were lower than for the pilot, however they were still at an acceptable level taking into account the agency change that occurred during fieldwork.

For Latvia, Ipsos observed an improved intercoder agreement of 24.7%, accomplished by the local re-training of coders.

The highest decrease in the agreement rate (in countries without an agency change), was observed in Denmark, where the pilot result of 100% agreement was difficult to replicate over much larger sample size.

Figure 23: NACE local agreement rate comparison (EWCTS 2021 Pilot vs. EWCTS 2021 Mainstage)



Source: Ipsos

For NACE Rev.2, the intercoder agreement level was 85.72%, which, once again, was an improvement over the previous iterations of the project. Countries that experienced issues during

the pilot stage (such as Latvia, Montenegro, North Macedonia, Serbia and Switzerland) reported a significant improvement.

The most significant decrease was reported in Cyprus and Denmark with a decrease of just over 20%. However, the small sample sizes required for pilot and the agency change in Cyprus can help explain the decreases and importantly the agreement rate still stands at over 70%.

Another indicator examined was the code agreement with the final code assigned after adjudication. Ipsos understands that the interpretation of verbatims can be difficult and there are instances in which discussions are required to select the most appropriate code among multiple possibilities. The median variance of this indicator among coders was 2.19% for ISCO and 2.66% for NACE.

Table 63: Local agreement rate with variance, ISCO

Country	Local Agreement Rate	Final code = Local 01	Final code = Local 02	Variance
EU Member States				
Austria	98.92%	95.68%	96.76%	1.08%
Belgium	94.57%	86.20%	84.84%	1.36%
Bulgaria	100.00%	99.45%	99.45%	0.00%
Croatia	64.95%	81.31%	73.36%	7.94%
Cyprus	70.80%	66.42%	67.88%	1.46%
Czechia	87.00%	85.65%	83.86%	1.79%
Denmark	80.82%	81.28%	79.00%	2.28%
Estonia	90.53%	61.05%	58.95%	2.11%
Finland	73.17%	78.54%	74.63%	3.90%
France	88.62%	84.92%	80.00%	4.92%
Germany	98.44%	96.44%	95.77%	0.67%
Greece	94.20%	76.81%	75.85%	0.97%
Hungary	89.11%	76.73%	82.67%	5.94%
Ireland	73.37%	78.89%	73.37%	5.53%
Italy	90.45%	94.90%	88.85%	6.05%
Latvia	70.70%	75.81%	66.98%	8.84%
Lithuania	90.46%	48.13%	49.38%	1.24%
Luxembourg	95.65%	92.03%	89.13%	2.90%
Malta	87.72%	84.80%	80.70%	4.09%
Netherlands	77.93%	80.18%	86.04%	5.86%
Poland	66.94%	80.60%	71.58%	9.02%
Portugal	98.47%	95.41%	94.90%	0.51%
Romania	100.00%	74.77%	74.77%	0.00%
Slovenia	98.36%	97.38%	97.05%	0.33%
Slovakia	88.30%	84.57%	89.36%	4.79%
Spain	99.02%	89.90%	88.93%	0.98%
Sweden	72.45%	86.22%	78.57%	7.65%
Candidates and Potential Candidates (CPC)				
Albania	82.24%	56.07%	58.88%	2.80%
Bosnia and Herzegovina	92.17%	66.96%	64.35%	2.61%
Kosovo	68.03%	74.59%	67.21%	7.38%
Montenegro	78.13%	75.00%	71.09%	3.91%
North Macedonia	98.29%	68.38%	67.52%	0.85%
Serbia	73.73%	73.73%	73.73%	0.00%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Local Agreement Rate	Final code = Local 01	Final code = Local 02	Variance
Other Countries				
Norway	76.44%	85.60%	86.13%	0.52%
Switzerland	81.25%	82.50%	82.50%	0.00%
United Kingdom	99.23%	98.85%	98.85%	0.00%

Source: Ipsos

Table 64: Local agreement rate with variance, NACE

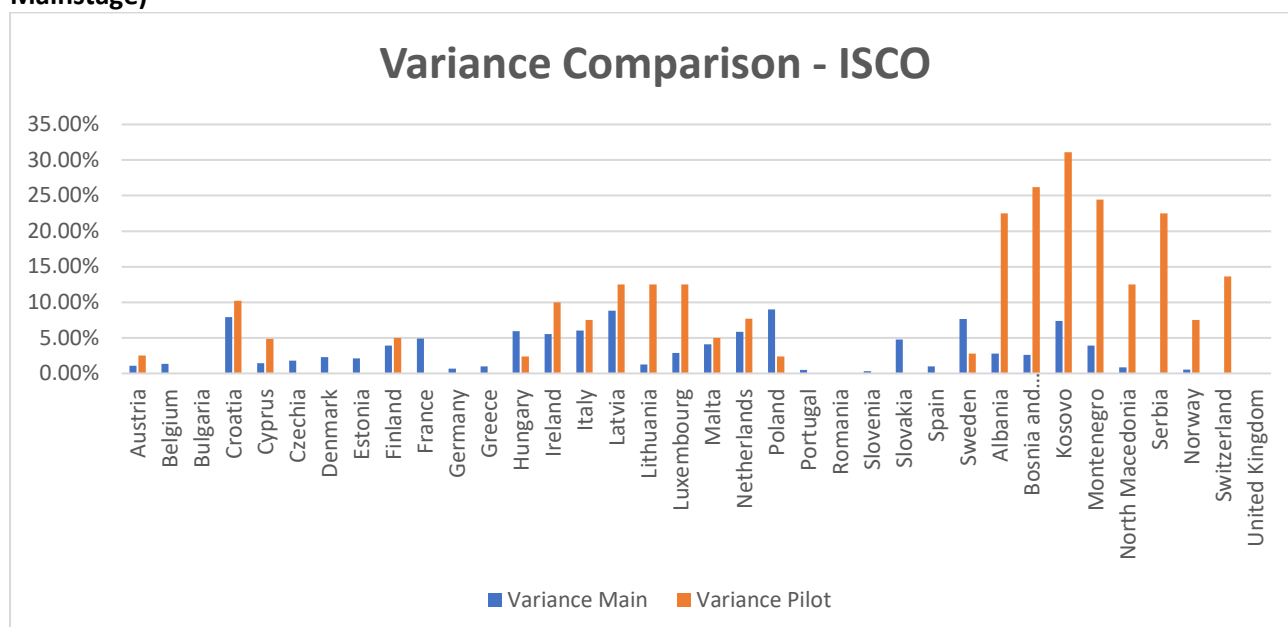
Country	Local Agreement Rate	Final code = Local 01	Final code = Local 02	Variance
EU Member States				
Austria	97.84%	95.14%	97.30%	2.16%
Belgium	94.34%	86.43%	85.52%	0.90%
Bulgaria	100.00%	98.91%	98.91%	0.00%
Croatia	71.03%	85.98%	75.23%	10.75%
Cyprus	72.26%	72.99%	72.99%	0.00%
Czechia	88.79%	89.69%	88.79%	0.90%
Denmark	79.00%	83.11%	76.71%	6.39%
Estonia	94.74%	64.74%	65.26%	0.53%
Finland	82.44%	87.32%	84.88%	2.44%
France	79.08%	83.69%	80.62%	3.08%
Germany	97.55%	97.10%	95.55%	1.56%
Greece	90.34%	78.26%	77.29%	0.97%
Hungary	84.65%	80.69%	84.16%	3.47%
Ireland	75.88%	81.41%	72.86%	8.54%
Italy	83.76%	91.72%	81.53%	10.19%
Latvia	66.98%	79.53%	72.09%	7.44%
Lithuania	96.27%	57.26%	56.43%	0.83%
Luxembourg	98.55%	92.03%	91.30%	0.72%
Malta	92.40%	87.72%	87.72%	0.00%
Netherlands	88.29%	85.59%	93.24%	7.66%
Poland	65.03%	78.14%	75.14%	3.01%
Portugal	99.49%	96.43%	95.92%	0.51%
Romania	98.13%	85.51%	84.58%	0.93%
Slovenia	99.34%	98.03%	98.69%	0.66%
Slovakia	89.89%	85.64%	90.96%	5.32%
Spain	99.02%	91.86%	91.53%	0.33%
Sweden	80.10%	83.16%	78.06%	5.10%
Candidates and Potential Candidates (CPC)				
Albania	80.37%	63.55%	69.16%	5.61%
Bosnia and Herzegovina	91.30%	75.65%	74.78%	0.87%

Country	Local Agreement Rate	Final code = Local 01	Final code = Local 02	Variance
Kosovo	68.85%	78.69%	72.95%	5.74%
Montenegro	81.25%	82.81%	75.00%	7.81%
North Macedonia	80.34%	75.21%	82.05%	6.84%
Serbia	81.36%	90.68%	81.36%	9.32%
Other Countries				
Norway	77.23%	85.86%	88.74%	2.88%
Switzerland	68.75%	73.75%	83.13%	9.38%
United Kingdom	91.19%	91.19%	90.04%	1.15%

Source: Ipsos

The variance reported for ISCO decreased in most countries. The only exceptions here were Poland (+6.64%), France (+4.92%), Sweden (+4.87%), Slovakia (+4.79%) and Hungary (+3.56%).

Figure 24: Variance between local to final code assigned, ISCO (EWCTS 2021 Pilot vs. EWCTS 2021 Mainstage)

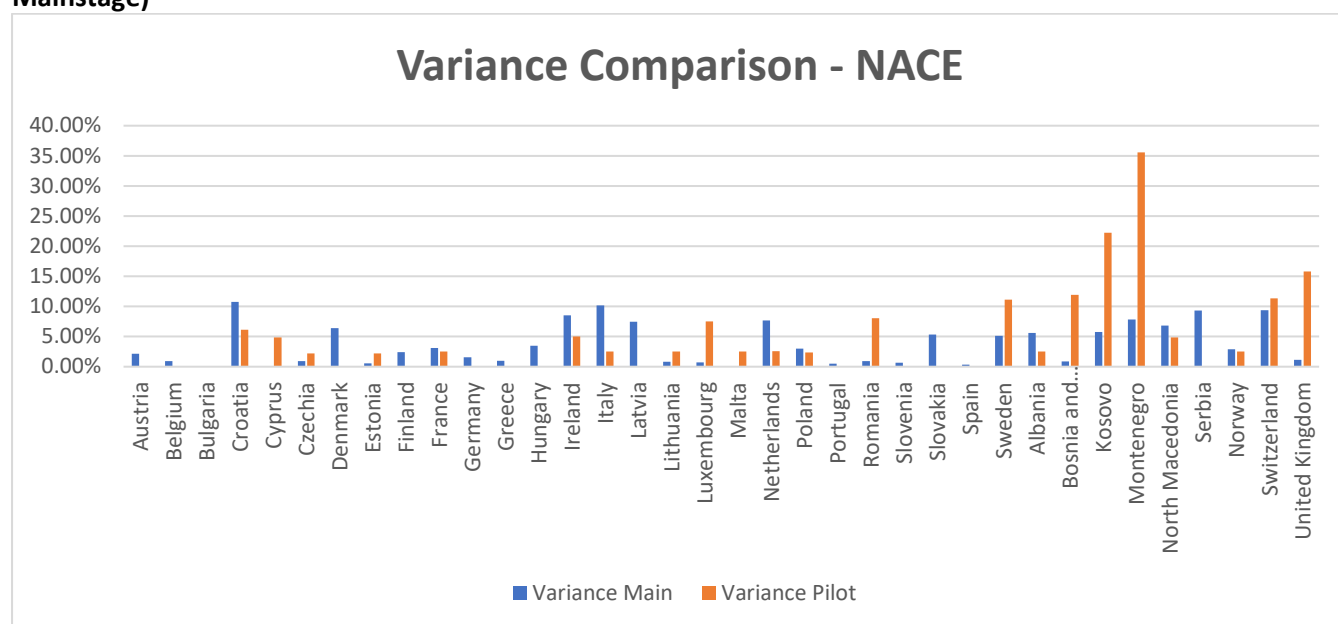


Source: Ipsos

For France and Slovakia, the pilot results revealed no reported variance, which was easier to achieve for the local teams given the small sample size of the pilot and less variance in verbatims.

For Poland the local agreement level was slightly below 70% - an increase compared to the pilot. However, this translated into more variance between coder assigned codes (visible at different digit level analysis outlined later in this chapter) and higher variance between coders.

For NACE the positive trend was maintained, with Serbia (+9.32%), Italy (+7.69%), Latvia (+7.4%) and Denmark (+6.39%), all reporting increases.

Figure 25: Variance between local to final code assigned, NACE (EWCTS 2021 Pilot vs. EWCTS 2021 Mainstage)

Source: Ipsos

During the pilot fieldwork, Latvia, Denmark and Serbia managed to achieve 0% variance between coders, which was more difficult to replicate for the mainstage fieldwork given the significant increase in sample sizes.

Finally, Ipsos measured the types of issues detected in both coding frames. The percentage of the codes assigned - at different levels of precision - shows the overall variance level in terms of verbatim interpretation.

Table 65: Local agreement level at different digit level, ISCO

Country	Local agreement rate (4 digits)	Local agreement rate (3 digits)	Local agreement rate (2 digits)	Local agreement rate (1 digit)	Variance
EU Member States					
Austria	98.92%	99.46%	99.46%	99.46%	0.54%
Belgium	94.57%	95.93%	96.15%	96.83%	2.26%
Bulgaria	100.00%	100.00%	100.00%	100.00%	0.00%
Croatia	64.95%	73.83%	79.44%	88.32%	23.36%
Cyprus	70.80%	75.91%	81.02%	89.05%	18.25%
Czechia	87.00%	88.79%	90.13%	95.52%	8.52%
Denmark	80.82%	88.58%	93.15%	100.00%	19.18%
Estonia	90.53%	92.63%	93.68%	94.21%	3.68%
Finland	73.17%	79.51%	84.39%	87.32%	14.15%
France	88.62%	92.00%	92.62%	94.15%	5.54%
Germany	98.44%	98.66%	98.89%	99.33%	0.89%
Greece	94.20%	95.65%	98.07%	99.03%	4.83%
Hungary	89.11%	91.58%	95.05%	97.52%	8.42%
Ireland	73.37%	76.38%	76.88%	79.40%	6.03%
Italy	90.45%	92.99%	96.82%	98.41%	7.96%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Local agreement rate (4 digits)	Local agreement rate (3 digits)	Local agreement rate (2 digits)	Local agreement rate (1 digit)	Variance
Latvia	70.70%	76.74%	77.67%	82.79%	12.09%
Lithuania	90.46%	92.95%	94.61%	98.34%	7.88%
Luxembourg	95.65%	96.38%	96.38%	97.83%	2.17%
Malta	87.72%	90.06%	92.98%	94.15%	6.43%
Netherlands	77.93%	85.59%	87.84%	90.54%	12.61%
Poland	66.94%	74.59%	77.87%	86.07%	19.13%
Portugal	98.47%	98.98%	98.98%	98.98%	0.51%
Romania	100.00%	100.00%	100.00%	100.00%	0.00%
Slovenia	98.36%	98.69%	99.67%	100.00%	1.64%
Slovakia	88.30%	88.30%	88.83%	93.09%	4.79%
Spain	99.02%	100.00%	100.00%	100.00%	0.98%
Sweden	72.45%	77.04%	79.59%	83.67%	11.22%
Candidates and Potential Candidates (CPC)					
Albania	82.24%	85.05%	86.92%	88.79%	6.54%
Bosnia and Herzegovina	92.17%	93.04%	98.26%	98.26%	6.09%
Kosovo	68.03%	74.59%	81.15%	84.43%	16.39%
Montenegro	78.13%	80.47%	85.16%	88.28%	10.16%
North Macedonia	98.29%	98.29%	98.29%	100.00%	1.71%
Serbia	73.73%	81.36%	85.59%	87.29%	13.56%
Other Countries					
Norway	76.44%	84.03%	88.48%	93.72%	17.28%
Switzerland	81.25%	86.25%	92.50%	97.50%	16.25%
United Kingdom	99.23%	99.23%	99.62%	100.00%	0.77%

Source: Ipsos

Table 66: Local agreement level at different digit level, NACE

Country	Local agreement rate (3 digits)	Local agreement rate (2 digits)	Local agreement rate (1 digits)	Variance
EU Member States				
Austria	97.84%	98.92%	98.92%	1.08%
Belgium	94.34%	95.48%	97.96%	3.62%
Bulgaria	100.00%	100.00%	100.00%	0.00%
Croatia	71.03%	78.50%	85.51%	14.49%
Cyprus	72.26%	81.75%	89.78%	17.52%
Czechia	88.79%	94.62%	96.86%	8.07%
Denmark	79.00%	82.65%	90.87%	11.87%
Estonia	94.74%	96.84%	98.42%	3.68%
Finland	82.44%	90.73%	97.56%	15.12%
France	79.08%	84.92%	89.85%	10.77%
Germany	97.55%	98.89%	99.33%	1.78%
Greece	90.34%	93.72%	98.07%	7.73%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Local agreement rate (3 digits)	Local agreement rate (2 digits)	Local agreement rate (1 digits)	Variance
Hungary	84.65%	88.12%	94.55%	9.90%
Ireland	75.88%	85.93%	90.95%	15.08%
Italy	83.76%	91.08%	94.27%	10.51%
Latvia	66.98%	77.67%	84.19%	17.21%
Lithuania	96.27%	96.68%	97.51%	1.24%
Luxembourg	98.55%	99.28%	99.28%	0.72%
Malta	92.40%	94.74%	98.25%	5.85%
Netherlands	88.29%	93.24%	94.59%	6.31%
Poland	65.03%	76.50%	86.89%	21.86%
Portugal	99.49%	99.49%	99.49%	0.00%
Romania	98.13%	99.07%	99.53%	1.40%
Slovenia	99.34%	99.67%	100.00%	0.66%
Slovakia	89.89%	93.09%	96.81%	6.91%
Spain	99.02%	99.67%	99.67%	0.65%
Sweden	80.10%	89.80%	95.92%	15.82%
Candidates and Potential Candidates (CPC)				
Albania	80.37%	84.11%	91.59%	11.21%
Bosnia and Herzegovina	91.30%	93.04%	98.26%	6.96%
Kosovo	68.85%	82.79%	90.98%	22.13%
Montenegro	81.25%	91.41%	94.53%	13.28%
North Macedonia	80.34%	88.89%	91.45%	11.11%
Serbia	81.36%	88.98%	92.37%	11.02%
Other Countries				
Norway	77.23%	84.82%	89.79%	12.57%
Switzerland	68.75%	77.50%	90.00%	21.25%
United Kingdom	91.19%	95.79%	96.55%	5.36%

Source: Ipsos

Cases without a final code assigned

Despite the committed efforts of the fieldwork and coding teams, Ipsos still encountered some respondents who refused to disclose information or were not cooperative enough to provide sufficient information for coding. These cases were classified with a separate 3-digit (999) or 4-digit (9999) code, depending on the code frame. The main driver for this code assignment was either a refusal at any of the verbatim questions or an insufficiently detailed verbatim.

Overall, the number of cases without a code assigned for ISCO was 103 (0.14% of completed interviews) and 190 for NACE Rev.2 (0.26% of completed interviews). Excluding cases with refusals or insufficient information, 43 cases did not have an ISCO code assigned due to a lack of verbatim quality. This figure stood at 129 cases for NACE. With a larger sample size in comparison to EWCS 2015 (the last full iteration of the survey), this marked a significant improvement given that 188 cases (0.43% of completes) for ISCO and 381 cases (0.87% of completes) for NACE were not coded due to insufficient information.

Table 67: Number of cases without full coding, ISCO

Country	Cases with insufficient information for coding	Cases with refusal at Q5, Q6 or both
EU Member States		
Austria	1	0
Belgium	0	0
Bulgaria	10	8
Croatia	1	1
Cyprus	3	3
Czechia	2	0
Denmark	3	1
Estonia	2	1
Finland	3	1
France	0	0
Germany	2	1
Greece	1	0
Hungary	2	2
Ireland	2	1
Italy	0	0
Latvia	5	3
Lithuania	10	3
Luxembourg	4	3
Malta	4	4
Netherlands	1	0
Poland	9	6
Portugal	0	0
Romania	13	10
Slovenia	2	0
Slovakia	10	5
Spain	0	0
Sweden	1	1
Candidates and Potential Candidates (CPC)		
Albania	0	0
Bosnia and Herzegovina	0	0
Kosovo	0	0
Montenegro	3	2
North Macedonia	1	0
Serbia	0	0
Other Countries		
Norway	4	2
Switzerland	3	1
United Kingdom	1	1

Source: Ipsos

Table 68: Number of cases without full coding, NACE

Country	Cases with insufficient information for coding	Cases with refusal at Q13
EU Member States		
Austria	10	0
Belgium	6	0
Bulgaria	8	2
Croatia	1	1
Cyprus	6	3
Czechia	6	2
Denmark	6	3
Estonia	8	3
Finland	5	1
France	1	0
Germany	3	1
Greece	2	0
Hungary	10	1
Ireland	3	2
Italy	4	0
Latvia	9	5
Lithuania	16	2
Luxembourg	8	4
Malta	6	5
Netherlands	0	0
Poland	10	4
Portugal	1	0
Romania	17	10
Slovenia	3	1
Slovakia	10	3
Spain	5	0
Sweden	6	0
Candidates and Potential Candidates (CPC)		
Albania	0	0
Bosnia and Herzegovina	0	0
Kosovo	0	0
Montenegro	3	2
North Macedonia	2	0
Serbia	4	0
Other Countries		
Norway	5	4
Switzerland	5	1
United Kingdom	1	1

Source: Ipsos

9. Data

Introduction

This section outlines the different data checks conducted on the survey data and paradata, developed and implemented by Ipsos.

Review of the dataset submitted

The data set provided by Ipsos at the end of the mainstage fieldwork was a combined data set of paradata, contact data, survey data and quality control data, in accordance with the specified and agreed data map.

The *first section* of the SPSS delivery focused on the general paradata for the record - containing country, sample frame, number of contacts, a summary of weekend/weekday call attempts, fieldwork period, last outcome status and the AAPOR grouping.

The *second section*, responsible for the high number of reported variables, was the paradata on contact attempts and interviewers – containing interviewer ID, interviewer gender, interviewer age, interviewer education, interviewer language, outcome code, call time and contact status of each of the 50 call attempts.

The *third section* of variables contained the main survey data and coding results for NACE rev.2 and ISCO 08.

The *fourth section* related to the quality control conducted during the fieldwork. These variables included information on the number and type of checks performed per record.

Accompanying the data set deliverables, the CCT also delivered the *raw verbatims* from Q5, Q6 and Q13 in Excel format. This ensured that all local languages could be visualised and the verbatims analysed.

There was also *a separate data set* in Excel which contained the question length in seconds per respondent.

Problematic questions, high item non-response, notable outliers

The observed non-response rate at country level is between 1% and 32% for all countries. The highest non-response at question level was reported in Cyprus, Luxembourg, Malta, Portugal and Albania at question Q102 ("What proportion of revenue do you receive from your most important client?" – asked only to self-employed respondents):

Table 69: Variables with high non-response, on overall completes (without data cleaning)

Question Name	Country	Non-response %	Base for calculation
Q102	Cyprus	32%	292
Q102	Luxembourg	25%	110
Q102	Malta	32%	161

Question Name	Country	Non-response %	Base for calculation
Q102	Portugal	25%	356
Q102	Albania	32%	311

Source: Ipsos

In the dataset there were occurrences of high non-response rates in the survey. All of these relate to specific situations with respondents, none of which are associated with fraudulent behaviour on the interviewers' side.

Table 70: Respondents with a high non-response rate

RespondentID	Non-response	Information
not for publication	45%	A long period of sick-leave meant that the respondent was unable to answer some of the questions or some questions were rendered not applicable for the respondent.
not for publication	41%	Difficult respondent, accompanied by less than ideal explanations provided by the interviewer during the survey (based on an examination of the audio-recording).
not for publication	46%	Respondent is bound by a non-disclosure agreement within his/her workplace which increased the likelihood of a refusal to answer some questions

Source: Ipsos

Data quality checks

Ipsos implemented different stages of data validation during and shortly after data collection.

The survey was built to comply fully with the questionnaire specifications, ensuring that all questions were asked in the correct order and displayed all of the answer options. All survey questions were developed according to the specified permitted values – one or multiple answers allowed, or answers in a specific numeric or character range.

The next stage of validation was executed in the Dimensions software. Using daily raw data exports, the data validation script was checked for any routing and permitted value issues. The next step was the validation of the client-ready SPSS file which checked for any inconsistencies.

The data checks applied were as follows:

- Routing check - determine if there is a question answered which should not have been asked, or if there is a question with a missing answer⁴⁹.
- Permitted values check - determine if there are answers outside the agreed ranges⁵⁰.
- Consistency check - determine the consistency between variables, i.e. where permitted values for one variable are dependent on previous variables⁵¹.
- Outlier check - look for implausible/illogical values in open-ended numeric questions using answer distribution analysis.

⁴⁹ The checks are built into the survey script and part of the automated quality control script for the raw data (and a separate quality control script for the SPSS data).

⁵⁰ Ibid

⁵¹ Ibid.

- Straight line check - examine identical answer patterns on a pre-agreed set of questions.
- Item non-response check - check the share of “Don’t know”, “Refused” and “Not applicable” answers.
- Paradata variable check – consistency between variables per contact attempt and final status variables

Data quality check results

Routing checks

All validation checks within this section have been implemented with the usage of a custom validation script written in Python⁵², with validation conditions specified in the SPSS data map file.

The objectives of the checks have been to determine:

- Where a question has been answered but should not have been. Here, no issues were detected
- Where a question has not been answered but should have been. Here, no issues were detected

Permitted values checks

All validation checks under this section have been implemented with the usage of a custom validation script written in Python, with validation conditions specified in the SPSS data map file. The objective of the checks were to determine:

- Where a question has been answered with an answer/code outside of the permitted pre-defined answer list, or outside of the pre-defined valid answer options range. Here, no issues detected.

Consistency checks

All validation checks within this section have been implemented with the usage of a custom validation script written in Python, with validation conditions specified in the SPSS data map file. The objectives of the checks was to determine if the filtering or asking conditions between different questions had been implemented correctly. Question dependency was also checked against the module allocation per respondent, resulting in additional checks on 35 variables. Here, no issues were detected.

Country graphs displaying the distribution of contact attempts within each country can be found in the separate Data Validation and Editing Report, available on Eurofound’s website.

⁵² Python – an interpreted, high-level general-purpose programming language [see: <https://www.python.org/>]

Comparison between recontact data and sample data

For additional verification of the proper sample usage, Ipsos initiated a comparison of the data provided in the questions for recontact. Due to the composition of the sample being purely mobile telephone numbers, the expectation was that there would be some variation in the information provided, primarily if one or more additional telephones were owned by the respondent. Additional factors for any deviations can also be attributed to potential typos/incorrect information being typed in by the interviewer.

Table 71: Telephone number matching between sample and recontact data

	Completed Interviews	Agreement for recontact	Telephone numbers 100% matching sample data	Telephone numbers matching with prefix adjustment	Telephone number not matching [#]	Telephone number not matching [%]	Agreement without telephone number [#]	Telephone number not matching [Adjusted] [%]
EU Member States								
Austria	1779	1270	1031	4	141	11.1%	111	11.4%
Belgium	4233	3394	2763	1956	464	13.7%	194	14.3%
Bulgaria	1796	1477	1443	464	37	2.5%	8	2.5%
Croatia	1800	1319	1224	13	80	6.1%	15	6.1%
Cyprus	1365	1032	936	159	811	78.6%	120	-2.0%
Czechia	1990	1679	1337	549	1299	77.4%	36	18.8%
Denmark	1820	1333	1146	1129	146	11.0%	50	11.1%
Estonia	1804	1520	1430	1413	66	4.3%	48	4.5%
Finland	1903	1670	1401	9	223	13.4%	68	13.8%
France	3213	2627	2433	1	106	4.0%	89	4.2%
Germany	4131	2705	2173	5	279	10.3%	288	10.3%
Greece	1798	1322	1088	1088	115	8.7%	121	9.5%
Hungary	1792	1264	1140	155	91	7.2%	40	7.4%
Ireland	1790	1582	1414	2	159	10.1%	18	10.1%
Italy	3131	2310	2222	2220	84	3.6%	8	3.6%
Latvia	1799	1437	1353	1353	68	4.7%	24	4.7%
Lithuania	1871	1525	1292	1292	249	16.3%	2	16.1%
Luxembourg	1363	1059	987	515	109	10.3%	28	10.0%
Malta	1472	1094	925	922	134	12.2%	40	12.6%
Netherlands	1816	1363	1170	1	126	9.2%	67	9.7%
Poland	2900	2279	1835	1834	182	8.0%	273	8.8%
Portugal	1880	1671	1498	116	57	3.4%	20	9.3%
Romania	1808	1345	1274	0	84	6.2%	1	6.1%
Slovenia	2631	1778	1660	14	118	6.6%	60	6.2%
Slovakia	1794	1507	1115	20	839	55.7%	89	21.8%
Spain	2903	2537	2398	2396	135	5.3%	7	5.3%
Sweden	1826	1559	1286	1266	267	17.1%	12	17.2%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

	Completed Interviews	Agreement for recontact	Telephone numbers 100% matching sample data	Telephone numbers matching with prefix adjustment	Telephone number not matching [#]	Telephone number not matching [%]	Agreement without telephone number [#]	Telephone number not matching [Adjusted] [%]
Candidates and Potential Candidates (CPC)								
Albania	989	576	548	64	148	25.7%	29	21.6%
Bosnia and Herzegovina	1140	833	729	0	94	11.3%	21	11.6%
Kosovo	1134	997	898	1	107	10.7%	18	10.5%
Montenegro	1148	881	773	8	91	10.3%	18	10.5%
North Macedonia	1137	917	789	5	129	14.1%	5	13.9%
Serbia	1149	911	790	0	104	11.4%	22	11.5%
Other Countries								
Norway	3301	2578	2512	1216	34	1.3%	36	1.3%
Switzerland	1224	946	731	2	206	21.8%	20	21.5%
UK	2134	1639	1558	708	79	4.8%	4	4.8%

Source: Ipsos

The matching has been achieved by iteratively comparing the sample telephone number with the answer provided at QP16⁵³ directly, removing any leading zeros in each of the telephone numbers and removing the country prefix. If any of the adjustments led to matching between the telephone numbers then Ipsos considered the information to be matching. Additional pre-processing was applied in a couple of countries to remove false positive issues:

Sweden – mobile network prefixes (“070”, “072”, “073”, “076”, “079”) have been aligned to a consistent typing form. Data provided by the interviewers contained different typing schemes for the telephones such as “070-”, “70”, “070”, “70-”.

Hungary – prefixes of “06” and “36” were equalised, since they can be used with the same telephone number, depending on the type of dialling, e.g. internal or external.

Ultimately these comparison checks have been extended to the time series analysis to enable Eurofound and Ipsos to better understand the issue. In the cases where a high number of deviations were found for a certain period (in Albania, Austria, Cyprus, Germany, Portugal and Slovakia) further detailed investigations were carried out by Eurofound and Ipsos.

Geo-classification

The module for geo-classification implemented in the EWCTS 2021 is built upon the online solution, developed by the online division within Ipsos. For each country there is a pre-built data base with

⁵³ “Can you tell me your name, please?”

statistical information, including NUTS⁵⁴/LAU⁵⁵/DEGURBA⁵⁶ information. Depending on the country, a different set of questions are asked to obtain the lowest level of information required for the accurate geo-classification of the respondent.

Table 72: Number of questions asked and lowest level of detail obtained

Country	Number of questions	Lowest level of information obtained
EU Member States		
Austria	3	LAU2
Belgium	3	Postal code and LAU2
Bulgaria	3	LAU2 ⁵⁷
Croatia	2	LAU2
Cyprus	2	Town name
Czechia	2	LAU2
Denmark	4	Postal code and LAU2
Estonia	2	LAU2
Finland	4	Postal code and LAU2
France	2	Postal code and LAU2
Germany	2	Postal code and LAU2
Greece	3	LAU2
Hungary	3	Postal code and LAU2
Ireland	1	Council
Italy	5	LAU2 and town name
Latvia	1	LAU2
Lithuania	3	LAU2
Luxembourg		LAU2
Malta	1	Locality
Netherlands	4	Postal code and LAU2
Poland	5	Postal code and LAU2
Portugal	2	LAU2
Romania	2	LAU2
Slovenia	1	LAU2
Slovakia	2	LAU2
Spain	4	Postal code and LAU2
Sweden	4	Postal code and LAU2
Candidates and Potential Candidates (CPC)		
Albania	3	Town name
Bosnia and Herzegovina	4	Town name
Kosovo	3	Town name

⁵⁴ NUTS - Nomenclature of territorial units for statistics [<https://ec.europa.eu/eurostat/web/nuts/history>]

⁵⁵ LAU – Local administrative unit [<https://ec.europa.eu/eurostat/web/nuts/local-administrative-units>]

⁵⁶ DEGURBA – Degree of urbanisation [<https://ec.europa.eu/eurostat/web/degree-of-urbanisation/background>]

⁵⁷ LAU2 – formerly known as NUTS level 5; lower LAU levels consisted of municipalities or equivalent units in the EU Member States

Country	Number of questions	Lowest level of information obtained
Montenegro	3	Town name
North Macedonia	2	Town name
Serbia	3	Town name
Other Countries		
Norway	3	Postal code or NUTS3 (if refusal)
Switzerland	2	LAU2
United Kingdom	3	LAU2 or NUTS1 (if refusal)

Source: Ipsos

The achieved share of interviews according to urbanisation level is shown in the table below.

Table 73: Number of achieved interviews according to urbanisation level

Country	Cities (densely populated areas)	Towns and suburbs (intermediate density areas)	Rural areas (thinly populated areas)
EU Member States			
Austria	599	528	652
Belgium	1312	2348	573
Bulgaria	1250	358	188
Croatia	914	527	359
Cyprus	959	234	172
Czechia	811	679	500
Denmark	689	572	559
Estonia	934	358	512
Finland	909	562	432
France	1645	795	773
Germany	1814	1541	776
Greece	1250	365	183
Hungary	941	522	329
Ireland	537	374	879
Italy	1543	1223	365
Latvia	932	379	488
Lithuania	1199	182	490
Luxembourg	384	384	595
Malta	654	765	53
Netherlands	792	541	137
Poland	1632	653	615
Portugal	877	554	317
Romania	916	451	368
Slovenia	763	1029	839
Slovakia	734	600	460

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Cities (densely populated areas)	Towns and suburbs (intermediate density areas)	Rural areas (thinly populated areas)
Spain	1884	779	240
Sweden	792	682	352
Candidates and Potential Candidates (CPC)			
Albania	607	191	191
Bosnia and Herzegovina	No statistical information		
Kosovo*	695	0	439
Montenegro*	761	0	387
North Macedonia*	625	0	282
Serbia	686	310	153
Other Countries			
Norway	1351	1234	539
Switzerland	433	557	234
United Kingdom	960	550	113

*Denotes the countries for which the DEGURBA classification is not adopted. Recoding from the Urban/Rural code frame has been completed to match the DEGURBA classification (Urban = DEGURBA code 1, Rural = DEGURBA code 3)

Source: Ipsos

Table 74: Share of achieved interviews according to reference statistics

Country	Achieved			Expected			Difference		
	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)
EU Member States									
Austria	33.67%	29.68%	36.65%	29.85%	30.32%	39.83%	3.82%	-0.64%	-3.18%
Belgium	30.99%	55.47%	13.54%	29.14%	55.87%	15.00%	1.85%	-0.40%	-1.46%
Bulgaria	69.60%	19.93%	10.47%	51.15%	24.21%	24.63%	18.45%	-4.28%	-14.16%
Croatia	50.78%	29.28%	19.94%	33.72%	30.79%	35.49%	17.06%	-1.51%	-15.55%
Cyprus	70.26%	17.14%	12.60%	62.12%	18.37%	19.51%	8.14%	-1.23%	-6.91%
Czechia	40.75%	34.12%	25.13%	31.48%	33.23%	35.29%	9.27%	0.89%	-10.16%
Denmark	37.86%	31.43%	30.71%	34.81%	27.57%	37.62%	3.05%	3.86%	-6.91%
Estonia	51.77%	19.84%	28.38%	47.95%	17.85%	34.20%	3.82%	1.99%	-5.82%
Finland	47.77%	29.53%	22.70%	42.17%	30.60%	27.22%	5.60%	-1.07%	-4.52%
France	51.20%	24.74%	24.06%	44.98%	18.49%	36.53%	6.22%	6.25%	-12.47%
Germany	43.91%	37.30%	18.78%	38.37%	40.13%	21.50%	5.54%	-2.83%	-2.72%
Greece	69.52%	20.30%	10.18%	39.84%	32.04%	28.12%	29.68%	-11.74%	-17.94%
Hungary	52.51%	29.13%	18.36%	32.77%	36.89%	30.34%	19.74%	-7.76%	-11.98%
Ireland	30.00%	20.89%	49.11%	35.52%	21.84%	42.64%	-5.52%	-0.95%	6.47%
Italy	49.28%	39.06%	11.66%	35.14%	48.46%	16.40%	14.14%	-9.40%	-4.74%
Latvia	51.81%	21.07%	27.13%	46.36%	22.62%	31.02%	5.45%	-1.55%	-3.89%
Lithuania	64.08%	9.73%	26.19%	48.08%	13.51%	38.41%	16.00%	-3.78%	-12.22%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Achieved			Expected			Difference		
	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)
Luxembourg	28.17%	28.17%	43.65%	22.34%	39.38%	38.28%	5.83%	-11.21%	5.37%
Malta	44.43%	51.97%	3.60%	48.79%	48.60%	2.62%	-4.36%	3.37%	0.98%
Netherlands	43.61%	29.79%	7.54%	56.78%	32.94%	10.27%	-13.17%	-3.15%	-2.73%
Poland	56.28%	22.52%	21.21%	35.79%	28.26%	35.95%	20.49%	-5.74%	-14.74%
Portugal	46.65%	29.47%	16.86%	44.40%	32.81%	22.79%	2.25%	-3.34%	-5.93%
Romania	50.66%	24.94%	20.35%	38.33%	27.70%	33.97%	12.33%	-2.76%	-13.62%
Slovenia	29.00%	39.11%	31.89%	18.85%	34.73%	46.42%	10.15%	4.38%	-14.53%
Slovakia	40.91%	33.44%	25.64%	21.76%	37.54%	40.70%	19.15%	-4.10%	-15.06%
Spain	64.90%	26.83%	8.27%	54.67%	32.76%	12.56%	10.23%	-5.93%	-4.29%
Sweden	43.37%	37.35%	19.28%	37.51%	35.73%	26.76%	5.86%	1.62%	-7.48%
Candidates and Potential Candidates (CPC)									
Albania	61.38%	19.31%	19.31%	No statistical information for comparison					
Bosnia and Herzegovina	No statistical information								
Kosovo	61.67%	0.00%	38.95%	No statistical information for comparison					
Montenegro	66.29%	0.00%	33.71%	No statistical information for comparison					
North Macedonia	54.97%	0.00%	24.80%	35.72%	36.29%	27.99%	19.25%	-36.29%	-3.19%
Serbia	59.34%	26.82%	13.24%	35.53%	23.71%	40.76%	23.81%	3.11%	-27.52%

Country	Achieved			Expected			Difference		
	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)	(Densely populated areas)	(Intermediate density areas)	(Thinly populated areas)
Other Countries									
Norway	40.93%	37.38%	16.33%	31.28%	40.62%	28.09%	9.65%	-3.24%	-11.76%
Switzerland	35.38%	45.51%	19.12%	29.48%	51.54%	19.50%	5.90%	-6.03%	-0.38%
UK	44.99%	25.77%	5.30%	57.57%	29.77%	12.66%	-12.58%	-4.00%	-7.36%

Source: Ipsos

Reference statistics for comparison have been extracted from Eurostat: Quarterly population by sex, age, degree of urbanisation and labour status (1000) [lfsq_pgauws] on a 15+ year old population and no gender separation. The base reference period is quarter one of 2021 (Q1 2021) although for a number of countries the previous one had to be used due to missing recent information. These countries are Switzerland (with a reference period of 2020), the United Kingdom (2019), Montenegro (2020), North Macedonia (2020) and Serbia (2020).

In the EU member states, the highest observed differences in the population distribution are in Bulgaria, Croatia, Czechia, Greece, Hungary, Italy, Lithuania, Netherlands, Poland, Romania, Slovakia and Spain. This has not been compared to other similar survey results, since the implemented module for capturing geographical location of respondents has been adapted from similar online survey, used by the online division of Ipsos. The adaptation to telephone interviewing, as well the requirement for full survey coverage, makes it a unique solution developed for the EWCTS 2021.

In Bulgaria, the densely populated areas are over-represented by 18.44%. Comparing more detailed data at NUTS2 level, the population distribution is in line with the reference statistics.

Table 75: Share of working population at NUTS2 level, Bulgaria

GEO/TIME	2019	2020	Achieved [#]	Expected [%]	Achieved [%]
BG31[Severozapaden]	273.4	262.4	159	8.46%	8.85%
BG32 [Severen tsentralen]	354.7	343	160	10.97%	8.91%
BG33[Severoiztochen]	417.2	409.6	227	12.90%	12.64%
BG34 [Yugoiztochen]	461.8	442.7	181	14.28%	10.08%
BG41 [Yugozapaden]	1078.3	1040.7	751	33.35%	41.82%
BG42 [Yuzhen tsentralen]	647.6	623.3	318	20.03%	17.71%

Source: Ipsos

In Bulgaria, the population distribution is uneven and around 40% of the population is concentrated in nine municipalities, with 73.7% of the population living in cities. This, in combination with a mobile-only sample, resulted in a demographic representation of 8% combined over-representation of the younger population and many interviews completed in the largest cities.

As an example, the BG41 [Yugozapaden] area contains the capital and 652 interviews were completed in densely populated areas (86% of interviews). In BG33 [Severoiztochen], 75% of the interviews were also completed in densely populated areas. For BG33 [Severoiztochen] and BG34 [Yugoiztochen] a seasonality effect is evident due to a high unemployment rate during the spring in the service/tourist sector in coastal areas, affected by COVID-19 measures.

In Croatia, densely populated areas are overrepresented by 17.06%. 575 of the completes were in the capital region, driving up the over-representation of city interviews.

In Greece, densely populated areas are over-represented by 29.68%. Η Αττική [EL30 Attiki] accounts for 966 city interviews, accompanied by Κεντρική Μακεδονία [EL52 Kentriki Makedonia] with 157 interviews. The two regions comprise 89% all city completes in the country.

In Hungary, densely populated areas are over-represented by 19.84%. 609 (100%) of the interviews in Budapest are city interviews (65% from the country data).

In Lithuania, densely populated areas are over-represented by 16.00%. The Vilnius region accounts for 698 city interviews, close to 70% of all city interviews in the country.

In Poland, densely populated areas are over-represented by 19.94%. The highest disproportion between DEGURBA levels in NUTS2 regions are in Warszawski Stołeczny [PL91] (75% of interviews in cities) and Slaskie [PL22] (61% of interviews in cities).

In Romania, densely populated areas are over-represented by 14.57%. Most of the city interviews were conducted in the capital [RO32] (283) and in the Norst-Est [RO21]/Nord_Vest [RO11] development regions.

In Slovakia, densely populated areas are over-represented by 17.52%. “Bratislavský kraj” [SK01] is the only NUTS2 region with more population working in densely populated areas/cities. This is considered to be the most affluent region with little more than 10% of the population living there. Overall, 32% of the interviews were conducted in the capital region of Bratislava. With an unemployment rate of 4% (compared to 6.7% in the country), more eligible respondents can be found in the region.

In Spain, densely populated areas are over-represented by 10.22%. Most of the interviews were conducted in the areas of “Comunidad de Madrid” [ES30], “Cataluña” [ES51] and “Andalucía” [ES61], which are also the areas with the highest employment rates⁵⁸

In all countries with an over-representation of city areas, the regions driving this represent either capital cities/regions or well-developed regions with low unemployment rates. This mirrors the tendency for urbanisation and the search for better opportunities in larger urban areas by the population.

⁵⁸ According to the statistical office of Spain
https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595

10. Quality Control, Ethics and Data Protection

Given the scale and importance of the EWCTS 2021, it was vital to deliver a high-quality project, with robust, sound data that stood up to scrutiny. This section provides an overview of the various rounds of checks that have been performed on the data, as well as pro-active measures that were taken before fieldwork commenced to maximise data quality. A discussion of the quality measures also takes place throughout this report given that it is integral to every aspect of the survey.

Ipsos structured the CCT to ensure that the appropriate level of skills, experience and resources were available to carry out the tasks involved in a timely and cost-effective manner. The CCT coordinated and managed all activities for the study and provided a central point of contact for both the client and the network partners across all 36 countries. The CCT's responsibility was also to ensure the compliance of each partner and sub-contractor with the working procedures and quality assurance measures that had been designed for the success of the EWCTS 2021.

Quality control pre-fieldwork

This section provides an overview of the steps undertaken before fieldwork began to maximise data quality. These included:

- A TRAPD translation process.
- Piloting the questionnaire, fieldwork materials and all aspects of the survey process
- Comprehensive interviewer training. The briefings were also accompanied by supplementary documents and training materials
- A full programme of sampling
- Standardised approaches to recruitment across countries
- Training of all project managers and interviewers
- Scripting processes with a number of comprehensive quality checks, including plausibility checks, as outlined in Chapter 7 (Mainstage Fieldwork).

Quality control during fieldwork

For this study, the quality control procedures were based on the well-established practices for all major multi-country CATI projects. As such, all local fieldwork teams had sufficient experience with them.

Based on the local team's capabilities and quality control systems, two quality control methods were adopted:

- Listening into live contact attempts to ensure that the respondent selection was being conducted correctly (where applicable) and that questions had been asked as instructed.
- Audio recording the contact attempt or interview, then listening in once the call had been completed.

For both types of quality control, the supervisors would check that the survey had been administered correctly.

The selection of cases for quality control was undertaken by the local teams, following their usual practices for a minimum amount of quality control checks per shift, additional checks on new interviewers for the call centre and multi-project performance monitoring (including work not related to the EWCTS 2021). All of these practices were combined with the quality framework established by Eurofound and agreed with Ipsos:

- A minimum of 10% quality control on completed interviews (at country level)
- A minimum of 10% quality control on successful contact attempts (at country level)
- A minimum of 1 interview checked per interviewer

Quality control was almost exclusively undertaken using local software or integrated quality systems, which could not be accessed directly by Ipsos. To ensure that Ipsos could review all such checks, cumulative quality control reports from all network partners were requested by Ipsos on a weekly basis each Friday at noon, containing information per record for the type of quality control, the result, and actions taken by local team.

The issues to be tracked during fieldwork were combined in three general groups with specific actions to be taken as follows:

Table 76: Quality control issue types

Issue Type	Issue Description	Action 1 [Live interview]	Action 2 [Recording]
A	Correct interviewer behaviour. Small improvements possible in interviewing.	CATI supervisor provides feedback and improvement tips to the interviewer after completion.	CATI supervisor provides feedback and improvement tips to the interviewer after completion.
B	Correct interview behaviour. Small inconsistencies in the data collected are observed.	CATI supervisor adjusts the mistakes during the survey review. Interviewer is retrained.	In case of repetition of errors, all previous work of the interviewer is reviewed (if past audio recordings are still available)
C	Improper/impolite behaviour. Information not recoded properly (mis-clicking the correct code), questions are not asked or not asked correctly.	The current interview is marked as invalid. Remove interviewer from work on the project until he/she is retrained and the CATI manager is confident that this will not be repeated.	Previous work of the interviewer is reviewed (if past audio recordings are still available). Issues are presented to Eurofound with suggestion on next steps – i.e. removal of all the interviewer's work

Source: Ipsos

Number of checked completed records by method and country

The first indicator of the quality control framework is sufficient quality control on completed interviews, ensuring the proper administration of the questionnaire content and data collection. All countries made significant efforts to ensure that the quality control processes were followed for the completed interviews. This is usually the standard practice in CATI fieldwork, so no issues were encountered during the execution and reporting of this quality control segment.

Table 77: Number of quality controlled completed interviews per method.

Country	Completed interviews	Checked through live listening	Checked through recordings	Overall checked (n)	Overall checked (%)
EU Member States					
Austria	1779	178	204	382	21.47%
Belgium	4233	872	0	872	20.60%
Bulgaria	1796	147	42	189	10.52%

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed interviews	Checked through live listening	Checked through recordings	Overall checked (n)	Overall checked (%)
Croatia	1800	295	210	505	28.06%
Cyprus	1365	419	0	419	30.70%
Czechia	1990	91	236	327	16.43%
Denmark	1820	144	124	268	14.73%
Estonia	1804	135	359	494	27.38%
Finland	1903	160	241	401	21.07%
France	3213	684	0	684	21.29%
Germany	4131	262	452	714	17.28%
Greece	1798	743	0	743	41.32%
Hungary	1792	0	389	389	21.71%
Ireland	1790	253	0	253	14.13%
Italy	3131	857	0	857	27.37%
Latvia	1799	1	282	283	15.73%
Lithuania	1871	0	364	364	19.45%
Luxembourg	1363	128	61	189	13.87%
Malta	1472	203	39	242	16.44%
Netherlands	1816	121	68	189	10.41%
Poland	2900	181	214	395	13.62%
Portugal	1880	72	489	561	29.84%
Romania	1808	0	314	314	17.37%
Slovenia	2631	770	1	771	29.30%
Slovakia	1794	91	197	288	16.05%
Spain	2903	819	0	819	28.21%
Sweden	1826	163	276	439	24.04%
Candidates and Potential Candidates (CPC)					
Albania	989	0	578	578	58.44%
Bosnia and Herzegovina	1140	0	219	219	19.21%
Kosovo	1134	0	151	151	13.32%
Montenegro	1148	0	221	221	19.25%
North Macedonia	1137	0	194	194	17.06%
Serbia	1149	0	224	224	19.50%

Country	Completed interviews	Checked through live listening	Checked through recordings	Overall checked (n)	Overall checked (%)
Other Countries					
Norway	3301	490	0	490	14.84%
Switzerland	1224	126	38	164	13.40%
United Kingdom	2134	6	439	445	20.85%
Total	71764	8411	6626	15037	20.95%

Source: Ipsos

Number of checked successful contact attempts by method/country

The second indicator of the quality control framework was sufficient quality control on successful contact attempts, ensuring proper introductions and the handling of refusals. This was a crucial part of the data collection process, since upfront refusals have been the dominant outcome of successful contact attempts.

To properly separate all contacts and successful ones, Eurofound and Ipsos agreed on set of outcomes once verbal contact with the respondent had been established. The table below shows the outcome codes for each call attempt that were classified as successful contacts.

Table 78: Outcome codes considered for successful contacts

Code	Label	Final or Interim	Description
101	Abandoned	Final	Abandoned interview by respondent
102	AddToDNCList	Final	Request by respondent to be added to do not call list
103	BusinessNumber	Final	Business number
104	Completed	Final	Completed interview
107	LanguageBarrier	Final	Respondent language is not one supported by the survey
109	Refused	Final	Refusal by respondent
113	UserDefTerm201	Final	Termination during interviewing (screening)
114	UserDefTerm203	Final	Termination during interviewing (screening)
115	UserDefTerm204	Final	Termination during interviewing (screening)
116	UserDefTerm205	Final	Termination during interviewing (screening)
117	UserDefTerm209	Final	Termination during interviewing (screening)
46	Already interviewed	Final	Specific outcome for Poland, indicating previous interviewing of the same respondent
122	UserDefTerm210	Final	Deceased
123	UserDefTerm171	Final	No time/interview too long
124	UserDefTerm172	Final	Not interested
125	UserDefTerm173	Final	Up-front refusal, used in Estonia

Code	Label	Final or Interim	Description
801	Active	Interim	Active interview (current data collection)
803	Appointment	Interim	Appointment with respondent (fixed date)
805	CallbackAnotherTime	Interim	Unspecified recall with respondent
806	CallbackToComplete	Interim	Unspecified appointment with respondent
808	CommunicationDifficulty	Interim	Line/Network issues
813	LanguageRecall	Interim	Recall with an alternative survey language and new interviewer, fluent in the new language
817	QualifiedAbandoned	Interim	Abandoned interview by the respondent, after screening is completed
820	SoftAppointment	Interim	Unspecified appointment with respondent
821	Stopped	Interim	Stopped interview, generally associated with survey closure in CATI link countries

Source: Ipsos

Based on these assumptions, the table below displays the quality control rates achieved on contact attempts.

Table 79: Achieved quality control rates on successful call attempts

Country	Contact attempts (successful)	Quality controlled contact attempts	Live listening	Listening to audio recording	Achieved rate
EU Member States					
Austria	62638	7635	7424	211	12.19%
Belgium	45559	4582	4582	0	10.06%
Bulgaria	28090	3733	154	3579	13.29%
Croatia	27673	2815	452	2363	10.17%
Cyprus	41711	5617	5617	0	13.47%
Czechia	86370	10981	134	10847	12.71%
Denmark	25404	4452	2188	2264	17.52%
Estonia	17219	2097	1420	677	12.18%
Finland	32530	4634	879	3755	14.25%
France	37370	3683	3683	0	9.86%
Germany	203522	21804	21322	482	10.71%
Greece	25872	2649	2649	0	10.24%
Hungary	26199	10106	77	10029	38.57%
Ireland	31358	2941	2941	0	9.38%
Italy	54586	6634	6634	0	12.15%
Latvia	31180	3551	1	3550	11.39%

Country	Contact attempts (successful)	Quality controlled contact attempts	Live listening	Listening to audio recording	Achieved rate
Lithuania	25762	3056	0	3056	11.86%
Luxembourg	29643	3024	2953	71	10.20%
Malta	11952	1701	1364	337	14.23%
Netherlands	18001	1801	193	1608	10.00%
Poland	117905	17913	808	17105	15.19%
Portugal	17946	3557	181	3376	19.82%
Romania	34448	5032	0	5032	14.61%
Slovenia	48744	5294	4632	662	10.86%
Slovakia	56778	7577	121	7456	13.34%
Spain	56058	14014	14014	0	25.00%
Sweden	35060	3569	643	2926	10.18%
Candidates and Potential Candidates (CPC)					
Albania	9362	1146	0	1146	12.24%
Bosnia and Herzegovina	10808	2036	0	2036	18.84%
Kosovo	8261	831	0	831	10.06%
Montenegro	24891	2581	0	2581	10.37%
North Macedonia	19617	1969	0	1969	10.04%
Serbia	21971	2364	0	2364	10.76%
Other Countries					
Norway	49229	4932	4932	0	10.02%
Switzerland	52221	8004	7961	43	15.33%
United Kingdom	34560	7100	7	7093	20.54%
Total	1460498	195415	97966	97449	13.38%

Source: Ipsos

The countries not meeting the 10% target for quality control checking of contact attempts were the following:

- **Ireland:** The quality control level achieved was 9.44%. The local team carried out checks on almost all of their interviewers. Two interviewers with 194 contact attempts and 0 completed interviews have been missed. Due to the usage of the live listening method to perform quality control, the local quality control team did not manage to check a sufficient number of contact attempts before fieldwork closure.

- **France:** The quality control level achieved was 9.93%. The local team carried out checks on all interviewers working on the project. Due to the usage of the live listening method to perform quality control, the local quality control team did not manage to check a sufficient number of contact attempts before fieldwork closure.

During fieldwork the number of issues reported during the data collection period remained low, especially compared to the EWCS 2020 CAPI fieldwork conducted in 2019 and 2020.

The most significant issue relating to these checks occurred in Slovenia. Through separate quality control procedures, Eurofound identified a number of short interviews in the data, which related primarily to individual interviewers. After a series of internal investigations undertaken by the CCT and the local Slovenian team (including back checks conducted by an independent company), the work of the interviewers was considered to be fraudulent and all interviews completed by them were flagged as invalid in the data set.

Table 80: Quality control and issues identified

Country	Quality controlled contacts	Share of live listening	Share of recording	Issue Type A found	Issue Type B found	Issue Type C found
EU Member States						
Austria	7635	97.24%	2.76%	0	0	0
Belgium	4582	100.00%	0.00%	164	0	1
Bulgaria	3733	4.13%	95.87%	18	9	0
Croatia	2815	16.06%	83.94%	177	0	0
Cyprus	5617	100.00%	0.00%	10	0	0
Czechia	10981	1.22%	98.78%	87	0	1
Denmark	4452	49.15%	50.85%	90	0	6
Estonia	2097	67.72%	32.28%	20	0	0
Finland	4634	18.97%	81.03%	18	0	0
France	3683	100.00%	0.00%	253	6	0
Germany	21804	97.79%	2.21%	70	0	0
Greece	2649	100.00%	0.00%	32	0	0
Hungary	10106	0.76%	99.24%	55	1	0
Ireland	2941	100.00%	0.00%	162	5	0
Italy	6634	100.00%	0.00%	6	0	0
Latvia	3551	0.03%	99.97%	12	0	0
Lithuania	3056	0.00%	100.00%	56	0	0
Luxembourg	3024	97.65%	2.35%	20	0	0
Malta	1701	80.19%	19.81%	30	0	0
Netherlands	1801	10.72%	89.28%	301	3	0
Poland	17913	4.51%	95.49%	129	0	0
Portugal	3557	5.09%	94.91%	8	14	0
Romania	5032	0.00%	100.00%	454	38	0
Slovenia	5294	87.50%	12.50%	3649	36	0
Slovakia	7577	1.60%	98.40%	84	0	0

Country	Quality controlled contacts	Share of live listening	Share of recording	Issue Type A found	Issue Type B found	Issue Type C found
Spain	14014	100.00%	0.00%	1	1	0
Sweden	3569	18.02%	81.98%	364	8	0
Candidates and Potential Candidates (CPC)						
Albania	1146	0.00%	100.00%	0	0	0
Bosnia and Herzegovina	2036	0.00%	100.00%	67	0	0
Kosovo	831	0.00%	100.00%	13	0	0
Montenegro	2581	0.00%	100.00%	117	0	0
North Macedonia	1969	0.00%	100.00%	48	4	0
Serbia	2364	0.00%	100.00%	89	1	0
Other Countries						
Norway	4932	100.00%	0.00%	0	0	0
Switzerland	8004	99.46%	0.54%	25	1	0
United Kingdom	7100	0.10%	99.90%	161	2	0
Total	195415	50.13%	49.87%	6790	129	8

Source: Ipsos

Another key indicator, related to interviewer performance, was the number of completed interviews per interviewer. Completing fieldwork with only a small number of interviewers potentially risks unknown interviewer effects such as bias, a high refusal rate and the risk of high-impact fraudulent behaviour, although this may be less of a risk in the more controlled setting of a telephone interview.

To reflect this, Eurofound established an upper limit of 200 completed interviews per interviewer, with some agreed exceptions at set-up stage, where local teams provided a justification for increasing the threshold. Due to their large sample size, for Norway this was 250 interviews and for Belgium, 300 interviews per interviewer.

A high number of completes per interviewer was evident in a couple of countries with the main reasons for this being the following:

- Commissioning of extra interviews for module allocation balance or extra replacement interviews to correct for quality issues.
- Involvement of the country's most experienced interviewers for a longer period of time due to the difficulty in obtaining replacements.

Table 81: Number of interviewers used during fieldwork

Country	Completed interviews	Interviewers used	Minimum completes per interviewer	Maximum completes per interviewer
EU Member States				
Austria	1779	52	1	250
Belgium	4233	62	1	312

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Completed interviews	Interviewers used	Minimum completes per interviewer	Maximum completes per interviewer
Bulgaria	1796	26	8	253
Croatia	1800	36	1	202
Cyprus	1365	19	1	174
Czechia	1990	99	1	162
Denmark	1820	126	1	66
Estonia	1804	24	2	378
Finland	1903	44	1	268
France	3213	42	1	202
Germany	4131	93	1	206
Greece	1798	29	1	164
Hungary	1792	44	1	117
Ireland	1790	52	1	123
Italy	3131	31	3	253
Latvia	1799	19	1	309
Lithuania	1871	35	3	126
Luxembourg	1363	36	1	173
Malta	1472	39	4	133
Netherlands	1816	42	1	133
Poland	2900	57	1	159
Portugal	1880	18	9	278
Romania	1808	21	20	190
Slovenia	1794	24	1	297
Slovakia	2631	59	1	133
Spain	2903	20	11	246
Sweden	1826	69	1	93
Candidates and Potential Candidates (CPC)				
Albania	989	20	1	284
Bosnia and Herzegovina	1140	13	17	224
Kosovo	1134	13	2	201
Montenegro	1148	7	72	209
North Macedonia	1137	14	4	157
Serbia	1149	15	1	192
Other Countries				
Norway	3301	29	1	386
Switzerland	1224	29	1	82
United Kingdom	2134	32	2	225

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Source: Ipsos

Quality Assurance (QA) Plan/quality indicators

As part of the project, the CCT provided Eurofound with sporadic updates on the quality indicators for the survey. These updates provided all the information necessary to document the process and ultimately to assess whether the specified targets had been met. The initial process worked well, although updates were not as regular as anticipated due to workload demands within Ipsos and Eurofound. Having said this, the weekly teleconferences between Eurofound and Ipsos provided a good opportunity to discuss all aspects of the quality process and whether or not the indicators were likely to be met. A full overview of these quality indicators and Ipsos's performance on each one can be found with the Quality Report.

Ethics

The importance of respecting high ethical standards and abiding by data protection regulations in all international survey research projects is a key priority for Ipsos and Eurofound. In addition to compliance with GDPR⁵⁹ and the data protection regulation governing the European Union institutions and agencies⁶⁰, the basis for the approach to the EWCTS 2021 was the UK Government Social Research ethical principles and other relevant ethical codes such as the MRS⁶¹ and ICC/ESOMAR⁶² codes, with which Ipsos are fully compliant.

In addition to the above, Ipsos also worked closely with its Social Research Ethics Group in the UK. The group exists to support researchers in delivering work which meets the ethical requirements of Ipsos' clients - helping them anticipate, manage and reduce risks in the research process. The group provides an advisory and review function for all projects within the Social Research Institute at Ipsos, with a specific focus on high-risk projects involving vulnerable individuals or sensitive issues. To fulfil the Institute's mandatory ethics requirement, researchers should complete an ethics form for all new projects, which is then submitted to the Ethics Group for review. The group provides advice and guidance on ensuring the project is carried out ethically and how to handle challenging issues. This approach ensures that research ethics are considered from the outset of all projects, minimising risks to clients, the research and staff.

For the EWCTS 2021, applications for the pilot and main stage were submitted and approved by the group. Areas of particular interest in this study concerned the process of obtaining consent, live listening or recording for quality control purposes and the discussion of sensitive issues in the questionnaire, e.g. violence, harassment, bullying, verbal abuse, unwanted sexual attention and threats.

The last of these was addressed by noting that these questions would be handled carefully by the interviewing team – all of whom had been fully trained. This issue was also covered in the training manual for interviewers and noted the need for interviewers to anticipate that this could happen and to treat the respondents with respect. If any respondents felt uncomfortable during this series of questions, interviewers were prompted to remind respondents that all of their answers would be treated in the strictest confidence and combined within the report so that their identity would not be revealed. It is also worth noting here that the answer codes for these questions were purely "yes" or "no", with no requirement to provide further details.

⁵⁹ General Data Protection Regulation (EU) 2016/679(GDPR) which came into force on 25th May 2018.

⁶⁰ Regulation (EU) 2018/1725 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018R1725>

⁶¹ The Market Research Society (UK) Code of Conduct. See: <https://www.mrs.org.uk/standards/code-of-conduct>.

⁶² ESOMAR and the International Chamber of Commerce (ICC) International Code. See: <https://esomar.org/uploads/attachments/ckqtawvj00uukdtrhst5sk9u-iccesomar-international-code-english.pdf>

As a follow up to this, and to provide further assistance, a fieldwork memo was sent to all local partners (dated 29th March 2021) asking them to provide the interviewers with the contact details for support organisations/charities in relation to these issues. This would allow them to signpost participants to the relevant options should the interview cover distressing topics for them or if they became upset.

Other steps taken to ensure that the research was conducted in an ethical manner included asking respondents to give their consent to be re-contacted for research in the future, with the option to decline this request. In addition, call attempts were capped at five calls per number in order to limit the burden on individuals. Having said this, in an attempt to maximise the response rate and achieve the required sample sizes in the tight timelines, almost all countries made more than five calls for some contacts. This was particularly the case in Germany, Austria, Poland, Czechia and Slovakia. In contrast, the Netherlands did not exceed five calls for any contacts.

Data protection

When developing the materials for the research, close attention was paid to the GDPR laws that came into force in May 2018 and the data protection regulation concerning Eurofound. In line with these, a Data Protection Notice document was developed by Eurofound's Data Protection Officer, the Eurofound EWCS team, the Ipsos CCT and their Business Excellence (BES) Team. The notice was translated into all languages covered by the survey and was made available online (with a link to the notice being read out by interviewers should the respondent mention data protection). The notice addressed the following to sufficiently inform the respondents:

- Who is collecting the data?
- What data is being collected?
- What is the legal basis for processing the data?
- Will the data be shared with any third parties?
- How will the information be used?
- How long will the data be stored for?
- What rights the respondent has?
- How can the respondent raise a complaint?

In addition to this, the CCT developed a comprehensive data flow document, which outlines how personal data is obtained and managed throughout the course of the EWCTS 2021 life cycle, based on best practice. It details the flow of data through the sampling process, the screener and survey development, the main survey flow and deliverables. Comprehensive information is also provided regarding the data origin, sample data composition, access to sample files, sample file management, protection and secure transfer.

Ipsos NV and all network partners are committed to ensuring that the research it conducts and coordinates complies with relevant regulatory and industry codes of practice, including data protection and other legal obligations in relevant countries. Ipsos has an integrated quality, compliance and information security management system, called the Business Excellence System, which includes appropriate policies, procedures and technological controls for the protection of information it holds and processes. The system is certified to:

- ISO 9001 the international standard for Quality Management Systems;
- ISO 20252 the international standard for Market, Opinion and Social Research;
- ISO 27001 the international standard for Information Security Management Systems/

Ipsos worked to ensure that these standards were met where applicable across the Ipsos Group and other network partners through appropriate contractual and project service agreements specific to the EWCS project.

Data Issues relating to data protection

Overall there were no significant problems in relation to data protection, aside from a few issues in the following countries:

Norway: one individual emailed Eurofound directly in May 2021 and asked how Ipsos had obtained his confidential mobile number. After consultation with Ipsos, Eurofound (as the Data Controller) responded to the individual on the 26th May with a detailed email to assure him that the sample was generated randomly by Sample Solutions. The email also explained the key steps in the sampling process.

UK: one individual emailed Ipsos on the 12th June to request that the company divulge what information they held on him and how Ipsos UK had obtained his telephone number. The UK Head of Compliance emailed the individual on the 15th June to request the name of the study and Eurofound responded to the individual on the 7th July with a comprehensive email that answered all of his questions and provided further details.

Germany: One individual telephoned T.I.P. on the 28th October to ask why they were permitted to call him, who the commissioning client was and where the agency had obtained his telephone number? However, the person did not state the name of the study. The Data Protection Officer (DPO) at T.I.P. emailed the individual on the 29th October to answer all of the above queries and request that he replied with the name of the study so that the DPO could pass on the contact details to the client. The person did not reply to the email, despite a reminder email also being sent.

One individual telephoned T.I.P. on the 29th October to ask how the agency obtained his telephone number. He also wished to complain to the commissioning client. T.I.P. explained the purpose of the study alongside the sampling method and emailed him the contact details for Eurofound.

One individual telephoned T.I.P. on the 4th November to complain that they were not permitted to call his number without consent. T.I.P. offered to provide a full explanation and the contact details for Eurofound but the individual did not want to pass on his email address.

One individual emailed T.I.P. on the 6th November to ask that he be removed from the sample. T.I.P. removed his details from the sample and replied directly to the email. However, it was classed as 'undeliverable' despite two attempts.

There were a few other informal queries from individuals during the screening process who asked how the agency had obtained their telephone number. However, these were quickly resolved by the interviewers and by directing the individuals to the Data Protection Notice that was available online. More information on data and transfers can be found in Chapter 7.

11. Fieldwork report

Introduction

The chapter provides an overall summary of the fieldwork reviewing the preparation of the fieldwork, the overall performance per country, timings, the impact of COVID-19 on fieldwork, working hours, progress per country, delays (where encountered) and monitoring.

Fieldwork planning

The Ipsos team and Eurofound placed a great deal of time and effort into planning the fieldwork in all 36 countries. For both the pilot and main stage fieldwork, the Ipsos CCT prepared extensive training sessions, which all local project managers attended (see Chapter 7: Mainstage Fieldwork – Mainstage Train the Trainer Sessions for more information). The Eurofound team members also participated in the training in order to demonstrate the importance of the survey, to demonstrate their commitment and be on hand to respond to any queries directly.

Following the training, the local project managers were required to prepare full training sessions for their interviewers. On average, around five training sessions were conducted per country, although this varied from one (in countries such as Czechia, Slovakia, Montenegro and Albania) up to 24 (in Slovenia). This range may be explained by the fact that some countries may have had more interviewers to train to achieve a larger sample size, may have run additional sessions in multiple languages, or may have needed to brief new interviewers who were recruited to the project.

Prior to the main stage fieldwork, the sample requirements were calculated, and the sample loaded into the system. Table 82 below illustrates the breakdown of the sample that was initially loaded and the total sample size loaded by the end of the fieldwork period.

Table 82: Sample loaded and used

Country/territory	Target number of completes	First batch of the sample loaded	Total sample loaded	Total number of batches loaded	Total numbers called	Total completed	Total number of calls per complete
EU MEMBER STATES							
Austria	1800	24279	107016 ⁶³	9	107007	1779	60.2
Belgium	3000	25319	61905	6	51024	4233	12.1 ⁶⁴
Bulgaria	1800	5154	15461	7	14685	1796	8.2
Croatia	1800	10746	31792	5	31793	1800	17.7

⁶³ In Austria 20,000 more numbers were released to achieve additional interviews.

⁶⁴ For the top-up in Belgium the estimated sample was released with one batch to ensure that the target will be reached within the time limit.

Country/territory	Target number of completes	First batch of the sample loaded	Total sample loaded	Total number of batches loaded	Total numbers called	Total completed	Total number of calls per complete
Cyprus	1300	4006	77716 ⁶⁵	8	59834	1365	43.8 ⁶⁶
Czechia	1800	23205	96998 ⁶⁷	6	89657	1990	45.1
Denmark	1800	15535	57952	7	57912	1820	31.8
Estonia	1800	7212	17339	7	17337	1804	9.6
Finland	1800	27706	51556	4	47714	1903	25.1
France	3200	28226	47605	5	46486	3213	14.5
Germany	4100	73099	433685 ⁶⁸	11	398420	4131	96.4 ⁶⁹
Greece	1800	11239	29935	4	29935	1798	16.6
Hungary	1800	8109	27557	7	26557	1792	14.8
Ireland	1800	13376	34914	8	34914	1790	19.5
Italy	3100	31899	84498	5	84494	3131	27.0
Latvia	1800	13702	32705	5	32692	1799	18.2
Lithuania	1800	26093	26093	1	24587	1871	13.1
Luxembourg	1300	11202	68871	8	43931	1363	32.2
Malta	1300	4715	14142	7	13237	1472	9.0
Netherlands	1800	12726	20707	5	20251	1816	11.2
Poland	2900	75983	116535	4	116456	2900	40.2
Portugal	1800	10761	32686	5	21263	1880	11.3
Romania	1800	9000	26984	8	26385	1808	14.6

⁶⁵ In Cyprus the new provider (Pulse) received 69,204 numbers.

⁶⁶ In Cyprus, Pulse received the batches based on the sample management strategy for the main stage fieldwork that was agreed between Ipsos and Eurofound.

⁶⁷ In Czechia the local team received a further 50,588 numbers for additional completes.

⁶⁸ In Germany, a further 74,387 numbers were released for additional interviews.

⁶⁹ For the additional interviews in Germany another provider (T.I.P.) was included in the fieldwork, but this did not change the sample management procedures. The two providers (DT&P and T.I.P.) received separate sample batches to complete the additional target.

Country/territory	Target number of completes	First batch of the sample loaded	Total sample loaded	Total number of batches loaded	Total numbers called	Total completed	Total number of calls per complete
Slovakia	1800	21396	72428 ⁷⁰	7	69128	1794	38.5
Slovenia	2622	16143	48718 ⁷¹	9	48073	2631	18.3
Spain	2900	32927	92504	6	92504	2903	31.9
Sweden	1800	24296	89166	8	89138	1826	48.8
CANDIDATES AND POTENTIAL CANDIDATES (CPC)							
Albania	1000	2000	11993 ⁷²	10	10556	989	10.7
Bosnia & Herzegovina	1000	5762	10278	6	9337	1140	8.2
North Macedonia	1000	8589	25766	8	20025	1137	17.6
Kosovo	1000	2268	11736	8	9533	1134	8.4
Montenegro	1000	11439	34316	5	29873	1148	26.0
Serbia	1000	10902	26785	7	24194	1149	21.1
OTHER COUNTRIES							
Norway	3295	22606	61283	6	60088	3301	18.2
Switzerland	1100	27369	61344	4	60064	1224	49.1
United Kingdom	2100	23758	42246	6	42245	2134	19.8

Source: Ipsos

The average number of telephone calls required for one complete was 26.2 calls. This number varies across the EU member states, the CPC countries and other countries. The average number of calls for a complete ranged from 27.0 in the EU member states, to 15.3 in the CPC countries. This significant difference may be explained by the higher number of telephone calls required in specific EU member states compared to the others, e.g. Germany (96.4), Austria (60.2), Sweden (48.8) and Czechia (43.8). At the other end of the scale, a lower number of calls were required in Bulgaria (8.2), Malta (9.0) and Estonia (9.5).

This difference might be explained by a number of factors, including local attitudes toward CATI surveys, the number of calls typically conducted in the country, the quality of the sample, attitudes towards answering calls from unknown numbers and general interest levels in the survey topic. The large number of calls required to complete one interview might be correlated to the ease with which respondents were persuaded to participate in the survey.

⁷⁰ In Slovakia the local team received 22,151 numbers to achieve additional completes.

⁷¹ In Slovenia the local team received 8,277 numbers to achieve additional completes.

⁷² In Albania the local team received 700 numbers to achieve additional completes.

The Austrian, German and Netherlands teams mentioned that this was not an easy task for a variety of reasons, including the survey length and introduction text (despite amendments following the pilot). Also, the greater amount of numbers required in Germany and Austria might be explained by the partial re-field which was conducted in the autumn of 2021.

As expected, the number of calls required per complete was lower in the CPC countries – with the same conclusion being reached following the pilot stage. The local teams explained that respondents are generally more willing to participate in surveys, they believe that their replies will have an impact on the policy making process and the European Union name is respected.

“We encountered many contacts who could never be reached, but I don’t know if these are empty numbers or if people just didn’t want to speak.” (Austria and Germany)

“It was not very easy to persuade people to participate, it helped a bit to point out the importance of the results for future decision making.” (Austria and Germany)

“It wasn’t really easy to persuade people to participate. This was mostly because we thought that the introduction of the survey was too long. If you want to persuade people to participate, you want to grab their attention immediately and explain why you call in just a few sentences”. (The Netherlands)

“That it was commissioned by Eurofound and that it is done in 36 countries. This gave weight and seriousness. Yes, those who were hesitant were for the length, 20 minutes.” (Sweden)

The feedback from countries who experienced more difficulties in fieldwork and required more telephone numbers to work on the survey tended to be more negative compared to the countries who required a lower number of telephone numbers. The main reasons for the higher number of contacts required were either those with non-working numbers, a higher level of refusals and the length of the questionnaire. Although the majority of the field partners reported that the topic was interesting, the length of the survey may have discouraged some respondents.

For future CATI surveys, Ipsos would recommend using a shorter questionnaire and possibly reconsider the fieldwork rules and their monitoring in order to avoid the need for multiple recontacts at the end of the fieldwork.

After the initial sample was uploaded, several sample batches were loaded during the fieldwork period, with an average of six being loaded in total. The only country with one sample batch loaded was Lithuania as the yield rate was overestimated from the beginning and the local team did not require any additional sample to achieve the target.

Besides Lithuania, in all other countries, additional sample was loaded.

Overall performance

The calculations for the sample outcomes and response rates reported in this section are based on the final disposition codes only (i.e. they do not include interim status outcomes). The EWCTS 2021 fieldwork did not have an upper limitation on the number of contacts, but all cases with interim outcomes had to be called at least five times following a certain call pattern.

One country (the Netherlands) achieved their target number of completes with a maximum of five calls per number, i.e. no numbers were called six or more times. Eleven countries made up to 11-15 calls (only cases with more than 500 contacts are included) and only six of them, made up to 20 calls. Other countries may have had single cases with a high number of calls made to one contact, but those were more likely to be exceptions rather than common practice.

The median number of call attempts for all countries is 17.5 calls, which varies from 5 to 46 (for one case). The high number of call attempts might be explained by multiple appointments made by the respondents or additional calls initiated in order to fulfil the fieldwork requirements.

Table 83 below illustrates the number of calls attempts made by country.

Table 83: Number of cases with 1-5 calls attempts or more

Country/territory	Cases with 1 call attempt	Cases with 2 call attempts	Cases with 3 call attempts	Cases with 4 call attempts	Cases with 5 call attempts	Cases with 6-10 call attempts	Cases with 11-15 call attempts	Cases with 16-20 call attempts	Cases with more than 21 calls	Highest number of call attempts
EU MEMBER STATES										
Austria	20270	9810	5645	4647	2939	40142	18325	5216	13	22
Belgium	13215	7545	4070	2655	2291	16740	4394	108	6	22
Bulgaria	4118	2396	1684	1316	1766	2949	429	27	0	20
Croatia	12240	5093	2852	1951	6633	3006	18	0	0	12
Cyprus	32246	9747	4241	2977	6337	4264	22	0	0	12
Czechia	31972	16686	8110	5012	6672	20615	589	0	1	34
Denmark	8134	4677	3554	2271	12801	26373	102	0	0	13
Estonia	5602	2897	1702	1055	2361	3285	432	3	0	17
Finland	9151	4998	3365	2483	9011	13177	3678	517	1334	38
France	8054	5053	3312	2794	11477	15529	264	3	0	17
Germany	54693	36393	20730	25627	54198	99751	98207	8810	11	24
Greece	10943	5136	2771	1729	1663	7686	7	0	0	11
Hungary	8583	3909	2094	1244	1049	9621	57	0	0	15
Ireland	4965	5067	2549	2515	10429	9260	129	0	0	13
Italy	22903	10239	7094	6531	26115	11393	218	1	0	17
Latvia	12854	4818	2386	1341	885	9931	477	0	0	15
Lithuania	11144	4167	1902	1027	3714	2628	5	0	0	12
Luxembourg	8580	5009	3461	3060	1695	17903	3749	451	23	39
Malta	9815	596	481	376	1903	66	0	0	0	8

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Country/territory	Cases with 1 call attempt	Cases with 2 call attempts	Cases with 3 call attempts	Cases with 4 call attempts	Cases with 5 call attempts	Cases with 6-10 call attempts	Cases with 11-15 call attempts	Cases with 16-20 call attempts	Cases with more than 21 calls	Highest number of call attempts
Netherlands	6063	3137	1757	1102	8192	0	0	0	0	5
Poland	19559	9835	6840	5445	4014	22245	32790	14294	1434	37
Portugal	8056	3698	2346	1785	1907	3427	44	0	0	14
Romania	5879	3687	2498	1872	5904	6275	262	8	0	17
Slovakia	20492	9818	5837	3488	5665	20065	3763	0	0	15
Slovenia	19387	9051	4565	3161	6064	5748	96	1	0	16
Spain	14644	8803	7059	5518	17864	32093	5638	776	109	32
Sweden	17044	7274	3966	2647	13449	44696	61	1	0	18
CANDIDATES AND POTENTIAL CANDIDATES (CPC)										
Albania	5185	1795	928	578	1485	438	102	40	5	32
Bosnia & Herzegovina	2687	1353	778	579	2222	1304	337	63	14	41
North Macedonia	9394	3177	1495	953	3080	1636	247	34	9	31
Kosovo	3143	1827	1174	768	2059	512	48	2	0	20
Montenegro	12224	4461	2206	1686	6235	2838	199	20	4	46
Serbia	11868	4346	1916	1070	3472	1199	254	46	23	42
OTHER COUNTRIES										
Norway	14593	7227	4234	2960	19488	11521	63	2	0	17
Switzerland	9497	4336	4254	3044	8021	27779	2319	814	0	20
United Kingdom	6032	4252	2932	2527	9795	15562	1138	6	1	23

As mentioned above, the high number of calls to some numbers may be the result of trying to fulfil the fieldwork call patterns (i.e. an exact number of calls on a certain day and within certain time slots). Furthermore, the majority of the cases not following the fieldwork rules, which were returned to the CCT from the local countries, were those without a successful contact.

Considering the higher number of calls made to those numbers (5+ calls), there was no firm expectation that a successful interview would be achieved. That said, 12.6% of all completes were achieved with more than five call attempts. More information can be found in Table 84 below.

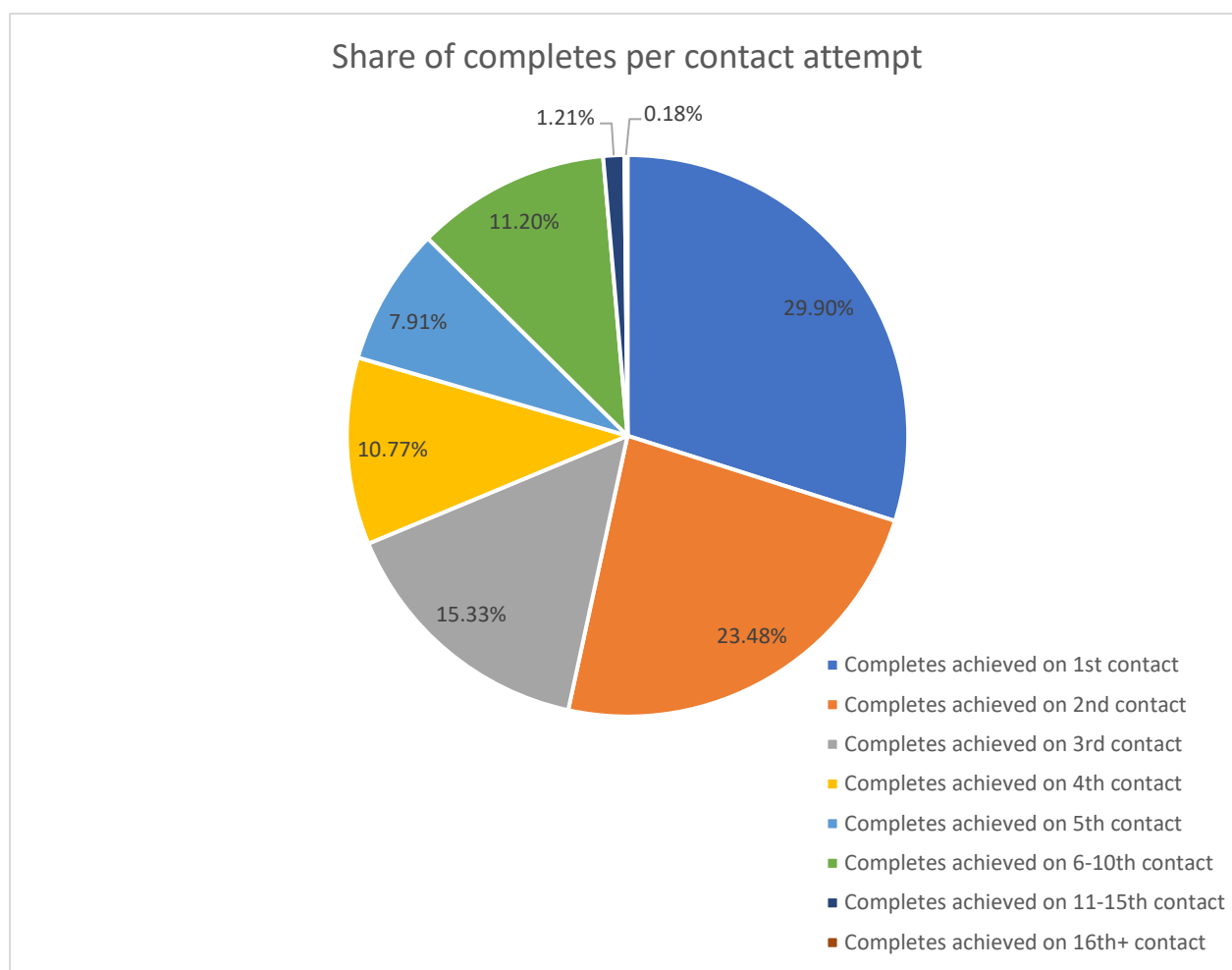
Table 84: Number of completes per call attempt

Country/ territory	Completes on 1st contact	Completes on 2nd contact	Completes on 3rd contact	Completes on 4th contact	Completes on 5th contact	Completes on 6-10th contact	Completes on 11-15th contact	Completes on 16th+ contact
EU MEMBER STATES								
Austria	476	324	252	148	129	371	67	12
Belgium	1216	918	569	407	330	698	92	3
Bulgaria	441	429	290	206	150	254	26	0
Croatia	739	419	258	164	110	109	1	0
Cyprus	488	341	238	143	85	70	0	0
Czechia	629	526	304	218	131	178	4	0
Denmark	704	402	302	205	137	70	0	0
Estonia	628	518	317	210	110	21	0	0
Finland	468	421	328	202	175	261	34	14
France	504	743	569	482	331	555	27	2
Germany	959	767	576	487	391	848	99	4
Greece	676	427	255	145	118	176	1	0
Hungary	527	427	299	205	136	198	0	0
Ireland	551	387	292	229	157	171	3	0
Italy	929	775	535	344	261	280	7	0
Latvia	587	521	298	156	90	142	5	0
Lithuania	616	555	320	194	101	85	0	0
Luxembourg	396	365	239	173	104	82	4	0
Malta	783	356	148	109	71	5	0	0
Netherlands	464	532	327	223	270	0	0	0
Poland	626	515	378	270	222	605	223	61
Portugal	800	505	256	153	88	78	0	0
Romania	448	471	284	231	155	215	4	0
Slovakia	670	454	256	175	123	113	3	0
Slovenia	931	703	376	258	189	172	2	0
Spain	631	534	459	317	232	591	119	20

Country/ territory	Completes on 1st contact	Completes on 2nd contact	Completes on 3rd contact	Completes on 4th contact	Completes on 5th contact	Completes on 6-10th contact	Completes on 11-15th contact	Completes on 16th+ contact
Sweden	459	448	282	219	190	225	3	0
CANDIDATES AND POTENTIAL CANDIDATES (CPC)								
Albania	453	264	115	71	39	41	4	2
Bosnia & Herzegovina	352	241	168	118	68	158	31	4
North Macedonia	465	278	140	92	70	79	12	1
Kosovo	448	274	181	109	60	60	2	0
Montenegro	413	270	161	116	72	107	8	1
Serbia	470	286	153	102	62	68	8	0
OTHER COUNTRIES								
Norway	803	882	574	413	318	303	8	0
Switzerland	158	127	159	179	180	348	65	8
United Kingdom	537	471	357	251	219	291	8	0

Source: Ipsos

Unsurprisingly, a greater share of all completes were achieved on the first and second contact attempts. One fifth (20.5%) of all completes were achieved on or after the fifth call attempt.

Figure 26: Share of completes per contact attempt

Source: Ipsos

Fieldwork timings

Mainstage fieldwork was scheduled for the beginning of March, with all countries starting fieldwork in the week commencing the 8th March. Table 85 below illustrates the fieldwork start and end dates per country. It is important to note here that the dates in the table are for the very first and last call attempt and does not include information for the first and the last complete.

Table 85: Fieldwork timings

Country/territory	Fieldwork Start	Fieldwork end date
EU MEMBER STATES		
Austria	08-03-21	16-11-21
Belgium	08-03-21	16-11-21
Bulgaria	09-03-21	25-07-21
Croatia	05-03-21	18-06-21
Cyprus	14-07-20	30-10-21
Czechia	09-03-21	19-10-21

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Country/territory	Fieldwork Start	Fieldwork end date
Denmark	08-03-21	31-08-21
Estonia	08-03-21	13-08-21
Finland	09-03-21	16-08-21
France	08-03-21	17-07-21
Germany	06-01-21	18-11-21
Greece	08-03-21	06-07-21
Hungary	10-03-21	17-07-21
Ireland	08-03-21	30-07-21
Italy	08-03-21	31-07-21
Latvia	08-03-21	30-07-21
Lithuania	08-03-21	04-08-21
Luxembourg	08-03-21	28-07-21
Malta	09-03-21	29-07-21
Netherlands	08-03-21	13-08-21
Poland	08-03-21	26-07-21
Portugal	08-03-21	16-10-21
Romania	05-03-21	26-07-21
Slovakia	09-03-21	11-10-21
Slovenia	08-03-21	19-10-21
Spain	08-03-21	27-07-21
Sweden	08-03-21	05-08-21
CANDIDATES AND POTENTIAL CANDIDATES (CPC)		
Albania	09-03-21	17-11-21
Bosnia & Herzegovina	11-03-21	29-07-21
North Macedonia	08-03-21	29-07-21
Kosovo	09-03-21	29-07-21
Montenegro	08-03-21	29-07-21
Serbia	08-03-21	29-07-21
OTHER COUNTRIES		
Norway	08-03-21	27-07-21
Switzerland	08-03-21	09-08-21
United Kingdom	09-03-21	09-08-21

Source: Ipsos

One country finished the fieldwork by the end of June (Croatia), 18 by the end of July and 8 by the end of August. Due to re-field requirements in certain countries (Cyprus, Portugal, Czechia, Slovakia, Slovenia, Austria and Germany) and the top up sample in Belgium, the fieldwork in these countries finished in the autumn and up until the end of November. The reason for these staggered timings was mainly due to varying sample sizes and the number of recalls required in order to close the open

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cases according to the fieldwork rules and the replacement interviews required. Denmark experienced the most issues in closing the recalls and this was mainly due to resourcing problems. Slovenia together with other countries also continued fieldwork up until mid-November to compensate for interviews that had been cancelled.

Table 86 below includes the cumulative number of completes per week of fieldwork. The shortest fieldwork duration was 15 weeks in Croatia. Here, the team did not have many recalls to undertake, therefore fieldwork completed in around three months. 29 countries required more than 20 weeks of fieldwork. It should be noted however that a majority of countries reached the required number of completed interviews in a timely manner, but still required additional time to complete their recalls and close the contacts, in order to respect the fieldwork rules.

As an example, Bulgaria reached the target of 1,800 interviews (with four removed after the fieldwork was complete) in 17 weeks and needed two more to correctly close the open cases. It should also be noted that the countries were initially estimated to finish the fieldwork by the end of June. Ipsos monitored the progress of the fieldwork extremely closely, but the end date was revised several times. The reasons for progress issues came from the multiple open cases that had to be closed, additional interviews that had to be completed (especially in countries where the re-field took place) and overall slower progress in some of the countries.

Within the pandemic and with multiple requirements for following the fieldwork patterns, reaching the required levels of quality control on both completes and successful contacts, required extremely agile and flexible planning of the fieldwork. Quick progress in terms of completes usually occurs at the expense of lower quality data by using large volumes of sample and less stringent fieldwork rules. In contrast, the EWCTS had very exacting rules to enhance the quality of the data and meant that additional time was required to fulfil the fieldwork requirements.

Table 86: Cumulative number of completes per week (weeks 1-20)

	Week																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
EU MEMBER STATES																				
Austria	83	184	312	483	665	894	926	969	1108	1240	1274	1287	1376	1445	1467	1467	1467	1467	1468	1470
Belgium	225	588	733	803	968	1099	1349	1529	1621	1684	1708	1749	1832	2193	2475	2620	2751	2851	2990	2997
Bulgaria	16	145	380	506	577	646	796	914	940	1097	1271	1375	1518	1612	1694	1755	1792	1792	1794	1796
Croatia	128	303	514	722	813	943	1034	1186	1239	1276	1447	1498	1629	1757	1800	1800	1800	1800	1800	1800
Cyprus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Czechia	213	246	445	474	483	529	583	619	658	722	777	802	948	953	984	984	984	984	984	984
Denmark	140	309	449	567	778	823	895	1007	1060	1090	1197	1279	1483	1576	1624	1679	1693	1715	1795	1795
Estonia	124	292	360	429	461	544	807	1021	1174	1234	1348	1410	1524	1595	1652	1665	1685	1707	1791	1797
Finland	18	96	176	215	297	528	771	1029	1134	1263	1362	1437	1559	1718	1816	1838	1863	1886	1894	1894
France	195	530	653	895	1044	1282	1643	1887	2162	2275	2496	2668	2797	2897	2969	3041	3127	3173	3212	3213
Germany	121	355	566	831	890	1119	1581	2169	2493	2510	2551	2594	2784	3006	3281	3478	3605	3605	3606	3606
Greece	307	484	595	667	828	1014	1139	1212	1222	1263	1423	1530	1574	1653	1746	1788	1798	1798	1798	1798
Hungary	62	274	483	645	725	885	979	1095	1132	1189	1297	1404	1512	1677	1762	1790	1790	1790	1790	1792
Ireland	180	360	479	567	678	705	879	1142	1291	1361	1437	1536	1583	1617	1643	1682	1693	1696	1705	1755
Italy	195	466	604	660	729	776	986	1380	1562	1781	2048	2199	2320	2380	2576	2765	2948	2992	3021	3095
Latvia	176	478	574	610	708	789	1043	1298	1391	1472	1611	1675	1738	1783	1790	1794	1799	1799	1799	1799
Lithuania	159	453	615	704	780	807	862	1195	1487	1691	1806	1864	1864	1864	1870	1870	1870	1870	1870	1870
Luxembourg	12	45	93	142	166	201	232	292	331	455	666	780	904	1010	1129	1247	1284	1322	1330	1347
Malta	257	495	495	546	649	661	798	853	876	944	965	1016	1186	1260	1299	1302	1303	1303	1342	1396
Netherlands	51	263	520	714	820	993	1175	1237	1266	1295	1351	1468	1589	1677	1722	1759	1780	1782	1785	1794

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	Week																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Poland	141	581	1020	1141	1159	1177	1390	1587	1630	1730	1928	2057	2159	2335	2494	2640	2771	2841	2890	2897
Portugal	53	129	242	385	531	723	880	1050	1172	1281	1345	1376	1446	1517	1544	1556	1557	1557	1557	1557
Romania	180	426	615	677	741	879	1024	1104	1164	1217	1237	1317	1462	1542	1614	1708	1761	1785	1803	1808
Slovakia	160	219	297	317	317	392	417	529	763	923	1150	1286	1301	1337	1362	1375	1375	1375	1375	1378
Slovenia	144	401	521	549	701	752	888	1061	1121	1152	1242	1382	1472	1583	1668	1768	1818	1894	2156	2361
Spain	266	661	784	885	943	1021	1216	1551	1693	1850	2066	2250	2408	2540	2581	2593	2655	2718	2810	2859
Sweden	48	173	255	361	426	564	727	869	1001	1074	1148	1208	1228	1278	1324	1462	1553	1630	1665	1687
CANDIDATES AND POTENTIAL CANDIDATES (CPC)																				
Albania	9	25	87	151	223	262	281	383	484	535	548	553	632	681	748	752	770	780	828	841
Bosnia & Herzegovina	0	51	132	156	241	356	501	649	692	724	752	842	867	916	952	963	999	1042	1080	1096
North Macedonia	43	73	116	166	224	300	353	435	504	596	650	690	823	891	991	997	997	1010	1077	1106
Kosovo	11	44	93	154	254	304	344	403	447	554	626	662	774	895	1003	1027	1027	1032	1083	1102
Montenegro	69	142	195	254	326	410	507	584	616	666	705	759	836	879	1007	1020	1020	1038	1079	1141
Serbia	45	131	263	379	469	499	521	530	547	603	763	857	894	971	1011	1025	1025	1025	1067	1101
OTHER COUNTRIES																				
Norway	150	460	658	716	799	1015	1143	1213	1353	1664	1779	1839	1947	2172	2377	2595	2816	3168	3291	3291
Switzerland	20	168	265	374	448	592	634	703	786	861	956	1006	1086	1086	1086	1086	1086	1098	1161	1177
United Kingdom	56	203	360	486	574	697	824	959	1064	1168	1235	1340	1413	1627	1795	1928	2016	2042	2057	2076

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Table 87: Cumulative number of completes per week (weeks 22-37)

	Week																
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
EU MEMBER STATES																	
Austria	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1494	1547	1615	1775	1779
Belgium	3001	3001	3001	3001	3001	3001	3070	3163	3251	3416	3596	3848	4001	4171	4215	4217	4233
Bulgaria	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796	1796
Croatia	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Cyprus	0	0	0	0	0	0	0	63	191	421	745	1064	1175	1329	1365	1365	1365
Czechia	984	984	984	1019	1155	1245	1297	1482	1640	1810	1923	1982	1990	1990	1990	1990	1990
Denmark	1795	1795	1809	1814	1815	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820
Estonia	1797	1797	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804	1804
Finland	1894	1897	1897	1903	1903	1903	1903	1903	1903	1903	1903	1903	1903	1903	1903	1903	1903
France	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213
Germany	3613	3630	3710	3710	3710	3710	3710	3710	3710	3710	3710	3710	3738	3883	4025	4115	4131
Greece	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798
Hungary	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Ireland	1788	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
Italy	3120	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131	3131
Latvia	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799	1799
Lithuania	1870	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871
Luxembourg	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363	1363
Malta	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472	1472
Netherlands	1807	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816
Poland	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900
Portugal	1557	1557	1557	1557	1557	1564	1613	1682	1729	1756	1821	1878	1880	1880	1880	1880	1880
Romania	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808
Slovakia	1378	1378	1378	1412	1526	1570	1575	1697	1744	1763	1792	1794	1794	1794	1794	1794	1794

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Week																		
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
Slovenia	2414	2422	2425	2495	2590	2624	2628	2629	2629	2630	2631	2631	2631	2631	2631	2631	2631	
Spain	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	2903	
Sweden	1774	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	
CANDIDATES AND POTENTIAL CANDIDATES (CPC)																		
Albania	880	888	896	896	896	896	896	896	896	896	896	896	896	901	927	971	985	989
Bosnia & Herzegovina	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
North Macedonia	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137	1137
Kosovo	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134
Montenegro	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148	1148
Serbia	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149
OTHER COUNTRIES																		
Norway	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301	3301
Switzerland	1204	1217	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224
United Kingdom	2128	2131	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134	2134

Source: Ipsos

Impact of COVID-19 on fieldwork

Interviewers were asked if COVID-19 had any impact on fieldwork activities and all agencies provided feedback on this question. The responses were diverse.

A group of 11 agencies stated that COVID-19 **did not have any impact** on the fieldwork (these countries being Cyprus, Italy, Malta, Poland, Romania, Sweden, Bosnia & Herzegovina, North Macedonia, Serbia, Norway and Switzerland).

However, ten agencies believed that COVID-19 had a **positive impact** on the fieldwork. In their opinion it was relatively easier to reach respondents whilst they were working from home due to the pandemic. The local agencies in Belgium, Croatia, Czechia, Greece, Ireland, Netherlands, Slovakia, Albania and Kosovo all noticed this change. In the case of Lithuania, the respondents were typically more responsive.

Conversely however, Latvia, Denmark, Slovenia, Spain, Kosovo and Montenegro believed that COVID-19 had a **negative impact** on fieldwork, mainly reporting that some people who had lost their jobs due to the current crisis were not eligible for the study.

In addition to the above, Austria and Germany noticed a significant decline in the response rate in all studies conducted since the beginning of the pandemic. Anecdotally, Finland and Portugal also mentioned that the general uncertainty in relation to COVID-19 caused higher stress levels in respondents which they felt had a negative impact on their willingness to participate in the study.

Similarly, interviewers in Bulgaria said that they had to put more effort into persuading respondents to participate in the study. Montenegro reported that some people worked longer hours due to COVID-19 and were therefore less available for the interview and the interviewers had to reschedule interviews several times. Croatia, Czechia, France, Slovakia, Albania and Kosovo mentioned that response rates declined as COVID-19 restrictions were eased. Other notable comments linked to COVID-19 are as follows:

- The agencies in the UK and Estonia mentioned that it was more difficult to brief their interviewers remotely and they prefer to have the face-to-face meetings.
- Greece and Portugal said that the number of interviewers were limited in the CATI centres since the space rules had an impact on the number of people that could have worked at the same time.
- Luxembourg and Slovenia mentioned that many interviewers had to work from their home office which was a less preferable way of working compared to their local agencies. That said, all agencies had fully planned for these situations during the transition and preparation phases of the EWCTS 2021.

Selected quotations (from local agency feedback forms):

“If it had any impact at all, it’s that people were easier to reach due to [working in their] home office or other COVID restrictions which kept them at home. It didn’t have any negative impact at all. (Belgium)

“COVID-19 restrictions actually had positive effect on response rates, once there were eased, response rates fell.” (Croatia)

“Some people had lost their job, so they couldn’t participate in the survey, even if they wanted to.” (Latvia)

“Sometimes on RR [response rates]. When we had a hard lockdown, people were more willing to respond. Then when it started to loosen up, the RR [response rate] went down.” (Czechia)

“It was difficult for some of the interviewers to participate in web training and those had to be done face-to-face.” (Estonia)

“We didn’t have any negative impact as the CATI at home project was already set up, if anything we think it had a positive impact. At the start of fieldwork some people took part as they were at home with nothing to do, and others found the survey more topical because it included COVID-19.” (Ireland)

“The COVID-19 measures, like working from home as much as possible, could have had a positive impact on the response rate of EWCS, since it became likely that more people would pick up the phone.” (Netherlands)

“The positive effect was that during the lockdown people were more available to answer, while the negative aspect was that people lost their jobs and this increased the number of people that screened out to participate in this survey.” (Kosovo)

Source: Ipsos

Interviewer working hours and respondent availability

As the survey collected information about working conditions and the target respondents were those who had worked in the previous week, the working hours of the CATI centres were extremely important for reaching various types of respondents at different times of the day. Considering that many of the respondents may have been working shifts, part-time jobs or roles with unsociable hours, Ipsos communicated the importance of having coverage in the CATI centres during the specified hours.

Although each call centre reported their interviewer working hours prior to the start of the project, during the actual mainstage fieldwork the working hours varied based on a number of factors including sample availability, overall progress, the number of recalls required and other projects that were scheduled. Most of the countries started their calls around 9 or 10 am and actively worked through until 7 or 8pm. Some countries registered more than 1,000 calls before 9am in the morning: Estonia made more than 10,000 calls before 9 am, Luxembourg – 6205 calls, Norway – 3248, Poland – 2805 and Finland - 1429. Calling this early has a certain rationale as the interviewers aimed to catch people before they started work for the day, but it was not common practice across countries. The other reason mentioned for this practice was due to the number of recalls that had to be completed at the end of fieldwork. Since Ipsos requested that all open cases without a successful contact allocated to them be closed according to the rules, some countries used an automatic dialler to speed up the process. In the monthly tables below, it is clearly visible that most of the early morning contacts in Luxembourg and Norway were undertaken during the last month of the fieldwork when the aim was to close the open contacts. The number of early calls in Finland may have been made for the same reason. In Estonia the team purposely tried to catch respondents prior to the start of their working day – before 9 am – from the beginning of the fieldwork.

As expected, the most active dialling hours were in the late afternoon and early evening, although for some countries other time slots were prioritised. For example, the most active dialling time in Germany was between 3-5 pm.

The volume of calls made around noon and in the early afternoon differ across countries. In Greece, Malta, Portugal and Italy a significant reduction in the number of contacts was envisaged in that time slot, which may be explained by the local specifics of the country, working hours, interviewer breaks and the overall dialling policy within the country. Considering the national specifics, Hungary does not dial numbers after 8pm and made very few calls after 7pm as it is culturally inappropriate.

The same practices were also implemented for the re-fields, with active afternoon hours of dialling and less contacts made in the morning.

First five call attempts

The first five contact attempts per country shows the same pattern as the total amount of calls – predominantly a lower number of calls early in the morning and many more in the afternoon. The CCT monitored the call patterns very strictly – the team ran regular reports in which the issues related to following the fieldwork rules were visualised. If the rules were not met by the local teams, the CCT required them to make additional calls in order to fulfil the fieldwork rules. The most common reasons for the CCT returning cases to the local agency were those that were lacking either one evening or one weekend call. The table below includes information about the time slots for the first five calls

Table 88: First five calls attempt in each country

Country	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00-7:00
EU MEMBER STATES																	
Austria	0	5	8615	16243	17245	29561	31806	43842	44995	44044	59335	57536	34189	21143	29	0	0
Belgium	0	49	14750	16433	14259	7307	17196	12897	7563	6857	19522	19058	14637	17963	334	0	0
Bulgaria	1	323	1579	4319	5679	4009	4229	3614	3834	4411	5631	4553	2478	385	36	0	0
Croatia	0	1	4132	6784	6361	6740	4935	4853	7481	8363	11118	11358	8356	6576	13	0	0
Cyprus	0	0	27	10211	17225	15600	12924	5511	475	8547	13352	16857	13990	10463	4292	5	7
Czechia	0	201	10528	25430	27453	25308	25315	22551	18401	23603	22853	19099	19785	8578	2	0	0
Denmark	0	7	187	783	10292	13794	11427	13606	9019	39965	38241	43221	26518	26341	210	0	3
Estonia		2	309	1987	3000	3451	3669	3233	3412	3255	3864	3107	1961	1139	136	2	0
Finland	0	1134	2931	4749	13132	10232	13523	12704	15397	21258	23548	23731	19731	15667	20	0	2
France	0	3	10215	13568	12809	20235	17290	9242	10298	15077	17567	17248	19234	12851	0	0	0
Germany	0	51	13435	28614	54211	85640	133083	199191	235723	224562	209921	183509	146369	81494	1259	0	0
Greece	0	0	6294	9474	12656	8412	10687	5931	78	584	11353	10919	4343	2470	23	0	0
Hungary	0	116	1573	5998	5934	6230	7301	6788	7867	6651	16647	16005	184	0	0	0	0
Ireland	0	4	3236	6893	9216	10847	7672	9461	7087	6626	18738	19670	14084	17983	379	0	0
Italy	0	3	19510	16566	15866	9925	19	34820	32674	32572	23091	28089	28963	25918	11406	0	0
Latvia	0	0	603	10149	10606	10696	10729	9120	10904	10462	8624	4829	3295	1451	9	0	0
Lithuania	0	1	124	938	2577	2961	2674	2779	8653	10916	9327	7758	9500	2817	2	0	0
Luxembourg	0	0	3	8	1756	2770	2744	3863	3380	3205	8193	10905	10123	2746	3	0	0
Malta	0	15	1471	847	952	427	7	22	86	5132	6271	4278	3607	684	0	0	0
Netherlands	0	377	1912	2357	4691	3950	6026	6009	3377	3384	4786	8531	7632	6538	3406	0	0
Poland	0	2045	5154	10748	11354	20466	26163	45345	45046	64173	65702	43189	47060	55322	13643	4	0

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Country	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00-7:00
Portugal	0	34	615	4028	4118	4163	121	4124	6453	5801	5390	5894	6350	6824	2605	0	0
Romania	0	40	6831	7890	9117	8204	9166	8136	6572	8002	11326	8393	3906	2892	5	0	0
Slovakia	0	86	10533	17883	21324	21232	21210	16217	9611	24239	22965	25563	20233	7958	2	0	0
Slovenia	1	193	4365	7392	8159	8063	7411	6183	11180	11468	18865	17046	15581	7462	4	0	0
Spain	0	0	12166	38294	34975	37328	39360	27846	18229	18548	26310	22676	24742	27427	29621	377	0
Sweden	0	465	23419	25803	24871	12223	19825	14259	13552	32934	48642	46258	49532	32935	383	12	0
CANDIDATES AND POTENTIAL CANDIDATES (CPC)																	
Albania	0	2	1816	4504	3280	2553	1378	1129	938	943	4355	2461	742	115	2	0	3
Bosnia & Herzegovina	0	0	36	2603	3342	3363	2992	2395	1930	1151	6565	3673	1327	365	0	0	1
North Macedonia	4	3	3	57	4771	9182	7158	4107	1622	1104	6893	6261	4656	3002	233	0	19
Kosovo	0	0	3	475	3386	2953	2408	1993	1665	2552	3716	3069	1505	975	1414	342	40
Montenegro	2	3	0	98	10186	8530	9331	9563	5730	3398	14685	10655	5869	2906	22	0	10
Serbia	0	0	0	63	3856	2460	14807	6440	2729	1709	12401	7910	2830	338	15	0	0
OTHER COUNTRIES																	
Norway	0	2880	5165	6076	6058	18360	16412	17307	14162	29145	25819	23684	18694	14679	10359	159	0
Switzerland	0	0	146	27745	32268	14731	44634	13068	1325	1404	53931	42492	6014	14	0	0	0
United Kingdom	0	10	15215	20232	14687	14383	9950	14474	9240	9951	18164	16878	11040	11466	260	0	0

Source: Ipsos

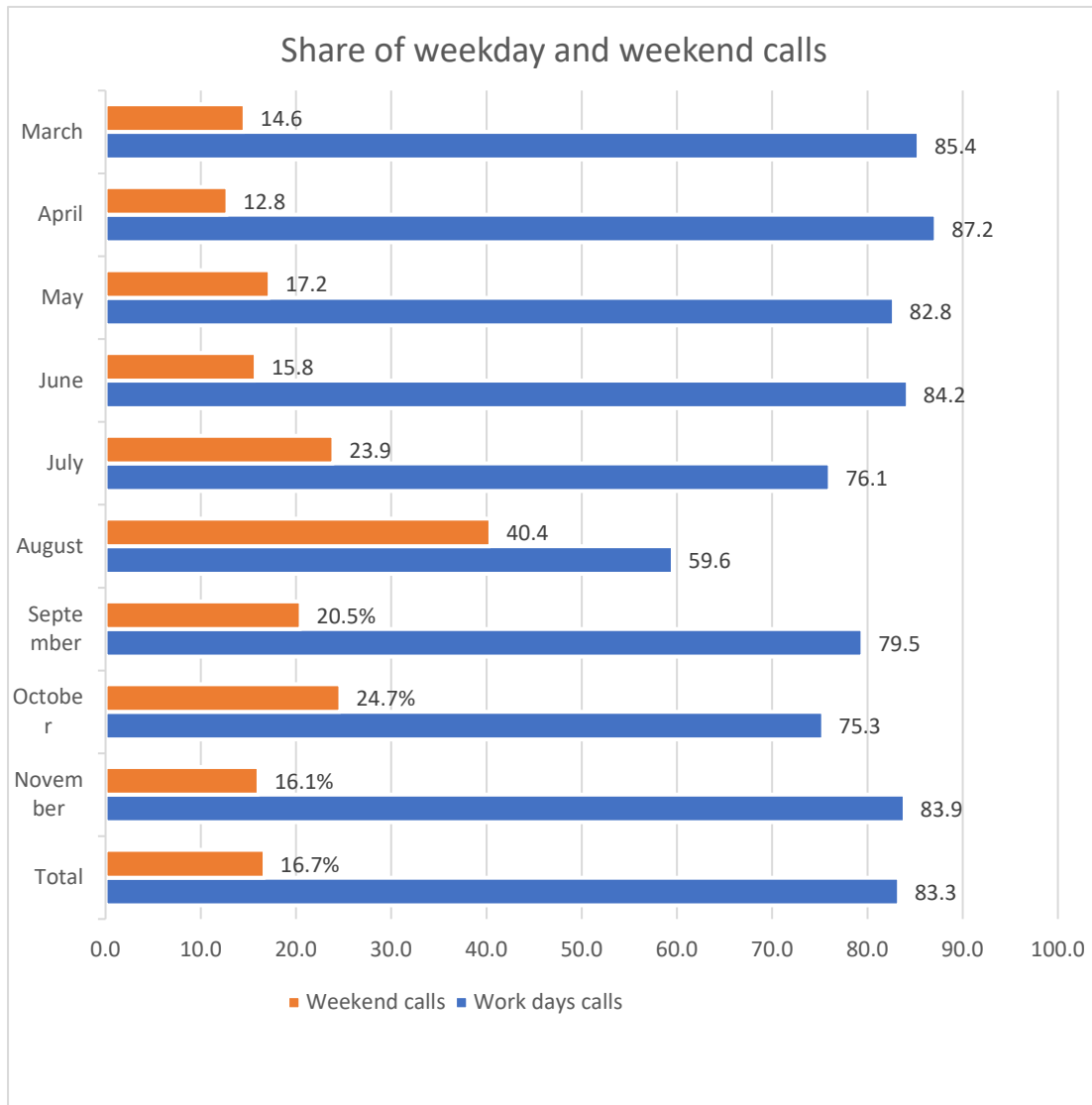
Share of weekday and weekend calls

As stated above, strict fieldwork rules were implemented for the project. Ipsos closely monitored the number of weekday, evening and weekend calls, and minimum number of days between the first and the last contact attempt.

The fieldwork rules required the teams to make at least one weekend call per contact and so Ipsos monitored the share of these. As expected, the share of weekday calls was much higher compared to the weekend calls (83.3% versus 16.7% respectively).

This trend shows some variations across the months, but no significant deviations. As Ipsos expected, the share of the weekend calls was lower towards the start of fieldwork, but more intensive during the most active fieldwork months. This can be explained by the dynamics of the fieldwork or local country specifics, e.g., some call centres were not open on Sunday, or there were limitations on work time during the weekend. During the re-fields in the autumn, the teams achieved an improved balance between the share of weekday and weekend calls, but this may be explained by the fact that the fieldwork teams worked with a smaller number of contacts with a more intensive deadline.

Figure 27: share of weekend and weekdays calls



Source: Ipsos

Ipsos also anticipated some variations in the share of weekday and weekend calls on a monthly basis for the various countries. It is clearly evident that countries where a lower amount of weekend calls were made during the first month then had to focus more upon these at a later stage. This is evident in Malta and Albania, where less than 1,000 weekend calls were made at the beginning of the fieldwork, but then increased significantly.

Ipsos tried to avoid such inconsistencies in the agencies’ performance and ran several analysis reports on a weekly basis to try and ensure that the share of weekday and weekend calls was spread equally throughout the months. However, in some periods the equal distribution between the two was difficult to predict. For example, during April and May Ipsos noticed a smaller number of weekend calls being made in several countries. However, this can be explained by the number of public holidays in several countries. In contrast, and during the summer months, although the share of weekend calls was higher, the number of calls in that month was lower as an absolute number and this should be considered when reviewing the data.

Table 89: number of weekday/weekend calls per month (March – July 2021)

Country	Total		March		April		May		June		July	
	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls
EU MEMBER STATES												
Austria	614417	118585	105657	20414	174985	18613	150791	35566	73380	7173	24049	8230
Belgium	223392	26281	21738	1707	34599	2649	14592	617	55807	7277	25684	4994
Bulgaria	43877	11808	9778	2744	9581	2440	13261	4195	10658	2081	599	348
Croatia	78635	13760	28314	3569	23900	3852	14799	4171	11622	2168	0	0
Cyprus	117001	20379	931	69	3126	111	2563	156	1834	204	2837	564
Czechia	193145	101897	43812	12004	7701	6383	16091	24575	18401	3264	314	6
Denmark	210238	61374	53039	11579	43470	8891	52326	23908	39960	9670	8281	5183
Estonia	55222	9211	7348	1078	14258	2693	11784	2099	6865	1386	2798	729
Finland	225635	51586	13848	2949	72222	23329	47735	12008	63696	9332	24524	3828
France	161670	43788	43303	11498	48982	14207	47075	12594	18170	4408	4140	1081
Germany	2340928	367826	323378	42489	720577	67221	412440	21768	646350	101473	130903	68147
Greece	74054	25252	25436	8073	17374	8270	16896	4268	14338	4641	10	0
Hungary	83638	21042	22893	7791	18341	6288	16393	4653	25979	2114	32	196
Ireland	119025	32173	28683	7619	38320	3473	27251	14545	13991	4092	10780	2444
Italy	258278	43383	45384	4125	55477	6954	72327	8783	60760	10053	24330	13468
Latvia	99781	13560	24492	2741	38465	3562	21486	6364	15336	893	2	0
Lithuania	55963	10163	15927	3717	15395	3007	23943	232	16	2801	208	406
Luxembourg	190276	50395	12325	3243	26255	5925	48245	8939	69537	13032	33914	19256
Malta	20273	3607	5968	805	4104	1035	3492	1103	3399	402	3310	262

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Country	Total		March		April		May		June		July	
	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls
Netherlands	52340	10636	17335	2808	15972	2393	8131	3026	8357	1507	2254	902
Poland	835436	147463	133325	12586	107485	14127	162831	43567	333157	60924	98638	16259
Portugal	54683	8643	8842	1294	15178	1084	10676	1342	5270	1544	2883	1433
Romania	85710	19920	25703	5267	17938	3825	15869	3743	21525	6264	4675	821
Slovakia	215448	64055	20297	2044	17127	1817	82916	26019	18958	9948	56	5
Slovenia	110098	23539	14891	5499	22163	3327	14387	3795	21236	3851	27543	5083
Spain	417655	68192	123210	9401	90209	11651	111805	10265	55685	19593	36746	17282
Sweden	362996	75057	59641	11827	76611	16747	57692	11477	50551	15859	90666	16520
CANDIDATES AND POTENTIAL CANDIDATES (CPC)												
Albania	21488	5144	2379	395	5122	825	5378	1919	4461	998	2262	608
Bosnia & Herzegovina	30239	6920	3590	859	12993	3505	6008	928	3512	892	4136	736
North Macedonia	44790	10516	6196	899	9965	1704	12236	3254	11250	2887	5143	1772
Kosovo	22445	5608	3336	726	5902	1333	5839	1855	5533	1173	1835	521
Montenegro	72056	15890	9842	1548	18385	3627	14372	4415	16698	3925	12759	2375
Serbia	50551	11058	12922	2029	8012	1622	15008	3898	6379	1099	8230	2410
OTHER COUNTRIES												
Norway	194437	33729	20991	2930	29323	1682	33562	3035	66404	15204	44157	10878
Switzerland	232746	71397	62896	22725	67231	16436	69112	26568	7389	20	23678	5184
United Kingdom	166045	39432	28162	6044	33305	7497	33803	8468	47244	11161	23501	3923

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Table 90: number of weekday/weekend calls per month (August – November 2021)

Country	Total		August		September		October		November	
	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls
EU MEMBER STATES										
Austria	614417	118585	0	0	0	0	17243	13673	68312	14916
Belgium	223392	26281	29	0	20261	1157	49833	7356	849	524
Bulgaria	43877	11808	0	0	0	0	0	0	0	0
Croatia	78635	13760	0	0	0	0	0	0	0	0
Cyprus	117001	20379	123	0	36877	4831	68710	14444	0	0
Czechia	193145	101897	24411	20731	60512	24234	21903	10700	0	0
Denmark	210238	61374	13162	2143	0	0	0	0	0	0
Estonia	55222	9211	12169	1226	0	0	0	0	0	0
Finland	225635	51586	3610	140	0	0	0	0	0	0
France	161670	43788	0	0	0	0	0	0	0	0
Germany	2340928	367826	0	41875	0	0	42894	14730	64386	10123
Greece	74054	25252	0	0	0	0	0	0	0	0
Hungary	83638	21042	0	0	0	0	0	0	0	0
Ireland	119025	32173	0	0	0	0	0	0	0	0
Italy	258278	43383	0	0	0	0	0	0	0	0
Latvia	99781	13560	0	0	0	0	0	0	0	0
Lithuania	55963	10163	474	0	0	0	0	0	0	0
Luxembourg	190276	50395	0	0	0	0	0	0	0	0
Malta	20273	3607	0	0	0	0	0	0	0	0

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Country	Total		August		September		October		November	
	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls	Weekday calls	Weekend calls
Netherlands	52340	10636	291	0	0	0	0	0	0	0
Poland	835436	147463	0	0	0	0	0	0	0	0
Portugal	54683	8643	1	0	7650	517	4183	1429	0	0
Romania	85710	19920	0	0	0	0	0	0	0	0
Slovakia	215448	64055	19862	3368	49321	13807	6911	7047	0	0
Slovenia	110098	23539	9393	1335	450	612	35	37	0	0
Spain	417655	68192	0	0	0	0	0	0	0	0
Sweden	362996	75057	27835	2627	0	0	0	0	0	0
CANDIDATES AND POTENTIAL CANDIDATES (CPC)										
Albania	21488	5144	11	0	0	0	980	196	895	203
Bosnia & Herzegovina	30239	6920	0	0	0	0	0	0	0	0
North Macedonia	44790	10516	0	0	0	0	0	0	0	0
Kosovo	22445	5608	0	0	0	0	0	0	0	0
Montenegro	72056	15890	0	0	0	0	0	0	0	0
Serbia	50551	11058	0	0	0	0	0	0	0	0
OTHER COUNTRIES										
Norway	194437	33729	0	0	0	0	0	0	0	0
Switzerland	232746	71397	2440	464	0	0	0	0	0	0
United Kingdom	166045	39432	30	2339	0	0	0	0	0	0

Source: Ipsos

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Table 91: Share of weekday/weekend calls per month per country (March – July 2021)

Country	Total		March		April		May		June		July	
	Weekday calls	Weekend calls	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %
EU MEMBER STATES												
Austria	614417	118585	17.2	17.2	28.5	15.7	24.5	30.0	11.9	6.0	3.9	6.9
Belgium	223392	26281	9.7	6.5	15.5	10.1	6.5	2.3	25.0	27.7	11.5	19.0
Bulgaria	43877	11808	22.3	23.2	21.8	20.7	30.2	35.5	24.3	17.6	1.4	2.9
Croatia	78635	13760	36.0	25.9	30.4	28.0	18.8	30.3	14.8	15.8	0.0	0.0
Cyprus	117001	20379	0.8	0.3	2.7	0.5	2.2	0.8	1.6	1.0	2.4	2.8
Czechia	193145	101897	22.7	11.8	4.0	6.3	8.3	24.1	9.5	3.2	0.2	0.0
Denmark	210238	61374	25.2	18.9	20.7	14.5	24.9	39.0	19.0	15.8	3.9	8.4
Estonia	55222	9211	13.3	11.7	25.8	29.2	21.3	22.8	12.4	15.0	5.1	7.9
Finland	225635	51586	6.1	5.7	32.0	45.2	21.2	23.3	28.2	18.1	10.9	7.4
France	161670	43788	26.8	26.3	30.3	32.4	29.1	28.8	11.2	10.1	2.6	2.5
Germany	2340928	367826	13.8	11.6	30.8	18.3	17.6	5.9	27.6	27.6	5.6	18.5
Greece	74054	25252	34.3	32.0	23.5	32.7	22.8	16.9	19.4	18.4	0.0	0.0
Hungary	83638	21042	27.4	37.0	21.9	29.9	19.6	22.1	31.1	10.0	0.0	0.9
Ireland	119025	32173	24.1	23.7	32.2	10.8	22.9	45.2	11.8	12.7	9.1	7.6
Italy	258278	43383	17.6	9.5	21.5	16.0	28.0	20.2	23.5	23.2	9.4	31.0
Latvia	99781	13560	24.5	20.2	38.5	26.3	21.5	46.9	15.4	6.6	0.0	0.0
Lithuania	55963	10163	28.5	36.6	27.5	29.6	42.8	2.3	0.0	27.6	0.4	4.0
Luxembourg	190276	50395	6.5	6.4	13.8	11.8	25.4	17.7	36.5	25.9	17.8	38.2

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European Working Conditions Telephone Survey 2021: Technical report

Country	Total		March		April		May		June		July	
	Weekday calls	Weekend calls	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %
Malta	20273	3607	29.4	22.3	20.2	28.7	17.2	30.6	16.8	11.1	16.3	7.3
Netherlands	52340	10636	33.1	26.4	30.5	22.5	15.5	28.5	16.0	14.2	4.3	8.5
Poland	835436	147463	16.0	8.5	12.9	9.6	19.5	29.5	39.9	41.3	11.8	11.0
Portugal	54683	8643	16.2	15.0	27.8	12.5	19.5	15.5	9.6	17.9	5.3	16.6
Romania	85710	19920	30.0	26.4	20.9	19.2	18.5	18.8	25.1	31.4	5.5	4.1
Slovakia	215448	64055	9.4	3.2	7.9	2.8	38.5	40.6	8.8	15.5	0.0	0.0
Slovenia	110098	23539	13.5	23.4	20.1	14.1	13.1	16.1	19.3	16.4	25.0	21.6
Spain	417655	68192	29.5	13.8	21.6	17.1	26.8	15.1	13.3	28.7	8.8	25.3
Sweden	362996	75057	16.4	15.8	21.1	22.3	15.9	15.3	13.9	21.1	25.0	22.0
CANDIDATES AND POTENTIAL CANDIDATES (CPC)												
Albania	21488	5144	11.1	7.7	23.8	16.0	25.0	37.3	20.8	19.4	10.5	11.8
Bosnia & Herzegovina	30239	6920	11.9	12.4	43.0	50.7	19.9	13.4	11.6	12.9	13.7	10.6
North Macedonia	44790	10516	13.8	8.5	22.2	16.2	27.3	30.9	25.1	27.5	11.5	16.9
Kosovo	22445	5608	14.9	12.9	26.3	23.8	26.0	33.1	24.7	20.9	8.2	9.3
Montenegro	72056	15890	13.7	9.7	25.5	22.8	19.9	27.8	23.2	24.7	17.7	14.9
Serbia	50551	11058	25.6	18.3	15.8	14.7	29.7	35.3	12.6	9.9	16.3	21.8
OTHER COUNTRIES												
Norway	194437	33729	10.8	8.7	15.1	5.0	17.3	9.0	34.2	45.1	22.7	32.3
Switzerland	232746	71397	27.0	31.8	28.9	23.0	29.7	37.2	3.2	0.0	10.2	7.3
United Kingdom	166045	39432	17.0	15.3	20.1	19.0	20.4	21.5	28.5	28.3	14.2	9.9

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Table 92: Share of weekday/weekend calls per month per country (March – July 2021)

Country	Total		August		September		October		November	
	Weekday calls	Weekend calls	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls	Weekend calls	Weekday calls	Weekend calls
EU MEMBER STATES										
Austria	614417	118585	0	0	0	0	2.8	11.5	11.1	12.6
Belgium	223392	26281	0.0	0.0	9.1	4.4	22.3	28.0	0.4	2.0
Bulgaria	43877	11808	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Croatia	78635	13760	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cyprus	117001	20379	0.1	0.0	31.5	23.7	58.7	70.9	0.0	0.0
Czechia	193145	101897	12.6	20.3	31.3	23.8	11.3	10.5	0.0	0.0
Denmark	210238	61374	6.3	3.5	0.0	0.0	0.0	0.0	0.0	0.0
Estonia	55222	9211	22.0	13.3	0.0	0.0	0.0	0.0	0.0	0.0
Finland	225635	51586	1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
France	161670	43788	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Germany	2340928	367826	0.0	11.4	0.0	0.0	1.8	4.0	2.8	2.8
Greece	74054	25252	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary	83638	21042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	119025	32173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	258278	43383	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia	99781	13560	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	55963	10163	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Luxembourg	190276	50395	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country	Total		August		September		October		November	
	Weekday calls	Weekend calls	Weekday calls %	Weekend calls %	Weekday calls %	Weekend calls %	Weekday calls	Weekend calls	Weekday calls	Weekend calls
Malta	20273	3607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	52340	10636	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	835436	147463	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	54683	8643	0.0	0.0	14.0	6.0	7.6	16.5	0.0	0.0
Romania	85710	19920	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia	215448	64055	9.2	5.3	22.9	21.6	3.2	11.0	0.0	0.0
Slovenia	110098	23539	8.5	5.7	0.4	2.6	0.0	0.2	0.0	0.0
Spain	417655	68192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden	362996	75057	7.7	3.5	0.0	0.0	0.0	0.0	0.0	0.0
CANDIDATES AND POTENTIAL CANDIDATES (CPC)										
Albania	21488	5144	0.1	0.0	0.0	0.0	4.6	3.8	4.2	3.9
Bosnia & Herzegovina	30239	6920	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Macedonia	44790	10516	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kosovo	22445	5608	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Montenegro	72056	15890	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serbia	50551	11058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER COUNTRIES										
Norway	194437	33729	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland	232746	71397	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
United Kingdom	166045	39432	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0

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Field force involved in the project

The methodology of the project required a strong field force to be engaged during the fieldwork. Due to the topic, complexity, length and fieldwork requirements, multiple interviewers had to be involved in the survey. A total of 1,563 interviewers worked on the project and 1,418 of them managed to complete at least one successful interview. All interviewers had to be fully trained and be familiar with the questionnaire and fieldwork requirements. To avoid any issues in relation to possible bias, each interviewer could achieve up to a maximum of 200 completes.

The number of interviewers involved in the project varied significantly across the different countries. Denmark had the largest number of interviewers involved in the project – a total of 134, although 31 of them conducted less than five interviews. This may be explained by the longer fieldwork period, slower progress, the overall complexity of the project and other project commitments. Similarly, Sweden had 72 interviewers working on the study, with 71 achieving at least one complete. Out of the 71, 18 completed between 1 and 5 interviews. This is likely to be attributed to the fact that Sweden experienced some issues with the sample size and overall progress, and thus the number of interviewers involved in the project was relatively high.

Germany and Czechia are another two countries where a large number of interviewers were involved in the fieldwork. In Czechia, 111 interviewers were part of the project and 99 of them achieved at least one successful interview. 31 of the Czech interviewers achieved between 1 and 5 completes. In Germany, 99 interviewers worked on the study and only 6 did not achieve a successful interview. It is worth mentioning here that both countries had to re-field some interviews and so the large number of interviewers involved in the project is likely to be partly explained by this.

The higher number of interviewers involved in the project correlates to the average number of completes per interviewer. If a smaller number of interviewers were involved in the project then the average number of completes was higher. This is evident in Montenegro where 7 interviewers worked on the project and achieved an average of 165 interviews per person. In Italy, Kosovo, Norway, Portugal, Slovenia and Spain, interviewers achieved an average of over 100 interviews each. In all such countries, up to 31 interviewers worked on the study.

In contrast, countries such as Austria, Czechia, Denmark, Ireland, Luxembourg, Malta, Slovakia and Sweden achieved an average of less than 40 interviews per interviewer. In Luxembourg, the team experienced some issues during the fieldwork as the automatic dialler was blocked by mobile operators and the team needed to expand the fieldwork team, commissioning another company as a subcontractor. This is the main reason for the lower number of average completes and the smaller number of interviewers involved in the project.

Austria and Germany should also be noted as partial re-fields were needed in both countries, which required a larger fieldwork force to be engaged in the survey. As a result, this reduced the average number of completes achieved per interviewer.

Table 93 below includes information on the number of interviewers working on the project, the number with completed interviews, those with a low number of completes and the average number of completes per country. As mentioned previously, all local agencies fully trained their interviewers prior to the start of fieldwork. However, due to the complexity of the project and specifics regarding the call pattern, some interviewers dropped out of the project after a short period of work. This is the main reason for the differing figures in Table 93. There are some countries that trained a higher number of interviewers, but some did not achieve a successful interview or completed very few

interviews. The number of interviewers who spent less time on the project is higher in countries such as Czechia and Denmark where the overall field force was larger.

Table 93: Number of interviewers worked on the project

Country	Total interviewers working in the project	Interviewers with completes	Number of interviewers with <=5 completes	Average number of completes
EU MEMBER STATES				
Austria	57	52	12	34
Belgium	75	62	14	68
Bulgaria	27	26	0	69
Croatia	43	36	9	50
Cyprus	40	19	1	72
Czechia	111	99	31	20
Denmark	134	126	31	14
Estonia	31	24	5	75
Finland	50	44	8	43
France	43	43	3	75
Germany	99	93	16	44
Greece	31	29	1	62
Hungary	46	44	7	41
Ireland	53	49	4	34
Italy	31	31	3	101
Latvia	20	19	2	95
Lithuania	36	35	1	53
Luxembourg	38	36	9	36
Malta	40	39	1	38
Netherlands	50	42	6	43
Poland	58	57	7	51
Portugal	19	18	0	104
Romania	28	21	0	86
Slovakia	62	59	15	30
Slovenia	27	24	2	110
Spain	21	20	0	145
Sweden	72	71	18	26
CANDIDATES AND POTENTIAL CANDIDATES (CPC)				
Albania	29	20	5	49
Bosnia & Herzegovina	13	13	0	88
North Macedonia	14	14	1	81

Country	Total interviewers working in the project	Interviewers with completes	Number of interviewers with <=5 completes	Average number of completes
Kosovo	10	9	1	125
Montenegro	7	7	0	164
Serbia	15	15	1	77
OTHER COUNTRIES				
Norway	31	30	4	106
Switzerland	33	29	2	42
United Kingdom	38	33	3	65

Source: Ipsos

Fieldwork duration and interim deadlines/targets

As well as a deadline for the full completion of fieldwork, all countries were assigned deadlines for the completion of 10% and 50% of the interviews. Countries were divided into groups for reaching the completion targets, which were based on the local estimations for reaching them. The targets for the interim deliveries were about 10 days apart, between the first and the third group. During the fieldwork, based on the progress of the local partners, they were transferred from one group to another, mainly because they were not able to meet their targets. An example for this was Luxembourg where the team faced issues with the automatic dialler for couple of weeks and due to this unexpected issue they could not reach the target for completing their interim and final target.

The majority of the countries managed to meet the 10% target on time. Only two countries – Finland and Luxembourg – required additional time. The main reasons for the delay can be attributed to the slow start to fieldwork in Luxembourg and a COVID-19 outbreak in the call centre in Finland. Five countries (France, Ireland, Norway, Slovenia and Spain) managed to reach the 10% target in a couple of days, reaching it 20 days earlier than initially estimated. Similarly, Czechia, Greece, Malta and Romania reached the 10% target just 2-4 days after launching the fieldwork. This can be attributed to a number of reasons including the usage of the freshly loaded sample, a large number of interviewers involved in the project at the start, as well as a lower number of overall completes being required in some countries.

Compared to the good overall progress on reaching the 10% target, several countries had difficulties achieving the 50% target on time. Ten countries (Albania, Bulgaria, Czechia, Italy, Kosovo, Luxembourg, North Macedonia, Slovakia, Sweden and the United Kingdom) achieved the 50% target ten or more days later than planned. The main reasons for this were additional work required on the sample that was already loaded, re-visiting contacts to ensure that they met the fieldwork rules, non-working days (Easter holidays), local elections (in Albania and Bulgaria) or other project commitments.

As mentioned above, the blocking of the automatic dialler in Luxembourg meant that manual dialling had to be introduced which was significantly more time-consuming. This is the main reason for the slower progress there. Compared to the 10% target, only three countries reached their 50% target ten or more days earlier than expected – these being Denmark, France, and Ireland.

The table below contains more information on the expected target dates and actual dates when targets were achieved.

Table 94: Interim targets - expected completion date and actual completion date

Country	Country target	10% target deadline	10% target reached - date	10% achieved	50% target deadline	50% target reached	50% achieved	100% target deadline	100% target reached	100% achieved
EU MEMBER STATES										
Austria	1800	24-03-21	18-03-21	186	16-04-21	17-04-21	900	15-06-21	16-11-21	1779
Belgium ⁷³	3000	29-03-21	12-03-21	303	26-04-21	27-04-21	1501	30-06-21	16-11-21	4233
Bulgaria	1800	24-03-21	20-03-21	180	16-04-21	27-04-21	903	15-06-21	20-07-21	1796
Croatia	1800	24-03-21	15-03-21	196	16-04-21	14-04-21	917	15-06-21	14-07-21	1800
Cyprus ^[1]	1300	24-03-21	21-09-21	130	16-04-21	08-10-21	750	15-06-21	30-10-21	1365
Czechia	1800	24-03-21	11-03-21	180	16-04-21	31-05-21	900	15-06-21	17-10-21	1990
Denmark	1800	24-03-21	14-03-21	180	07-05-21	23-04-21	909	15-06-21	31-08-21	1820
Estonia	1800	24-03-21	15-03-21	213	26-04-21	24-04-21	905	15-06-21	11-08-21	1804
Finland	1800	24-03-21	30-03-21	185	26-04-21	25-04-21	900	15-06-21	13-08-21	1903
France	3200	05-04-21	15-03-21	370	07-05-21	22-04-21	1643	15-06-21	16-08-21	3213
Germany	4100	29-03-21	20-03-21	420	26-04-21	28-04-21	2066	30-06-21	17-11-21	4131
Greece	1800	24-03-21	10-03-21	200	16-04-21	10-04-21	903	15-06-21	29-07-21	1798
Hungary	1800	24-03-21	17-03-21	202	16-04-21	16-04-21	911	15-06-21	17-07-21	1792
Ireland	1800	05-04-21	11-03-21	180	07-05-21	23-04-21	913	15-07-21	30-07-21	1790
Italy	3100	29-03-21	16-03-21	353	26-04-21	06-05-21	1562	30-06-21	31-07-21	3131
Latvia	1800	30-03-21	12-03-21	218	26-04-21	20-04-21	936	15-06-21	29-07-21	1799
Lithuania	1800	30-03-21	12-03-21	209	30-04-21	24-04-21	927	15-06-21	31-07-21	1871

⁷³The target for Belgium only includes part of the top up.

Country	Country target	10% target deadline	10% target reached - date	10% achieved	50% target deadline	50% target reached	50% achieved	100% target deadline	100% target reached	100% achieved
Luxembourg	1300	29-03-21	31-03-21	132	26-04-21	20-05-21	672	30-06-21	28-07-21	1363
Malta	1300	24-03-21	10-03-21	171	16-04-21	09-04-21	652	15-06-21	29-07-21	1472
Netherlands	1800	24-03-21	17-03-21	208	16-04-21	13-04-21	915	15-06-21	04-08-21	1816
Poland	2900	29-03-21	16-03-21	348	26-04-21	23-04-21	1463	30-06-21	24-07-21	2900
Portugal	1800	24-03-21	22-03-21	184	16-04-21	23-04-21	905	15-06-21	15-10-21	1880
Romania	1800	24-03-21	11-03-21	180	16-04-21	16-04-21	913	15-06-21	18-07-21	1808
Slovakia	1800	24-03-21	16-03-21	200	16-04-21	13-05-21	923	15-06-21	08-10-21	1794
Slovenia	2622	05-04-21	15-03-21	273	07-05-21	24-05-21	1326	15-07-21	07-10-21	2631
Spain	2900	05-04-21	12-03-21	313	07-05-21	28-04-21	1504	15-07-21	24-07-21	2903
Sweden	1800	24-03-21	19-03-21	186	16-04-21	03-05-21	925	15-06-21	05-08-21	1826
CANDIDATES AND POTENTIAL CANDIDATES (CPC)										
Albania	1000	24-03-21	24-03-21	100	16-04-21	08-05-21	511	15-06-21	17-11-22	989
Bosnia & Herzegovina	1000	24-03-21	23-03-21	115	16-04-21	22-04-21	501	15-06-21	29-07-21	1140
North Macedonia	1000	24-03-21	22-03-21	102	16-04-21	05-05-21	504	15-06-21	29-07-21	1137
Kosovo	1000	24-03-21	24-03-21	112	16-04-21	10-05-21	527	15-06-21	29-07-21	1134
Montenegro	1000	24-03-21	13-03-21	103	16-04-21	26-04-21	547	15-06-21	29-07-21	1148
Serbia	1000	24-03-21	15-03-21	103	16-04-21	16-04-21	500	15-06-21	29-07-21	1149

Country	Country target	10% target deadline	10% target reached - date	10% achieved	50% target deadline	50% target reached	50% achieved	100% target deadline	100% target reached	100% achieved
OTHER COUNTRIES										
Norway	3295	05-04-21	16-03-21	343	07-05-21	12-05-21	1661	15-07-21	27-07-21	3301
Switzerland	1100	24-03-21	17-03-21	141	16-04-21	13-04-21	553	15-06-21	09-08-21	1224
United Kingdom	2100	29-03-21	19-03-21	229	26-04-21	06-05-21	1064	30-06-21	08-08-21	2134

Source: Ipsos

Fieldwork monitoring

Ipsos closely monitored many aspects of the fieldwork including the overall progress and pace, fieldwork rule compliance, quality control performed, sample exhaustion, details for forecasting, demographic spread and call outcome distribution. Ipsos prepared a weekly report for Eurofound containing this information. Fieldwork rule compliance was monitored via separate reports, produced by the Bulgarian data processing teams and reprocessed by the CCT.

As described in previous chapters of this report, the local fieldwork partners who worked with CATI Links prepared and sent call history files each day. These files contained information for all calls undertaken during the fieldwork. After receiving the call history files, the data processing teams reviewed them, recoding the outcomes to the centralised call outcomes, recoding the date and time into certain formats and combining the information for the analysis required. Overall, the process ran smoothly, but at the start of fieldwork the local partners, the CCT and the data processing (DP) teams encountered some issues when formulating the best way to organise this process.

Some of the local partners scheduled their call history files to be *uploaded on the Ipsos FTP server* on a daily basis – this was the case for Albania, Belgium, Bosnia and Herzegovina, Czechia, Greece, Hungary, Kosovo, Montenegro, North Macedonia, Poland, Serbia and Slovakia. The rest of the CATI Links countries sent their call history files *via e-mail on a daily basis*. The same information for CATI Direct countries was automatically exported daily from Dimensions.

The initial discussions between the CCT and CATI Links partners was very intensive because the layouts and set-up needed to be clarified in detail prior to the start of fieldwork. Although the details were clarified, there were several changes during the course of fieldwork with several countries. Due to the complexity of all processes, some of the fieldwork partners required more time to prepare and set up the automations; additional outcomes were added during the fieldwork process and the layout of the files was changed for Norstat countries because an additional dialler was used.

Although the pilot fieldwork was set up to be a full “dress rehearsal” for the mainstage, it should be mentioned that due to the volumes of mainstage fieldwork, not all of the decisions and approaches which worked for the pilot were suitable for the main stage. For example, the need for additional outcomes to be added was very minor during the pilot due to the short timescale and smaller sample sizes. However, during the mainstage this need became more apparent and was more complex and time intensive. In addition to this, the size of the mainstage files became an issue which was not apparent during the pilot fieldwork.

During the second half of mainstage fieldwork an issue arose with the call history files. Due to the volume of numbers dialled the files were too large and thus the automation process did not work as anticipated. This meant that call history files needed to be sent manually by Austria, Denmark, and Germany and the CCT received these files once or twice a week. The processing of these files also required more time in comparison to those received at the start of fieldwork.

The data processing team prepared two main reports for Eurofound on a weekly basis. The weekly report was produced each Tuesday and contained information on the weekly progress, quality control, demographics, pace and expected fieldwork end dates. The preparation of the fieldwork report usually began on Monday, checking whether all the deliveries required from the local partners were available. If the call history files were outdated or problematic in any way (for example, the layout was changed or there were additional outcome codes which did not have the corresponding recoding outcome), then the local partners were contacted by the CCT with a request to send updated and corrected output.

The other files required from all the local teams (both CATI Links and CATI Direct countries) were the quality control files. Here, the local teams had to include all cases for which the quality control process had been completed. This included both interviews (i.e., completes) and contacts which were not defined as a completed interview. The local countries were required to provide the information in a file with a certain format. The file contained the following information: country code, interviewer ID, respondent ID, type of quality control completed (i.e., live-listening or recording), issues found, type of issues, actions expected, and actions confirmed.

Table 95: Layout of the QC files sent by the local fieldwork countries

Country code (2 letter)	Interviewer ID	Respondent ID	Quality control type	Issues [Y/N]	Issue type A	Issue type B	Issue type C	Action expected	Action confirmed
AT	1111	11111	Live listening	N	No	No	No	N/A	N/A

Source: Ipsos

Each file received was validated by the CCT and if an issue was detected, the local team was contacted. The main issues reported were as follows:

- Country code left blank
- The interviewer ID did not match the interviewer ID in the data – usually this issue occurs if the call history file Ipsos have is outdated
- The respondent ID does not have the required length – this is usually a typo
- Quality control type – the teams have to identify whether it is live-listening or recording, and the main mismatches came from other abbreviations used by the local teams (e.g., online instead of recording).
- Issues and type of issues – usually there are no mistakes in completing these columns
- Actions expected and Action confirmed – the team had to complete these columns even if the IDs did not have any problems. This tended to be the main issue detected in these columns.

If the file was completed according to the instructions, the DP team proceeded with the processing of the information and prepared the quality control report. The team aimed to have at least 10% of quality control undertaken on 10% of completes and successful contacts. This indicator was one of the key factors the CCT focused on during the fieldwork.

As mentioned previously, fieldwork rule compliance was another key indicator monitored by the Ipsos CCT. All contacts must follow the below call pattern before a contact is closed:

- At least 5 call attempts
- At least 2 evening calls
- At least one daytime call
- At least one weekend call
- 14 days between the first and the last call attempt

In order to monitor the above, the Ipsos CCT together with the data processing team, prepared a report containing all cases with interim outcome codes. The cases with final outcomes were not included in the report because if an ID had a final outcome (i.e., a completed interview, refusal, wrong number, etc.), it was considered to be closed and no further calls had to be made.

The reports contained information about all cases with interim outcomes and all the time slots in which they were dialled – during the morning, the afternoon, the evening. It also included information on whether the calls were made on a weekday or the weekend, information about the number of days between the first and the last calls, the number of successful contacts (i.e., when someone picks up the telephone and actual contact is made) and the last outcome code marked by the interviewer.

After receiving the report from the DP team, the CCT checked whether the fieldwork rules had been fulfilled for the contacts. If so, it was considered to be closed with no additional calls being required. However, if any of the contact rules had not been met for the contact then it was returned to the local team for additional calls. As the fieldwork rules cannot be fulfilled in the first few weeks (i.e., the minimum number of 14 days between the first and last call cannot be met) the CCT closely monitored the fieldwork compliance rules from the beginning of April, when all countries had completed at least three weeks of fieldwork.

Shortly after establishing the process of reporting and sharing the cases which had not met the fieldwork rules, the local teams identified an issue: they explained that if the interviewers made a successful contact with the respondent and he/she required the additional call to be made at a certain time (e.g., only in the mornings), then the field team should respect the preferences of the respondent. Ipsos and Eurofound discussed this issue and agreed that the above fieldwork rules should be strictly followed for cases in which no successful contact was made. Thus, the local fieldwork partners only needed to deal with the cases that had five or more call attempts, where no contact with the respondent was made or those which were not following the fieldwork rules. All other cases in which there is a successful contact also must have at least five call attempts, but those should be made in the preferred timeslot of the respondent.

The other major indicators monitored were fieldwork pace, overall progress and the estimated target reached. Based on the daily number of completes, the team developed a calculation for the estimated targets. If a country was progressing slowly then it was contacted by the CCT and the reasons for the delay were clarified in detail and a catch-up plan was developed.

Accuracy of the fieldwork monitoring tables

As stated previously, to prepare the weekly fieldwork reports the CCT required the call history files from the local CATI Links fieldwork countries, as well as the quality control files. During the second half of the fieldwork both Ipsos and the local fieldwork teams faced issues with the call history files from the countries with a higher number of contact attempts. The teams in Austria, Denmark, and Germany generated a larger number of calls, which made the call history files too large. Because of this, the local team had to send them manually and the data processing team in Bulgaria usually spent a couple of hours a day processing the files, depending on their size.

Due to the multiple inputs Ipsos received from the local countries and the frequency of receiving them, the scripts were set up to accept the last correct input. This would mean that if a certain country was sending a call history file on a daily basis, but for some reason the daily file was not accurate or could not be processed (due to layout issues or codes not matching, etc.), the report would be run with the latest input file received from the country that was deemed to be accurate.

The main advantage of this setup is the usage of the inputs, which are validated, re-coded and confirmed to be accurate. However, the same approach also led to some reports being generated with outdated information.

The quality control files sent by the local partners caused Ipsos some issues when generating the weekly report and these reasons are outlined below. The deadline for sending the quality control files was Friday by the end of the day. Each Friday the local project managers received multiple automated reminder messages to send the report if it had not been sent. Also, each local project manager received a validation log-in case of any issues, meaning that they were then required to send a revised file.

Overall, the process ran smoothly considering the number of countries and files involved. However, Ipsos did encounter some delays. If a local partner did not send the report on time, the whole process had to be delayed or Ipsos had to use the last validated and confirmed file, which had been received the week before. Ipsos checked the quality control levels on completed interviews and quality control levels on successful contacts based on the latest validated file received by the local teams. If the file sent was not the latest one, the share of the quality checks undertaken appeared to be lower compared to the number of contacts and completes.

This issue occurred with several countries during the fieldwork – with Belgium, the Norstat countries and Kosovo. After receiving the accurate file from the local team, Ipsos reprocessed it and updated Eurofound with the share of quality control checks undertaken in the problematic country. Nonetheless, providing accurate, up to date information to Eurofound continued to be an issue during the entire fieldwork period because of the complex nature of the process.

Issues with the call history files were not that frequent because the local fieldwork partners sent them on daily basis during the fieldwork. As mentioned earlier, Austria, Germany, and Denmark sent the files at least once a week and thus the information in the fieldwork report was accurate and up to date.

No other major issues were reported during the weekly reporting and on the whole the process worked well.

Application of the centralised monitoring system

As stated previously in the report, Ipsos employed a centralised monitoring system during the fieldwork. Monitoring the same indicators across all countries ensured consistency and the integrity of the data, as well as employing the same criteria for identifying issues encountered by the countries.

Fieldwork was closely monitored by the Ipsos data manager and the CCT. If an issue was detected for any country then either the data manager or personnel from the CCT would contact the country and inform them of the problem. In addition to this, several automatic e-mails were sent relating to the quality control files – either reminder e-mails or e-mails containing a log of the issues encountered in the files.

The CCT, together with the DP teams, developed additional reports for the CATI direct countries which were sent to the project managers. These reports contained the number of records available on certain days and timeslots in the upcoming days and were developed to help local fieldwork partners plan a schedule for their workforce, given that they knew the contacts that would be available in the certain timeslots.

All Ipsos CATI Direct countries had a centralised Dimensions set-up. This means that the call patterns were set by the CCT as well as the sample loading, with the local teams not being involved in this process. This ensured the same setup and overall approach in all CATI Direct countries.

In the mainstage feedback forms the local teams were also asked to evaluate their work with the CCT. Overall, the feedback shows that most partners had a positive experience working with the CCT. Since members of the CCT had a good working relationship with the local partners they were encouraged when receiving such good feedback from them in their forms.

Issues encountered and actions taken

During fieldwork, some issues arose with several actions taken to resolve them. The main types detected during fieldwork related to slow progress, too many cases not following the fieldwork rules, lower levels of quality control being performed, telephone number mismatches and sample issues in Albania, Austria, Cyprus, Czechia, Germany, Portugal Slovakia and Slovenia.

As stated previously, no major delays occurred for the 10% data delivery but did for the 50% dataset and the 100% dataset. The Ipsos team monitored the progress of the completes on a weekly basis and had regular calls with the local countries to stress the importance of progressing smoothly at a regular pace throughout fieldwork. Conversely, Ipsos also had calls with countries progressing extremely fast at the beginning of fieldwork to ask that progress be managed to ensure that they did not reach the overall target too quickly just in case this could introduce a seasonality bias. Several countries had issues in reaching 100% completes on time. As mentioned previously, additional recalls were required to fulfil the fieldwork rules. For the countries facing serious delays, Ipsos required an action plan to be created with an estimated number of completes per day.

One of the main issues encountered during fieldwork was the requirement to follow the fieldwork rules, especially for cases where no final outcome was achieved. These were cases with multiple call attempts in which no one answers, or cases where the telephone was always busy, or cases in which the call was constantly rescheduled for another time, but no effective interview was achieved. Initially Ipsos reviewed all cases which did not have a final outcome (all except language barrier, refusals, outside of target, business telephones, wrong numbers and completes). However, after several weeks of fieldwork, the team faced an issue which was not considered when the fieldwork rules were defined – this being respondents' requests to be called back later on a specific day/time.

As noted previously, several countries mentioned that they were not able to follow the fieldwork rules if such requests were made. Because of this, Ipsos and Eurofound decided that the fieldwork rules should be applied strictly for cases in which there was no successful contact with the respondent. If there was a successful contact, the interviewer should try to reach the respondent at the requested time, but also try and follow the fieldwork rules.

Ipsos developed and followed a protocol for monitoring fieldwork compliance during March 2021 and finalised it during April. Initially the reports were set to display a certain warning message ("Missing weekend call", "Missing evening call" etc.), but shortly after the initial setup, Ipsos and the local fieldwork partners agreed that this was not the best set-up. By following this system, each ID with multiple issues was duplicated and it was confusing for some of the local fieldwork partners. Since this information was reviewed by the local project manager and the supervisor, it had to be in a very simple layout, which may have also been used by individuals who were not fluent in English.

With this in mind, the next version of the report was simplified and included all time slots in which the telephone number was dialled and additional information as to what was missing. For example, if an ID was missing both a day call and evening call, those were marked as “1” and all other time slots, which are fulfilled, were marked with a 0. In a separate column, the CCT indicated whether each case had been called five times or more. If the case had less than 5 calls, the local teams were still informed what call/time slot was missing in order to better plan their work. All local fieldwork partners were informed that they must follow the rules and each contact should have at least five call attempts.

At the end of the fieldwork all countries had high levels of fieldwork rule compliance with few violations. Such violations varied from 0.5% to 3% across countries. This share was calculated based on the number of contacts accessed.

Another issue encountered during fieldwork related to the levels of quality control achieved by the local countries. The initial requirement for checks was 10% of all completed interviews and at least 10% of all successful contacts (i.e., where the interviewer has spoken to the potential respondent). A number of countries initially struggled to achieve the levels of quality control, especially for the successful contacts. After discussions with the fieldwork partners, it became apparent that some local partners (Czechia, Kosovo, North Macedonia, Poland, Slovakia and Spain) had not checked all of the successful contact outcomes, resulting in lower levels of quality control at the beginning. Ipsos sent a list of all outcomes considered to be successful to the local agencies and this significantly improved the shares of quality control, because the teams covered the whole range instead of only focusing on certain outcomes.

Most of the local teams stated that achieving the 10% target for quality control (especially for the successful contact attempts) was challenging because of the large number of contacts generated.

During the fieldwork, Ipsos conducted a number of additional ad-hoc quality checks. These included a cross-check between the original telephone numbers loaded in the sample to be dialled by the interviewers, and the telephone numbers provided by respondents at the end of the survey for recontact purposes (had they consented) as well as back-checks in a number of countries by an independent research company.

Issues in certain countries which were resolved during fieldwork:

Czechia, Slovakia and Portugal accidentally used another database of sample for a short period of the fieldwork – the interviews carried out during this period were replaced by re-fielding which was completed by the mid-October.

For Cyprus, Ipsos identified some anomalies in the data which, upon investigation, led to the replacement of the fieldwork agency and a full re-field which was completed in October with a high level of quality control applied to the work of the new agency to ensure that procedures were correctly followed.

In Albania and Slovenia, quality checks identified some shorter than normal interviews which led to them being replaced with fieldwork completed by mid November.

For Austria and Germany, it was observed that towards the end of fieldwork the number of respondents giving their consent to be recontacted for future research was relatively low and on investigation it was difficult to establish a reason for this therefore a number of interviews were replaced with fieldwork completed in November.

The fieldwork in other countries ran smoothly and besides the issues with the progress or levels of quality control, which were resolved rather quickly, no major issues were detected.

As a general conclusion, Ipsos believe that many aspects of fieldwork went well and the efforts of the CCT and their local agencies ensured that all of the fieldwork was completed before the end of 2021. Furthermore Ipsos believe that the data provided to Eurofound is of high quality.

Consent for recontact by country

Ipsos collected consent for recontact for future surveys in each country, with figures varying by country. Respondents might either agree or disagree to provide their contact details, however, they also might have refused to answer the question. From the data below, it is clear that the share of respondents who refused to answer the question is very low.

Table 96: Consent for recontact by country

Country/territory	Agreed to provide contact details	Agreed to provide contact details - %	Unwilling to provide contact details	Unwilling to provide contact details = %	Refused to answer	Refused to answer %
EU MEMBER STATES						
Austria	1270	71.4	507	28.5	2	0.1
Belgium	3394	80.2	794	18.8	45	1.1
Bulgaria	1477	82.2	302	16.8	17	0.9
Croatia	1319	73.3	475	26.4	6	0.3
Cyprus	1032	75.6	327	24.0	6	0.4
Czechia	1679	84.4	305	15.3	6	0.3
Denmark	1333	73.2	473	26.0	14	0.8
Estonia	1520	84.3	281	15.6	3	0.2
Finland	1670	87.8	232	12.2	1	0.1
France	2627	81.8	584	18.2	2	0.1
Germany	2705	65.5	1421	34.4	5	0.1
Greece	1322	73.5	462	25.7	14	0.8
Hungary	1264	70.5	526	29.4	2	0.1
Ireland	1582	88.4	206	11.5	2	0.1
Italy	2310	73.8	818	26.1	3	0.1
Latvia	1437	79.9	355	19.7	7	0.4
Lithuania	1525	81.5	343	18.3	3	0.2
Luxembourg	1059	77.7	299	21.9	5	0.4
Malta	1094	74.3	374	25.4	4	0.3
Netherlands	1363	75.1	446	24.6	7	0.4
Poland	2279	78.6	615	21.2	6	0.2
Portugal	1671	88.9	204	10.9	5	0.3
Romania	1345	74.4	458	25.3	5	0.3
Slovakia	1507	84.0	286	15.9	1	0.1

Disclaimer: This working paper has not been subject to the full Eurofound evaluation, editorial and publication process.

Country/territory	Agreed to provide contact details	Agreed to provide contact details - %	Unwilling to provide contact details	Unwilling to provide contact details = %	Refused to answer	Refused to answer %
Slovenia	1778	67.6	846	32.2	7	0.3
Spain	2537	87.4	360	12.4	6	0.2
Sweden	1559	85.4	261	14.3	6	0.3
CANDIDATES AND POTENTIAL CANDIDATES (CPC)						
Albania	576	58.2	404	40.8	9	0.9
Bosnia & Herzegovina	833	73.1	299	26.2	8	0.7
North Macedonia	917	80.7	217	19.1	3	0.3
Kosovo	997	87.9	130	11.5	7	0.6
Montenegro	881	76.7	266	23.2	1	0.1
Serbia	911	79.3	236	20.5	2	0.2
OTHER COUNTRIES						
Norway	2578	78.1	717	21.7	6	0.2
Switzerland	946	77.3	272	22.2	6	0.5
United Kingdom	1639	76.8	490	23.0	5	0.2

Source: Ipsos

The average number of respondents who agreed to be recontacted was 78.0% across all countries, which varied from more than 85% of the sample (in countries such as Finland, Ireland, Kosovo, Portugal, Spain and Sweden) to less than 60% in Albania. The team in Albania explained that since elections took place during the fieldwork some respondents were worried that their contact details might be used for other purposes.

Respondent cooperation

Encouraging respondents to participate

Based on the feedback from interviewers, the most effective way to encourage respondents to participate in the survey was to explain the purpose and subject of the study. Many respondents became more open when they heard such research could potentially lead to improvements in the quality of work and working conditions in the future. In most of the countries, the respondents were also keener to answer the questions when they heard that it is a European study conducted on behalf of an EU agency in 36 countries, with the possible exception of the United Kingdom.

Lithuania mentioned that the introduction text helped them to persuade respondents to take part. However, many countries perceived the introduction to be too long (Belgium, Bulgaria, Czechia, Estonia, Luxembourg, Montenegro, Netherlands, Poland, Portugal, Serbia, Slovakia, Slovenia and Spain). This is despite a reduction in length following the pilot stage. Some of the respondents in Belgium and Bulgaria asked for the introduction to be reduced and to go straight to the questionnaire. There were also some individuals who terminated the conversation during the interviewer's introduction.

The main reasons for refusals related to a lack of time for the interview, no interest in the EWCS subject or in surveys in general. The length of the interview also discouraged some respondents. Some individuals did not want to talk about their work situation via the telephone. There were also individuals who did not wish to talk about their work at all. A few respondents in Montenegro were worried that someone from their workplace would find out about the interview, despite reassurances given to respondents that their answers would be completely confidential. Greece also mentioned that respondents employed in more sensitive sectors, for instance the police or army, were reluctant to take part in the survey.

Selected quotations (from the local agency feedback forms):

“I think it was fairly easy to persuade them. Our interviewers have experience on how to persuade people to participate and used this for the EWCS survey as well. Of course, there were some people that didn’t want to participate in the survey, but not that it formed a huge problem. The reasons why people didn’t want to participate were mainly a lack of time, no interest in the subject, a bit of distrust thinking that we were a bit too invasive, although we clearly explained the reasons for our questions. These are everyday issues, nothing out of the ordinary.” (Belgium)

“Persuading the respondents to take part in the survey was not very easy. Although the topic of the study was perceived as important, the extent to which it caused personal interest largely influenced the willingness to participate. Initial contacts were often close to refusal as respondents did not show interest or willingness to participate in any surveys” (Bulgaria)

“There is negative trend regarding response rates on all CATI projects and this project was no different. People are mostly not interested in taking part in general, there was nothing specific about topic of this survey that impacted response rates (all surveys that last longer than 10-15 minutes have lower response rates regardless of topic).” (Croatia)

“Overall, the respondents were interested in the survey. We think that partly this might have been because of the introduction, where the respondent is informed that their part in participating has a big role in changing and improving working conditions in all of Europe. A lot of respondents refused to partake after they heard about the average length of the interview.” (Lithuania)

“Upon mentioning that the interview takes over 20 minutes, many respondents refused. Informing participants that their input can help influence future employment laws and regulations helped to increase cooperation and participation.” (Malta)

“As always, nothing helps if someone does not participate in surveys or has no time. The most important reason was the expected length of interview (LOI).” (Poland)

*“The main barrier to participation was the interview length. In general, the objective of the survey and that it’s sponsored by an EU entity helps to sell it.”
(Portugal)*

“Some of the respondents were interested in the subject and it was easy to persuade them, but some of the respondents refused because the length of interview (LOI) was too high.” (Romania)

“That it was commissioned by Eurofound and that it is done in 36 countries. This gave weight and seriousness. Yes, those who were hesitant cited the length of 20 minutes.” (Sweden)

“People were interested in participating in the survey, they found the topic interesting and this helped the cooperation. The main reason for refusals was that people didn’t have time to answer when they were informed about the length of questionnaire.” (Kosovo)

*“We did not meet upon any particular challenges apart from refusals due to the length of the survey, which is quite normal. The amount of information interviewers had definitely helped them persuade people to participate.”
(Norway)*

“Difficult due to lack of interest. We tried to explain it would help work life balance, but some of the participants don’t see much point taking part in an EU study when the UK is not part of the EU.” (UK)

Source: Ipsos

Respondent engagement and levels of interest

Interviewers were asked about respondent levels of interest in the survey topic and all agencies submitted feedback on this question. Overall, most of the respondents who took part in the survey were positive and interested in the survey topic. Many people enjoyed the conversation about their work. People were mostly interested in the survey because it affects their everyday life in terms of the working conditions.

Less positively, some respondents tended to express negative reactions towards the length of the questionnaire and they sometimes became impatient. Hungary mentioned that some respondents lost interest due to a long questionnaire, even though they were initially interested in the topic. Sometimes the interviewers had to constantly motivate the respondents to continue the interview. Some respondents from Romania and Montenegro stopped the interview due to the length of the questionnaire.

Respondents in Croatia, Estonia, Malta and Portugal had issues with the scale options which were seen as too long and some seemed to forget the answer options by the time they were all read out. Since the questionnaire was already perceived to be long and voluminous, respondents were sometimes fatigued.

Some individuals in certain occupations in Malta, Romania and Slovenia found some of the questions to be irrelevant to them and thus impacted their engagement levels at times.

Some individuals in Denmark, Estonia, Portugal and Hungary became suspicious during the ISCO and NACE questions which were considered to be “intrusive”. There were some respondents who abandoned the survey during the open-ended questions. Conversely however, Ireland noted that this project had less people terminating the call mid-survey in comparison to other projects.

Some respondents in Poland and Bosnia & Herzegovina expressed doubts as to whether the results would help to change anything in their country. However, Bosnia & Herzegovina emphasised that this attitude is common in their country, regardless of the survey topic.

Selected quotations (from local agency feedback forms)

“In general, the respondents that participated reacted to it very well. They liked the subject, thought it was interesting. To my knowledge they were keen on answering our questions because they could give their opinion on their own jobs.”
(Belgium)

“Those respondents that agreed to participate showed considerable interest in the topic of the survey and were engaged. The main feedback was that these types of questions regarding their working life were never asked before and they were happy to share it.” (Croatia)

“For some the length of interview (LOI) was tiresome, for some Q5, Q6 and Q13 [the open-ended questions relating to ISCO/NACE] were suspicious and we had drop-outs there when some people refused to participate and the interview was abandoned.” (Denmark)

“Quite interested. A high level of engagement. When they agreed to participate, they were very interested as this topic concerns them. This is confirmed by the very different profiles that agreed to respond to the study.” (France)

“Overall people were interested in this survey, quite a high level of respondent engagement.” (Latvia)

“Throughout the survey, some respondents were very engaged and elaborated on some of the questions, however this was not always the case. Individuals in certain occupations found some of the questions irrelevant to them and this therefore impacted their engagement levels at times.” (Malta)

“Mainly about the length of the conversation. Some expressed doubts as to whether the results will help to change anything.” (Poland)

“We had a few cases where respondents said the survey was too general and not applicable to their working conditions. If for example they are working in a shop (as a salesperson) then why is the interviewer asking questions if they work from home, a vehicle etc.” (Slovenia)

“Respondents thought it was relevant, well-formulated with interesting questions.” (Sweden)

“Respondents who agreed to participate generally cooperated well during the interviews. Some of them lost attention or patience during the interviews and indicated that the interview was too long. However, most of these interviews were successfully completed, after the application of the learned techniques by the interviewers. Reactions were mixed, while some viewed the possible outcomes of the survey positively in terms of improving working conditions. Others were sceptical that anything positive would occur.” (Bosnia & Herzegovina)

“When engaged, people took the questions seriously, answered to best of their knowledge, overall engagement was good. We noticed some participants who were impatient and interrupted the interviewer. As the interview progressed we noticed also that the answers of some respondents got shorter and shorter and respondents regularly mentioned that the interview duration was too long.” (Switzerland)

Source: Ipsos

12. Conclusions

Overall, the management and fieldwork of the EWCTS 2021 survey was a success, especially considering the scale and complexity of the fieldwork requirements. The topic of the survey was interesting to many of the respondents, particularly in such an extraordinary year of great change. All parties, including Eurofound, Ipsos and the local agencies worked tirelessly to move from the scoping research and transition period to the implementation of the survey within tight timelines. This is particularly notable given the abrupt termination of the CAPI fieldwork in early 2020 and the commitment from all teams at a time of great upheaval both professionally and personally. Despite the various challenges outlined in this report, their respective efforts meant that the requested sample sizes in all countries were met and high quality data was delivered following extensive quality checks by all parties.

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