# Standard Report on Methods and Quality

# for Earnings and Labour Costs

This documentation applies to the reporting period:

2021

Last edited: 13/09/2022

CENTRAL STATISTICS OFFICE Skehard Road, Cork 021 4535000

www.cso.ie

# Contents

1.	Ove	rview	4
2.	Gen	eral Information	4
	2.1	Statistical Category	4
	2.2	Area of Activity	4
	2.3	Organisational Unit Responsible, Persons to Contact	4
	2.4	Objectives and Purpose; History	4
	2.5	Periodicity	4
	2.6	Client	4
	2.7	Users	4
	2.8	Legal basis	4
3.	Stat	istical Concepts, Methods	5
	3.1	Subject of the Statistics	5
	3.2	Units of Observation/Collection Units/Units of Presentation	5
	3.3	Data Sources	5
	3.4	Reporting Unit/Respondents	5
	3.5	Type of Survey/Process	5
	3.6	Characteristics of the Sample/Process	5
	3.7	Survey Technique/Data Transfer	5
	3.8	Questionnaire (including explanations)	6
	3.9	Participation in the Survey	6
	3.10	Characteristics of the Survey/Process and its Results	6
	3.11	Classifications Used	6
	3.12	Regional Breakdown of Results	6
4.	Proc	duction of the Statistics, Data Processing, Quality Assurance	6
	4.1	Data Capture	6
	4.2	Coding	6
	4.3	Data Editing	7
	4.4	Imputation (for Non-Response or Incomplete Data Sets)	7
	4.5	Grossing and Weighting	7

4	1.6	Computation of Outputs, Estimation Methods Used	. 7
4	1.7	Other Quality Assurance Techniques Used	. 7
5.	Qua	lity	. 8
5	5.1	Relevance	. 8
5	i.2	Accuracy and Reliability	. 8
5	5.3	Data Revision	11
5	5.4	Timeliness and Punctuality	13
5	5.5	Accessibility and Clarity	13
6.	Add	itional Documentation and Publications	13

# 1. Overview

The Earnings and Labour Costs Quarterly release is based on data collected by the Earnings, Hours and Employment Costs Survey (EHECS). EHECS replaced both the four-yearly Labour Costs Survey and all other CSO short-term earnings inquiries from Q1 2008.

The Earnings and Labour Costs Annual release is based on annualised data from the four quarters of the Earnings, Hours and Employment Costs Survey (EHECS).

The Earnings and Labour Costs Quarterly release provides insight into the short-term developments of the Irish labour market by reporting a number of key labour market indicators, including average earnings and labour costs statistics, establishment employment statistics and job vacancy statistics. EHECS data is also used to fulfil quarterly Eurostat regulatory requirements such as the Labour Costs Index, Job vacancy Statistics and Short-term Labour Indicator statistics.

The Earnings and Labour Costs Annual release provide annual trends in average and total earnings and labour costs. It forms the basis for the Eurostat Labour Costs Survey which is completed every 4 years.

# 2. General Information

# 2.1 Statistical Category

Earnings and Labour Costs data is compiled using survey returns from enterprises across NACE sectors B to S which have three or more employees.

# 2.2 Area of Activity

Business Statistics – Earnings / Earnings Analysis

#### 2.3 Organisational Unit Responsible, Persons to Contact

Business Statistics - Earnings	Earnings Analysis
Helen Hayes 5205	Jennifer O'Riordan 5917
Barry Kelleher 5208	Louise Egan 5951
<u>ehecs@cso.ie</u>	earnings@cso.ie

#### 2.4 Objectives and Purpose; History

To maintain a series of quarterly and annual earnings and labour costs statistics across economic sectors.

#### 2.5 Periodicity

Quarterly surveys of enterprises on the CSO Business Register.

#### 2.6 Client

A range of national and international requirements are met by this survey, such as Eurostat's four-year Labour Cost Survey (LCS), quarterly Labour Cost Index (LCI), quarterly Job Vacancy Statistics (JVS) and quarterly short-term labour marker statistics.

# 2.7 Users

There is wide national usage from other Government Departments, economists, media, research bodies and citizens. International users who also access the data include Eurostat, the ILO and the OECD.

#### 2.8 Legal basis

The survey is conducted under the S.I. No 115 of 2018 Statistics (Labour Costs Survey) Order 2018 Details available via the following link:

#### http://www.irishstatutebook.ie/pdf/2018/en.si.2018.0115.pdf

The survey fulfils Commission Regulation (EC) No 1503/2006 of 28 September 2006 implementing and amending Council Regulation (EC) No 1165/98 concerning short-term statistics having regard to definitions of variables, list of variables and frequency of data compilation.

Details are available via the following link:

http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32006R1503

The survey fulfils Commission Regulation (EC) No 1216/2003 of 7 July 2003 regarding the transmission of information on labour costs. Details are available via the following link: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005R1737&gid=1401266381370&from=EN

# 3. Statistical Concepts, Methods

# 3.1 Subject of the Statistics

Earnings, hours, labour costs, employment and job vacancies.

#### 3.2 Units of Observation/Collection Units/Units of Presentation

Enterprises across NACE sectors B-S with 3 or more employees on the Business Register.

#### 3.3 Data Sources

Individual enterprises in NACE sectors B-S with 3 or more employees.

#### 3.4 Reporting Unit/Respondents

Individual enterprises in NACE sectors B-S with 3 or more employees.

#### 3.5 Type of Survey/Process

All enterprises in NACE sectors B-S with 50 or more employees and a sample of those with 3 to 49 employees are surveyed each quarter.

#### 3.6 Characteristics of the Sample/Process

#### 3.6.1 Population and Sampling Frame

The annual sampling frame from the Central Business Register is synchronised with a local register once a year. This usually occurs towards the end of each year. The local register is also updated on an on-going basis using data received in the EHECS survey and from other CSO sources. These appear as enterprise updates on this register which are monitored by staff.

Among the variables updated are employment, contact details, births and deaths and changes in enterprise structure.

#### 3.6.2 Sampling Design

A census of all enterprises with 50 or more employees is undertaken each quarter. A stratified sample by NACE 2-digit sector and size of enterprise classifications is used for enterprises with less than 50 employees, with the following proportions by size class for all sectors:

Size Class	3-9 employees	10-19 employees	20-49 employees				
Sampling Fraction	2.3%	6.0%	17.1%				

[Data refers to Quarter 4 2021]

The overall sample was approximately 7,700 enterprises in 2019, representing approximately 9.4% of all enterprises and accounts for approximately 68.2% of all employees across NACE sectors B-S.

#### 3.7 Survey Technique/Data Transfer

The EHECS survey consists of two hard copy questionnaires (Form A and Form B) and in addition, utilises an electronic payroll software system of data collection (.xml returns). The Form A questionnaire is issued to all enterprises with registered employment of 100 or more persons. The Form B questionnaire is an abridged version of the form issued to enterprises with less than 100 persons employed. The XML questionnaires have the same format as the Form A and are processed via the enterprise's payroll software system. The return of XML questionnaires is independent of

the class size an enterprise belongs to - the only requisite is that the enterprise avails of the CSO functionality in their payroll software.

# 3.8 Questionnaire (including explanations)

Form A and Form B questionnaires and explanatory notes can be found at the following link: <u>http://www.cso.ie/en/surveysandmethodology/earnings/earningshoursandemploymentcostssurvey</u> XML reports are generated via the CSO module included in some payroll software products used by enterprises.

			-	-		
The	norcontogo	hradidawa	oficend	forme	h., +., m.	:
I Ne	Dercentage	DIPAKOOWO	OF ISSUED	TOTINS	DV IVDP	IS:
	PC: 0000 AC				~, ., ~ ~	

	,	<i>,</i> ,	
Туре	Form A	Form B	XML
Proportion issued	28%	37%	35%

[Data refers to Quarter 4 2021]

# 3.9 Participation in the Survey

Participation is mandatory under Irish law, SI. 115/2018. This includes enterprises in NACE sectors B-S with 3 or more employees.

#### 3.10 Characteristics of the Survey/Process and its Results

The survey is conducted by post and email. The questionnaires and emails are issued in the last week of the relevant quarter. Preliminary results are released within T+56 days of the reference quarter and final results are published in the following quarter's release.

# 3.11Classifications Used

NACE Rev.2 Broad Occupation Groups Enterprise Size Class Private Sector/Public Sector (including sub-sectors)

# 3.12Regional Breakdown of Results

State level only

# 4. Production of the Statistics, Data Processing, Quality Assurance

# 4.1 Data Capture

Paper questionnaire returns are scanned and verified before being uploaded to the CSO Data Management System (DMS). Payroll software returns (.xml files) are extracted from the secure deposit box and processed to also allow them to be uploaded to the DMS.

# Form type response with employer and employee

	Form Type						
Response Detail	Form A (not XML)	Form B	XML				
	%	%	%				
Employer coverage	12.8%	20.9%	66.19%				
Employee coverage	14.48%	2.9%	82.5%				

[Data refers to Quarter 4 2021]

# 4.2 Coding

The DMS Register Management application is used to assign and maintain NACE, WAID (Work Allocation ID) and public/private sector codes, while non-relevance codes are also applied where appropriate.

# 4.3 Data Editing

Extensive edit rules are applied to check unit level data each time a dataset is compiled, with additional quarterly checks against previous returns for all enterprises with 250 or more employees.

The main checks performed on the data include:

- Check that all relevant variables are filled in correctly for each category received:
  - Ensure that employment is present both at beginning and end of the quarter
  - Ensure that both wages and hours variables are present (regular/overtime)
  - Ensure that both wages and PRSI variables are present
- Check that the hourly rate of wage (regular/irregular/overtime) falls within a reasonable range for the sector
- Check that the average number of hours worked per week (full-time/part-time/apprentices) fall within a reasonable range for the sector
- Check that the received figures tally up (e.g. that the PRSI value in the form is within correct parameters for the wages and salaries indicated)
- Check that BIK and pension figures returned are within a reasonable range.
- Ensure that the hired and vacancies rates received are correct.

#### 4.4 Imputation (for Non-Response or Incomplete Data Sets)

Imputation is undertaken for non-respondent enterprises with 50 or more employees. Where an enterprise responded in any of the previous three quarters, ratio-imputation is used replacing any missing value with the proportional change in that variable based on all other respondents in the quarter. Otherwise a stratum average (mean) imputation method is used replacing any missing value with the mean of that variable for all other cases in the quarter (both methods are based on respondent enterprises of a similar size and activity).

# 4.5 Grossing and Weighting

For enterprises with 3-49 employees inclusive, a weighting factor (reciprocal of sampling fraction) is used to weight the estimates to the total population for both employees and enterprises. The Business Register forms the basis of the sampling frame for grossing the survey results, with Labour Force Survey (LFS) quarterly employment by NACE sector results used as a secondary weighting source.

#### 4.6 Computation of Outputs Estimation Methods Used

The DMS is used to generate a file of clean enterprise level data at the end of the data collection and editing process, which is then passed to the analysis area where the file is further processed in SAS to produce average earnings, hours worked and labour costs results.

# 4.7 Other Quality Assurance Techniques Used

- Metadata such as response rates, Coefficient of Variation (CV) estimates, non-respondent calls and key company updates are compiled and checked each quarter
- Coherence checks are undertaken on individual enterprises across quarters. Matched sample analysis is undertaken to determine the effects of sample changes
- Time-series analysis across NACE sectors is used to study quarterly changes within broader longer-term trends in earnings

# 5. Quality

# 5.1 Relevance

Wide usage of the data across national and international organisations and discussion in the media and by the general public is common as it is a timely set of results which are a key indicator in short-term economic analysis.

# 5.2 Accuracy and Reliability

# 5.2.1 Sampling Effect & Representivity

The sample is selected quarterly to ensure that it is representative of the population of enterprises in the state. It is a rolling sample with the frame being updated with employment figures each quarter. Sampling strata are defined by NACE 2-digit code and employment class size. A census is performed in all the strata for the '50 or more employees' group. For the rest of the strata different sampling fractions apply. Where a stratum has been deemed homogenous the sampling fractions used are lower than in more heterogeneous strata.

Coefficients of variations are calculated each quarter to measure variability in each indicator and NACE classification. This highlights any sampling error that may arise and identifies where further quality assessment needs to be focused.

#### 5.2.2 Sampling error – indicators

Coefficients of variation are calculated each quarter to measure variability in each indicator and NACE classification. This highlights any sampling error that may arise and identifies where further quality assessment needs to be focused.

	Avera				
Coefficients of Variation	Weekly Earnings	Hourly Earnings	Hourly Earnings ex Irregular	Average Weekly Hours	Vacancies
BS	2.7%	2.7%	2.1%	1.4%	8.5%
BE	4.2%	4.2%	3.1%	2.5%	24.0%
F	8.7%	8.7%	7.0%	3.7%	46.4%
G	5.6%	5.6%	4.2%	2.9%	25.4%
Н	7.6%	7.6%	7.4%	5.7%	38.4%
1	5.2%	5.2%	5.0%	5.0%	46.6%
J	6.6%	6.6%	8.5%	3.2%	18.2%
KL	8.7%	8.7%	7.1%	3.6%	17.4%
M	5.7%	5.7%	5.6%	3.4%	19.6%
N	10.0%	10.0%	8.2%	4.1%	36.4%
0	3.8%	3.8%	3.1%	2.0%	23.2%
Р	12.5%	12.5%	9.6%	9.4%	22.4%
Q	5.1%	5.1%	4.4%	3.6%	17.8%
RS	6.8%	6.8%	4.2%	4.3%	29.7%

#### 5.2.3 Coefficients of variation - 2021

#### 5.2.4 Non-Sampling Effects

Following a Lean Six Sigma project, response rate targets for preliminary and final data are set to ensure that the change from preliminary to final data remains broadly in the range of plus or minus 5%. Other non-sampling effects such as errors on the Business Register, questionnaire errors or processing errors are all examined as part of the quality assurance techniques used above.

#### 5.2.5 Quality of the Data Sources Used (other than survey register)

N/A

#### 5.2.6 Register Coverage

Over-coverage is analysed at the time that the local register is synchronised with the Central Business Register, while under-coverage following analysis does not appear to be an on-going issue for EHECS.

#### 5.2.7 Coverage error

All enterprises are allocated to a NACE according to the NACE recorded on the Central Statistics Office (CSO) Central Business Register (CBR) and this is assumed to be correct.

All known active enterprises with 3 or more employees are included in the sampling frame so no non-sampling errors outside the minor non-coverage within the CSO's CBR are known to exist for enterprises in that size class. Enterprises with less than 3 employees are not sampled and are therefore not reflected in the results.

The CSO's CBR is updated on an ongoing basis to ensure continuing relevance. However, there can be a time lag in updated information being reflected on the CSO's CBR. As such there can be limited under-coverage where new births of enterprises are not reflected for some time and over-coverage where closures are not immediately reflected. If such ceased enterprises are included in the quarterly sample and found to be ceased, the CSO's CBR is updated accordingly. The exact level of over and under-coverage cannot be estimated.

Coverage	Q121		Q221		Q321		Q421	
Rate	Firms	Employees	Firms	Employees	Firms	Employees	Firms	Employees
BS	5.4%	54.4%	5.7%	56.4%	5.7%	56.2%	5.4%	55.4%
BE	12.7%	62.5%	12.6%	64.5%	13.9%	65.7%	12.3%	63.3%
F	1.6%	15.1%	1.8%	18.5%	1.7%	16.8%	1.5%	15.8%
G	4.4%	43.1%	4.3%	42.1%	4.4%	42.6%	4.2%	43.1%
Н	4.0%	47.1%	4.0%	47.4%	5.2%	61.2%	4.9%	57.8%
I	4.8%	35.3%	4.8%	33.9%	4.7%	30.3%	4.5%	31.3%
J	9.0%	59.4%	10.1%	62.1%	9.4%	53.4%	10.1%	59.5%
KL	6.7%	61.8%	7.4%	66.0%	7.2%	66.5%	7.1%	68.0%
Μ	3.8%	39.7%	4.1%	41.1%	4.1%	41.2%	3.9%	40.2%
Ν	8.8%	45.8%	10.8%	51.8%	9.1%	57.4%	8.4%	59.7%
0	70.8%	96.5%	44.8%	98.3%	44.0%	98.0%	40.1%	93.8%
Р	4.4%	79.6%	4.4%	80.7%	4.4%	76.0%	4.1%	72.9%
Q	7.9%	70.5%	8.4%	74.0%	8.1%	72.9%	7.2%	70.7%
RS	3.9%	25.1%	4.3%	32.9%	4.2%	32.7%	4.1%	32.2%

# 5.2.8 Coverage Rate – 2021

# 5.2.9 Non-response (Unit and Item)

Item non-response is not an issue as only fully completed questionnaires are used in analysis.

Unit non-response is dealt with by imputation or weighting. Non-response firms with greater than 50 employees are imputed based upon their previous returns. If they have not returned for five or more quarters, imputation will be based upon the average of their sample sub-sector. Non-response firms with less than 50 employees will be accounted for in the weighting process.

#### 5.2.10 Measurement Errors

As data is sourced from payroll information differences between actual values and those collected by the survey is assumed to be small. For both the scanned and electronically submitted data an extensive range of edit checks were undertaken and respondent enterprises were contacted with follow up queries to identify corrections to the data. The main instrument to examine any errors is the use of consistency checks between quarterly returns.

Response rates provide insight into the scale of measurement errors and are illustrates for 2019 below.

	Q121		Q221		Q321		Q421	
Response								
Rate	Firms	Employees	Firms	Employees	Firms	Employees	Firms	Employees
BS	51.9%	75.2%	51.8%	73.1%	51.6%	73.1%	52.3%	72.4%
BE	55.2%	75.1%	51.4%	69.8%	52.5%	69.0%	53.5%	71.1%
F	37.0%	47.2%	35.8%	49.0%	37.3%	48.7%	34.2%	49.0%
G	45.0%	65.0%	46.3%	63.6%	47.4%	65.7%	45.8%	62.0%
Н	45.1%	71.5%	45.8%	71.8%	44.9%	67.9%	46.2%	49.9%
I	40.7%	36.3%	41.1%	53.3%	42.2%	54.0%	45.4%	60.3%
J	55.3%	69.1%	59.2%	71.2%	58.0%	73.7%	58.6%	81.1%
KL	66.8%	83.7%	67.4%	88.5%	69.1%	86.4%	64.6%	82.4%
Μ	56.3%	72.3%	57.7%	74.2%	52.6%	71.5%	57.9%	76.7%
Ν	49.4%	66.4%	50.3%	63.5%	47.2%	64.2%	48.2%	64.7%
0	75.5%	51.4%	71.7%	46.1%	74.7%	48.9%	70.7%	44.9%
Р	60.2%	89.2%	54.9%	74.1%	55.7%	73.5%	61.3%	74.8%
Q	64.0%	69.7%	62.9%	69.7%	60.9%	70.8%	60.7%	73.0%
RS	53.6%	70.4%	56.5%	69.0%	54.3%	66.8%	56.6%	72.6%

#### 5.2.11 Response Rate – 2021

#### 5.2.12 Processing Errors

Data is scanned and verified for paper returns, while the electronic returns are uploaded directly to the DMS. A dedicated team assists respondents to set up CSO-compatible payroll software removing processing errors.

#### 5.2.13 Imputation

Imputation is undertaken for non-respondent enterprises with 50 or more employees. Where an enterprise responded in any of the previous three quarters, ratio-imputation is used replacing any missing value with the proportional change in that variable based on all other respondents in the quarter. Otherwise a stratum average (mean) imputation method is used replacing any missing value with the mean of that variable for all other cases in the quarter (both methods are based on respondent enterprises of a similar size and activity).

Imputation		Q121		Q221		Q321		Q421
Rate	Firms	Employees	Firms	Employees	Firms	Employees	Firms	Employees
BS	24.9%	24.3%	26.1%	26.3%	26.3%	26.1%	31.7%	28.7%
BE	25.0%	23.5%	28.8%	28.8%	28.3%	30.0%	32.5%	31.1%
F	29.3%	44.4%	29.3%	43.7%	29.5%	44.7%	34.7%	46.1%
G	29.7%	30.9%	29.7%	34.5%	29.2%	32.7%	37.4%	38.4%
н	27.3%	25.4%	28.1%	25.8%	29.1%	29.3%	35.5%	49.4%
I	33.4%	56.7%	34.1%	43.4%	34.4%	42.1%	37.6%	40.0%
J	24.7%	27.9%	23.9%	27.0%	23.0%	23.7%	29.5%	19.0%
KL	15.6%	26.9%	15.5%	10.1%	15.1%	12.4%	22.0%	12.8%
М	20.2%	26.1%	19.1%	25.5%	21.2%	26.8%	25.4%	23.5%
Ν	28.5%	31.4%	31.4%	35.0%	31.5%	33.9%	41.3%	38.1%
0	6.3%	4.2%	15.1%	9.7%	12.3%	6.7%	16.7%	12.1%
Р	15.6%	10.0%	20.4%	27.2%	19.9%	26.4%	23.0%	25.1%
Q	22.1%	20.7%	22.8%	18.8%	24.9%	20.9%	31.7%	25.8%
RS	10.6%	22.1%	11.6%	26.1%	12.8%	27.3%	11.8%	22.4%

#### 5.2.14 Imputation rate – 2021

#### 5.2.15 Model-related Effects

Data model is designed to produce consistent and comparable periods of earnings figures.

Trends in earnings can be affected by the composition of employees in a sector or group, and characteristics such as length of service, educational attainment and nature of work should be taken into account, but none of these variables are available from the EHECS survey.

#### 5.3 Data Revision

As is the usual practice with short-term data, provisional data is published initially, followed, at the release of the next quarter's data, by final data. For each quarter there will be the current quarter's provisional data and the previous quarter's final data. Differences between provisional and final data are usually minor.

EHECS data is seasonally adjusted. The seasonal adjustment specifications for each indicator are updated annually. This update can lead to revisions in historic time series extending back throughout the entire time series.

#### 5.3.1 Data Revision – Policy and Practice

Provisional data is revised with final data in the subsequent quarter. The percentage change from preliminary to final data for each indicator and NACE category is published in each EHECS release. Final data is not subject to revision, except under exceptional circumstances, such as an error, classification change or revision to secondary source data.

#### 5.3.2 Data Revision

Percentage change between preliminary & final data O4 2021							
	Average weekly earnings	Average hourly earnings	Average weekly hours				
BS	0.3%	0.2%	0.3%				
BE	-0.5%	-0.4%	0.0%				
F	2.3%	2.4%	0.0%				
G	-0.2%	-0.3%	0.0%				
Н	2.2%	1.6%	0.6%				
1	-0.6%	0.5%	-1.1%				
J	-0.1%	-0.8%	0.8%				
KL	1.3%	0.8%	0.6%				
М	0.1%	-0.2%	0.3%				
Ν	1.4%	-0.4%	1.9%				
0	0.5%	0.8%	-0.3%				
Р	0.9%	0.7%	0.4%				
Q	-1.0%	-0.6%	-0.3%				
RS	1.1%	0.7%	0.4%				

#### 5.3.3 Seasonal Adjustment

To correct for typical seasonal patterns, the earnings, hours and labour costs series are seasonally adjusted each quarter. Since Quarter 1 2015, seasonal adjustment of earnings and labour costs data is completed by applying the X-13-ARIMA model, developed by the U.S. Census Bureau.

Seasonal adjustment is conducted using the direct approach, where each individual series (average weekly earnings, average weekly paid hours, average hourly earnings, average hourly irregular earnings, average hourly other labour costs and average hourly total labour costs) is independently adjusted for each sector.

Resulting the direct seasonal adjustment approach employed, it should be noted that the sum of any component series may not be equal to seasonally adjusted series to which these components belong. For example, the seasonally adjusted average hourly earnings and seasonally adjusted other labour costs will not necessarily add up to the seasonally adjusted average total labour costs.

The X-13 ARIMA method has the X-11 moving averages process at its core but builds on this by providing options for pre-treating the series using a regARIMA approach for prior adjustment and series extension. Essentially, this methodology will estimate seasonal factors while taking account of calendar effects (e.g. timing of Easter), outliers, temporary changes and level shifts.

JDemetra+ is the seasonal adjustment software used for the adjustment of Earnings and Labour Costs data. The tool was developed by the National Bank of Belgium (NBB) in cooperation with the Deutsche Bundesbank and Eurostat and has been officially recommended to the members of the ESS as software for seasonal and calendar adjustment of official statistics.

All earnings series are updated quarterly with the entire seasonally adjusted series from Q1 2008 as part of the concurrent approach. A comprehensive review of the seasonal adjustment specification is carried out annually where revisions to the entire series are made.

# 5.4 Timeliness and Punctuality

# 5.4.1 Provisional Results

Preliminary data is released within T+56 days of the end of the reference quarter. Preliminary data is transmitted to Eurostat within T+60 (STS)/T+70 (LCI) days of the end of the reference quarter.

# 5.4.2 Final Results

Final data is released at the same time as preliminary data for the subsequent quarter which is within T+112 days of the end of the reference quarter.

# 5.4.3 Coherence

Data is tested for coherence at individual enterprise level each quarter comparing data with previous returns and inconsistencies are followed up with respondents. The coherence of earnings and employment output from EHECS are reviewed in relation to other sources such as National Accounts, Earnings Analysis using Administrative Data Sources (EAADS) and the Structure of Earnings Survey.

# 5.4.4 Comparability

Results are compared to other sources of earnings data such as the Earnings Analysis using Administrative Data Sources (EAADS), the Structure of Earnings Survey and National Account's Compensation of Employees estimates. Employment estimates are checked quarterly against the Labour Force Survey (LFS). Public sector employment is compared to FTE data from the Department of Public Expenditure and Reform. Any differences are researched and explained before results are finalised.

# 5.5 Accessibility and Clarity

# 5.5.1 Assistance to Users, Special Analyses

A dedicated team along with all other staff members dealing with Form A returns assist data providers to set-up .xml returns using payroll software.

# 5.5.2 Revisions

Final data is not subject to revision, except under exceptional circumstances such as an error, classification change or revision to secondary source data.

# 5.5.3 Publications

# 5.5.4 Releases, Regular Publications

Earnings and Labour Costs (Quarterly) Earnings and Labour Costs (Annual)

5.5.5 Statistical Reports

None

# 5.5.6 Internet

Earnings and Labour Costs - CSO - Central Statistics Office https://data.cso.ie/product/ELCQ

# 5.5.7 Confidentiality

Information collected is treated as strictly confidential in accordance with the Statistics Act 1993.

# 6. Additional Documentation and Publications

CSO Survey and Methodology <u>http://www.cso.ie/en/surveysandmethodology/earnings/</u> Labour Cost Survey / Labour Cost Index <u>Labour costs - Labour Market (incl. LFS) - Eurostat (europa.eu)</u> Short Term Statistics <u>Overview - Short-term business statistics - Eurostat (europa.eu)</u> Job Vacancy Statistics Job vacancies - Labour Market (incl. LFS) - Eurostat (europa.eu)