# EU Labour Force Survey Database User Guide

Version: May 2023

## Purpose of this document

The purpose of this document is to assist users of EU Labour Force Survey (EU-LFS) data in defining requests and analysing the received data. It aims at informing both users of tailor-made extractions and users of scientific use files containing anonymised LFS microdata. It presents the structure of the LFS, the available variables (submitted by the national statistical institutes or derived at Eurostat) and the rules for dissemination. The EU Labour Force Survey explanatory notes are equally available to the public, but are targeted at the national statistical institutes (NSI); from Eurostat's perspective, they describe the expected input from the NSIs to Eurostat. This document describes Eurostat's output of EU-LFS data to users.

A changed legal basis for the EU-LFS took effect starting with the first quarter of 2021. The new framework legislation is informally referred to as the "IESS" (Integrated European Social Statistics)<sup>1</sup> regulation, which is complemented by specific legal acts relevant for the EU-LFS. The "Statistics Explained" articles on the EU-LFS give a comprehensive overview of the legal acts.<sup>2</sup>

This user guide focuses on the concepts, variables and data structures based on the new legal framework. In order to allow comparisons over time, historical data before 2021 were transcoded as far as possible to match the variables according to the IESS coding scheme. The previous EU-LFS user guide<sup>3</sup> remains available as a reference on the EU-LFS as it was valid up to 2020.

### General Information on the LFS and FU microdata

General information on the EU Labour Force Survey can be found here:

Dedicated section on the Eurostat website:

https://ec.europa.eu/eurostat/web/lfs/overview

Eurostat's "Statistics Explained" pages:

https://ec.europa.eu/eurostat/statistics-explained/index.php/EU labour force survey

Eurostat microdata available to researchers and the related procedures:

https://ec.europa.eu/eurostat/web/microdata/overview

explained/index.php?title=EU\_labour\_force\_survey\_%E2%80%93\_main\_features\_and\_legal\_basis#Legal\_basis

<sup>&</sup>lt;sup>1</sup> Regulation (EU) 2019/1700 of the European Parliament and of the Council of 10 October 2019, <a href="https://eur-lex.europa.eu/eli/reg/2019/1700/oj">https://eur-lex.europa.eu/eli/reg/2019/1700/oj</a>

<sup>&</sup>lt;sup>2</sup> https://ec.europa.eu/eurostat/statistics-

https://ec.europa.eu/eurostat/documents/1978984/6037342/EULFS-Database-UserGuide.pdf

## Table of Contents

1	1 General structure of the EU LFS database			
	1.1	Qua	rterly and yearly datasets	4
	1.2	Sub	sampling and datasets	4
	1.2.	1	Consequences for standard use of EU-LFS data	5
2	Ove	rview	of the variables from 2021	6
	2.1	Core	e variables	6
	2.2	Deri	ved variables for standard labour market analyses from 2021	10
	2.3	Deri	ved variables for household level analysis	12
3	Cha	nges	to the EU-LFS in 2021	13
	3.1	Con	ceptual and methodological changes	13
	3.2	Ove	rview of changes by variable	14
	3.2.	1	New variables	14
	3.2.	2	Changed variables	15
	3.2.	3	Discontinued variables	15
	3.2.	4	Variables with changed periodicity or frequency	16
	3.3	Cha	nges in sampling	17
	3.3.	1	Rotational scheme	17
	3.3.	2	Subsampling	17
	3.4	Mai	n indicators: breaks in series	19
	3.5	Trar	scoding of historical data	19
4	Det	ailed	coding and explanations	21
	4.1	Listi	ng of variables with detailed coding and explanations	21
	4.2	Deri	ved variables for labour market analysis	78
	4.2.	1	Technical items	78
	4.2.	2	Variables related to age and duration	78
	4.2.	3	Potential additional labour force and labour market slack	82
	4.2.	4	Participation in education	83
	4.2.	5	Migration	84
	4.2.	6	Classification levels	85
	4.3	Deri	ved variables at household level	87
5	Mo	dules		93
	5.1	Ad-l	noc modules up to 2020	93
	5.2	Eigh	t-yearly variables and ad-hoc subjects from 2021	93
6 Classifications		94		
7 Scientific use files		95		

7.1	Ano	nymisation	95
		Core variables	
7.	1.2	Module-specific anonymisation criteria (2005-2021)	101
7.2	Sub	samples and weights in scientific use files	103
8 R	eferenc	es	104

## 1 General structure of the EU LFS database

### 1.1 Quarterly and yearly datasets

The LFS under the new legal framework since 2021 ("IESS") distinguishes two major blocks of variables, quarterly and yearly ones. Quarterly data covers main LFS variables like the employment status, hours worked, educational attainment level etc. and serves needs for short-term analysis. It allows the calculation of quarterly LFS results and main indicators. Yearly data covers both quarterly and yearly variables. It includes additional information and provides the basis for more structural analysis. Yearly data also include the biennial variables and the regular module / ad-hoc-subject variables for a given reference year. The legal act accordingly refers to the quarterly variables as the "main variables" and to all others (yearly, biennial, module) as "structural variables".

This split into quarterly and yearly information is similar to the one already applied in the LFS from 2006 to 2020. Differences to the pre-IESS situation concern individual variables, their codes, their target groups, their frequencies, but also improvements to the methodology, e.g. for measuring the employment status according to the ILO definition. Details can be found in the respective regulations and in the "Statistics Explained" article on EU-LFS methodology.<sup>4</sup>

While quarterly data analyses only concern persons, yearly data allow taking the household dimension into account, both for analysis at household level itself and at individual level against the household background. The latter option for analysis at individual level against the household background applies also to some regular modules.

#### 1.2 Subsampling and datasets

Until 1997, EU-LFS data were mainly collected on a yearly basis, usually in spring of a reference year. Between 1998 and 2005, the transition to a quarterly continuous survey took place. In 2006, the structure of the LFS changed significantly to reduce the burden on respondents; since then, all variables have to be collected on a yearly basis, but only a selection of them on a quarterly basis. Those variables which do not have to be collected on a quarterly but only on a yearly basis are referred to as structural variables. To comply with the new structure, LFS data are basically divided into 2 databases:

- Quarterly datasets containing only the quarterly variables
- Yearly datasets containing all variables of the core LFS survey, the quarterly and the structural ones

In order to facilitate comparisons over time, data for reference years prior to 2006 are treated in the same way as data from 2006 onwards, i.e. a similar split into quarterly and yearly datasets is carried out.

Data for all four quarters of a year are in principle progressively available starting between 1998 and 2004 for all EU countries, except for Germany for which quarterly data are available from 2005 and Croatia for which this is the case from 2007. For reasons of cross-country comparison, the reference sample for yearly files hence corresponds to the reference quarter in spring until 2004, and to an annual sample covering all quarters and weeks of the year from 2005.

<sup>4</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU labour force survey

For the years from 2005 onwards this annual sample consists of the full set of the four quarterly samples in all countries with the following exceptions :

- spring quarter 2 is used for IE and FI from 2005 to 2006, UK from 2005 to 2007, CH from 2005 to 2009
- a subsample representing the whole year is used for ES, FR, NL, NO from 2006, DE from 2006 to 2011 and again from 2020, FI from 2007, BG, UK from 2008, CH from 2010, CZ from 2011, LU from 2015, BE and LV from 2017, IE, EL, MT, PT and SI from 2021

The special annual subsamples are usually even smaller than the ones of a single quarter – the exact sample size depends on the rotation scheme in place in a given country.

Since 2006, the split between quarterly (main) and yearly (structural) variables has had implications for the quarterly and yearly datasets because national statistical institutes (NSIs) have made use of subsampling in various ways. The full quarterly samples are not always used for the collection of the structural variables; yearly subsamples from them are often chosen for this purpose if they are sufficient to fulfil yearly precision requirements. These subsamples then have to consist of independent observations over the reference year.

Yearly and - from 2021 - biennial variables can be collected either for the full quarterly samples or yearly subsamples. Up to 2020, modules have been collected either on a limited number (mostly one) of full quarterly samples or on a yearly subsample. From 2021, only the latter option is possible. Household level data are a special case. Like the structural variables, they can be collected from the full quarterly samples, but some countries generally collect data on individuals and provide household level data only for a yearly subsample; this can be the case also where structural variables are otherwise collected from the full quarterly samples.

Detailed information on the use of subsampling in the national surveys is available in the annual publication "Description of the characteristics of national surveys". Currently, this publication covers reference years prior to the implementation of IESS.

#### 1.2.1 Consequences for standard use of EU-LFS data

With a focus on comparability across countries, the following rules are applied:

- Quarterly results are only calculated for variables with quarterly frequency.
- Yearly results until 2004 are usually calculated based on spring quarter information only.
- From 2005 onwards, yearly figures can be calculated in two ways:
  - If only quarterly variables are concerned, an annual average of 4 quarters, using quarterly datasets, can be produced.
  - If structural variables form part of the analysis, yearly datasets have to be used.

These principles are applied to detailed LFS tables on the Eurostat website and tailor-made extractions. Users of tailor-made extractions as well as researchers working with anonymised LFS microdata and applying a similar approach should hence be able to replicate Eurostat results. On the other hand, LFS main indicator tables are adjusted for breaks in series, missing past data etc. and might therefore show different results.

<sup>&</sup>lt;sup>5</sup> https://ec.europa.eu/eurostat/web/lfs/publications/quality-reporting

Module data and household level information are included in the yearly datasets. This is different from the dataset structure used up to 2020, where separate datasets for the modules and, where applicable, for household subsamples were provided.

## 2 Overview of the variables from 2021

In the following, the list of variables available in the Eurostat LFS datasets is divided into three categories:

- (a) Core variables provided by the National Statistical Institutes to Eurostat according to Commission Implementing Regulation (EU) 2019/2240, Annex I. The expression 'core variables' as used here includes both quarterly and structural (annual and biennial) variables of the LFS, without the eight-yearly variables and ad hoc subjects (which are explained in chapter 5).
- (b) Derived variables for standard labour market analysis
- (c) Derived variables for household analysis

The detailed documentation of the derivations covers the variables in categories (b) and (c), but also some in category (a). The variables REFMONTH, AGE, EMPSTAT and ILOSTAT are reported by the NSIs, but their derivation can be reproduced from other reported variables.

#### 2.1 Core variables

A detailed list of variables as the NSIs report them is specified in Annex I of the LFS implementing act, Commission Implementing Regulation (EU) 2019/2240. The following list provides an overview of the core variables available from reference year 2021.

## Main (quarterly) variables

Variable name	Identifier
01. Technical Items	
Year of survey	REFYEAR
Reference week	REFWEEK
Reference month	REFMONTH
Interview week	INTWEEK
Living in a private household or an institution	HHTYPE
Stratum	STRATUM
Primary sampling unit	PSU
Final (or ultimate) sampling unit	FSU
Design weight	DEWEIGHT
Unique identifier	IDENT
Serial number of the household	HHNUM
Sequence number in the household	HHSEQNUM
Quarterly weighting factor	COEFFQ
Sequence number of the survey wave	INTWAVE
Questionnaire used	INTQUEST
Interviewing mode used	MODE
Nature of participation in the survey	PROXY
Country of residence	COUNTRY
Region of residence	REGION
Degree of urbanisation	DEGURBA
02. Person and household characteristics	
Sex	SEX
Year of birth	YEARBIR
Passing of birthday	PASSBIR
Age in completed years	AGE
Country of main citizenship	CITIZENSHIP
Country of birth	COUNTRYB
Country of birth of the father	COBFATH
Country of birth of the mother	COBMOTH
Duration of stay in the country of residence in completed years	YEARESID
Country of previous residence	COUNTRPR
03. Labour market participation	
Working in the reference week	WKSTAT
Main reason for absence from work during the entire reference week	ABSREAS
Job attachment	JATTACH
Being in employment	EMPSTAT
Number of jobs	NUMJOB
Searching for employment during the 4 weeks ending in the reference week	SEEKWORK
Willingness to work even if not searching for employment	WANTWORK
Main reason for not searching for employment	SEEKREAS
Main reason for not wanting to work	WANTREAS
Having used an active search method to find a job (for not employed people)	ACTMETNE
Wish to work more than the current number of usual hours	WISHMORE
Availability to start working immediately or to work more	AVAILBLE

Variable name	Identifier
Main reason for not being available to start working immediately or to work more	AVAIREAS
ILO employment status	ILOSTAT
Country of place of work for main job	COUNTRYW
Region of place of work for main job	REGIONW
Status in employment in main job	STAPRO
Economic activity of the local unit for main job	NACE3D
Occupation in main job	ISCO4D
Full- or part-time main job (self-defined)	FTPT
Permanency of main job	TEMP
Total duration of temporary main job	TEMPDUR
Main reason for part-time work in the main job	FTPTREAS
Duration of search for employment	SEEKDUR
Status in employment in second job	STAPRO2J
Economic activity of the local unit for second job	NACE2J2D
Main activity status (self-defined)	MAINSTAT
04. Educational attainment and background	
Educational attainment level (highest level of education successfully completed)	HATLEVEL
05. Job tenure, work biography and previous work experience	
Year in which person started working for current employer or as self-employed in	
current main job	YSTARTWK
Month in which person started working for current employer or as self-employed in	
current main job	MSTARTWK
Existence of previous employment experience	EXISTPR
Year in which person left the last job or business	YEARPR
Month in which person left the last job or business	MONTHPR
Main reason for leaving last job or business	LEAVREAS
06. Working conditions including working hours and working time arrangements	
Contractual working hours in main job	CONTRHRS
Number of hours per week usually worked in main job	HWUSUAL
Days of absence from main job due to holidays and leave	ABSHOLID
Days of absence from main job due to own illness, injury or temporary disability	ABSILLINJ
Days of absence from main job due to other reasons	ABSOTHER
Overtime or extra hours worked in main job	EXTRAHRS
Number of hours actually worked in main job	HWACTUAL
Number of hours per week usually worked in second job	HWUSU2J
Number of hours actually worked in second job	HWACTU2J
07. Participation in education and training	
Participation in formal education and training (student or apprentice) in the last 4	
weeks	EDUCFED4
Level of the most recent formal education or training activity in the last 4 weeks	EDUCLEV4
Participation in non-formal education and training in the last 4 weeks	EDUCNFE4
09. Income, consumption and elements of wealth, including debts	1
Registration at a public employment service (PES)	REGISTER

## Structural (yearly and biennial) variables

Variable name	Identifier	Frequency
01. Technical Items		
Yearly weighting factor	COEFFY	Υ
Weighting factor for the two-yearly variables	COEFF2Y	Υ
Yearly weighting factor - module	COEFFMOD	Υ
Yearly household weighting factor	COEFFHH	Υ
02. Person and household characteristics		
Main reason for migrating	MIGREAS	2Y (odd)
Relationship to the reference person in the household	HHLINK	Υ
Sequence number of partner	HHSPOU	Υ
Sequence number of father	HHFATH	Υ
Sequence number of mother	ННМОТН	Υ
03. Labour market participation		
Working at home for the main job	HOMEWORK	Υ
Main reason for having a temporary main job	TEMPREAS	Υ
Contract with a temporary employment agency for the main job	TEMPAGCY	Υ
Number and importance of clients in the 12 months ending with the reference week	MAINCLNT	Υ
Decision on the start and end of working time	VARITIME	Υ
Supervisory responsibilities in main job	SUPVISOR	Υ
Size of the local unit for main job	SIZEFIRM	Υ
Looking for another job	LOOKOJ	Υ
Number of hours that the person would like to work in total in a week	HWWISH	Υ
Main reason why care for children or incapacitated relatives limits labour market participation	NEEDCARE	Υ
04. Educational attainment and background		.i
Field of the highest level of education successfully completed	HATFIELD	Υ
Year when the highest level of education was successfully completed	HATYEAR	Υ
Work experience at a workplace as part of HATLEVEL	HATWORK	Υ
05. Job tenure, work biography and previous work experience		.1
Public employment service helped to find the current main job	WAYJFOUN	Υ
Most effective method used to find the current main job (for persons in employment)	FINDMETH	Υ
Status in employment in last job or business	STAPROPR	Υ
Economic activity of the local unit in which person last worked	NACEPR2D	Υ
Occupation in the last job	ISCOPR3D	Υ
06. Working conditions including working hours and working time arrangem	<u>i</u>	1 - 7
Shift work in main job	SHIFTWK	2Y (odd)
Evening work in main job	EVENWK	2Y (odd)
Night work in main job	NIGHTWK	2Y (odd)
Saturday work in main job	SATWK	2Y (odd)
Sunday work in main job	SUNWK	2Y (odd)
07. Participation in education and training		(ouu)
Participation in formal education and training (student or apprentice) in the last 12 months	EDUCFED12	2Y (even)

Variable name	Identifier	Frequency	
Level of the most recent formal education or training activity in the last 12 months	EDUCLEV12	2Y (even)	
Participation in non-formal education and training in the last 12 months	EDUCNFE12	2Y (even)	
08. Health: status and disability, access to, availability and use of health care and health determinants			
Self-perceived general health	GENHEALTH	2Y (even)	
Limitation in activities because of health problems	GALI	2Y (even)	
09. Income, consumption and elements of wealth, including debts			
Gross monthly pay from the main job	INCGROSS	Υ	
Flag on gross monthly pay from main job	INCGROSS_F	Υ	

## 2.2 Derived variables for standard labour market analyses from 2021

The following tables list the derived LFS variables for standard labour market analyses based on the list of core variables above. Details about their coding and derivation are explained in chapter 4.2.

## **Derived quarterly variables**

Variable description	Identifier
Age at which person last established his/her usual residence in the country	AGERESID
Time since person started to work	STARTIME
Time since person last worked	LEAVTIME
Time since person last worked (classes)	LEAVCLAS
Duration of unemployment	DURUNE
Underemployed part-time workers	UEMP
Potential additional labour force - Available but not seeking	PALF_AV_NS
Potential additional labour force - Seeking but not available	PALF_S_NAV
Potential additional labour force	PALF
Labour market slack	LMSLACK
Education or training received during previous 4 weeks	EDUC4WEEKS
Migration status	MIGSTAT
Country of birth of parents	COBPARENT
Level of formal education (3 levels)	HATLEV1D
Economic activity, up to 2007 (NACE Rev. 1.1, 2 digits)	NACE1_2D
Economic activity, up to 2007 (NACE Rev. 1.1, 1 digit)	NACE1_1D
Economic activity, up to 2007 (NACE Rev. 1.1, 3 high level national accounts aggregates)	NACE1_S
Economic activity in second job, up to 2007 (NACE Rev. 1.1, 2 digits)	NACE1_2D2J
Economic activity in second job, up to 2007 (NACE Rev. 1.1, 1 digit)	NACE1_1D2J
Economic activity in second job, up to 2007 (NACE Rev. 1.1, 3 high level national accounts aggregates)	NACE1_S2J
Economic activity, from 2008 (NACE Rev. 2, 2 digits)	NACE2_2D
Economic activity, from 2008 (NACE Rev. 2, 1 digit)	NACE2_1D
Economic activity, from 2008 (NACE Rev. 2, 10 high level aggregates)	NACE2_S
Economic activity in second job, from 2008 (NACE Rev. 2, 1 digit)	NACE2_1D2J
Economic activity in second job, from 2008 (NACE Rev. 2, 10 high level aggregates)	NACE2_S2J
Occupation, up to 2010 (ISCO-88, 3 digits)	ISCO88_3D

Occupation, up to 2010 (ISCO-88, 2 digits)	ISCO88_2D
Occupation, up to 2010 (ISCO-88, 1 digits)	ISCO88_1D
Occupation, from 2011 (ISCO-08, 3 digits)	ISCO08_3D
Occupation, from 2011 (ISCO-08, 2 digits)	ISCO08_2D
Occupation, from 2011 (ISCO-08, 1 digits)	ISCO08_1D
Level of formal education (3 levels)	HATLEV1D
Region of residence (NUTS level 2)	REGION_2D
Region of residence (NUTS level 1)	REGION_1D
Region of place of work for main job (NUTS level 2)	REGION_2DW
Region of place of work for main job (NUTS level 1)	REGION_1DW
Fixed reference quarter	QUARTER
Fixed reference year	YEAR

## **Derived yearly variables**

Variable description	Identifier
Age at which person obtained the highest level of education	HATAGE
Years passed since person obtained the highest level of education	HATTIME
Education or training received during previous 12 months	EDUC12MONTHS
European Socio-economic Groups (ESeG, 2 digits)	ESEG_2D
European Socio-economic Groups (ESeG, 1 digit)	ESEG_1D
Economic activity in previous job, up to 2007 (NACE Rev. 1.1, 1 digit)	NACE1_1DPR
Economic activity in previous job, up to 2007 (NACE Rev. 1.1, 3 high level national	NACE1_SPR
accounts aggregates)	
Economic activity in previous job, from 2008 (NACE Rev. 2, 1 digit)	NACE2_1DPR
Economic activity in previous job, from 2008 (NACE Rev. 2, 10 high level aggregates)	NACE2_SPR
Occupation in previous job, up to 2010 (ISCO-88, 2 digits)	ISCO88_2DPR
Occupation in previous job, up to 2010 (ISCO-88, 1 digit)	ISCO88_1DPR
Occupation in previous job, from 2011 (ISCO-08, 2 digits)	ISCO08_2DPR
Occupation in previous job, from 2011 (ISCO-08, 1 digit)	ISCO08_1DPR

NOTE: Suffixes of NACE/ISCO/ESeG variables

4D = 4 digits (for ISCO)

3D = 3 digits (for ISCO/NACE)

2D = 2 digits (for ISCO/ESeG/NACE)

1D = 1 digit (for ISCO/NACE)

S = special aggregates for national accounts

PR = previous job

## 2.3 Derived variables for household level analysis

The technical variables and the person and household characteristics allow it to derive a number of variables with an annual frequency describing the household situation at individual but also at household level, in combination with labour status information. The first variable in the list, HHPERS, is assigned to the individuals in a household, while all other variables are assigned at household level, i.e. they take the same values for all members of a household. Detailed information is available in chapter 4.3.

Variable description	Identifier	
Distinction child vs adult	HHPERS	
Household size and age structure		
Total number of persons in the household (irrespective of age)	HHNBPERS	
Number of children between 0 and 2 years in the household	HHNBCH0TO2	
Number of children between 3 and 5 years in the household	HHNBCH3TO5	
Number of children between 6 and 8 years in the household	HHNBCH6TO8	
Number of children between 9 and 11 years in the household	HHNBCH9TO11	
Number of children between 12 and 14 years in the household	HHNBCH12TO14	
Number of children between 15 and 17 years in the household	HHNBCH15TO17	
Number of children aged less than 15 years in the household	HHNB0TO14	
Total number of children in the household	HHNBCHILD	
Age of the youngest child less than 15 years in the household	HHAGEYG14	
Age of the youngest child in the household	HHAGEYG	
Total number of adults in the household	HHNBADULT	
Number of persons aged 65 years or more in the household	HHNBOLD	
Variables describing the working status of household members		
Total number of employed persons aged 15 and more in the household	HHNBALLEMPL	
Number of employed adults in the household	HHNBADEMPL	
Number of unemployed adults in the household	HHNBADUNEMP	
Number of adults outside the labour force in the household	HHNBADOUTLF	
Working status of adults living in the same household	HHWKSTAT	
Jobless household (except student-only household)	HHJOBLESS	
Household composition		
Aggregated household composition	HHCOMP	
Existence of parents in the same household	HHPARENT	
Existence of spouse / co-habiting partner in the household	HHPARTNR	
Existence of children in the same household	HHCHILDR	

## 3 Changes to the EU-LFS in 2021

## 3.1 Conceptual and methodological changes

The new legal basis for the EU-LFS from 2021 brought about several changes at conceptual level, with the ILO labour status as the centrepiece and various other concepts related to it. The fieldwork has been more harmonised with this legislation, which introduced more detailed specifications on the routing of the questionnaires. Requirements to the panel design and to precision of results have been further developed. Several variables were introduced, some were changed and renamed, some others dropped completely.

A comprehensive overview of the methodological changes to the LFS from reference year 2021 is given in the "Statistics Explained" article on LFS methodology:

#### https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU labour force survey

The detailed definitions of persons being employed, unemployed or outside the labour force as described in "Statistics Explained" have some implications for the way in which the labour status (ILOSTAT) can be derived from the other variables in the EU-LFS.

In the LFS up to 2020, ILOSTAT was derived using the variables WSTATOR (replaced with WKSTAT from 2021), AGE, SEEKWORK, METHOD[A-M] (replaced with ACTMETNE from 2021) and AVAILBLE. With IESS, ILOSTAT is derived in two steps:

- The new variable EMPSTAT first distinguishes whether respondents between 15 and 89 years of age are employed or not; for respondents outside this age band, EMPSTAT is 'not applicable'. If EMPSTAT is '1' (employed), ILOSTAT is '1' (employed) as well.
- EMPSTAT cases '2' (not employed) are then further derived to ILOSTAT '2' (unemployed) or '3' (outside the labour force), while persons aged below 15 and above 89 are considered as outside the labour force by definition.
- In the first step, the distinction between being employed or not employed in EMPSTAT takes into account the following variables:
  - WKSTAT, the situation of the respondent as regards work,
  - o ABSREAS, the reason for an absence from work,
  - o JATTACH, the job attachment in case of an absence, by type of absence.
- In the second step, EMPSTAT then is a key variable for the further derivation of ILOSTAT on variables that are similar to the pre-IESS ILOSTAT derivation:
  - AGE
  - SEEKWORK, search for employment during the past four weeks ending with the reference week,
  - o ACTMETNE, methods of job search,
  - AVAILBLE, availability to start work within two weeks.

For the detailed transcoding of the variables into EMPSTAT and ILOSTAT, please refer to section 4.1. More conceptual guidance on the individual variables is given in the LFS explanatory notes.

## 3.2 Overview of changes by variable

## 3.2.1 New variables

Variable name	Identifier	
01. Technical Items		
Stratum	STRATUM	
Primary sampling unit	PSU	
Final (or ultimate) sampling unit	FSU	
Design weight	DEWEIGHT	
Unique identifier	IDENT	
Interviewing mode used	MODE	
02. Person and household characteristics		
Country of birth of the father	COBFATH	
Country of birth of the mother	СОВМОТН	
Main reason for migrating	MIGREAS	
Country of previous residence	COUNTRPR	
03. Labour market participation	<u>i</u>	
Being in employment	EMPSTAT	
Number of jobs	NUMJOB	
Main reason for not wanting to work	WANTREAS	
Number and importance of clients in the 12 months ending with the reference week	MAINCLNT	
Decision on the start and end of working time	VARITIME	
04. Educational attainment and background		
Work experience at a workplace as part of HATLEVEL	HATWORK	
05. Job tenure, work biography and previous work experience		
Most effective method used to find the current main job (for persons in		
employment)	FINDMETH	
Status in employment in last job or business	STAPROPR	
06. Working conditions including working hours and working time arrangements		
Contractual working hours in main job	CONTRHRS	
Days of absence from main job due to holidays and leave	ABSHOLID	
Days of absence from main job due to own illness, injury or temporary disability	ABSILLINJ	
Days of absence from main job due to other reasons	ABSOTHER	
Overtime or extra hours worked in main job	EXTRAHRS	
Number of hours per week usually worked in second job	HWUSU2J	
07. Participation in education and training	1	
Participation in formal education and training (student or apprentice) in the last 4		
weeks	EDUCFED4	
Level of the most recent formal education or training activity in the last 4 weeks	EDUCLEV4	
Participation in non-formal education and training in the last 4 weeks	EDUCNFE4	
Participation in formal education and training (student or apprentice) in the last 12		
months	EDUCFED12	
Level of the most recent formal education or training activity in the last 12 months	EDUCLEV12	
Participation in non-formal education and training in the last 12 months	EDUCNFE12	
08. Health: status and disability, access to, availability and use of health care and health determinants		
Self-perceived general health	GENHEALTH	
Limitation in activities because of health problems	GALI	

### 3.2.2 Changed variables

This table only lists the main changes to the variables, in some cases also a renaming. Minor changes in the coding are not listed here but in the transcoding tables in chapter 4.1.

Variable identifier	Comment
INTQUEST	More detailed coding to define sets of variables collected from the respondent
HHLINK	More detailed coding to describe relationships within a household more precisely
DATEBIR -> PASSBIR	PASSBIR allows a more precise derivation of AGE when a last reference week spills over into the next calendar year.
WSTATOR -> WKSTAT	The status of the respondent as being at work, absent, not having a job has been revised according to the conceptual changes.
SEEKWORK	An additional category has been added for respondents who found a job that started between the reference week and the interview week.
NOWKREAS -> ABSREAS	Reasons for absence of work have been revised according to the conceptual changes.
METHOD[A-M] ->	The previous 13 variables on job search methods have been replaced with the
ACTMETNE	single variable ACTMETNE.
EXISTPR	An additional category for occasional employment has been added.
INCDECIL -> INCGROSS	Income deciles have been replaced with income levels; the additional variable INCGROSS_F specifies information on the data source and net/gross income.

#### 3.2.3 Discontinued variables

The following variables are no longer collected from 2021:

- HHINST
- Variables referring to the previous year: WSTAT1Y, STAPRO1Y, NACE1Y2D, COUNTR1Y, REGION1Y
- MARSTAT
- LOOKREAS
- SEEKTYPE
- PRESEEK
- WAYMORE
- HOURREAS
- COURLEN, COURPURP, COURFILD, COURWORH
- HATVOC

#### 3.2.4 Variables with changed periodicity or frequency

For some variables that existed before 2021, the periodicity or frequency was changed with the new legal framework from 2021. This affects the availability of consistent time series.

#### From yearly to quarterly periodicity and frequency

The following variables were yearly ones up to reference year 2020 and have a quarterly periodicity since 2021:

- FTPTREAS
- SEEKREAS
- AVAIREAS
- LEAVREAS
- MAINSTAT
- REGISTER

In tailor made extractions, this change leads to a break in the availability of the series as it is not possible to disaggregate periodicity of these variables to a quarterly periodicity before 2021.

For technical reasons, and to mark clearly the break in the periodicity, the six variable names above have a suffix "\_Y" in tailor-made extractions of yearly data for reference years up to 2020. From 2021, the variables without the suffix are available with the quarterly periodicity and as annual averages.

### From quarterly to yearly periodicity and frequency

The following variables were quarterly ones up to reference year 2020 and have a yearly periodicity since 2021:

- HWWISH
- LOOKOJ

To have a consistent periodicity for all reference years, these variables have been aggregated to a yearly periodicity also for the reference years before 2021.

#### From yearly to biennial frequency

The variables on topic 6, "Working conditions including working hours and working time arrangements", were yearly variables up to 2020. In terms of periodicity, they remain yearly from 2021 onwards. The frequency however changed from yearly to biennial. The following variables are collected only in odd years:

- SHIFTWK
- EVENWK
- NIGHTWK
- SATWK
- SUNWK

There are no provisions to reconcile the frequency before and after 2021. These variables remain available with a yearly frequency up to 2020 and are available every second year from 2021.

#### 3.3 Changes in sampling

#### 3.3.1 Rotational scheme

While rotational schemes were already used in the LFS before 2021, the IESS regulation stipulates that there must be a minimum sample overlap of 20 % between the same quarters in consecutive years and of 50 % between consecutive quarters without taking into account attrition.

#### 3.3.2 Subsampling

Subsampling is not new to the LFS from 2021, but the requirements to its use are more specific than before. This is relevant to the subsampling for structural variables and the subsampling for household level data.

#### 3.3.2.1 Subsampling for structural variables

While the quarterly (main) variables have to be collected on the full quarterly samples, subsamples may be used for the collection of the yearly and biennial variables. These subsamples of independent observations must consist of complete waves and cover at least one eighth of the full quarterly samples. While subsampling for the yearly and biennial variables is optional, it must be used for the eight-yearly variables and ad-hoc subjects.

These subsamples must fulfil the requirement that the (sub)sample for the yearly variables includes the (subsample) for the biennial variables, which must in turn include the subsample for the modules, i.e. the eight-yearly variables and ad-hoc subjects.

#### 3.3.2.2 Subsampling for household level data

Subsampling is possible also for the collection of data at household level. Countries may choose to survey individuals in general and to collect the household level data for a subsample consisting of originally selected individuals as the reference persons and the additional household members. For the additional household members, the minimum set of household level variables listed below has to be collected. If modules require household level background information on the surveyed individuals, it is possible to use another subsample for this purpose than for the regular annual household level data. In that case, this specific household level subsample for a module must contain the minimum set of variables up to the variable HHMOTH in the list below (covering the topics "technical items" and "person and household characteristics"), but e.g. no information on the labour status of the additional household members.

Variable	Variable name
identifier	Very of company
REFYEAR	Year of survey
REFWEEK	Reference week
REFMONTH	Reference month
INTWEEK	Interview week
ННТҮРЕ	Living in a private household or an institution
STRATUM	Stratum
PSU	Primary sampling unit
IDENT	Unique identifier
HHNUM	Serial number of the household
HHSEQNUM	Sequence number in the household
COEFFHH	Yearly household weighting factor
INTWAVE	Sequence number of the survey wave
INTQUEST	Questionnaire used
MODE	Interviewing mode used
PROXY	Nature of participation in the survey
COUNTRY	Country of residence
REGION	Region of residence
DEGURBA	Degree of urbanisation
SEX	Sex
YEARBIR	Year of birth
PASSBIR	Passing of birthday
AGE	Age in completed years
CITIZENSHIP	Country of main citizenship
COUNTRYB	Country of birth
COBFATH	Country of birth of the father
совмотн	Country of birth of the mother
HHLINK	Relationship to the reference person in the household
HHSPOU	Sequence number of partner
HHFATH	Sequence number of father
ннмотн	Sequence number of mother
WKSTAT	Working in the reference week
ABSREAS	Main reason for absence from work during the entire reference week
JATTACH	Job attachment
EMPSTAT	Being in employment
NUMJOB	Number of jobs
SEEKWORK	Searching for employment during the 4 weeks ending in the reference week
WANTWORK	Willingness to work even if not searching for employment
ACTMETNE	Having used an active search method to find a job (for not employed people)
WISHMORE	Wish to work more than the current number of usual hours
AVAILBLE	Availability to start working immediately or to work more
ILOSTAT	ILO employment status
	- 1

HOMEWORK	Working at home for the main job
STAPRO	Status in employment in main job
FTPT	Full- or part-time main job (self-defined)
TEMP	Permanency of main job
MAINSTAT	Main activity status (self-defined)
HATLEVEL	Educational attainment level (highest level of education successfully completed)
HATYEAR	Year when the highest level of education was successfully completed
HWUSUAL	Number of hours per week usually worked in main job
HWACTUAL	Number of hours actually worked in main job
EDUCFED4	Participation in formal education and training (student or apprentice) in the last 4 weeks
EDUCNFE4	Participation in non-formal education and training in the last 4 weeks
INCGROSS	Gross monthly pay from the main job
INCGROSS_F	Flag on gross monthly pay from main job

#### 3.4 Main indicators: breaks in series

The changes introduced by IESS can cause breaks in the time series of the quarterly and annual LFS main indicators as they derive from EU-LFS microdata. The LFS main indicators section covers the main statistics on the labour market in tables showing various breakdowns of labour market participation, employment and unemployment. In order to provide stakeholders with the most relevant labour market policy indicators, Member States and Eurostat produce and disseminate break-corrected series, thus ensuring data comparability over time. The following "Statistics Explained" article provides detailed information on the breaks in series exercise and is updated regularly.

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey - correction for breaks in time series

#### 3.5 Transcoding of historical data

Historical data up to 2020 have been transcoded as far as possible to the IESS variables and their coding scheme valid from 2021. The transcoding of variables that were in use from 2006 to 2020 is to a large extent documented in the detailed listing of the coding scheme for the current LFS in section 4.1. The complete and detailed transcoding tables are available in a separate document here.

Years prior to 2006 are treated in a simplified way: the ILO labour status as derived at that time has been directly translated into EMPSTAT 'employed', and other labour status variables transcoded in line with the new filtering. This simplification was necessary because the derivation formula for ILOSTAT changed several times before 2006, reflecting the implementation of new concepts and changes in the underlying variables.

The ILO labour status (variable ILOSTAT) was derived in a consistent way from 2006 to 2020; it changed again only with the introduction of IESS from 2021 (see section 4.1 of this document). It would be possible only with limitations to apply the new ILOSTAT derivation logic to the years from 2006 to 2020. Therefore, ILOSTAT has been kept unchanged in the transcoding also for those reference years. The derivation of ILOSTAT from 2021 requires that EMPSTAT is derived before; in the data before 2021, it is not possible to derive post-IESS EMPSTAT precisely with the former LFS variables, which would finally lead to uncertainties about the correct outcome of ILOSTAT. Moreover, many statistical analyses and publications have been based on this labour status derivation, and the labour status in the existing time series has formed the basis

and reference for the development of break-free, seasonally adjusted time series in the LFS Main Indicators, covering the period of 2009 to 2020.

In the transcoded microdata used for tailor-made extractions and for the scientific use files, rather than deriving ILOSTAT differently with the 'IESS logic', the derivation of the unchanged ILOSTAT has therefore been expressed with the new IESS variables, but a slightly changed derivation logic. The details of the pre-IESS and post-IESS derivation of ILOSTAT using the post-IESS variables are explained in the variable description in section 4.1.

## 4 Detailed coding and explanations

## 4.1 Listing of variables with detailed coding and explanations

The letter codes underneath the variable identifiers provide some information about the variable:

- The first letter indicates the periodicity:
   Q quarterly
  - 2Y biennial (in odd/even years)
- 2) The second letter indicates the variable type:
  - T technical

yearly

- C collected
- D derived
- 3) The third letter H is shown if the variable is in the minimum set of household variables to be collected for the additional household members in cases of household subsampling; otherwise no letter is displayed in the third position.

Where appropriate, transcoding information is provided where variables valid up to 2020 have been used to generate the variables as defined in the IESS regulation. The transcoding is provided here for a selection of variables, where it is particularly relevant. A complete documentation of the transcoding is available <a href="here">here</a>. The complete coding scheme of the former variables (such as WSTATOR and SIGNISAL) with their detailed labels is not provided here in detail to avoid overloading this document. The coding of the historical variables is available in the LFS User Guide in its versions up to September 2020.

The Excel table annexed to this user guide provides a list of all core LFS variables according to IESS with various characteristics of the variables according to which the list can be filtered.

## 01. Technical Items

Variable identifier	Codes	Variable name, labels	Filter
REFYEAR Q T H		Year of survey	
	YYYY	Year of survey (4 digits)	

REFWEEK Q T H		Reference week	
	01-53	Number of the week (2 digits)	

REFMONTH Q D H		Reference month	
	01-12	Number of the month (2 digits)	

INTWEEK Q T H		Interview week	
	01-53	Number of the week (2 digits)	

HHTYPE Q T H		Living in a private household or an institution	
	1	Person surveyed and living in the same private household	
	2	Person surveyed in the private household but living in an institution	
	3	Person surveyed in the private household but living in another private household	

STRATUM Q T H		Stratum	
	Not blank	Stratum identifier (15 character alphanumeric)	
	Blank	Not applicable	

PSU		Primary sampling unit	
QTH	Not blank	Primary sampling unit identifier (15 character alphanumeric)	
	Blank	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
FSU Q T		Final (or ultimate) sampling unit	
	Not blank	Final sampling unit identifier (15 character alphanumeric)	
	Blank	Not applicable (only for the not sampled persons in a sample of individuals)	

DEWEIGHT		Design weight	
QT			
	Not blank	Design weight (in thousands, with up to 5 decimals)	
	Blank	Not applicable	

IDENT		Unique identifier	
QTH			
	Not blank	Identifier (25 character alphanumeric)	

HHNUM		Serial number of the household	
QTH			
	Not blank	Household number (8 character alphanumeric)	

HHSEQNUM Q T H		Sequence number in the household	
	01-98	Sequence number allocated to each member of the household (2 digits)	

COEFFQ Q T		Quarterly weighting factor	
	Not blank	Quarterly weight (in thousands, with up to 7 decimals)	
	Blank	Not applicable	

COEFFY Y T		Yearly weighting factor	Everybody in the yearly (sub-)sample for annual variables
	Not blank	Yearly weight (in thousands, with up to 7 decimals)	
	Blank	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
COEFF2Y Y T		Weighting factor for the two-yearly variables	Everybody in the yearly (sub-) sample for two-yearly variables
	Not blank	Two-yearly weight (in thousands, with up to 7 decimals)	
	Blank	Not applicable	

COEFFMOD Y T		Yearly weighting factor — module	Everybody in the yearly module subsample
	Not blank	Yearly module weight (in thousands, with up to 7 decimals)	
	Blank	Not applicable	

<b>COEFFHH</b> Y T H		Yearly household weighting factor	Everybody in the yearly (sub-) sample to be used for household analyses
	Not blank	Yearly household weight (in thousands, with up to 7 decimals)	
	Blank	Not applicable	

INTWAVE Q T H		Sequence number of the survey wave	
	01-08	Sequence number of the survey wave	

Variable identifier	Codes	Variable name, labels	Filter
INTQUEST Q T H		Questionnaire used	
	01	Quarterly	
	02	Quarterly and yearly	
	03	Quarterly, yearly and biennial	
	04	Quarterly, yearly, biennial and module	
	05	Quarterly and (originally selected) respondent forms part of household subsample	
	06	Quarterly, yearly and (originally selected) respondent forms part of household subsample	
	07	Quarterly, yearly, biennial and (originally selected) respondent forms part of household subsample	
	08	Quarterly, yearly, biennial, module and (originally selected) respondent forms part of household subsample	
	09	Household — minimum set of variables (for additional household members)	
	10	Household — restricted set of module background variables (for additional household members)	

Transcoding INTQUEST				
pre-IESS FR	post-IESS FR			
INTQUEST	INTQUEST			
1	11			
2	12			

MODE Q T H		Interviewing mode used	
	1	Computer-assisted personal interviewing (CAPI)	
	2	Computer-assisted telephone interviewing (CATI)	
	3	Computer-assisted web interviewing (CAWI)	
	4	Pen-and-Paper Personal Interviews (PAPI)	
	5	Copied from previous interview	
	6	Other	
	Blank	Not stated	

Variable identifier	Codes	Variable name, labels	Filter
PROXY Q T H		Nature of participation in the survey	
	1	Direct participation	
	2	Indirect participation (i.e. participation via another member of the household)	
	Blank	Not stated	

Transcoding PROXY	
pre-IESS FR	post-IESS FR
PROXY	PROXY
1	1
2, 9	2
Blank	Blank

COUNTRY		Country of residence	
QTH			
	Not Blank	Country of residence (SCL GEO alpha-2 code)	

REGION		Region of residence	
QTH			
	Not Blank	NUTS 3 region (3 character alphanumeric)	

<b>DEGURBA</b> Q T H		Degree of urbanisation	
	1	Cities	
	2	Towns and suburbs	
	3	Rural areas	

## 02. Person and household characteristics

Variable identifier	Codes	Variable name, labels	Filter
SEX Q C H		Sex	
	1	Male	
	2	Female	

YEARBIR Q C H		Year of birth	
	YYYY	Year of birth (4 digits)	
		Dissemination: usually as derived variable AGE, and AGE normally in 5-year age bands (0-4, 5-9 etc)	

PASSBIR Q C H		Passing of birthday	
	1	Yes and the reference week does not spill over into the next calendar year	
	2	No and the reference week does not spill over into the next calendar year	
	3	Yes and the reference week spills over into the next calendar year	
	4	No and the reference week spills over into the next calendar year	
		Dissemination: not disseminated, only used for calculation of variable AGE	

AGE		Age in completed years	
QDH			
	000-120	Age in completed years (3 digits)	
		Dissemination: usually in 5-year age bands (0-4, 5-9	
		etc)	

CITIZENSHIP Q C H		Country of main citizenship	
	Not blank	Country of main citizenship (SCL GEO alpha-2 code)	
	STLS	Stateless	
	FOR	Foreign citizenship but country unknown	
	Blank	Not stated	
		Dissemination: CITIZENSHIP in the anonymised microdata is provided in up to 16 country groups for reference years from 2004 onwards	

Variable identifier	Codes	Variable name, labels	Filter
COUNTRYB Q C H		Country of birth	
	Not blank	Country of birth (SCL GEO alpha-2 code)	
	FOR	Foreign-born but country of birth unknown	
	Blank	Not stated	
		Dissemination: COUNTRYB in the anonymised microdata is provided in up to 16 country groups for reference years from 2004 onwards	

COBFATH Q C H		Country of birth of the father	AGE <= 74
	Not blank	Country of birth of the father (SCL GEO alpha-2 code)	
	FOR	Father foreign-born but country of birth of the father unknown	
	Blank	Not stated	
	999	Not applicable	
		Dissemination: COBFATH in the anonymised microdata is provided in up to 16 country groups for reference years from 2004 onwards	

COBMOTH Q C H		Country of birth of the mother	AGE <= 74
	Not blank	Country of birth of the mother (SCL GEO alpha-2 code)	
	FOR	Mother foreign-born but country of birth of the mother unknown	
	Blank	Not stated	
	999	Not applicable	
		Dissemination: COBMOTH in the anonymised microdata is provided in up to 16 country groups for reference years from 2004 onwards	

MIGREAS 2Y(odd) C		Main reason for migrating	COUNTRY ≠ COUNTRYB AND 15 <= AGE <= 74
	1	Employment, job found before migrating	
	2	Employment, no job found before migrating	
	3	Family reasons	
	4	Education or training	
	5	Retirement	

6	International protection or asylum	
7	Other	
Blank	Not stated	
9	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
HHLINK Y C H		Relationship to the reference person in the household	
	01	Reference person	
	02	Partner of reference person	
	03	Son/daughter of reference person	
	04	Son/daughter-in-law of reference person	
	05	Grandchild of reference person	
	06	Parent of reference person	
	07	Parent-in-law of reference person	
	08	Grandparent of reference person	
	09	Brother/sister of reference person	
	10	Other relative	
	11	Other non-relative	
	Blank	Not stated	
	99	Not applicable	

Transcoding HHLINK			
pre-IESS FR	post-IESS FR		
HHLINK	HHLINK		
1	01		
2	02		
3	03		
4	20		
5	21		
6	11		

HHSPOU Y C H		Sequence number of partner	
	00	Person has no partner, or the partner does not belong to this household	
	01-98	Sequence number of partner in the household	
	99	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
HHFATH Y C H		Sequence number of father	
	00	Father does not belong to this household	
	01-98	Sequence number of father in the household	
	99	Not applicable	

ннмотн		Sequence number of mother	
YCH			
	00	Mother does not belong to this household	
	01-98	Sequence number of mother in the household	
	99	Not applicable	

YEARESID Q C		Duration of stay in the country of residence in completed years	
	999	Born in this country and never lived abroad for a period of at least 1 year	
	000	Less than 1 year in the country but intention to stay at least 1 year in total (residence definition)	
	001-150	Number of years in this country (since last establishing the place of usual residence in this country)	
	Blank	Not stated	
		Dissemination (from 2008) usually as follows: Aggregation of codes 010 to 149 in 5-year bands (010-014, 015-019 etc) in line with the standard aggregation of AGE.	

 $\mathbf{k}$ 

Transcoding YEARESID		
pre-IESS FR	post-IESS FR	
YEARESID	YEARESID	
00	999	
01-99	= 0 + (pre-IESS FR	
	YEARESID code-1)	
Blank	Blank	

COUNTRPR Q C		Country of previous residence	YEARESID = 000-010
	Not blank	Country of previous residence (SCL GEO alpha-2 code)	
	FOR	Foreign country but exact country of previous residence unknown	

999	Not applicable	
-----	----------------	--

## 03. Labour market participation

Variable identifier	Codes	Variable name, labels	Filter
WKSTAT Q C H		Working in the reference week	15 <= AGE <= 89
	1	Worked for pay or profit in the reference week	
	2	Absent from work or business during the reference week (self-declared)	
	3	Worked as unpaid family worker in the reference week	
	4	Neither worked nor had a job or business during the reference week	
	9	Not applicable	
		Dissemination: usually as derived variable EMPSTAT	

 $\mathbf{Z}$ 

Transcoding WKSTAT			
	pre-IESS FR		post-IESS FR
AGE	WSTATOR	STAPRO	WKSTAT
<15 or >=90	-	-	9
>=15 and <90	1	1,2,3,blank	1
>=15 and <90	1	4	3
>=15 and <90	2	1,2,3,4,blank	2
>=15 and <90	3	9	2
>=15 and <90	5	9	4

Variable identifier	Codes	Variable name, labels	Filter
ABSREAS Q C H		Main reason for absence from work during the entire reference week	WKSTAT = 2
	1	Holidays	
	2	Working time arrangements or compensation of overtime	
	3	Sick leave	
	4	Maternity or paternity leave	
	5	Job-related training	
	6	Parental leave	
	7	Off-season	
	8	Other reason	
	9	Having a job not started yet	
	Blank	Not stated	
	99	Not applicable	



Transcoding ABSREAS			
post-IESS FR	pre-IESS FR post-IESS FR		
WKSTAT	WSTATOR	NOWKREAS	ABSREAS
1,3,4,9	-	-	99
2	3	99	blank
2	2	07	01
2	2	08	02
2	2	04	03
2	2	05	04
2	2	03	05
2	2	06	06
2	2	00,01,02,09	08

The post-IESS variables are used here in a way that the resulting ILOSTAT remains unchanged in the transcoding of pre-IESS data to post-IESS variables. For this purpose, the category 'blank' in ABSREAS is used to capture former cases of layoffs (WSTATOR '3'), a category which does not have an equivalent in WKSTAT. In the transcoding of pre-IESS data to the post-IESS coding scheme, ABSREAS 'blank' is then assigned to EMPSTAT '2' (not employed) because former cases layoffs were considered as not employed.

Variable identifier	Codes	Variable name, labels	Filter
JATTACH Q C H		Job attachment	ABSREAS = 06, 07, 08, Blank
	1	Parental leave with any job-related income or benefit	
	2	Parental leave without any job-related income or benefit and with an expected duration of 3 months or less	
	3	Parental leave without any job-related income or benefit and with an expected duration of more than 3 months	
	4	Seasonal worker in off-season, regularly performing job-related tasks	
	5	Seasonal worker in off-season, not regularly performing any job-related task	
	6	Other absence where duration of absence is 3 months or less	
	7	Other absence where duration of absence is more than 3 months	
	9	Not applicable	

Transcoding JATTACH			
post-IESS FR	pre-IESS FR	post-IESS FR	
ABSREAS	SIGNISAL	JATTACH	
01,02,03,04,05,99	-	9	
06	1	8	
06	2	1	
06	3	1	
06	4,9	3	
08, blank	1	6	
08, blank	2,3,4,9	7	

Variable identifier	Codes	Variable name, labels	Filter
EMPSTAT Q D H		Being in employment	15 <= AGE <= 89
	1	Employed	
	2	Not employed	
	9	Not applicable	



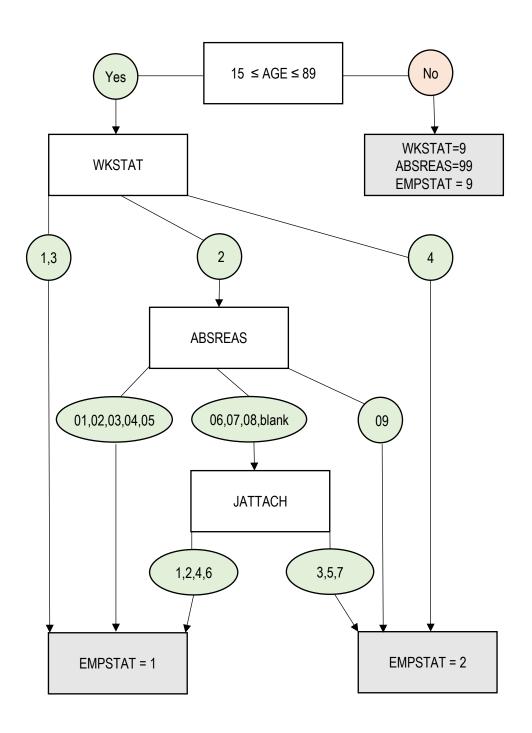
Transcoding El	Transcoding EMPSTAT			
	post-I	ESS FR		
WKSTAT	ABSREAS	JATTACH	EMPSTAT	
-	-	-	Out of sample	
1,3	-	-	1	
2	01-02-03-04- 05	9	1	
2	06	1	1	
2	06	3	2	
2	06	8	1	
2	08, blank	6	1	
2	08, blank	7	2	
4	99	9	2	
9	99	9	9	

The following table shows how EMPSTAT is derived for pre-IESS data up to 2020, where the post-IESS variables are used in a way that the resulting ILOSTAT remains unchanged. In the transcoding of ABSREAS, the 'blank' category is used to capture former cases of layoffs (WSTATOR '3'). These are assigned to EMPSTAT '2' here. JATTACH, like the former variable SIGNISAL, is not relevant for the pre-IESS derivation of EMPSTAT.

post-IESS F	post-IESS FR (EMPSTAT and ILOSTAT unchanged)			
WKSTAT	ABSREAS EMPSTAT			
-	-	Out of sample		
1,3	-	1		
2	01-05, 06, 08	1		
2	blank	2		
4	99	2		
9	99	9		

The following flowchart shows the post-IESS derivation of EMPSTAT.

### **EMPSTAT**



Variable identifier	Codes	Variable name, labels	Filter
NUMJOB Q C H		Number of jobs	EMPSTAT = 1
	1	Only one job	
	2	Two jobs	
	3	Three jobs or more	
	Blank	Not stated	
	9	Not applicable	



Transcoding NUMJOB		
post-IESS FR	pre-IESS FR	post-IESS FR
EMPSTAT	EXIST2J	NUMJOB
2,9	-	9
1	1	1
1	2	4
1	9, blank	blank

Variable identifier	Codes	Variable name, labels	Filter
SEEKWORK Q C H		Searching for employment during the 4 weeks ending in the reference week	EMPSTAT = 2 AND AGE <= 74
	1	Person is searching for employment	
	2	Person is not searching for employment and has already found a job which has not yet started but will start within a period of at most 3 months after the end of the reference week	
	3	Person is not searching for employment and has already found a job which has not yet started but will start in more than 3 months after the end of the reference week	
	4	Person is not searching for employment and has already found a job which started between the end of the reference week and the interview date	
	5	Person is not searching for employment and has not found any job to start later	
	9	Not applicable	

Z

Transcoding S	SEEKWORK			
post-IESS FR		pre-IESS FR		post-IESS FR
<b>EMPSTAT</b>	SEEKWORK	AGE	LOOKOJ	SEEKWORK
1,9	-	-	-	9
2	1	-	-	2
2	2	-	-	3
2	3	-	-	5
2	4	-	-	1
2	9	<15 or >=75	-	9
2	9	>=15 and <75	1	1
2	9	>=15 and <75	0, 9, Blank	5

Variable identifier	Codes	Variable name, labels	Filter
WANTWORK Q C H		Willingness to work even if not searching for employment	SEEKWORK = 5
	1	Person is not searching for employment but would nevertheless like to work	
	2	Person is not searching for employment and does not want to work	
	Blank	Not stated	
	9	Not applicable	

## $\mathbf{k}$

Transcoding WANTWORK						
post-IESS FR	pre-IESS FR	post-IESS FR				
SEEKWORK	WANTWORK	WANTWORK				
1,2,3,9	-	9				
5	1	1				
5	2	2				
5	9	blank				
5	blank	blank				

Variable identifier	Codes	Variable name, labels	Filter
SEEKREAS Q C		Main reason for not searching for employment	WANTWORK = 1
	1	No suitable job is available	
	2	Education or training	
	3	Own illness or disability	
	4	Care responsibilities	
	5	Other family reasons	
	6	Other personal reasons	
	7	Awaiting recall to work (lay-off)	
	8	Other reasons	
	Blank	Not stated	
	9	Not applicable	

Transcoding SEEKREAS						
post-IESS FR	pre-IESS FR	post-IESS FR				
WANTWORK	SEEKREAS	SEEKREAS				
2,9, blank	-	9				
1	1	7				
1	2	3				
1	3	4				
1	4	0				
1	5	2				
1	6	8				
1	7	1				
1	8	8				
1	blank	blank				

WANTREAS Q C		Main reason for not wanting to work	WANTWORK = 2
	1	Education or training	
	2	Own illness or disability	
	3	Care responsibilities	
	4	Other family reasons	
	5	Other personal reasons	
	6	Retirement	
	7	Other reasons	
	Blank	Not stated	
	9	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
ACTMETNE Q C H		Having used an active search method to find a job (for not employed persons)	SEEKWORK = 1
	1	Used active search method to find work	
	2	Did not use active search method to find work	
	9	Not applicable	



Transcoding	ACTM	ETNE									
post-IESS FR					pre-I	ESS FR					post-IESS FR
SEEKWOR K	МЕТНОВА	METHODB	МЕТНОВС	METHODD	METHODCE	METHODF	METHODG	МЕТНОВН	METHODI	METHODM	ACTMETNE
2,3,4,5,9	-	-	-	-	-	-	-	-	-	-	9
1	1	-	-	-	-	-	-	-	-	-	1
1	0	1	-	-	-	-	-	-	-	-	1
1	0	0	1	-	-	-	-	-	-	-	1
1	0	0	0	1	-	-	-	-	-	-	1
1	0	0	0	0	1	-	-	-	-	-	1
1	0	0	0	0	0	1	-	-	-	-	1
1	0	0	0	0	0	0	1	-	-	-	1
1	0	0	0	0	0	0	0	1	-	-	1
1	0	0	0	0	0	0	0	0	1	-	1
1	0	0	0	0	0	0	0	0	0	1	3
1	0	0	0	0	0	0	0	0	0	0	2

Pre-IESS variables METHODJ to METHODM refer to non-active search methods according the post-IESS FR definition, so they are not considered in the construction of ACTMETNE code 1.

METHODM ('other method used') was however considered an active search method up to 2020. It is therefore transcoded into an auxiliary code 3, which is not specified in the IESS regulation, to allow the rederivation of pre-IESS ILOSTAT further below.

Variable identifier	Codes	Variable name, labels	Filter
WISHMORE Q C H		Wish to work more than the current number of usual hours	EMPSTAT = 1
	1	No	
	2	Yes	
	Blank	Not stated	
	9	Not applicable	

Transcoding WISHMORE						
post-IESS FR	pre-IESS FR	post-IESS FR				
EMPSTAT	WISHMORE	WISHMORE				
2,9	-	9				
1	0	1				
1	1	2				
1	9, Blank	Blank				

AVAILBLE Q C H		Availability to start working immediately or to work more	SEEKWORK = 1, 2, 3, 4 OR WANTWORK = 1 OR WISHMORE = 2
	1	Person could start to work immediately (within 2 weeks)	
	2	Person could not start to work immediately (within 2 weeks)	
	9	Not applicable	

Transcoding AVAILBLE						
	post-IESS FR pre-IESS FR post-IESS FR					
SEEKWORK	WANTWORK	WISHMORE	AVAILBLE	AVAILBLE		
5	2, Blank	9	-	9		
9	9	1, 9 or Blank	-	9		
1,2,3	9	9	1	1		
1,2,3	9	9	2	2		
1	9	9	9	1		
3	9	9	9	2		
5	1	9	1	1		
5	1	9	2	2		
9	9	2	1	1		
9	9	2	2	2		

Variable identifier	Codes	Variable name, labels	Filter
AVAIREAS Q C		Main reason for not being available to start working immediately or to work more	AVAILBLE = 2
	1	Education or training	
	2	Own illness or disability	
	3	Care responsibilities	
	4	Other family reasons	
	5	Other personal reasons	
	6	Other reasons	
	Blank	Not stated	
	9	Not applicable	

Z

Transcoding AVAIREAS						
post-IESS FR	pre-IESS FR	post-IESS FR				
AVAILBLE	AVAIREAS	AVAIREAS				
1,9	-	9				
2	1	1				
2	4	7				
2	5	2				
2	2,3,6	6				
2	9, Blank	Blank				

Variable identifier	Codes	Variable name, labels	Filter
ILOSTAT Q D H		ILO employment status	
	1	Employed	
	2	Unemployed	
	3	Outside the labour force	



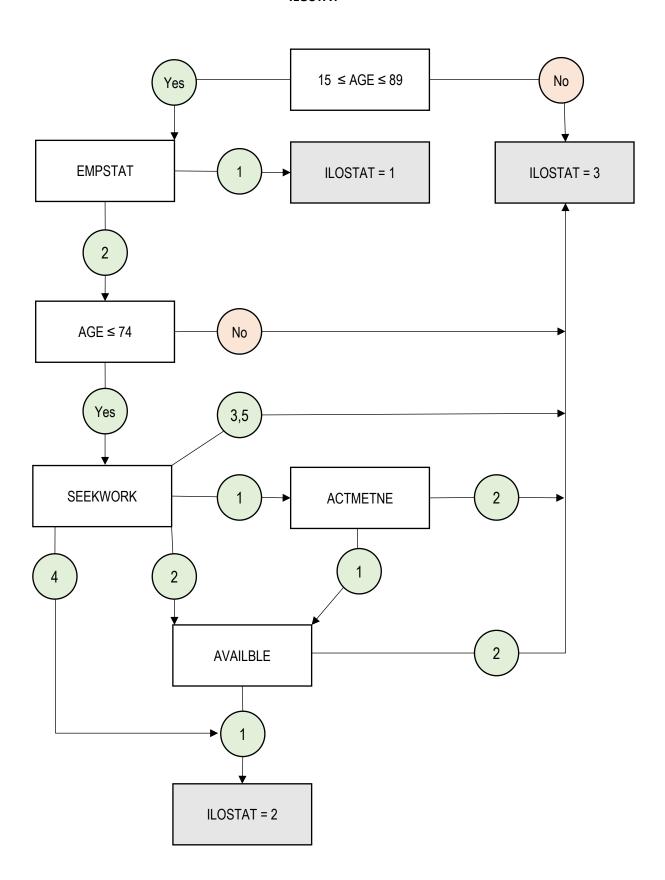
Transcoding ILOSTAT						
		post-IESS I	FR			
EMPSTAT	SEEKWORK	ACTMETNE	AVAILBLE	ILOSTAT		
9	-	-	-	3		
1	-	-	-	1		
2	5	9	-	3		
2	1	1	1	2		
2	1	1	2	3		
2	1	2, 3	1,2	3		
2	2	9	1	2		
2	2	9	2	3		
2	3	9	1,2	3		

The table above shows the transcoding for ILOSTAT which is valid with the IESS regulation from 2021. The table below shows how ILOSTAT is derived up to 2020; it shows the pre-IESS derivation using the post-IESS variables. The difference is in the assignment of the auxiliary code '3' for ACTMETNE. It is equivalent to METHODM '1' (yes) in the former coding for 'other method used'. In the post-IESS transcoding, it is assigned like ACTMETNE '2' (Did not use active search method to find work) to the outcome ILOSTAT '3'. In the derivation for the reference years up to 2020, it is assigned like ACTMETNE '1', i.e. the ILOSTAT outcome can be 2 or 3, depending on AVAILBLE.

post-IESS FR (EMPSTAT and ILOSTAT unchanged)						
EMPSTAT	SEEKWORK	ACTMETNE	AVAILBLE	ILOSTAT		
-	-	-	-	Out of sample		
9	-	-	-	3		
1	-	-	-	1		
2	5	9	-	3		
2	1	1,3	1	2		
2	1	1,3	2	3		
2	1	2	1,2	3		
2	2	9	1	2		
2	2	9	2	3		
2	3	9	1,2	3		

The following flowchart shows the post-IESS derivation of ILOSTAT.

#### **ILOSTAT**



Variable identifier	Codes	Variable name, labels	Filter
COUNTRYW Q C		Country of place of work for main job	EMPSTAT = 1
	Not blank	Country of place of work (SCL GEO alpha-2 code)	
	FOR	Foreign country but exact country of place of work unknown	
	Blank	Not stated	
	999	Not applicable	

REGIONW Q C		Region of place of work for main job	EMPSTAT = 1
	Not blank	NUTS 3 region for people working in their country of residence;	
		NUTS 2 region for people working in border regions of neighbouring countries;	
		country level information otherwise	
	Blank	Not stated	
	999	Not applicable	

HOMEWORK Y C H		Working at home for the main job	EMPSTAT = 1
	1	Person mainly works at home	
	2	Person sometimes works at home	
	3	Person never works at home	
	Blank	Not stated	
	9	Not applicable	

STAPRO Q C H		Status in employment in main job	EMPSTAT = 1
	1	Self-employed person with employees	
	2	Self-employed person without employees	
	3	Employee	
	4	Family worker (unpaid)	
	Blank	Not stated	
	9	Not applicable	
		<i>Dissemination</i> : Categories 1 and 2 are aggregated to category 0 in the anonymised microdata.	

Variable identifier	Codes	Variable name, labels	Filter
NACE3D Q C		Economic activity of the local unit for main job	EMPSTAT = 1
	010-990	NACE code at 3-digit level	
	Blank	Not stated	
	0	Not applicable	
		Dissemination: usually in aggregated form: NACE1D, NACE2D (NACE Rev 2) and NA11S, NA111D, NA112D 14 (NACE Rev 1) NACE is aggregated in the anonymised microdata in this way: NACE1D (NACE Rev 2), NA111D, NA11S (NACE Rev 1)	

ISCO4D		Occupation in main job	EMPSTAT = 1
QC			
	0000-9900	ISCO code at 4-digit level	
	Blank	Not stated	
	9999	Not applicable	
		Dissemination: usually in aggregated form: ISCO1D, ISCO2D and ISCO3D ISCO is available in the anonymised microdata in this way: ISCO1D, ISCO3D for ISCO-08 from 2011 onwards, IS881D, IS883D for ISCO-88(COM) until 2010	

FTPT Q C H		Full- or part-time main job (self-defined)	EMPSTAT = 1
	1	Full-time job	
	2	Part-time job	
	Blank	Not stated	
	9	Not applicable	

TEMP Q C H		Permanency of main job	STAPRO = 3
	1	Permanent job	
	2	Fixed-term job	
	Blank	Not stated	
	9	Not applicable	

TEMPDUR		Total duration of temporary main job	TEMP = 2
QC			
	1	Less than 1 month	
	2	From 1 to less than 3 months	
	3	From 3 to less than 6 months	

4	From 6 to less than 12 months	
5	From 12 to less than 18 months	
6	From 18 to less than 24 months	
7	From 24 to less than 36 months	
8	36 months or over	
Blank	Not stated	
9	Not applicable	



Transcoding TEMPDUR				
post-IESS FR	pre-IESS FR	post-IESS FR		
TEMP	TEMPDUR	TEMPDUR		
1,9, Blank	-	9		
2	1	1		
2	2	2		
2	3	3		
2	4	4		
2	5	5		
2	6	6		
2	7	7		
2	8	8		
2	Blank	Blank		

The transcoding table above suggests that TEMPDUR is coded in the same way before and after IESS. There has however been a change to the meaning of these codes, resulting in a shift of the duration of each period by one month, as listed in the table below.

Code	Label
1	Same meaning for pre and post 2021 data
2	From 1 to less than 4 months in pre 2021 data
2	From 1 to less than 3 months in post 2021 data
3	From 4 to less than 7 months in pre 2021 data
3	From 3 to less than 6 months in post 2021 data
4	From 7 to less than 13 months in pre 2021 data
4	From 6 to less than 12 months in post 2021 data
5	From 13 to less than 19 months in pre 2021 data
	From 12 to less than 18 months in post 2021 data
6	From 19 to less than 25 months in pre 2021 data
U	From 18 to less than 24 months in post 2021 data
7	From 25 to less than 37 months in pre 2021 data
'	From 24 to less than 36 months in post 2021 data

8	37 months or over in pre 2021 data 36 months or over in post 2021 data
Blank	Not stated
9	Not applicable

Variable identifier	Codes	Variable name, labels	Filter
TEMPREAS Y C		Main reason for having a temporary main job	TEMP = 2
	1	Could not find a permanent job	
	2	Did not want a permanent job	
	3	Fixed-term probationary contract	
	4	Apprenticeship	
	5	Training other than apprenticeship (trainees, internships, research assistants, etc.)	
	6	This type of job is only available with a temporary contract	
	7	Other reasons	
	Blank	Not stated	
	9	Not applicable	

Transcoding TEMPREAS				
post-IESS FR	pre-IESS FR	post-IESS FR		
TEMP	TEMPREAS	TEMPREAS		
1,9, Blank	-	9		
2	1	8		
2	2	1		
2	3	2		
2	4	3		
2	5	4		
2	6	5		
2	Blank	Blank		

Variable identifier	Codes	Variable name, labels	Filter
TEMPAGCY Y C		Contract with a temporary employment agency for the main job	STAPRO = 3
	1	No	
	2	Yes	
	Blank	Not stated	
	9	Not applicable	

Transcoding TEMPAGCY				
post-IESS FR	pre-IESS FR	post-IESS FR		
STAPRO	TEMPAGCY	TEMPAGCY		
1,2,4,9,Blank	-	9		
3	0	1		
3	1	2		
3	Blank	Blank		

FTPTREAS Q C		Main reason for part-time work in the main job	FTPT = 2
	1	Education or training	
	2	Own illness or disability	
	3	Care responsibilities	
	4	Other family reasons	
	5	Other personal reasons	
	6	Could not find a full-time job	
	7	Other reasons	
	Blank	Not stated	
	9	Not applicable	

Transcoding FTPTREAS			
post-IESS FR	pre-IESS FR	post-IESS FR	
FTPT	FTPTREAS	FTPTREAS	
1,9, Blank	-	9	
2	1	1	
2	2	2	
2	3	3	
2	4	8	
2	5	6	
2	6	7	
2	Blank	Blank	

Variable identifier	Codes	Variable name, labels	Filter
MAINCLNT Y C		Number and importance of clients in the 12 months ending with the reference week	STAPRO = 1, 2
	1	Only one client in the 12 months ending with the reference week	
	2	2-9 clients in the 12 months ending with the reference week, but one was dominant	
	3	2-9 clients in the 12 months ending with the reference week, and none was dominant	
	4	10 clients or more in the 12 months ending with the reference week, but one was dominant	
	5	10 clients or more in the 12 months ending with the reference week, and none was dominant	
	6	No client in the 12 months ending with the reference week	
	Blank	Not stated	
	9	Not applicable	

VARITIME Y C		Decision on the start and end of working time	EMPSTAT = 1
	1	Worker can fully decide him/herself	
	2	Worker can decide under flexible working time arrangements	
	3	Employer, organisation, or client(s) decides	
	4	Any other party decides	
	Blank	Not stated	
	9	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
SUPVISOR Y C		Supervisory responsibilities in main job	STAPRO = 3
	1	Yes	
	2	No	
	Blank	Not stated	
	9	Not applicable	

SIZEFIRM Y C		Size of the local unit for main job	EMPSTAT = 1
	01-09	Exact number of people, if between 1 and 9	
	10	10 to 19 people	
	11	20 to 49 people	
	12	50 to 249 people	
	13	250 people or more	
	14	Do not know but less than 10 people	
	15	Do not know but 10 people or more	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: The exact number of people in categories 01 to 09 is aggregated into one category.	

Transcoding SIZEFIRM			
post-IESS FR	pre-IESS FR	post-IESS FR	
EMPSTAT	SIZEFIRM	SIZEFIRM	
2,9	-	99	
1	01 to 09	= pre-IESS FR	
		SIZEFIRM code	
1	10, 11	10	
1	12	11	
1	13	23	
1	14	24	
1	15	25	
1	99,Blank	Blank	

LOOKOJ Y C		Looking for another job	EMPSTAT = 1
	1	Person is not looking for another job	
	2	Person is looking for another job	
	Blank	Not stated	
	9	Not applicable	

K

Transcoding LOOKOJ		
post-IESS FR	pre-IESS FR	post-IESS FR
EMPSTAT	LOOKOJ	LOOKOJ
2,9	-	9
1	0	1
1	1	2
1	9,Blank	Blank

Variable identifier	Codes	Variable name, labels	Filter
HWWISH Y C		Number of hours that the person would like to work in total in a week	EMPSTAT = 1
	0-98	Number of hours wished to work in total in a week	
	Blank	Not stated	
	99	Not applicable	

SEEKDUR Q C		Duration of search for employment	SEEKWORK = 1, 2, 4
	1	Less than 1 month	
	2	1 to 2 months	
	3	3 to 5 months	
	4	6 to 11 months	
	5	12 to 17 months	
	6	18 to 23 months	
	7	24 to 47 months	
	8	4 years or longer	
	Blank	Not stated	
	9	Not applicable	
		Dissemination: In the anonymised microdata, SEEKDUR and the derived DURUNE are aggregated in 4 groups: up to 5 months, 6 to 11 months, 12 to 23 months, 24 months or more	

 $\mathbf{k}$ 

Transcoding SEEKDUR		
post-IESS FR	pre-IESS FR	post-IESS FR
SEEKWORK	SEEKDUR	SEEKDUR
3,5,9	-	9
1,2	1	1
1,2	2	2
1,2	3	3
1,2	4	4

1,2	5	5
1,2	6	6
1,2	7	7
1,2	8	8
1,2	0, Blank	Blank

Variable identifier	Codes	Variable name, labels	Filter
NEEDCARE Y C		Main reason why care for children or incapacitated relatives limits labour market participation	SEEKREAS = 4 OR WANTREAS = 3 OR FTPTREAS = 3 OR AVAIREAS = 3
	1	Relevant care services not available	
	2	Relevant care services not affordable	
	3	Want to provide care themselves	
	4	Other factors were decisive	
	Blank	Not stated	
	9	Not applicable	

Transcoding NEEDCARE					
post-IE	post-IESS FR pre-IESS FR post-IESS FR				
SEEKREAS	FTPTREAS	NEEDCARE	NEEDCARE		
1,2,3, 7,8,9,	1,2,6,7,8,9, Blank	-	9		
0,Blank					
4	9	1,2,3	5		
4	9	4	6		
4	9	Blank	Blank		
9	3	1,2,3	5		
9	3	4	6		
9	3	Blank	Blank		

STAPRO2J		Status in employment in second job	NUMJOB = 2, 3
QC			
	1	Self-employed person with employees	
	2	Self-employed person without employees	
	3	Employee	
	4	Family worker (unpaid)	
	Blank	Not stated	
	9	Not applicable	
		<i>Dissemination</i> : Categories 1 and 2 are aggregated to category 0 in the anonymised microdata.	

Variable identifier	Codes	Variable name, labels	Filter
NACE2J2D Q C		Economic activity of the local unit for second job	NUMJOB = 2, 3
	01-99	NACE code at 2-digit level	
	Blank	Not stated	
	00	Not applicable	
		Dissemination: at 1-digit level in the anonymised microdata	

MAINSTAT Q C H		Main activity status (self-defined)	15 <= AGE <= 89
	1	Employed	
	2	Unemployed	
	3	Retired	
	4	Unable to work due to long-standing health problems	
	5	Student, pupil	
	6	Fulfilling domestic tasks	
	7	Compulsory military or civilian service	
	8	Other	
	Blank	Not stated	
	9	Not applicable	

 $\mathbf{k}$ 

Transcoding MAINSTAT			
post-IESS FR	pre-IESS FR	post-IESS FR	
WKSTAT	MAINSTAT	MAINSTAT	
9	-	9	
1,2,3,4	1	1	
1,2,3,4	2	2	
1,2,3,4	3	5	
1,2,3,4	4	3	
1,2,3,4	5	4	
1,2,3,4	6	7	
1,2,3,4	7	6	
1,2,3,4	8	8	
1,2,3,4	Blank	Blank	

### 04. Educational attainment and background

Variable identifier	Codes	Variable name, labels	Filter
HATLEVEL Q C H		Educational attainment level (highest level of education successfully completed)	15 <= AGE <= 89
	000	No formal education or below ISCED 1	
	100	ISCED 1 Primary education	
	200	ISCED 2 Lower secondary education	
	342	ISCED 3 Upper secondary education (general) — partial level completion, without direct access to tertiary education	
	343	ISCED 3 Upper secondary education (general) — level completion, without direct access to tertiary education	
	344	ISCED 3 Upper secondary education (general) — level completion, with direct access to tertiary education	
	349	ISCED 3 Upper secondary education (general) — without possible distinction of access to tertiary education	
	352	ISCED 3 Upper secondary education (vocational) — partial level completion, without direct access to tertiary education	
	353	ISCED 3 Upper secondary education (vocational) — level completion, without direct access to tertiary education	
	354	ISCED 3 Upper secondary education (vocational) — level completion, with direct access to tertiary education	
	359	ISCED 3 Upper secondary education (vocational) — without possible distinction of access to tertiary education	
	392	ISCED 3 Upper secondary education (orientation unknown) — partial level completion, without direct access to tertiary education	
	393	ISCED 3 Upper secondary education (orientation unknown) — level completion, without direct access to tertiary education	
	394	ISCED 3 Upper secondary education (orientation unknown) — level completion, with direct access to tertiary education	
	399	ISCED 3 Upper secondary education (orientation unknown) — without possible distinction of access to tertiary education	

44	10	ISCED 4 Post-secondary non-tertiary education — general	
45	50	ISCED 4 Post-secondary non-tertiary education — vocational	
49	90	ISCED 4 Post-secondary non-tertiary education — orientation unknown	
54	10	ISCED 5 Short-cycle tertiary education — general	
55	50	ISCED 5 Short-cycle tertiary education — vocational	
59	90	ISCED 5 Short-cycle tertiary education — orientation unknown	
60	00	ISCED 6 Bachelor's or equivalent level	
70	00	ISCED 7 Master's or equivalent level	
80	00	ISCED 8 Doctoral or equivalent level	
Bla	ank	Not stated	
99	99	Not applicable	
		Dissemination: Highest educational attainment level usually as derived variable HATLEV1D aggregated to 3 levels	

post-IESS FR	pre-IESS FR	2014-2020	post-IESS FR
AGE	HATLEVEL	HATVOC	HATLEVEL
<15 or >=90	-	-	999
>=15 and <90	000	9	000
>=15 and <90	100	9	100
>=15 and <90	200	9	200
>=15 and <90	302	1	342
>=15 and <90	303	1	343
>=15 and <90	304	1	344
>=15 and <90	300	1	349
>=15 and <90	302	2	352
>=15 and <90	303	2	353
>=15 and <90	304	2	354
>=15 and <90	300	2	359
>=15 and <90	302	9, Blank	392
>=15 and <90	303	9, Blank	393
>=15 and <90	304	9, Blank	394
>=15 and <90	300	9, Blank	399
>=15 and <90	400	1	440
>=15 and <90	400	2	450
>=15 and <90	400	9, Blank	490
>=15 and <90	500	9	500
>=15 and <90	600	9	600
>=15 and <90	700	9	700
>=15 and <90	800	9	800
>=15 and <90	Blank	9	Blank

Transcoding HATLEVEL			
post-IESS FR	pre-IESS FR	pre-IESS FR 2006-2013	
AGE	HATLEVEL	HATVOC	HATLEVEL
<15 or >=90	-	-	999
>=15 and <90	00	-	000
>=15 and <90	11	-	100
>=15 and <90	21, 22	-	200
>=15 and <90	31	-	393
>=15 and <90	32	-	394
>=15 and <90	30	-	399
>=15 and <90	41, 42, 43	-	490
>=15 and <90	52	-	540
>=15 and <90	51	-	550
>=15 and <90	60	-	900
>=15 and <90	Blank	-	Blank

Variable identifier	Codes	Variable name, labels	Filter
<b>HATFIELD</b> Y C		Field of the highest level of education successfully completed	HATLEVEL = 342-800
	001	Basic programmes and qualifications	
	002	Literacy and numeracy	
	003	Personal skills and development	
	009	Generic programmes and qualifications not further defined	
	011	Education	
	018	Inter-disciplinary programmes and qualifications involving education	
	021	Arts	
	022	Humanities (except languages)	
	023	Languages	
	028	Inter-disciplinary programmes and qualifications involving arts and humanities	
	029	Arts and humanities not further defined	
	031	Social and behavioural sciences	
	032	Journalism and information	
	038	Inter-disciplinary programmes and qualifications involving social sciences, journalism and information	
	039	Social sciences, journalism and information not further defined	
	041	Business and administration	
	042	Law	
	048	Inter-disciplinary programmes and qualifications involving business, administration and law	
	049	Business, administration and law not further defined	
	051	Biological and related sciences	
	052	Environment	
	053	Physical sciences	
	054	Mathematics and statistics	
	058	Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics	
	059	Natural sciences, mathematics and statistics not further defined	
	061	Information and Communication Technologies (ICTs)	
	068	Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)	

071	Engineering and engineering trades	
072	Manufacturing and processing	
073	Architecture and construction	
078	Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction	
079	Engineering, manufacturing and construction not further defined	
081	Agriculture	
082	Forestry	
083	Fisheries	
084	Veterinary	
088	Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary	
089	Agriculture, forestry, fisheries and veterinary not further defined	
091	Health	
092	Welfare	
098	Inter-disciplinary programmes and qualifications involving health and welfare	
099	Health and welfare not further defined	
101	Personal services	
102	Hygiene and occupational health services	
103	Security services	
104	Transport services	
108	Inter-disciplinary programmes and qualifications involving services	
109	Services not further defined	
Blank	Not stated	
999	Not applicable	

Transcoding HATFIELD					
post-IESS FR	pre-IESS FR 2016- 2020	post-IESS FR			
HATLEVEL	HATFIELD	HATFIELD			
000, 100, 200, 999, Blank	-	999			
>=342 and <=800	0000	000			
>=342 and <=800	0100	010			
>=342 and <=800	0200	020			
>=342 and <=800	0300	030			
>=342 and <=800	0400	040			
>=342 and <=800	0500	050			
>=342 and <=800	0600	060			

>=342 and <=800	0700	070
>=342 and <=800	0800	080
>=342 and <=800	0900	090
>=342 and <=800	1000	100
>=342 and <=800	8888, Blank	Blank
>=342 and <=800	9999	Blank

Variable identifier	Codes	Variable name, labels	Filter
<b>HATYEAR</b> Y C H		Year when the highest level of education was successfully completed	HATLEVEL = 100-800
	YYYY	Year when the highest level of education was successfully completed (4 digits)	
	Blank	Not stated	
	9999	Not applicable	

HATWORK Y C		Work experience at a workplace as part of HATLEVEL	HATLEVEL = 342-800 AND 20 <= AGE <= 34
	1	Work experience(s) at a workplace from 1 to 6 months, at least one paid	
	2	Work experience(s) at a workplace from 1 to 6 months, all unpaid	
	3	Work experience(s) at a workplace 7 months or over, at least one paid	
	4	Work experience(s) at a workplace 7 months or over, all unpaid	
	5	No or less than 1 month work experience	
	Blank	Not stated	
	9	Not applicable	

### 05. Job tenure, work biography and previous work experience

Variable identifier	Codes	Variable name, labels	Filter
YSTARTWK Q C		Year in which person started working for current employer or as self-employed in current main job	EMPSTAT = 1
	YYYY	Year concerned (4 digits)	
	Blank	Not stated	
	9999	Not applicable	
		Dissemination: usually via derived variable STARTIME	

MSTARTWK Q C		Month in which person started working for current employer or as self-employed in current main job	YSTARTWK ≠ 9999, Blank AND (REFYEAR — YSTARTWK) <= 2
	1-12	Month concerned	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: usually via derived variable STARTIME	

Variable identifier	Codes	Variable name, labels	Filter
WAYJFOUN Y C		Public employment service helped to find the current main job	(EMPSTAT = 1) AND ((YSTARTWK = REFYEAR) OR (YSTARTWK = REFYEAR — 1 AND 01 <= MSTARTWK <= 12 AND MSTARTWK > REFMONTH))
	1	Yes	
	2	No	
	Blank	Not stated	
	9	Not applicable	



Transcodin	g WAYJFOUN			
	post-IESS FR	pre-IESS FR	post-IESS FR	
<b>EMPSTAT</b>	YSTARTWK	MSTARTWK	WAYJFOUN	WAYJFOUN
2,9	-	-	-	9
1	YSTARTWK < = (REFYEAR-2)	-	-	9
1	Blank	-	-	9
1	YSTARTWK = (REFYEAR-1)	MSTARTWK <= REFMONTH	-	9
1	YSTARTWK = (REFYEAR-1)	Blank	-	9
1	YSTARTWK = (REFYEAR-1)	MSTARTWK > REFMONTH	0	2
1	YSTARTWK = (REFYEAR-1)	MSTARTWK > REFMONTH	1	1
1	YSTARTWK = (REFYEAR-1)	MSTARTWK > REFMONTH	9, Blank	Blank
1	YSTARTWK = REFYEAR	-	0	2
1	YSTARTWK = REFYEAR	-	1	1
1	YSTARTWK = REFYEAR	-	9, Blank	Blank

Variable identifier	Codes	Variable name, labels	Filter
FINDMETH Y C		Most effective method used to find the current main job (for persons in employment)	STAPRO = 3 AND (YSTARTWK ≠ 9999, Blank) AND (REFYEAR — YSTARTWK <= 7)
	01	Job advertisements	
	02	Friends, relatives or acquaintances	
	03	Public employment service	
	04	Private employment agency	
	05	Education or training institution, internship or previous work experience	
	06	Contacted employer directly	
	07	Employer contacted person directly	
	08	Applying for a public competition	
	09	Other method	
	Blank	Not stated	
	99	Not applicable	

EXISTPR		Existence of previous employment experience	EMPSTAT = 2
QC			
	1	Person has never been in employment	
	2	Person has employment experience limited to occasional work	
	3	Person has employment experience other than occasional work	
	Blank	Not stated	
	9	Not applicable	

Transcoding EXISTPR		
post-IESS FR	pre-IESS FR	post-IESS FR
EMPSTAT	EXISTPR	EXISTPR
1,9	-	9
2	0	4
2	1	3
2	9, Blank	Blank

YEARPR Q C		Year in which person left the last job or business	EXISTPR = 2, 3
	YYYY	Year concerned (4 digits)	
	Blank	Not stated	
	9999	Not applicable	
		Dissemination: usually via derived variable LEAVTIME	

Variable identifier	Codes	Variable name, labels	Filter
MONTHPR Q C		Month in which person left the last job or business	YEARPR ≠ 9999, Blank AND REFYEAR — YEARPR <= 2
	1-12	Month concerned	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: usually via derived variable LEAVTIME	

<b>LEAVREAS</b> Q C		Main reason for leaving last job or business	(EXISTPR = 2, 3) AND (YEARPR ≠ 9999, Blank) AND (REFYEAR — YEARPR <= 7)
	01	Dismissal or business closed for economic reasons	
	02	A fixed-term job has ended	
	03	Care responsibilities	
	04	Other family reasons	
	05	Education or training	
	06	Own illness and disability	
	07	Retirement	
	08	Other personal reasons	
	09	Other reasons	
	Blank	Not stated	
	99	Not applicable	

Transcoding LEAVREAS				
post-	IESS FR	pre-IESS FR	post-IESS FR	
EXISTPR	YEARPR	LEAVREAS	LEAVREAS	
4,9,Blank	-	-	99	
3	Blank	-	99	
3	REFYEAR -	-	99	
	YEARPR > 7			
3	REFYEAR -	00	01	
	YEARPR <= 7			
3	REFYEAR -	01	02	
	YEARPR <= 7			
3	REFYEAR -	02	03	
	YEARPR <= 7			
3	REFYEAR -	03	10	
	YEARPR <= 7			
3	REFYEAR -	04	06	
	YEARPR <= 7			

3	REFYEAR - YEARPR <= 7	05	05
3	REFYEAR - YEARPR <= 7	06	07
3	REFYEAR - YEARPR <= 7	07	07
3	REFYEAR - YEARPR <= 7	08	09
3	REFYEAR - YEARPR <= 7	09	09
3	REFYEAR - YEARPR <= 7	Blank	Blank

Variable identifier	Codes	Variable name, labels	Filter
STAPROPR Y C		Status in employment in last job or business	(EXISTPR = 2, 3) AND (YEARPR ≠ 9999, Blank) AND (REFYEAR — YEARPR <= 7)
	1	Self-employed person with employees	
	2	Self-employed person without employees	
	3	Employee	
	4	Family worker (unpaid)	
	Blank	Not stated	
	9	Not applicable	
		Dissemination: Categories 1 and 2 are aggregated to category 0 in the anonymised microdata.	

NACEPR2D Y C		Economic activity of the local unit in which person last worked	(EXISTPR = 2, 3) AND (YEARPR ≠ 9999, Blank) AND (REFYEAR — YEARPR <= 7)
	01-99	NACE code at 2-digit level	
	Blank	Not stated	
	00	Not applicable	

ISCOPR3D Y C		Occupation in the last job	(EXISTPR = 2, 3) AND (YEARPR ≠ 9999, Blank) AND (REFYEAR — YEARPR <= 7)
	000-990	ISCO code at 3-digit level	
	Blank	Not stated	
	999	Not applicable	

### 06. Working conditions including working hours and working time arrangements

Variable identifier	Codes	Variable name, labels	Filter
CONTRHRS Q C		Contractual working hours in main job	STAPRO = 3
	1-95	Number of working hours per week in the contract or agreement (with one possible decimal for half hours)	
	96	Has a contract or agreement without specified hours	
	97	Does not have a contract or agreement	
	Blank	Not stated	
	99	Not applicable	

HWUSUAL Q C H		Number of hours per week usually worked in main job	EMPSTAT = 1
	1-95	Number of hours usually worked in the main job (with one possible decimal for half hours)	
	97	Hours worked vary from week to week	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: hours greater than 80 are aggregated in a single category in the anonymised microdata	

V

Transcoding HWUSUAL				
post-IESS FR	pre-IESS FR	post-IESS FR		
EMPSTAT	HWUSUAL	HWUSUAL		
2,9	-	99		
1	00	97		
1	01-95	01-95		
1	96-98	95		
1	99, Blank	Blank		

Variable identifier	Codes	Variable name, labels	Filter
ABSHOLID Q C		Days of absence from main job due to holidays and leave	EMPSTAT = 1
	0-7	Number of days of absence (with one possible decimal for half days)	
	Blank	Not stated	
	9	Not applicable	

ABSILLINJ Q C		Days of absence from main job due to own illness, injury or temporary disability	EMPSTAT = 1
	0-7	Number of days of absence (with one possible decimal for half days)	
	Blank	Not stated	
	9	Not applicable	

ABSOTHER Q C		Days of absence from main job due to other reasons	EMPSTAT = 1
	0-7	Number of days of absence (with one possible decimal for half days)	
	Blank	Not stated	
	9	Not applicable	

EXTRAHRS Q C		Overtime or extra hours worked in main job	WKSTAT = 1, 3
	0	No overtime or extra hours in the main job	
	0.5-95,	Number of hours of overtime or extra hours in the main job (with one possible decimal for half hours)	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: hours greater than 80 are aggregated in a single category in the anonymised microdata	

 $\mathbf{k}$ 

Transcoding EXTRAHRS				
post-IESS FR	pre-II	ESS FR	post-IESS FR	
WKSTAT	HWOVERP	HWOVERPU	EXTRAHRS	
2,4,9	-	-	999	
1,3	00-98	00-98	= (HWOVERP + HWOVERPU)	
1,3	00-98	Blank	= HWOVERP	
1,3	Blank	00-98	= HWOVERPU	
1,3	99	99	Blank	
1,3	Blank	Blank	Blank	

Variable identifier	Codes	Variable name, labels	Filter
HWACTUAL Q C H		Number of hours actually worked in main job	EMPSTAT = 1
	0	Did not work in the main job in the reference week	
	1-95	Number of hours actually worked in the main job (with one possible decimal for half hours)	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: hours greater than 80 are aggregated in a single category in the anonymised microdata	

Transcoding HWACTUAL			
post-IESS FR	pre-IESS FR	post-IESS FR	
EMPSTAT	HWACTUAL	HWACTUAL	
2,9	-	99	
1	00	0	
1	01-95	= pre-IESS FR	
		HWACTUAL	
1	96-98	95	
1	99, Blank	Blank	

Variable identifier	Codes	Variable name, labels	Filter
HWUSU2J Q C		Number of hours per week usually worked in second job	NUMJOB = 2, 3
	1-95	Number of hours usually worked in the second job (with one possible decimal for half hours)	
	97	Hours worked vary from week to week	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: hours greater than 80 are aggregated in a single category in the anonymised microdata	

HWACTU2J		Number of hours actually worked in second job	NUMJOB = 2, 3
QC			
	0	Did not work in the second job in the reference week	
	1-95	Number of hours actually worked in the second job (with one possible decimal for half hours)	
	Blank	Not stated	
	99	Not applicable	
		Dissemination: hours greater than 80 are aggregated in a single category in the anonymised microdata	

Transcoding HWACTU2J				
post-IESS FR	pre-IESS FR	post-IESS FR		
NUMJOB	HWACTUA2	HWACTU2J		
1,9,Blank	-	99		
4	00	0		
4	01-95	= pre-IESS FR		
		HWACTUA2		
4	96-98	95		
4	Blank	Blank		

SHIFTWK 2Y(odd) C		Shift work in main job	STAPRO = 3
	1	Person usually does shift work	
	3	Person never does shift work	
	Blank	Not stated	
	9	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
EVENWK 2Y(odd) C		Evening work in main job	EMPSTAT = 1
	1	Person frequently works in the evening	
	2	Person sometimes works in the evening	
	3	Person never works in the evening	
	Blank	Not stated	
	9	Not applicable	

NIGHTWK 2Y(odd) C		Night work in main job	EMPSTAT = 1
	1	Person frequently works at night	
	2	Person sometimes works at night	
	3	Person never works at night	
	Blank	Not stated	
	9	Not applicable	

SATWK 2Y(odd) C		Saturday work in main job	EMPSTAT = 1
	1	Person frequently works on Saturdays	
	2	Person sometimes works on Saturdays	
	3	Person never works on Saturdays	
	Blank	Not stated	
	9	Not applicable	

SUNWK 2Y(odd) C		Sunday work in main job	EMPSTAT = 1
	1	Person frequently works on Sundays	
	2	Person sometimes works on Sundays	
	3	Person never works on Sundays	
	Blank	Not stated	
	9	Not applicable	

### 07. Participation in education and training

Variable identifier	Codes	Variable name, labels	Filter
EDUCFED4 Q C H		Participation in formal education and training (student or apprentice) in the last 4 weeks	15 <= AGE <= 74
	1	Yes (includes students on holidays)	
	2	No	
	Blank	Not stated	
	9	Not applicable	

 $\mathbf{k}$ 

Transcoding EDUCFED	4	
post-IESS FR	pre-IESS FR	post-IESS FR
AGE	EDUCSTAT	EDUCFED4
<15 or >=75	-	9
>=15 and <75	1, 3	1
>=15 and <75	2	2
>=15 and <75	Blank	Blank

Variable identifier	Codes	Variable name, labels	Filter
EDUCLEV4 Q C		Level of the most recent formal education or training activity in the last 4 weeks	EDUCFED4 = 1
	10	ISCED 1 Primary education	
	20	ISCED 2 Lower secondary education	
	34	ISCED 3 Upper secondary education — general	
	35	ISCED 3 Upper secondary education — vocational	
	39	ISCED 3 Upper secondary education — orientation unknown	
	44	ISCED 4 Post-secondary non-tertiary education — general	
	45	ISCED 4 Post-secondary non-tertiary education — vocational	
	49	ISCED 4 Post-secondary non-tertiary education — orientation unknown	
	54	ISCED 5 Short-cycle tertiary education — general	
	55	ISCED 5 Short-cycle tertiary education — vocational	
	59	ISCED 5 Short-cycle tertiary education — orientation unknown	
	60	ISCED 6 Bachelor's or equivalent level	
	70	ISCED 7 Master's or equivalent level	
	80	ISCED 8 Doctoral or equivalent level	
	Blank	Not stated	
	99	Not applicable	

# $\mathbf{Z}$

ranscoding EDU	JCLEV4		
post-IESS FR	pre-IESS FR 2014-2020		post-IESS FF
EDUCFED4	EDUCLEVL	EDUCVOC	EDUCLEV4
2, 9, Blank	-	-	99
1	1	9	10
1	2	9	20
1	3	1	34
1	3	2	35
1	3	Blank	39
1	4	1	44
1	4	2	45
1	4	Blank	49
1	5	9	50
1	6	9	60
1	7	9	70
1	8	9	80
1	Blank	9	Blank

post-IESS FR	pre-IESS F	pre-IESS FR 2003-2013	
EDUCFED4	EDUCLEVL	EDUCVOC	EDUCLEV4
2, 9, Blank	-	-	99
1	1	-	10
1	2	-	20
1	3	-	39
1	4	-	49
1	5	-	50
1	6	-	90
1	Blank	-	Blank

Variable identifier	Codes	Variable name, labels	Filter
EDUCNFE4 Q C H		Participation in non-formal education and training in the last 4 weeks	15 <= AGE <= 74
	1	Participating in at least one job-related non-formal education or training activity	
	2	Participating only in non-job-related/personal non- formal education or training activities	
	3	Not participating in any non-formal education or training activity	
	Blank	Not stated	
	9	Not applicable	

Transcoding EDUCNFE4				
post-IESS FR	pre-IESS FR	post-IESS FR		
AGE	COURATT	EDUCNFE4		
<15 or >=75	-	9		
>=15 and <75	1	4		
>=15 and <75	2	3		
>=15 and <75	Blank	Blank		

EDUCFED12 2Y(even) C		Participation in formal education and training (student or apprentice) in the last 12 months	15 <= AGE <= 74
	1	Yes	
	2	No	
	Blank	Not stated	
	9	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
EDUCLEV12 2Y(even) C		Level of the most recent formal education or training activity in the last 12 months	EDUCFED12 = 1
	10	ISCED 1 Primary education	
	20	ISCED 2 Lower secondary education	
	34	ISCED 3 Upper secondary education — general	
	35	ISCED 3 Upper secondary education — vocational	
	39	ISCED 3 Upper secondary education — orientation unknown	
	44	ISCED 4 Post-secondary non-tertiary education — general	
	45	ISCED 4 Post-secondary non-tertiary education — vocational	
	49	ISCED 4 Post-secondary non-tertiary education — orientation unknown	
	54	ISCED 5 Short-cycle tertiary education — general	
	55	ISCED 5 Short-cycle tertiary education — vocational	
	59	ISCED 5 Short-cycle tertiary education — orientation unknown	
	60	ISCED 6 Bachelor's or equivalent level	
	70	ISCED 7 Master's or equivalent level	
	80	ISCED 8 Doctoral or equivalent level	
	Blank	Not stated	
	99	Not applicable	

EDUCNFE12 2Y(even) C		Participation in non-formal education and training in the last 12 months	15 <= AGE <= 74
	1	Participating in at least one job-related non-formal education or training activity	
	2	Participating only in non-job-related/personal non- formal education or training activities	
	3	Not participating in any non-formal education or training activity	
	Blank	Not stated	
	9	Not applicable	

# 08. Health: status and disability, access to, availability and use of health care and health determinants

Variable identifier	Codes	Variable name, labels	Filter
GENHEALTH 2Y(even) C		Self-perceived general health	15 <= AGE <= 89
	1	Very good	
	2	Good	
	3	Fair (neither good nor bad)	
	4	Bad	
	5	Very bad	
	Blank	Not stated	
	9	Not applicable	

GALI 2Y(even) C		Limitation in activities because of health problems	15 <= AGE <= 89
	1	Severely limited	
	2	Limited but not severely	
	3	Not limited at all	
	Blank	Not stated	
	9	Not applicable	

INCGROSS Y C H		Gross monthly pay from the main job	STAPRO = 3
	00000000— 99999998	Gross monthly pay from main job (8 digits), including the proportionally part of payments made on a higher than monthly periodicity (National currency)	
	Blank	Not stated	
	9999999	Not applicable	
		Dissemination: in quantiles; details to follow.	

# 09. Income, consumption and elements of wealth, including debts

Variable identifier	Codes	Variable name, labels	Filter
INCGROSS_F Y C T		Flag on gross monthly pay from main job	STAPRO = 3
	11	Gross income collected and no imputation for item non-response/inconsistency	
	12	Gross income collected and imputation for item non-response/inconsistency from the labour force survey (LFS)	
	13	Gross income collected and imputation for item non-response/inconsistency from an administrative data source	
	14	Gross income collected and imputation for item non-response/inconsistency from other data source(s)	
	21	Net-to-gross conversion applied and no imputation (net amount available and no imputation for non-response/inconsistency)	
	22	Imputed net income for item non- response/inconsistency from the LFS and net-to-gross conversion applied (net amount not available and imputation applied for the net value)	
	23	Imputed net income for item non- response/inconsistency from an administrative data source and net-to-gross conversion applied (net amount not available and imputation applied for the net value)	
	24	Imputed net income for item non- response/inconsistency from other data source(s) and net-to-gross conversion applied (net amount not available and imputation applied for the net value)	
	25	Imputed gross income for item non- response/inconsistency (net amount not available and imputation applied directly for the gross value; no net-to-gross conversion applied)	
	Blank	Not stated	
	99	Not applicable	

Variable identifier	Codes	Variable name, labels	Filter
REGISTER Q C		Registration at a public employment service (PES)	15 <= AGE <= 74
	1	Person is registered at a public employment service and receives benefit or assistance	
	2	Person is registered at a public employment service but does not receive benefit or assistance	
	3	Person is not registered at a public employment service but receives benefit or assistance	
	4	Person is not registered at a public employment service and does not receive benefit or assistance	
	Blank	Not stated	
	9	Not applicable	

## 4.2 Derived variables for labour market analysis

#### 4.2.1 Technical items

#### YEAR, QUARTER

The Labour Force Survey is distributed along the 52 or 53 weeks of the reference year. The year of the survey and the reference month and reference week related to each interview are recorded in the core variables REFYEAR, REFMONTH and REFWEEK.

Weeks are coded using the norm ISO 8601 indicating that, according to the Gregorian calendar, the first week of a year is the one that includes the first Thursday of that year (which is equivalent to the week that includes 4th January). A similar Thursday rule is applied to determine the reference month, which always consists of four or five complete reference weeks.

All reference weeks are assigned to survey quarters (QUARTER) according to this rule as well. Quarter 1 usually covers the weeks 1 to 13, quarter 4 the weeks 40 to 52, but there can be slight deviations from this general rule for certain years. For further details see Commission Implementing Regulation (EU) 2019/2240, Article 5. Annex I of the <u>explanatory notes</u> provides a detailed listing of the allocation of reference weeks to quarters.

It may occur in some data before 2008 that the YEAR is not identical to REFYEAR. This is due to the organisation of the survey in several countries in the past, when survey quarters were shifted and started up to one month earlier because seasonal quarters instead of calendar quarters were used. In some cases, for instance, data collected on reference weeks (REFWEEK) at the end of a previous reference year (REFYEAR) may form part of the sample of the following YEAR and QUARTER. In these cases the effect is that REFYEAR for some observations is equal to YEAR-1 and e.g. a REFWEEK 52 may be allocated to QUARTER 1 of YEAR.

#### 4.2.2 Variables related to age and duration

#### 4.2.2.1 Coding of the derived variables

Variable identifier	Codes	Variable name, labels	Filter
AGERESID Q		Age at which person last established their usual residence in the country (available from 2008 onwards with detailed YEARESID codes)	everybody
		Single years	
	0	Born in the country (or arrived at age less than 1)	
	blank	missing	
		Dissemination: usually in 5-year age bands (1-4, 5-9 etc)	
		AGERESID is aggregated in the anonymised microdata	
		in these 5-year age bands; see corresponding chapter	

Variable identifier	Codes	Variable name, labels	Filter
HATAGE Y		Age at which person obtained the highest level of education	HATLEVEL = 100-800
		Single years	
	blank	missing	
		Dissemination: usually in 5-year age bands (1-4, 5-9 etc)	
	999	Not applicable	

HATTIME Y		Years passed since person obtained the highest level of education	HATLEVEL = 100-800
		Single years	
	blank	missing	
		Dissemination: usually in 5-year age bands (1-4, 5-9 etc)	
	999	Not applicable	

STARTIME		Time since the person started to work	EMPSTAT = 1
Q			
	000-998	Time in months since the person started current employment	
	blank	missing	
	999	Not applicable (EMPSTAT = 2)	

LEAVTIME		Time since the person last worked	YEARPR ≠ 9999
Q			
	000-998	Time in months since the person last worked	
	blank	missing	
	999	Person has never been in employment or information on previous employment is either not available or not applicable (YEARPR = 9999)	

LEAVCLAS		Time since person last worked (classes)	
Q			
	1	Less than 1 month	
	2	1 to 2 months	
	3	3 to 5 months	
	4	6 to 11 months	
	5	12 to 17 months	
	6	18 to 23 months	
	7	24 to 47 months	
	8	4 years or longer	
	Blank	missing	

Variable identifier	Codes	Variable name, labels	Filter
DURUNE Q		Duration of unemployment (classes)	ILOSTAT = 2
	1	Less than 1 month	
	2	1 to 2 months	
	3	3 to 5 months	
	4	6 to 11 months	
	5	12 to 17 months	
	6	18 to 23 months	
	7	24 to 47 months	
	8	4 years or longer	
	Blank	missing	
	9	Not applicable	
		Dissemination: In the anonymised microdata, DURUNE is aggregated in 4 groups: up to 5 months, 6 to 11 months, 12 to 23 months, 24 months or more	

#### 4.2.2.2 Description of the derivation

# AGERESID: Age at which person last established their usual residence in the country

AGERESID is calculated as REFYEAR-YEARBIR-(YEARESID+1) if YEARESID exists.

#### HATAGE: Age at which person obtained the highest level of education

HATAGE is calculated as HATYEAR-YEARBIR.

#### HATTIME: Years passed since person obtained the highest level of education

HATTIME is calculated as REFYEAR-HATYEAR.

#### STARTIME: Time since the person started to work

STARTIME is the number of months that have passed since the person started to work. YSTARTWK is the year in which the person started working for the current employer or as self-employed, MSTARTWK is the month of that year, and REFYEAR and REFMONTH the year of the survey and the reference month.

STARTIME is calculated as follows if YSTARTWK is applicable and available (neither 9999 nor blank):

- If REFYEAR YSTARTWK ≤ 2, then MSTARTWK should also be reported.
  - If MSTARTWK is available, then
     STARTIME = (REFYEAR YSTARTWK)\*12 + REFMONTH MSTARTWK
  - If MSTARTWK is not stated (blank), then
     STARTIME = (REFYEAR YSTARTWK)\*12 + REFMONTH
- If REFYEAR YSTARTWK > 2, then MSTARTWK is not available and the calculation is

STARTIME = (REFYEAR - YSTARTWK)\*12

If YSTARTWK is blank, so is STARTIME. If YSTARTWK is not applicable then STARTIME is set to 999, meaning 'not applicable'.

Note: For YSTARTWK prior to 2 years before REFYEAR, MSTARTWK is generally not available. Therefore, only general groups are delivered to indicate the different structure of the available information: STARTIME is set to 36 months for REFYEAR-YSTARTWK=3, to 48 months for REFYEAR-YSTARTWK=4 etc.

# LEAVTIME: time since the person last worked

LEAVTIME is the number of months that has passed since a non-employed person last worked. YEARPR is the year in which the person was last employed, MONTHPR is the month of that year, and REFYEAR and REFMONTH the year of the survey and the reference month.

LEAVTIME is calculated as follows if YEARPR is applicable and available (neither 9999 nor blank):

- If REFYEAR YEARPR ≤ 2, then MONTHPR should also be reported.
  - If MONTHPR is available, then
     LEAVTIME = (REFYEAR YEARPR)\*12 + REFMONTH MONTHPR
  - If MONTHPR is not stated (blank), then
     LEAVTIME = (REFYEAR YEARPR)\*12 + REFMONTH
- If REFYEAR YEARPR > 2, then MONTHPR is not available and the calculation is
  - LEAVTIME = (REFYEAR YEARPR)\*12

If YEARPR is blank, so is LEAVTIME. If YEARPR is not applicable then LEAVTIME is set to 999 (not applicable).

Note: For YEARPR prior to 2 years before REFYEAR, MONTHPR is generally not available. Therefore, only general groups are delivered to indicate the different structure of the available information: LEAVTIME is set to 36 months for REFYEAR-YEARPR=3, to 48 months for REFYEAR-YEARPR=4 etc.

#### **DURUNE: Duration of unemployment, based on LEAVCLAS**

In this derivation, LEAVTIME is the time since the person last worked (in months), LEAVCLAS is the same information aggregated to the same classes that are defined for the collected variable SEEKDUR. The duration of unemployment (DURUNE) is the duration of search for employment (SEEKDUR) or the length of the period since the person last worked (LEAVCLAS); whichever period is shorter.

LEAVTIME	LEAVCLAS
0	1
1–2	2
3–5	3
6–11	4
12–17	5
18–23	6

24–47	7
48 to 998	8
Blank, 999	Blank

DURUNE is derived only for the respondents who are unemployed (ILOSTAT = 2). In the other ILOSTAT cases it is coded 9 (not applicable).

#### 4.2.3 Potential additional labour force and labour market slack

The variables on the potential additional labour force and the labour market slack do not require tables showing the detailed coding. All of them are coded as '1' (yes) or '2' (no).

#### **UEMP: Underemployed part-time workers**

Underemployed part-time workers are persons working part-time (ILOSTAT=1, and FTPT=2) who wish to work additional hours (WISHMORE=2) and are available to do so (AVAILBLE=1).

In this case UEMP is '1' (yes), otherwise '2' (no).

#### **PALF: Potential additional labour force**

The potential additional labour force comprises the persons who are outside the labour force and "available but not seeking" or "seeking but not available". If one of the conditions is fulfilled, PALF is '1' (yes), otherwise '2' (no).

## PALF\_AV\_NS: Potential additional labour force - Available but not seeking

Persons available to work but not seeking are persons neither employed nor unemployed (ILOSTAT=3) who are available for work in the two weeks following the reference week (AVAILBLE=1) and

- (1) want to work (WANTWORK=1), are not seeking and have not found a job to start later (SEEKWORK=5), or
- (2) found a job to start in more than 3 months (SEEKWORK=3), or
- (3) were passively seeking work during the last 4 weeks (SEEKWORK=1, ACTMETNE=2).

In this case PALF\_AV\_NS is '1' (yes), otherwise '2' (no).

#### PALF\_S\_NAV: Potential additional labour force - Seeking but not available

Persons seeking work but not immediately available are persons neither employed nor unemployed (ILOSTAT=3) who are not available for work in the two weeks following the reference week (AVAILBLE=2) and

- (1) were actively seeking work during the last 4 weeks (SEEKWORK= 1, ACTMETNE=1), or
- (2) found a job to start within a period of at most 3 months (SEEKWORK=2), or

(3) found a job to start in more than 3 months (SEEKWORK=3).

In this case PALF\_S\_NAV is '1' (yes), otherwise '2' (no).

#### LMSLACK: Labour market slack

The indicator "labour market slack" is the sum of the persons who are unemployed or in one of the categories above. The derived variable LMSLACK is '1' (yes) if one of the following conditions is fulfilled, otherwise it is '2' (no).

- (1) unemployed (ILOSTAT=2), or
- (2) underemployed part-time worker (UEMP=1), or
- (3) potential additional labour force (PALF=1)

#### 4.2.4 Participation in education

The quarterly derived variable EDUC4WEEKS ("Education or training received during previous 4 weeks") combines the information from these two collected variables:

EDUCFED4: Participation in formal education and training (student or apprentice) in the last 4 weeks

EDUCNFE4: Participation in non-formal education and training in the last 4 weeks

If the respondent participated either in formal or non-formal education, then EDUC4WEEKS is '1' (yes), otherwise it is '0' (no), '9' (not applicable) or blank. The detailed coding is as follows:

```
if EDUCFED4='1' or EDUCNFE4 in ('1','2') then EDUC4WEEKS='1' else if EDUCFED4='2' and EDUCNFE4='3' then EDUC4WEEKS ='0' else if EDUCFED4='9' and EDUCNFE4='9' then EDUC4WEEKS ='9' else if EDUCFED4=' or EDUCNFE4=' then EDUC4WEEKS =' '
```

The derivation of the biennial derived variable EDUC12MONTHS ("Education or training received during previous 12 months") is the same, only the observation period and periodicity are different.

```
if EDUCFED12='1' or EDUCNFE12 in ('1','2') then EDUC12MONTHS='1' else if EDUCFED12='2' and EDUCNFE12='3' then EDUC12MONTHS ='0' else if EDUCFED12='9' and EDUCNFE12='9' then EDUC12MONTHS ='9' else if EDUCFED12=' or EDUCNFE12=' then EDUC12MONTHS =' '
```

# 4.2.5 Migration

#### **MIGSTAT:** migration status

For easier analysis of migration related data, the variable MIGSTAT is derived from the variables on the country of birth of the respondent and his/her parents. MIGSTAT is coded '9' for persons above the age of 74 as COBMOTH and COBFATH are not applicable in this case as well and the derivation would therefore not be meaningful.

Variable name	Code	Description	
MIGSTAT	0	Native-born with both parents native-born	
	1	Native-born with one parent born abroad (second generation)	
	2	Native-born with both parents born abroad (second generation)	
	3	Foreign-born (first generation)	
	4	Unknown	
	9	Not applicable	

The categories are derived as follows:

```
if AGE > 74 then MIGSTAT = '9'
```

else

if COUNTRYB = COUNTRY and COBMOTH = COUNTRY and COBFATH = COUNTRY then MIGSTAT = '0' else

if COUNTRYB = COUNTRY and COBMOTH ≠ COUNTRY and COBFATH ≠ COUNTRY then MIGSTAT = '2' else

if COUNTRYB = COUNTRY and (COBMOTH ≠ COUNTRY or COBFATH ≠ COUNTRY) then MIGSTAT = '1' else

if COUNTRYB ≠ COUNTRY and COUNTRYB ≠ ' ' then MIGSTAT= '3' else

MIGSTAT= '4'

# **HHMGSTAT:** migration status of the household

Please see section 4.3 on "derived variables at household level".

#### **COBPARENT:** country of birth of parents

This variable provides further information on the countries of birth of the respondent's parents.

Variable name	Code	Description	
COBPARENT	NAT	Reporting country	
	EUF	EU27 countries (from 2020) except reporting country	
	NEF	Non-EU27 countries (from 2020) nor reporting country	
	FOR	Foreign but exact country unknown	
	NRP	Not stated	
	NAP	Not applicable	

If at least one of the parents was born in the reporting country, then COBPARENT takes the value 'NAT' (reporting country). Otherwise, if at least one of the parents was born in another EU country, COBPARENT takes the value 'EUF' (EU27 except reporting country). Otherwise, if at least one of the parents is known to be born outside the EU, the value is 'NEF'. If both parents were born abroad, but the countries are not known, the value is 'FOR'; if the country of birth of both parents is unknown, the value is 'NRP'.

The categories are derived as follows:

```
if (COBFATH = COUNTRY or COBMOTH = COUNTRY) then COBPARENT='NAT'
    else
if (COBFATH in EU27 or COBMOTH in EU27) then COBPARENT='EUF'
    else
if (COBFATH = ' ' and COBMOTH = ' ') then COBPARENT='NRP';
    else
if ((COBFATH = FOR and COBMOTH = FOR) or (COBFATH = FOR and COBMOTH = ' ' or COBFATH = ' ' and COBMOTH = FOR)) then COBPARENT='FOR';
    else
if (COBFATH = 99 and COBMOTH = 99) then COBPARENT='NAP'
    else
COBPARENT='NEF'
```

#### 4.2.6 Classification levels

# HATLEV1D: Level of education according to ISCED 2011

HATLEVEL		HATLEV1D
First digit: 0–2	L	Low: Lower secondary
First digit: 3–4	М	Medium: Upper secondary

First digit: 5–8	Н	High: Third level
999	9	Not applicable
Blank	Blank	No answer

#### NACE, ISCO, ESeG and NUTS

Derived variables based on standard classifications are aggregated according to their hierarchical structures reflected in the coding.

Variable identifiers with the suffixes "1D", "2D" and "3D" indicate the number of digits to which the (NACE, ISCO, ESeG, NUTS) classification is aggregated.

For REGION, the additional suffix "W" refers to the region of work, i.e. the underlying variable is REGIONW. In NACE and ISCO based variables, the additional suffix "2J" refers to the second job and the suffix "PR" refers to the previous job.

The variable identifiers for ISCO and NACE indicate the version of the classification relevant for the reference year. "ISCO88" refers to ISCO-88, which was valid until 2010, "ISCO08" refers to ISCO-08 valid since 2011. "NACE1" refers to NACE Rev. 1 and 1.1 up to 2007, while "NACE2" refers to NACE Rev. 2, which has been valid since 2008.

The suffix "S" in variables on NACE activities is used in different ways in the two versions of the classifications for the purposes of National Accounts (SNA). In variables based in NACE Rev. 1 and 1.1 (up to 2007) the economic activities are aggregated as follows:

0 - Agriculture: sections A to B1 - Industry: sections C to F2 - Services: sections G to Q

In variables based in NACE Rev. 2 (from 2008) the economic activities are aggregated as follows:

- 01 Agriculture, forestry and fishing: section A
- 02 Manufacturing, mining and quarrying and other industry: sections B to E
- 03 Construction: section F
- 04 Wholesale and retail trade, transportation and storage, accommodation and food service activities: sections G to I
- 05 Information and communication: section J
- 06 Financial and insurance activities: section K
- 07 Real estate activities: section L
- 08 Professional, scientific, technical, administration and support service activities: sections M and N
- 09 Public administration, defence, education, human health and social work activities: sections O to Q
- 10 Other services: sections R to U

#### 4.3 Derived variables at household level

LFS information on household variables can be distinguished into

- household identifiers (variables grouping the household members into and ordering them within a household): HHNUM, HHSEQNUM,
- referential variables (variables setting the relationships between the individuals within a household):
   HHLINK, HHSPOU, HHFATH, HHMOTH,
- derived household variables (variables describing household composition, number of persons in a household, working status of household members and variables concerning the existence of relatives and a partner in the same household).

The start year for the derivation of further household variables is 2006 for quality reasons. What is more, the last major revision of the legal basis for the LFS before IESS entered into force in 2006, making the data from 2006 to 2020 highly comparable.

Standard derived household variables, used for constructing the household indicators disseminated for the EU LFS, are defined in the following. They refer to the household size, composition, its age structure, i.e. the number of persons/children (of a certain age) in the household, and additional features like the working status of the household members.

Analyses at individual level, using the household background, should use the (individual) household weighting factor COEFFHH. In addition, the average household weight of all household members (COEFFHHAVG) is calculated and used for analyses at household level.

The indicators are available in Eurostat's public database from 2006 onwards. They are based on LFS household variables which can be grouped in the following way:

#### HHPERS: distinction child vs adult

A main conceptual issue related to household statistics is the distinction between child and adult. In line with international standards, a child is defined as a household member aged less than 18 years. HHPERS is the only derived household variable that is assigned to household members individually. All others are assigned equally to all household members.

Variable name	Code	Description	
HHPERS		The person is considered as:	
	1	A child (a person aged less than 18)	
	2	An adult (a person aged 18 or above)	

# Variables describing the number of persons in a household

The number of all persons constituting a common household, irrespective of their age, can measure the household size. However, the LFS data collection allows determining the age structure of the household and counting the number of persons of a given age as well. The following derived variables, based on basic data only, can be used for this purpose:

# Household size and age structure

Code	Description
1-98	Total number of persons in the household (irrespective of age)
Blank	Not specified
0-98	Number of children between 0 and 2 years in the household
Blank	Not specified
0-98	Number of children between 3 and 5 years in the household
Blank	Not specified
0-98	Number of children between 6 and 8 years in the household
Blank	Not specified
0-98	Number of children between 9 and 11 years in the household
Blank	Not specified
0-98	Number of children between 12 and 14 years in the household
	Not specified
Blank	
0-98	Number of children between 15 and 17 years in the household
Blank	
	Niveshou of children and loss than 15 years in the household
	Number of children aged less than 15 years in the household
	Not specified
0-98	Total number of children in the household
Blank	Not specified
0-14	Age of the youngest child less than 15 years in the household
Blank	Not specified
0-17	Age of the youngest child in the household
Blank	Not specified
0-98	Total number of adults in the household
Blank	Not specified
0-98	Number of persons aged 65 years or more in the household
Blank	Not specified
	1-98 Blank 0-98 Blank 0-14 Blank 0-17 Blank 0-98 Blank 0-17 Blank 0-98

# Variables describing the working status of household members

The following derived variables, based on basic data plus ILOSTAT, FTPT and EDUCFED4 only, can be used to describe the working status of household members and the household as a whole:

Variable name	Code	Description		
HHNBALLEMPL	0-98	Total number of employed persons aged 15 and more in the household		
	Blank	Not specified		
HHNBADEMPL	0-98	Number of employed adults in the household		
	Blank	Not specified		
HHNBADUNEMP	0-98	Number of unemployed adults in the household		
	Blank	Not specified		
HHNBADOUTLF	0-98	Number of adults outside the labour force in the household		
	Blank	Not specified		
HHWKSTAT		Working status of adults living in the same household:		
	1	All adults working full time		
	2	At least one adult working part time, all other adults (if any) working		
	3	At least one adult working and one adult <b>not</b> working		
	4	All adults <b>not</b> working: all adults aged 18-24, studying and outside the labour force <sup>(1)</sup>		
	5	All adults <b>not</b> working: all adults aged 65 years or more and outside the labour force		
	6	All adults <b>not</b> working: others than codes 4 and 5		
	Blank	Not specified		

<sup>(1)</sup> Student households (=households composed exclusively of persons aged 18-24, outside the labour force and participating in formal education or training) are treated separately as they are excluded from the calculation of the indicator 'population in jobless households'

# HHWKSTAT - aggregated household working status (see variable above)

	WORKING		NOT WORKING		
Adults	full time	part time	aged 18-24, studying, outside the labour force	aged 65+, outside the labour force	others
ALL	HHWKSTAT=1	HHWKSTAT=2	HHWKSTAT=4	HHWKSTAT=5	HHWKSTAT=6
AT LEAST	HHWK:	STAT=2	-		
ONE	HHWKSTAT=3 (HHNBPERS>1)				

Variable name	Code	Description	
HHJOBLESS		The person lives in a jobless household:	
	Υ	Yes	
	N	No	
	S	Student household <sup>(1)</sup>	
	Blank	Not specified	

<sup>(1)</sup> Student households (=households composed exclusively of persons aged 18-24, outside the labour force and participating in formal education or training) are treated separately as they are excluded from the calculation of the indicator 'population in jobless households'.

Jobless households are households in which no member is in employment, i. e. all members are either unemployed or outside the labour force.

The following variables require detailed data, i.e. HHSPOU, HHFATH and HHMOTH.

# **HHCOMP:** aggregated household composition

Based on HHPERS, the variable HHCOMP (household composition) distinguishes households according to the number of adults and children. Priority is given to the presence of at least one child aged less than 15 living with his/her parent(s). If this is not the case, the presence of an own child aged 15-17 is verified. If this is again not the case, the loop ends with looking for the presence of other children of any age, regardless of whether there is an explicit link to a parent in the household or not.

	AT LEAST ONE					
	NOT OWN	own		One adult	More than one adult	
	aged be	low 15	aged 15-17		A couple	others
Children	-	yes	-	HHCOMP=11	HHCOMP=21	HHCOMP=31
	-	no	yes	HHCOMP=12	HHCOMP=22	HHCOMP=32
	yes	no	no	HHCOMP=13	HHCOMP=23	HHCOMP=33
	no	no	no	HHCOMP=10	HHCOMP=20	HHCOMP=30

Variable name	Code	Description
ННСОМР	10	One adult without children
		One adult with at least:
	11	an own child aged less than 15
	12	else: an own child aged 15 to 17
	13	else: another child
	20	One couple without children
		One couple with at least:
	21	an own child aged less than 15
	22	else: an own child aged 15 to 17
	23	else: another child
	30	Two adults (not a couple) or more without children
		Two adults (not a couple) or more with at least:
	31	an own child aged less than 15
	32	else: an own child aged 15 to 17
	33	else: another child
	Blank	Not specified

# HHPARENT, HHPARTNR, HHCHILDR: variables concerning the existence of relatives/ partner in the same household

	HHPARENT			HHPARTNR	HHCHILDR
	Only mother	Only father	Both parents	Spouse/cohabiting partner	Own child/ children
In the same household	HHPARENT=3	HHPARENT=2	HHPARENT=1	HHPARTNR=1	HHCHILDR=1
Not in the same household	-	-	HHPARENT=4	HHPARTNR=2	HHCHILDR=2
1.1	Blank/not specified				

Variable name	Code	Description	
HHPARENT	1	Both father and mother live in the same household	
	2	Only the father of the person lives in the same household	

	3	Only the mother of the person lives in the same household
	4	Neither father nor mother live in the same household
	Blank	Not specified
HHPARTNR	1	The spouse or cohabiting partner of the person lives in the same household
	2	The spouse or cohabiting partner (if any) of the person does not live in the same household
	Blank	Not specified
HHCHILDR	1	Child(ren) of the person live(s) in the same household
	2	Child(ren) of the person do(es) not live in the same household
	Blank	Not specified

# 5 Modules

# 5.1 Ad-hoc modules up to 2020

The 'ad hoc modules' were an inherent part of the EU-LFS from 1999 to 2020. Council Regulation No 577/98 specified that a further set of variables - the ad hoc module - could be added to supplement the information from the core questionnaire of the LFS. The programme for the ad hoc modules was defined by legal acts for some years in advance. Some modules where repeated over the years, but there was no regular schedule of modules. No ad hoc module was collected in 2015.

Detailed documentation of the history of the modules, their topics and specifications is available in chapter 6 "Modules" of the "Statistics Explained" article on LFS methodology:

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_-\_modules

Data on ad hoc modules have been released in aggregated tables in the online database on Eurostat's website. Tailor-made extractions of ad hoc module data are possible as well. The respective anonymised microdata have been included in the scientific use files (SUF) for researchers.

# 5.2 Eight-yearly variables and ad-hoc subjects from 2021

From 2021, the IESS framework regulation governs the sequence and subjects of the modules. Commission Delegated Regulation (EU) 2020/256<sup>6</sup> provides a multiannual rolling plan for the topics to be collected from 2021 to 2028 for the eight-yearly variables and ad hoc subjects. The principle is an eight-yearly cycle, consisting of two blocks of three predefined subjects each, leaving ad-hoc subjects to be defined every four years. The first set of eight-yearly variables on the "Labour market situation of migrants and their immediate descendants" in 2021 is specified in detail in the EU-LFS implementing act that also defines the core variables. The first ad-hoc subject on "Job skills" follows in 2022. This and the following module of 2023 are defined in Commission Implementing Regulation (EU) 2020/1642. More detail on the planning of modules, their subject and contents is available in the "Statistics Explained" article referred to in section 5.1 above.

<sup>&</sup>lt;sup>6</sup> https://eur-lex.europa.eu/eli/reg del/2020/256/oj

<sup>&</sup>lt;sup>7</sup> https://eur-lex.europa.eu/eli/reg impl/2019/2240/oi

<sup>8</sup> https://eur-lex.europa.eu/eli/reg impl/2020/1642/oj

# 6 Classifications

Several EU classifications are used in the EU Labour Force Survey for the coding of economic activity, occupation, professional status, country and region, degree of urbanisation and education. The respective code lists and some information on their development in the past can be found at

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_-\_documentation#Classifications

#### Detailed information is available for:

Economic activities NACE Rev. 2 since 2008, Rev 1.1 from 2005 to 2007/2008, Rev 1 from 1992 to

2004 and NACE 1970 from 1983 to 1991

Occupations ISCO-08 from 2011, ISCO 88 (COM) from 1992 to 2010

Professional status ICSE

Countries Eurostat standard code list GEO (generally following ISO)

Regions NUTS levels 2 and 3 (following the respective legal acts, also NUTS revisions)

Education ISCED 2011 from 2014, ISCED 1997 from 1998 to 2013; for fields of education and

training, ISCED-F 2013 from 2016

# 7 Scientific use files

#### 7.1 Anonymisation

National Statistical Institutes submit LFS microdata to Eurostat, but they remain owners of their data. The following anonymisation and aggregation criteria were agreed between Eurostat and the National Statistical Institutes in order to enable Eurostat to make scientific use files (SUF) available to researchers. Current anonymisation criteria cover the reference years up to 2021.

#### 7.1.1 Core variables

#### 7.1.1.1 General anonymisation criteria

Variable names are indicated below as in the legal acts valid from 2021. For technical reasons, the coding in the disseminated data may differ to cover various historical and derived codes. The detailed coding of all disseminated variables is provided in chapters 2 and 4 of this user guide.

#### Variables not included in the scientific use files

Technical variables: STRATUM, PSU, FSU, DEWEIGHT, IDENT

Person characteristics: YEARBIR, PASSBIR

Income: INCGROSS, INCGROSS\_F

#### Household numbers: HHNUM

Household numbers are randomised.

#### Age-related variables: AGE, YEARESID, AGERESID

Age is either provided a) in single years, b) in single years with partial perturbation within 5—year age groups, c) in 5-year age groups, or d) top-coded. The treatment in the individual countries is as follows:

Country		AGE GROUP	AGE GROUP		
	0-14	15-74	<i>75+</i>		
BE	Single	Single	Single		
BG	Single	Single	Single		
CZ	5-year age groups	5-year age groups	5-year age groups		
DK	5-year age groups *	Single with perturbation	Single with perturbation		
DE	Single	Single	Single		
EE	Single	Single	Single		

,			
	0-14	15-74	75+
IE	5-year age groups	5-year age groups	5-year age groups
EL	Single	Single	Single with top coding 85+
ES	Single	Single	Single
FR	Single	Single	Single
HR	5-year age groups	Single with perturbation	Top coding 75+
IT	5-year age groups	Single	Top coding 75+
CY	5-year age groups *	Single with perturbation	Single with perturbation
LV	Single	Single	Single
LT	Single	Single	Single
LU	Single	Single	Single
HU	Single	Single	Single
MT	5-year age groups	5-year age groups	Top coding 75+
NL	5-year age groups	5-year age groups	5-year age groups
AT	Single	Single	Top coding 75+
PL	5-year age groups	Single	Single with top coding 90+
PT	Single	Single	Single
RO	Single	Single	Single
SI	Single	Single	Single with top coding 80+
SK	5-year age groups	5-year age groups	Top coding 75+
FI	Single	Single	Single
SE	Single	Single	Single
IS	5-year age groups	5-year age groups	5-year age groups
NO	Single	Single	Single
CH	Single	Single	Single
UK	Single	Single	Single

AGE GROUP

Country

Tables at single age level must not be published. This new rule has also been added to the guidelines for publications of LFS SUF output.

In order to allow researchers a direct use of the different aggregation levels of age, two variables including age information are provided: AGE\_GRP containing 5-year age groups (incl. top-coded groups where requested) for all countries, and AGE with age in single years where allowed. In consequence, variable AGE is not filled if countries requested grouping of age.

Years of residence in the country (YEARESID) from 2008 onwards: single years up to 9, higher values are aggregated in 5-year bands (Y10-14, Y15-19 etc.).

<sup>\*:</sup> For countries that opted for single age with perturbation for children up to 14 years, Eurostat kept 5-year age groups as the perturbation of AGE for those children would require recalculation of several derived household variables.

Age at which person last established their usual residence in the country (AGERESID) from 2008 onwards: delivered in 5-year bands (0 = born in the country or arrived at age less than 1, Y1-4, Y5-9 etc.).

#### Status in employment: STAPRO, STAPRO2J, STAPROPR

Self-employed with and without employees are combined in a single category '0'.

# Economic activity: NACE3D, NACE2J2D, NACEPR2D

All variables related to economic activity are aggregated to NACE section level (1-digit).

#### **Occupation: ISCO4D**

ISCO4D is aggregated to 3-digit level.

#### Size of the local unit for main job: SIZEFIRM

Bottom coding is used for values lower than 10. Value '1-9' means 'up to 9'.

## Regional variables: REGION, REGIONW

Regional variables are disseminated at NUTS level 2.

# **Durations: SEEKDUR, DURUNE**

The durations of seeking for work and of unemployment are aggregated into categories as follows:

- 1 up to 5 months
- 2 6 to 11 months
- 3 12 to 23 months
- 4 24 months or more

#### Hours worked: CONTRHRS, HWUSUAL, EXTRAHRS, HWACTUAL, HWUSU2J, HWACTU2J, HWWISH

For variables concerning number of hours worked all hours from 80 onwards are aggregated in a single category '80'.

# Countries: CITIZENSHIP, COUNTRYB, COBFATH, COBMOTH, COUNTRPR

The country variables above are aggregated into geographical regions as below (codes follow the standard code list SCL\_GEO).

NAT National / native of own country

EU27\_2020 EU27\_2020 (from 2020)

EFTA EFTA

EUR\_NEU27\_2020\_NEFTA Europe outside EU27\_2020 and EFTA (from 2020)

EUR\_NEU27\_2020 Europe outside EU27\_2020 (=EFTA + EUR\_NEU27\_2020\_NEFTA) (from

2020)

EU15 EU15 (up to 2019)

NMS10 10 new Member States of 2004 (from 2004 to 2019)

NMS3 3 new Member States of 2007 and 2013 (from 2004 to 2019)

NMS13 13 new Member States 2004 to 2013 (=NMS10 + NMS3) (from 2004 to

2019)

EU28 (= EU15 + NMS13) (from 2004 to 2019) EUR\_NEU28\_NEFTA Europe outside EU28 and EFTA (up to 2019)

EUR\_NEU28 Europe outside EU28 (=EFTA + EUR\_NEU28\_EFTA) (up to 2019)

NEU15 Non-EU15 (up to 2003)

FOR non-national/non-native in case the distinction EU/Non-EU is not

possible (up to 2003); the original code FOR is blanked in other reference

years.

AFR\_N North Africa
AFR\_OTH Other Africa

ASI NME Near and Middle East

ASI\_E East Asia

ASI\_SSE South and South East Asia (ASI\_E + ASI\_S\_E)
ASI\_ESSE East and South Asia (= ASI\_E + ASI\_SSE)

AME N North America

AME\_C\_CRB Central America (and Caribbean)

AME S South America

AME\_LAT Latin America (= AME\_C\_CRB + AME\_S)

OCE Oceania (includes Australia)

AFR\_N\_ASI\_NME North Africa and Near and Middle East (= AFR\_N + ASI\_NME)

AME\_N\_OCE North America and Oceania (= AME\_N + OCE)

Several countries opted for further aggregation. These aggregations are:

Up to 2019:

**BG:** Apart from Nationals / Natives, only two groups are provided: EU28 and Europe outside EU28

(everything else is recoded to "No answer")

FR: Europe outside EU28, Latin America, North America and Australia / Oceania

HR: Apart from Nationals / Natives, only two groups are provided: EU28 and Europe outside EU28

(everything else is recoded to "No answer")

LV: NMS13, Europe outside EU28, East and South Asia, Latin America

MT: Apart from Nationals / Natives, only one group is provided: EU28 (everything else is recoded to "No

answer")

- **PL:** Apart from Nationals / Natives, only two groups are provided: EU28 and Europe outside EU28 (everything else is recoded to "No answer")
- **RO:** NMS10 and NMS 3 are aggregated to NMS13
- SI: Apart from Nationals / Natives, only two groups are provided: EU28 and Europe outside EU28 (everything else is recoded to "No answer")
- FI: NMS13, Europe outside EU28, North Africa and Near and Middle East, East and South Asia, Latin America, North America and Australia / Oceania
- **SE:** NMS13, East and South Asia, North Africa and Near and Middle East, Latin America, North America and Australia / Oceania
- **NO:** Apart from Nationals / Natives, only two groups are provided: EU28 and Europe outside EU28 (everything else is recoded to "No answer")

#### From 2020:

- **BG:** Apart from Nationals / Natives, only two groups are provided: EU27\_2020 and Europe outside EU27\_2020 (everything else is recoded to "No answer")
- FR: Europe outside EU27\_2020, Latin America, North America and Australia / Oceania
- **HR:** Apart from Nationals / Natives, only two groups are provided: EU27\_2020 and Europe outside EU27\_2020 (everything else is recoded to "No answer")
- LV: Europe outside EU27\_2020, East and South Asia, Latin America
- **MT:** Apart from Nationals / Natives, only one group is provided: EU27\_2020 (everything else is recoded to "No answer")
- **PL:** Apart from Nationals / Natives, only two groups are provided: EU27\_2020 and Europe outside EU27\_2020 (everything else is recoded to "No answer")
- SI: Apart from Nationals / Natives, only two groups are provided: EU27\_2020 and Europe outside EU27\_2020 (everything else is recoded to "No answer")
- FI: Europe outside EU27\_2020, North Africa and Near and Middle East, East and South Asia, Latin America, North America and Australia / Oceania
- **SE:** East and South Asia, North Africa and Near and Middle East, Latin America, North America and Australia / Oceania
- **NO:** Apart from Nationals / Natives, only two groups are provided: EU27\_2020 and Europe outside EU27\_2020 (everything else is recoded to "No answer")

# 7.1.1.2 Further country specific anonymisation criteria

**BG**: ISCO4D and ISCOPR3D are aggregated at 2-digit level

Contract with a temporary employment agency (TEMPAGCY) as well as overtime hours (EXTRAHRS) are blanked (unless not applicable).

**DE**: Region of residence (REGION) is aggregated at NUTS 1 level

NOTE: In Germany, the microcensus law requires that interviewed persons are informed about potential use of the information provided by researchers. Prior to 2002 this information was not given. Data referring to a date before 2002 have hence to be absolutely anonymised to exclude any disclosure risk – this is done through complete blanking of any regional information in addition to all other aggregation criteria.

Due to the increase of the sample size, and in order to comply with national standards, a further anonymisation has been necessary since 2005. Germany provides Eurostat with specific anonymisation weights to be used for the anonymised files (in addition to all criteria mentioned above), resulting in principle in a selection of a 70% subsample.

IT: Information on same-sex couples is anonymised

MT: No data for reference years prior to 2009 released

YEARESID values up to 74 are aggregated to 5-year bands, values greater than 74 in one single category 'Y GE75'. The latter is also applied to AGERESID

ISCO4D and ISCOPR3D are aggregated at 1-digit level

Country of place of work (COUNTRYW): aggregated in the same way as data on citizenship and country of birth. Therefore, region of work (REGIONW) abroad is blanked (unless not applicable).

NL: Regional variables (Region of residence REGION and region of place of work REGIONW) are blanked

AT: Region of residence (REGION) is aggregated at NUTS 1 level

**SI**: YEARESID and AGERESID values up to 74 are aggregated to 5-year bands, values greater than 74 in one single category 'Y\_GE75'.

ISCO4D and ISCOPR3D are aggregated at 2-digit level

Education attainment level (HATLEVEL): categories 393, 394 and 399 are aggregated into code 399 (2006 to 2013).

Country of place of work (COUNTRYW): aggregated in the same way as data on citizenship and country of birth. Therefore, region of work (REGIONW) abroad is blanked (unless not applicable).

Year when the highest level of education was successfully completed (HATYEAR) is blanked.

Field of the highest level of education successfully completed (HATFIELD) is aggregated to two-digit level

Year in which person started working in current job and year in which person left the last job or business (YSTARTWK, YEARPR): bottom coding of values more than 40 years before the reference year. STARTIME and LEAVTIME are adapted accordingly.

**UK**: Regional variables (Region of residence REGION and region of place of work REGIONW) are aggregated at NUTS 1 level

## 7.1.2 Module-specific anonymisation criteria (2005-2021)

#### 7.1.2.1 General anonymisation criteria

In accordance with the general criteria above the following ad hoc module variables have to be anonymised:

#### 2008 Labour market situation of migrants and their immediate descendants

- Year of acquisition of citizenship (YEARCITI): delivered as age of acquisition of citizenship (AGECITI) in
   5-year age groups
- Total number of years of residence in the host country (TOTRESID): delivered as difference to YEARESID with the variable DIFFRESID=TOTRESID-YEARESID, years a person had stayed in the host country prior to their last entry, in 5-year bands (0 = no difference, Y1-4, Y5-9 etc)
- Country of birth of father (COBFATH) and country of birth of mother (COBMOTH): same groups as CITIZENSHIP and COUNTRYB per country

#### 2009 Entry of young people into the labour market

- Country of birth of father (COBFATH) and country of birth of mother (COBMOTH): same groups as CITIZENSHIP and COUNTRYB per country
- Occupation of first job of more than 3 months (JOBOCC): delivered as JOBOCC3D in the same way as ISCO3D
- Citizenship at birth of father and mother (PARNAT): not included as this optional variable was transmitted by very few countries only

# 2014 Labour market situation of migrants and their immediate descendants

 Country of birth of father (COBFATH) and country of birth of mother (COBMOTH): same groups as CITIZENSHIP and COUNTRYB per country

#### 2016 Young people on the labour market

■ Level of additional formal education (ADDLEVEL): As this variable has been aggregated for IT (see below), the separate variable ADDLEV1D is available for all countries, which groups ISCED levels 1 and 2 into L, levels 3 to 4 into M and levels 5 to 8 into H.

#### 7.1.2.2 Module aggregations specific to individual Member States

#### 2005+: all ad hoc modules from 2005 onwards

**DE**: Anonymisation weights have to be used also for the ad hoc module data

#### 2008 Labour market situation of migrants and their immediate descendants

FI: No data for Finland is included in the anonymised microdata

#### 2009 Entry of young people into the labour market

**BG:** Occupation of first job of more than 3 months (JOBOCC3D): aggregated at ISCO 2-digit level

MT: Occupation of first job of more than 3 months (JOBOCC3D): aggregated at ISCO 1-digit level

SI: Occupation of first job of more than 3 months (JOBOCC3D): aggregated at ISCO 2-digit level

# 2014 Labour market situation of migrants and their immediate descendants

MT: Last country of work abroad (WORKOTHC): aggregated in the same way as data on citizenship and country of birth

**SI:** Last country of work abroad (WORKOTHC): aggregated in the same way as data on citizenship and country of birth

#### 2016 Young people on the labour market

IT: Reason for dropping out (DROPREAS) and reason for not continuing education (NCONREAS): items 1 and 2 are aggregated into code 8.

Level of additional formal education (ADDLEVEL): blanked (unless not applicable). Aggregated data are available in the separate variable ADDLEV1D, which groups ISCED levels 1 and 2 into L, levels 3 to 4 into M and levels 5 to 8 into H.

# 2019 Work organisation and working time arrangements

SI: Commuting time (COMMUTM) of 90 minutes or higher is aggregated to a single value of 90 minutes.

#### 2021 Labour market situation of migrants and their immediate descendants

MT: Country where the highest level of education was successfully completed (HATCNTR): aggregated in the same way as data on citizenship and country of birth

**NL:** Country where the highest level of education was successfully completed (HATCNTR): aggregated in the same way as data on citizenship and country of birth

**PL:** Country where the highest level of education was successfully completed (HATCNTR): aggregated in the same way as data on citizenship and country of birth

**SI:** Country where the highest level of education was successfully completed (HATCNTR): aggregated in the same way as data on citizenship and country of birth

# 7.2 Subsamples and weighting factors in scientific use files

Starting with the 2022 release of EU-LFS scientific use files, there are only quarterly and yearly datasets. While the quarterly datasets contain only the quarterly variables, the yearly datasets contain all variables of the LFS survey, i.e. the quarterly, annual, biennial (from 2021) and module variables. Household level data including derived variables are in the yearly datasets as well from 2006. In line with the different sets of variables, several weights are included in the quarterly and yearly datasets, namely

Quarterly datasets: weighting factors for Quarterly variables: COEFFQ

Yearly datasets: weighting factors for Annual variables: COEFFY

Biennial variables: COEFF2Y (from 2021)

Module variables: COEFFMOD

Household variables: COEFFHH, COEFFHHAVG

Since 2006, the EU-LFS offers the option of subsampling. Countries are free to choose whether to apply subsampling or not, the only exception being mandatory subsampling of module information from 2021 onwards. The following general rules apply:

Sample for annual variables

 $\supseteq$ 

Sample for biennial variables (from 2021)

Ξ

Sample for module (eight-yearly variables or ad-hoc subject)

Possible household (sub)samples have to fulfil other special rules. In case of household subsampling, there is also the option to collect information on a restricted set of variables only (from 2021: so-called minimum set of variables).

Yearly (sub)samples to be used for analysis of quarterly, annual, biennial and module variables, and of household data, can be identified by selecting the observations with weighting coefficients greater than zero. The relations between the different samples imply that analyses at individual level using only quarterly and annual variables should use COEFFY. Analyses using also a biennial variable should use COEFFY, and analyses using also a module variable COEFFMOD.

Concerning the inclusion of household information, analyses at individual level, using the household background, should use the (individual) household weighting factor COEFFHH. The average weight of all household members (COEFFHHAVG) is to be used for analyses at household level.

NOTE: the different weighting factors in a yearly dataset do not necessarily differ from each other. Depending on the concrete implementation of subsampling in a country, it might even be the case that all subsamples and all five weighting factors in a yearly dataset are identical.

# 8 References

# **Legal acts**

An overview of the legal acts is available at

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_%E2%80%93\_main\_features\_and\_legal\_basis#Main\_features\_of\_thee\_EU-LFS\_

# LFS explanatory notes

A table with links to all versions of the explanatory notes is here:

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_-\_documentation

# Latest user guide on the LFS up to reference year 2020

The last version of the LFS user guide before the implemenation of IESS is available here: <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_-\_documentation">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\_labour\_force\_survey\_-\_documentation</a>