

CROss-National Online Survey 2 (CRONOS-2) panel: Data and documentation user guide

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Introduction

This user guide provides a short overview of the data, documentation and weights of the CROss-National Online Survey 2 (CRONOS-2) panel made publicly available via the ESS Data Portal (<https://ess-search.nsd.no>). The guide highlights the key features of the available data files and provides information about the design and implementation of the project.

The document has four main sections. Section 1 introduces the aims and scope of the panel; section 2 describes the web panel methodology; section 3 provides an overview of the questionnaire contents, and section 4 gives an overview of the data files, help on how to access and combine datasets and a description of survey weights.

Further information about CRONOS-2 is publicly available via the ESS Data Portal. Data can be downloaded free of charge.

Queries from data users should be addressed to the ESS HQ team, writing to the following address: ess@city.ac.uk.

1. CROss-National Online Survey 2 (CRONOS-2) panel: Overview

The CROss-National Online Survey-2 (CRONOS-2) is the first attempt to establish a large-scale cross-national probability-based online panel following an input-harmonised approach – panel recruitment, setup, maintenance, and data processing were guided by the same methodological principles in all participating countries. The panel builds on the success of the pioneering CRONOS panel and was fielded in 12 countries: Austria, Belgium, Czechia, Finland, France, Hungary, Iceland, Italy, Portugal, Slovenia, Sweden and the United Kingdom. Compared to the previous CRONOS-1 experiment, we scaled up the project which resulted in a series of additional challenges due to the larger amount of diversity across the countries involved. Nevertheless, we have been able to centralise all the survey operations, in accordance with an input-harmonised approach.

CRONOS-2 aimed to lay the foundations for a European Social Survey web panel, increasing web-interviewing capacity across Europe and developing a mature web-interviewing infrastructure. Also, CRONOS-2 aimed to provide the academic, research and users community with additional substantive, high-quality, comparative data to complement ESS measures. In addition, for the first time a longitudinal component has been added to the main ESS measures.

As a consequence of the heterogeneity of the COVID-19 outbreak in terms of different timing of the lockdowns and government public health measures, we needed to split the participating countries into 4 groups. This means that data collection did not happen at the same time in all the participating countries. Group 1 was composed of Hungary and Slovenia; Group 2 of Czechia, Finland, France, and Iceland; Group 3 of Austria, Portugal, and Sweden; Group 4 of Belgium, Italy, and

UK.

CRONOS-2 comprised 6 main waves and an additional short Welcome Survey (to keep the panellists engaged while allowing the recruitment to finish). Four of these main waves (Wave 1, Wave 2, Wave 4, and Wave 5), were cross-national waves, and the same questions were asked across all participating countries. Wave 3 and Wave 6 were country-specific waves; that is, countries were allowed to design their own questionnaire. Each country-specific questionnaire was reviewed by CRONOS-2 Central team. Group 4 countries needed to skip the first country-specific wave (Wave 3) in order for them to finish the fieldwork of cross-national waves before project's closure. Finland decided to skip the last country-specific wave (Wave 6). In Hungary, after a low recruitment and response rates were observed, we decided to stop the fieldwork after Wave 2 and a push to self-completion experiment was alternatively implemented. A new sample was recruited to the web panel via a push to web approach. People were invited by post and asked to complete the ESS main questionnaire. At the end of the questionnaire a short module with recruitment questions was added to recruit panellists to CRONOS-2. Panellists recruited via push to web participated in Waves 1 and 2, to make this achieved sample comparable with the one recruited off the back of the ESS10.

2. Methodology

Harmonisation and piggy-backing

CRONOS-2 was developed following a harmonised methodological approach, maintaining survey characteristics constant across countries (where methodological appropriate). The main aim was to prevent methodological variations amongst countries that could potentially affect measures and confound data analysis and interpretation in a comparative setting.

Regarding the recruitment process, we implemented a piggy-backing approach, using an existing survey infrastructure that followed the same harmonisation principle (i.e. ESS). The main advantages of this approach concern the maximisation of the investments of the main 'parent' face-to-face survey, the reduction of panel recruitment costs, and the possibility to draw on trained interviewers.

Respondents to ESS Round 10 in each of the 12 countries were invited to participate in the online panel across six waves (plus a Welcome Survey). The ESS supported this initiative by allowing CRONOS-2 researchers to use the ESS sample and interviewer workforce to recruit panel members.

Target population

The CRONOS-2 panel target population was adults (18+), who have access to internet (those without internet access were not invited to join the panel), living in private households in Austria, Belgium, Czechia, Finland, France, Hungary, Iceland, Italy, Portugal, Slovenia, Sweden, and the United Kingdom. We excluded those aged

15 to 17 for reasons related to parental consent and to avoid the risks associated with providing minors with monetary incentives. There was no upper age limit for participation in CRONOS-2.

Sampling Frame

CRONOS-2 participants were recruited after participating in the ESS Round 10 (2020/2022) of the ESS (www.europeansocialsurvey.org). This choice allowed recruitment of panel members from random probability samples.

Information on the ESS sampling frame and sampling procedure for each country is available in the ESS Data Portal for Round 10 at <https://ess-search.nsd.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7> (under section “Country documentation”). The information about the gross sample in each country can be found in the “ESS10 – 2020 Country Documentation Report” at https://stessrelpubprodwe.blob.core.windows.net/data/round10/survey/ESS10_country_documentation_report_e03_0.pdf.

Standardised recruitment procedures

The ESS main questionnaire worked like a recruitment interview for the CRONOS-2 panel. The ESS data, merged with CRONOS-2 data, provide a large amount of background variables for panel members. Completing the main ESS interview was a requirement to become a panel member. Therefore, those who refused to cooperate in the ESS were not asked if they were willing to join the panel.

Recruitment procedures were standardised across CRONOS-2 countries. ‘Source’ fieldwork documents, such as interviewer manuals, instructions, protocols, and a GDPR information document, were prepared centrally and then translated by National Teams.

In terms of translation strategy, we aimed to keep the translated version of the documents as close as possible to the source version. When deviations from the source version were necessary, they were agreed with the central team.

After eligibility check (adults with internet access), ESS respondents were asked about their willingness to take in the follow-up web panel and for their contact information (email address, mobile phone number, and postal address for those who this information was not available) to send pre-notification, survey invitations and reminders to web surveys. Respondents needed to provide either an email address or a mobile phone number (or both). If respondents did not provide any contact details, they were excluded from the panel, even if they were willing to join the CRONOS-2 web panel. For the two ESS countries (Sweden and Austria) that needed to switch to a self-completion approach for the ESS Round 10 (due to COVID-19 limitations) panellists were recruited at the end of the questionnaire by asking their willingness to be contacted again for further studies (along with contact details), instead of their willingness to join the CRONOS-2 web panel.

Incentives

All CRONOS-2 panellists were offered unconditional incentives for a value of £5/€5 per wave. Incentives were sent with a postal pre-notification letter by National Teams before each survey wave was issued. Due to the unavailability of vouchers worth €5, Iceland sent incentives in three batches; 3000 ISK (approximately €20) for Welcome Survey, Wave 1 and 2; 3000 ISK for W3, W4 and W5; finally, 3000 ISK for the final wave. Sweden sent 100 SEK (approximately €8.5) before each survey.

Hungary and Italy followed a different approach, sending unconditional incentives in batches. In Hungary, before the Welcome Survey they sent 1500 HUF (€7.5 at the time) for the Welcome Survey, Wave 1 and Wave 2; then, before W3 they sent 1000 HUF for Wave 3 and Wave 4 (but they stopped fieldwork for these panellists to implement the push to self-completion recruitment experiment). Those who were recruited through push to web were sent 500 HUF before Wave 1 and Wave 2. Italy sent €5 before the Welcome Survey; 15 Euro before Wave 1, covering W1, W2, W4); finally, they sent 10 Euro before W5, covering W5 and W6).

Panellists communications: pre-notifications, invitations, reminders

Source versions of email/text message survey invitations and reminders were designed by the central team and then programmed in Qualtrics and distributed simultaneously to panellists. Pre-notification letters were prepared by Central Team and then distributed by National Teams approximately three days before the survey was distributed by email or text message. In addition, National Teams provided translations, handled telephone calls and emails to the panel helpline.

Schedule. Panellists received a pre-notification letter sent by post approximately three days before survey invitation (the aim was for the panellists to receive the letter the day before survey distribution). Then, panellists received an email or text message invitation to each wave with an individual survey link and three reminders; the first reminder was sent 1 week after the fieldwork started, the second two weeks after, and the third a week before fieldwork closure.

Contact strategy. Panellists received 5 survey contacts in total, 1 postal pre-notification letter, 1 survey invitation and 3 reminders. The invitation and the reminders were sent either by email or by text message. This was based on the type of contact details panellists provided during recruitment. For those providing both an email address and a mobile phone number the contact strategy was the following: email invitation, text message reminder, and 2 email reminders. Those who provided just an email address received the first reminder by email; instead, those who provided a mobile phone number received all the contacts by text message.

Inactive panellists were sent an additional postal letter after Wave 4 for countries in Group 1, 2, and 3, and after Wave 5 for countries in Group 4 (as they skipped Wave 3). The letter reminded them that they had not cooperated in any survey and that if they did not cooperate in the subsequent survey, their data would be deleted and they would be removed from the panel and incentives would no longer be sent to

them.

Some countries implemented extra actions during the fieldwork to enhance the response rate. In Belgium, before the launch of Wave 4, they called inactive panellists encouraging them to participate (due to operational difficulties at the French-speaking side, the response enhancement strategy was only applied for Dutch-speaking panellists). Czechia carried out phone calls and sent additional emails in Wave 1 and Wave 2. Finland in Wave 3 (between 1st and 2nd Reminder) implemented a protocol that involved pre-recorded phone calls with a follow up additional text message for inactive panellists. France implemented a complex protocol for systematic phone calls in all 6 Waves. Those panellists who did not cooperate in the previous survey/s or partially completed the survey were called before W1, W2 and W3 fieldwork. In addition, in the last week of the fieldwork for W1, W2, W3, W4, W5, and W6 all the panellists who did not provide a complete answer were called to remind them to finish the survey. Iceland (after 2nd reminder) called those panellists who did not complete the survey in W2 and W4. Italy called inactive panellists before the start of W2 fieldwork. Portugal called inactive panellists during W2 and W3. They also called those panellists who partially completed the survey in W2. In addition, they sent an additional text message to those who did not cooperate before the 3rd reminder in Wave 3, 4, and 48h before survey closure in W5 and W6. Slovenia sent a special postal reminder to inactive panellists during W3. Sweden sent an additional postal letter to inactive panellists two days after the 1st reminder was sent.

Fieldwork

Panel recruitment was strongly affected by the COVID-19 pandemic. The ESS fieldwork was supposed to start in September 2020 but due to the COVID-19 related issues and lockdowns across Europe, the participating countries were not able to launch the recruitment as restrictions/limitations to people mobility were in place. This resulted in CRONOS-2 waves being delayed.

Originally we planned to launch the first CRONOS-2 wave in April 2021 (with a Welcome Survey in December 2020), with surveys issued around every 2/3 months. However, this was not possible. As a consequence of the heterogeneity of the COVID-19 outbreak in terms of different timing of the lockdowns and government public health measures, we needed to split the participating countries in 4 groups (plus Hungary for those panellists recruited via push to web). This means that data collection did not happen at the same time in all the participating countries (see Tables 1 to 4).

Data collection started in Group 1 in October 2021 and closed in October 2022. In Group 2, data collection started in December 2021 and closed in December 2022. Group 3 started data collection in January 2022 and closed it in February 2023. Group 4 countries started data collection in June 2022 and closed it in March 2023.

Up to six main 20-minute surveys were fielded in the participating countries (plus a 10-minute Welcome Survey, for which the main function was to keep recruited

panellists engaged while finishing the recruitment to the web panel). Two of these six waves, that is W3 and W6, were optional country-specific waves, where each country fielded its own questionnaire. Waves 1, 2, 4, and 5, were cross-national waves, and the same questions were asked across all the participating countries.

Hungary (as result of the double recruitment process and the resulting effort in terms of resources) completed only Wave 1 and Wave 2. Finland did not participate in the last country-specific wave (wave 6). Finally, Group 4 countries were asked to skip one country-specific to allow enough time to field the cross-national waves before the project's closure.

Table 1 shows an overview of the fieldwork start and end date for each wave for countries in Group 1 (Slovenia and Hungary).

Table 1: Group 1 fieldwork start and end dates

	Start Date	End Date
Wave 0		
Slovenia	13/10/2021	10/11/2021
Hungary	20/10/2021	10/11/2021
Wave 1	24/11/2021	22/12/2021
Hungary Self-completion	23/11/2022	21/12/2022
Wave 2	26/01/2022	23/02/2022
Hungary Self-completion	18/01/2023	15/02/2023
Wave 3 (Only Slovenia)	09/03/2022	06/04/2022
Wave 4 (Only Slovenia)	04/05/2022	01/06/2022
Wave 5 (Only Slovenia)	15/06/2022	15/07/2022
Wave 6 (Only Slovenia)	07/09/2022	05/10/2022

Group 2 comprised Czechia, Finland, France, and Iceland. Originally also UK was part of Group 2, but recruitment needed to be stopped for issues related to pandemic so they joined Group 4. However those panellists who were already recruited participated in the Welcome Survey along countries in Group 2. Table 2 shows an overview of the fieldwork start and end date for each wave for countries in Group 2.

Table 2: Group 2 fieldwork start and end dates

	Start Date	End Date
Wave 0	01/12/2021	23/12/2021
Wave 1	16/02/2022	16/03/2022
Wave 2	13/04/2022	11/05/2022
Wave 3	15/06/2022	13/07/2022
France	20/06/2022	18/07/2022
Wave 4	01/09/2022	29/09/2022
Wave 5	12/10/2022	09/11/2022
Wave 6	23/11/2022	21/12/2022

*France started W3 fieldwork 1 week later to allow for national elections to finish

Group 3 comprised Austria, Portugal and Sweden. Table 3 shows an overview of the fieldwork start and end date for each wave for countries in Group 3.

Table 3: Group 3 fieldwork start and end dates

	Start Date	End Date
Wave 0	26/01/2022	23/02/2022
Wave 1	06/04/2022	04/05/2022
Wave 2	01/06/2022	29/06/2022
Wave 3	01/09/2022	29/09/2022
Wave 4	12/10/2022	09/11/2022
Wave 5	23/11/2022	21/12/2022
Wave 6	11/01/2023	08/02/2023
Austria	18/01/2023	15/02/2023

*Austria started W6 fieldwork 1 week later as there were some issues with the sending of incentives

Group 4 countries (Belgium, Italy and UK) had the most problematic recruitment phase in terms of discontinuity due to COVID 19. Especially in UK and Belgium some panellists were recruited very late (end of August 2022 and mid-September 2022). For these panellists (around 60 people in UK and 80 people in Belgium) Wave 1 was slightly delayed (see table 3). Table 4 shows an overview of the fieldwork start and end date for each wave for countries in Group 4.

Table 4: Group 4 fieldwork start and end dates

	Start Date	End Date
Wave 0	15/06/2022	13/07/2022
Italy	22/06/2022	13/07/2022
Wave 1	01/09/2022	29/09/2022
Belgium late recruited sample	15/09/2022	29/09/2022
UK late recruited sample	20/09/2022	04/10/2022
Wave 2	12/10/2022	09/11/2022
Wave 4	23/11/2022	21/12/2022
Wave 5	11/01/2023	08/02/2023
Wave 6	22/02/2023	22/03/2023

After the official closure of the waves those panellists who started to answer the survey during the fieldwork were allowed to finish it even after the fieldwork deadline (those who did not answer the survey but tried to access it after the survey closure were shown a message informing them that the survey was already closed). This was dictated by the necessity to keep surveys open in the system to let countries in other groups to carry out their fieldwork. Considering the lifespan of the web panel, we decided to keep the data of those panellists who partially completed the survey during the fieldwork but completed it later on. In the published dataset we included a variable that provides information regarding if the survey was completed during the fieldwork period or later.

Survey administration

The survey was programmed by central team at ESS HQ and administered centrally

(by ESS HQ Central team and Sciences Po support team) using the survey software Qualtrics and an in-house sample management system for cross-national surveys (named WPSS) developed by Sciences Po. WPSS allowed multiple and simultaneous distribution of the surveys in different countries. More information about the WPSS can be found at <https://www.sshopencloud.eu/web-panel-sample-service-wpss-cross-national-surveys-and-panels>.

To take part in the survey, participants only needed to click on the link provided in the invitation email/text message. Respondents were free to complete the survey on whatever device they wished (computer, tablet, smartphone). Respondents could exit the survey and finish completing it at a subsequent time.

In addition to answers provided by respondents, data about the response process (paradata) was collected during questionnaire completion. Basic paradata was collected as a standard feature of the web survey tool for all waves. This included the last question answered (helping identify break-off), survey completeness of ask-all questions, participation start and end timestamps and the total time the respondent spent in the questionnaire, timestamps for each module of questions and total time the respondent spent for each module of questions, device used to answer the questions, user agent variable.

Response rates

Table 5 shows the ESS respondents who were eligible to join the web panel (adults (18+) with internet access), the ESS respondents recruited to CRONOS-2, and the recruitment rate.

Table 5: Recruitment rates (%)

	ESS respondents Eligible	Recruited panellists	%
Austria	1686	796	47.2
Belgium	1173	888	75.7
Czechia	2257	1013	44.9
Finland	1407	1111	79.0
France	1693	1023	60.4
UK	989	752	76.0
Hungary	2330	632	27.1
Iceland	816	706	86.5
Italy	1850	641	34.6
Portugal	1231	719	58.4
Sweden	2197	1462	66.5
Slovenia	1008	731	72.5

Table 6 shows the response rates for all 12 countries and waves. The response rate is computed as the sum of complete and partial interviews over total number of panellists recruited to CRONOS-2.

Table 6: CRONOS-2 response rates (%), number of interviews (partial+complete) as a proportion of the recruited panellists

	W1		W2		W3		W4		W5		W6	
	n (P+C)	%										
Austria	629	79.0	635	79.8	627	78.8	647	81.3	604	75.9	627	78.8
Belgium	545	61.4	492	55.4	/	/	573	64.5	583	65.7	559	63.0
Czechia	294	29.0	284	28.0	283	27.9	284	28.0	288	28.4	275	27.1
Finland	826	74.3	802	72.2	761	68.5	739	66.5	724	65.2	/	/
France	652	63.7	720	70.4	742	72.5	724	70.8	707	69.1	723	70.7
UK	486	64.6	490	65.2	/	/	487	64.8	472	62.8	472	62.8
Hungary	462	73.1	479	75.8	/	/	/	/	/	/	/	/
Iceland	519	73.5	532	75.4	501	71.0	525	74.4	459	65.0	497	70.4
Italy	266	41.5	249	38.8	/	/	243	37.9	225	35.1	212	33.1
Portugal	398	55.4	417	58.0	403	56.1	396	55.1	382	53.1	379	52.7
Sweden	894	61.1	831	56.8	865	59.2	845	57.8	787	53.8	818	56.0
Slovenia	522	71.4	503	68.8	564	77.2	569	77.8	534	73.1	554	75.8

Data processing

Data processing was carried out in order to produce user friendly data files. This involved data cleaning (of labels and values), id-scrambling, implementing custom missing values, the inclusion of Admin variables for randomisation and split-ballot experiments, computation of indicator variables for survey completeness and interview duration, and making data available in multiple formats.

Due to ethical considerations, panel members were allowed to ‘skip’ any question if they wished to do so, even if they had not provided any answers.

Data were checked for disclosure risks by national teams. Identification risks arose for just two variables (Wave 5: “Some people describe themselves in the same way as their sex registered at birth whereas others choose something different. How do you describe yourself?” and the following string variable “How do you describe yourself?”). As those variables were judged to present a significant disclosure risk, Sikt removed them from the published datasets. The variables can be accessed under special licence to be provided by Sikt (contact essdatasupport@sikt.no).

3. CRONOS-2 questionnaires

CRONOS-2 waves were designed and programmed in ‘source English’ and then translated in 14 languages: Slovenian, Hungarian, French, Icelandic, Finnish, Czech, Portuguese, German, Swedish, Italian, Dutch (Belgium), French, (Belgium), Polish

(Iceland), Swedish (Finland). Respondents received the language version that matched the language in which the ESS face-to-face interview was conducted. Translations were carried out by the national teams.

Each CRONOS-2 cross-national wave included 4 question modules (wave 5 and 6 also include some repeated modules from Wave 1 and 2) selected for inclusion following an open competition. The first time, a longitudinal component was added to the ESS (modules: drivers of institutional trust, COVID-19 vaccinations, perceptions of surveys, and financial wellbeing). The applications and items submitted to be included in CRONOS-2 went through a very extensive and accurate design process. Items were reviewed and designed by CRONOS-2 central team (Questionnaire Design Teams provided a draft of the questions to be included in the web panel) and a sub-group of the ESS Core Scientific team (with the help of National Coordinators concerning translation issues).

Concerning the topics covered by the CRONOS-2 surveys, Wave 1 included questions measuring attitudes towards “**climate policies**” and “**COVID-19 vaccinations**”. The first wave also included modules to understand “**drivers of institutional trust**” and the “**perceptions of surveys**”.

“**Welfare and redistribution items**” (Social Europe module) were included in Wave 2, alongside questions on the “**beginning and end of life**” (“The EVS approach to the explanation of attitudes towards beginning and end of life (EVS-MORALBOUNDS)” module). Wave 2 also featured items on “**financial wellbeing**” and “**memory policies**”, which asked about commemorative ceremonies, memorials, and public speeches.

Items about “**technocracy and populism**”, “**attitudes toward family diversity**” and the “**effect of the pandemic on mental health and the consequences for public opinion in Europe**” were asked in Wave 4. This wave also included a “**culturally sensitive study of societal development**”, which aimed to establish what respondents feel marks societal development (in terms of economic prosperity, equality, longevity, etc.).

Wave 5 asked respondents whether they have “**trust in scientific disciplines**” (In science we trust? module), their attitudes with regard to “**being excluded and ignored (Ostracism)**”, and questions on “**income generation and redistribution of wealth**”. Questions in Wave 5 also focused on COVID-19 by asking questions about “**government information during the pandemic**” (Trust, compliance, and fairness during the COVID-19 pandemic module).

Additional information on the questionnaires is available to CRONOS-2 data users:

- Details about questionnaires and original proposals submitted by Questionnaire Design Teams are available from the ESS Data Portal.
- The actual wording of the questions with the response options (source questionnaire) is available in the source codebooks and in the survey

screenshots (including routing and survey logic). This material is available from the ESS Data Portal.

4. CRONOS-2 datasets

Overview of available datasets

CRONOS2 data is distributed across seven studies in the ESS Data Portal. The country documentation, codebooks and questionnaires are included in the online documentation of each wave. All together 24 different datasets are published and made freely available for download from the ESS Data Portal. Table 7 provides details of dataset names and descriptions.

Table 7: Summary of datasets released

Dataset Name	Dataset Description
[integrated data]	One dataset containing substantive web survey data from all cross-national waves plus ESS10 data for responding panellists in all 12 countries.
Cross-national waves [wave0] [wave1] [wave2] [wave4] [wave5]	One dataset for each wave of data collection, containing web survey data for responding panellists in all the 12 countries (Hungary participated only in Wave 0, 1 and 2). These files contain a subset of variables from the ESS10 data. Data users wishing to use other variables from ESS Round 10 can merge these files with the ESS round 10 files by using the variables “cntry”, “idno” and “mode” as key variables.
Country-specific waves [wave3] [wave6]	One dataset for each of the two country-specific waves in each country. These files are in the original language of the country where survey were fielded. These files contain a subset of variables from the ESS10 data. Data users wishing to use other variables from ESS Round 10 can merge these files with the ESS round 10 files by using the variables “cntry”, “idno” and “mode” as key variables.
Recruitment Dataset	A dataset containing information on the responses to the recruitment questions.

Data access

Datasets are freely available to download from ESS Data Portal for non-commercial use in three different formats: SPSS, STATA, and CSV file.

ESS Round 10 data (which can be combined with CRONOS-2 datasets) are also

freely available for download for non-commercial use, along with ESS Round 10 documentation, from <https://ess-search.nsd.no>.

CRONOS-2 data should be cited as: CRONOS2 [NAME OF DATASET] (2023). Sikt - Norwegian Agency for Shared Services in Education and Research, Norway – Data Archive and distributor of ESS data for ESS ERIC. doi:[insert doi].

Combining datasets

It is possible to combine any of the different CRONOS-2 datasets for analysis. CRONOS-2 datasets can also be combined with the ESS Round 10 datasets.

To combine CRONOS-2 and/or ESS datasets the datasets should be merged using three variables: “cntry”, “idno” (a unique identifier for ESS respondents in each country) and “mode”.

Weights

An analysis weight (c2weight) has been produced for each of the six waves of CRONOS-2. This weight was created by adjusting the post-stratified ESS10 analysis weight (anweight) for non-response at the respective wave of CRONOS-2. The weight can therefore be used on its own for any analysis of CRONOS-2 data, as it incorporates the post-stratified ESS10 design weight and adjustments for nonresponse at both ESS10 and the respective CRONOS-2 wave.

The CRONOS-2 nonresponse adjustment derived from a logistic regression model of response at the respective CRONOS-2 wave conditional on response at ESS10 and eligibility for CRONOS-2, the adjustment factor being the reciprocal of the model predicted value (probability of responding to the respective CRONOS-2 wave).

The predictor variables in the model were selected via a multi-step process. First, stepwise procedures were used to fit a model for each of the 64 country-wave combinations and for each of the six waves with all countries combined. A standard set of eleven predictor variables were entered into each model, all coming from ESS10: vote, brncntr, gndr, agea, maritalb, domicil, eisced, pdwrk, region, viepol, and fairelc – with cntry additionally entering the all-countries models. For each variable, adjacent categories whose coefficients were not significantly different in any model were combined. Non-substantive categories were combined with the modal category whenever the coefficients did not significantly differ (which was usually the case, as the numbers of non-substantive responses was small). For each wave, model coefficients were then compared between country-specific models to identify variables that interacted with country. These interactions were then incorporated explicitly into the all-country model for the respective way, by deriving new variables defined by the relevant combination of country and the other variable. The final result was therefore six all-country wave-specific models, which included some interactions with country. Of the 13 variables tested for inclusion in the models, only pdwrk and

region were dropped, though the others were all simplified in various ways due to the combination of categories. Notably, age was included in the final models as a categorical variable with four categories (16-35, 36-45, 46-65 and 66 or over), but also interacted with country.

For each country-wave combination, the adjusted weight was scaled to a mean of 1.0. The weights can therefore be used without further adjustment for any analysis that is either restricted to one country or aims to compare countries. For analysis that pools respondents from multiple countries, the weights will give each country an equal influence. If users wish to produce pooled analysis in which countries contribute different degrees of influence, for example in proportion to population size, the weight will need to be re-scaled for each country.

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The national teams comprised:

Austria:

National coordinator: Peter Grand

Other NC members: Marie Lisa Sailer

Belgium

National coordinators: Bart Meuleman, Pierre Baudewyns

Other NC members: Celine Wuyts, Daniël Spruit, Stefano Camatarri

Czechia

National coordinator: Klara Plecita

Other NC members: Jaroslava Pospíšilová

Finland:

National coordinator: Heikki Ervasti

Other NC members: Takis Venetoklis, Sami Mustikkamaa, Mari Anttila, Sofia Portaankorva.

France:

National coordinator: Agnaly Michaud

Other NC members: Chiao Li, Brune du Marais, Nicolas Sauger

Hungary:

National coordinator: Vera Messing, Bence Ságvári

Other NC members: Gergely Hammer, Gabriella Borsós

Iceland

National coordinator: Guðbjörg Andrea Jónsdóttir

Other NC members: Árni Bragi Hjaltason

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Portugal

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Slovenia

National coordinator: Slavko Kurdija

Other NC members: Tina Vovk, Živa Broder

Sweden

National coordinator: Mikael Hjerm

Other NC members: Filip Fors Connolly, Katarina Östberg

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Other NC members: Natalie Maplethorpe, Imogen Stevenson