

Handbook on Forms of Employment



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Handbook on Forms of Employment



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Preface

In recent years, many countries have witnessed the emergence and growth of new forms of employment, driven by economic changes, the adoption of new business models, technological advancement, and continuing digitalization. New ways of organising work and production have been accelerated by the COVID-19 pandemic, leading to a further increase in the scale and scope of new forms of employment. These new forms of employment, often characterised by unconventional work relationships and modalities, and the growing number of workers involved in them sparked discussions among policymakers on the development of diverse forms of employment and their potential impact on social protection and working conditions.

For statistical offices, this trend has created the need to measure the development of diverse forms of employment by compiling adequate and relevant statistics to meet the statistical demands of decision-makers, researchers, and the public. Therefore, in 2021 the Bureau of the Conference of European Statisticians established a Task Force to develop a conceptual framework to assist countries in producing relevant, coherent and internationally comparable statistics on forms of employment.

The Handbook presents a broad framework to classify and understand forms of employment, which is centred around two main dimensions: work relationships (as defined in the 2018 International Classification of Status in Employment) and work modalities (the way in which work is coordinated, performed, and compensated). To develop a full understanding of forms of employment, the Handbook provides definitions of the concepts of permanence and stability of employment. It also covers the broader context of forms of employment which includes person-level circumstances, social protection, and quality of employment to help better understand the impact of forms of employment on well-being. The Handbook provides definitions of key concepts, general principles and guidelines as well as a list of key recommended indicators with the goal of facilitating national statistical efforts to classify, measure and track diverse forms of employment relevant to their national context.

The Handbook acknowledges and refers to existing international recommendations, such as those prepared by Eurostat, the Organisation for Economic Co-operation and Development (OECD) and the International Labour Organization (ILO).

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In February 2021, the Bureau of the Conference of European Statisticians carried out an in-depth review on new forms of employment based on a paper prepared by Statistics Canada¹. Following the results of the in-depth review, the Bureau established the Task Force on Forms of Employment to develop a conceptual framework for measuring forms of employment. The Task Force worked from July 2021 to June 2022 and this Handbook is the result of its work.

The Task Force was chaired by Vincent Dale (Statistics Canada). Other members were Bjorn Jarvis (Australian Bureau of Statistics), Vincent Hardy and Martin Lemire (Statistics Canada), Geovanni Portilla (Colombia), Hanna Sutela (Statistics Finland), Claude Picart (National Institute of Statistics and Economic Studies, France), Christian Wingerter (Federal Statistical Office of Germany), Edel Flannery (Central Statistics Office of Ireland), Mark Feldman and Merav Pasternak (Central Bureau of Statistics of Israel), Federica Pintaldi (Italian National Institute of Statistics), Ana Lilia Cambron, Oscar Ramírez and Juan Trejo (National Institute of Statistics and Geography, Mexico), Lian Kösters (Statistics Netherlands), Ann Lisbet Brathaug (Statistics Norway), Agnieszka Zgierska (Statistics Poland), Elena Zarova (Federal State Statistics Service of Russia), Boon Heng Ang (Manpower Research and Statistics Department, Singapore), Tina Osvald Zaletelj and Hana Vratnar (Statistical Office of Slovenia), Silvia Perrenoud (Swiss Federal Statistical Office), David Freeman (Office for National Statistics of the United Kingdom), Anne Polivka and Patrick Carey (Bureau of Labor Statistics, United States), Michael Frosch, Christina Behrendt and Valeria Nesterenko (International Labour Organization), Irene Mandl (European Labour Authority), Riccardo Gatto (Eurostat), Fabrice Murtin and Jorrit Zwijnenburg (Organisation for Economic Co-operation and Development), Françoise Carré (Women in Informal Employment: Globalizing and Organizing), Franceska Grum (United Nations Statistics Division), Carsten Boldsen, Evita Sisene and Simiao Wang (UNECE).

Each chapter was drafted by a lead author(s) and subsequently reviewed by Task Force members. The lead authors were Vincent Hardy (Chapter 1 and Chapter 3), Michael Frosch (Chapter 2), Ana Lilia Cambron and Juan Trejo (Chapter 4), David Freeman (Chapter 5), Christina Behrendt and Valeria Nesterenko (Chapter 6), Boon Heng Ang (Chapter 7), Riccardo Gatto and Agnieszka Zgierska (Chapter 8). Ann Lisbet Brathaug and Tihomira Dimova were lead authors of Annex A. Vincent Hardy was lead author of Annex B and Annex C. Jessica Gill (Statistics Canada), Lian Kösters, Irene Mandl, Patrick Carey, Tina Osvald Zaletelj, Anne Polivka, Christian Wingerter, Elena Zarova and Jorrit Zwijnenburg also contributed to the drafting of the chapters.

Vincent Hardy reviewed the Handbook to ensure clarity and consistency across chapters. A big thank you to Joe Grice who provided thorough edits and valuable feedback to the Handbook.

¹ https://unece.org/sites/default/files/2021-11/WP8_New%20forms%20of%20employment_ENG%20updated_0.pdf

Contents

Preface	i
Acknowledgements	ii
Chapter 1 Introduction	1
1.1 What is a “form” of employment?	2
1.2 Classifying forms of employment	2
1.3 The Conceptual framework: a two-dimensional classification	3
1.4 Integrating the dimensions in measurement	5
1.5 Organization of the Handbook	7
1.6 Topics and considerations for further work	8
Chapter 2 Work relationships	9
2.1 Employment and jobs	9
2.1.1 What is a job?	10
2.2 ICSE-18: a statistical standard for categorizing jobs	12
2.2.1 Key concepts in the ICSE-18 framework	13
2.2.2 The main categories of ICSE-18 according to type of authority	14
2.3 Classifying challenging forms of employment	17
2.3.1 Classification of jobs according to economic risk and authority	17
2.3.2 Statistical classification versus legal classification	18
2.3.3 ICSE-18 and work modalities	19
2.3.4 Multi-party work relationships	20
Chapter 3 Work modalities	25
3.1 Definition and relationship with other statistical concepts	26
3.2 Statistical properties	27
3.3 The main aspects of work modalities	27
3.3.1 Working-time	27
3.3.2 Work location	34
3.3.3 Electronic allocation and supervision of work tasks	39
3.3.4 Forms of remuneration and payment	44
3.3.5 Cooperation within and across organizations	47
3.4 Informality	50
Chapter 4 Stability and permanence in work relationships	53
4.1 Background	53
4.2 Types of work relationships	54
4.3 Towards a definition of permanence and stability in work relationships	55
4.3.1 Definition of permanence in work relationships	55
4.3.2 Definition of stability in work relationships	59
4.3.3 Distinction between permanence and stability	61

4.4 Gig work.....	62
4.5 Measurement of stability and permanence in work relationships	64
4.5.1 Measures relevant to all status in employment categories.....	64
4.5.2 Measures relevant to dependent workers.....	64
4.5.3 Measures relevant to independent workers.....	67
4.6 Questions that could be used for the measurement of permanence.....	69
4.7 Questions that could be used for the measurement of job stability	71
Chapter 5 Measuring interactions with personal circumstances and characteristics.....	75
5.1 Personal, job and employer characteristics	75
5.1.1 Job characteristics	76
5.1.2 Employer characteristics	76
5.1.3 Personal, household and family characteristics.....	76
5.2 Examples of individual personal characteristics	77
5.2.1 Age.....	77
5.2.2 Gender or sex	77
5.2.3 Nationality/Migrant status	77
5.2.4 Race/ethnic group	77
5.2.5 Disability	77
5.2.6 Education status	78
5.3 Examples of household and family characteristics	78
5.3.1 Housing tenure	78
5.3.2 Dependent children.....	79
5.3.3 Type of household or family.....	79
5.4 Examples of the fit between people and jobs.....	79
5.5 Examples of characteristics of wider labour market and economic participation.....	79
5.5.1 Income and earnings (including all sources)	79
5.5.2 Multiple jobs.....	80
5.6 Personal characteristics and precarious employment	80
5.7 Person-level trajectories and constraints in the supply of labour	81
5.7.1 Constrained labour supply and forms of employment	81
5.7.2 Persistence in the form of employment.....	82
5.7.3 Use of administrative data and further longitudinal analysis	83
Chapter 6: Employment and Social Protection.....	85
6.1 Social protection: definition and key concepts	85
6.2 Employment and social protection	87
6.2.1 Social protection mechanisms and employment.....	87
6.2.2 How well are workers in different forms of employment protected?.....	89
6.3 Social protection and employment forms.....	91

6.4 Indicators on social protection (including health protection)	92
6.4.1 Dimensions relevant to social protection indicators	92
6.4.2 Social protection indicators as part of quality of employment	94
6.4.3 Social protection and health coverage indicators in the SDG framework	94
6.4.4 Data requirements	95
6.5 Data sources.....	96
Chapter 7 Forms of Employment and Quality of Employment	99
7.1 Quality of Employment	99
7.2 The dimensions of quality of employment	100
7.3 Forms of employment as indicators of quality of employment.....	102
7.3.1 Work relationships as indicators of quality of employment.....	103
7.3.2 Work modalities as indicators of quality of employment.....	103
7.4 Forms of employment as drivers of quality of employment	104
7.5 Society-level and person-level indicators	106
Chapter 8 Data sources and indicators	107
8.1 Data Sources	107
8.1.1 Household-based surveys	107
8.1.2 Establishment-based surveys.....	111
8.1.3 Administrative records-based statistics	112
8.1.4 Ad hoc surveys	112
8.2 Indicators.....	113
8.2.1 Statistical measurement of workers based on ICSE-18	113
8.2.2 Statistical measurement of forms of employment not based on ICSE-18.....	114
8.3 Recommendations on frequency	119
Annex A. Employment in national accounts	121
Annex B. Prevalence of new forms of employment in CES countries	129
Annex C. Possible combinations of work relationships and work modalities	135
References.....	141

Chapter 1 Introduction

1.1 Alongside the digitalisation and globalisation of societies around the world, demographic change, and the green transition, new ways of organizing employment have emerged in recent decades. The COVID-19 pandemic and public health measures introduced by governments to limit the spread of the virus have also accelerated the emergence of work performed remotely with the support of information and communication technologies (ICT) and other digital technologies. New forms of employment can offer benefits to both businesses and workers, but also challenge existing statistical and legal concepts, labour market institutions and social protection systems. This has created a need to adapt statistical concepts and measurement strategies to better capture the growing diversity of forms of employment.

1.2 In 2020, the Bureau of the Conference of European Statisticians completed an In-Depth Review on *New Forms of Employment and Quality of Employment* to assess current challenges around measuring various forms of employment. The review found that there is strong interest among policy makers and researchers across the CES region for data on new forms of employment, particularly digital platform employment.

1.3 At the centre of the statistical measurement of forms of employment are resolutions of the International Conference of Labour Statisticians (ICLS), which provide guidelines on core statistical concepts such as work, employment, unemployment and work relationships.

1.4 While these core concepts reflect broad consensus within the international statistical community, they are accompanied by a variety of additional terms and definitions proposed by international organizations, researchers, and national statistical agencies to describe in greater detail various aspects of employment. These supplementary concepts, which include notions such as non-standard employment, quality of employment, atypical employment and gig work, among others, have made substantive contributions to the understanding of the various ways in which employment is organized and carried out around the world.

1.5 Yet, these terms occasionally overlap and are not integrated as part of a coherent framework, leading to possible confusion about the precise nature and characteristics of various employment-related phenomena. The lack of a clear overarching framework also poses a challenge to NSOs who wish to track the growing diversity of forms of employment in a consistent and comparable manner.

1.6 In this context, the main purpose of this Handbook is to reconcile the rich conceptual literature on forms of employment around a coherent and durable Conceptual Framework. This framework can serve as a guide for further data collection and offers a set of terms for NSOs and researchers to use when analysing and disseminating data on forms of employment. In addition, it aims to help NSOs and other researchers understand and classify new forms of employment that are currently emerging in their country. The guide does not replace the resolutions of the ICLS and key international guidelines such as the UNECE *Handbook on Measuring Quality of Employment*. Rather, it is a reference document which compiles information from a variety of sources and serves as a starting point for more in-depth data collection and research on specific topics.

1.7 It is hoped that the Handbook can foster consensus within the international statistical community by providing a common conceptual language for the classification and measurement of existing and future forms of employment.

1.8 While the present Handbook focuses largely on employment statistics, labour statisticians are encouraged to stay informed of changes and innovations in other statistical

areas such as national accounts, and the classification of occupations and industries. On several topics, including digitalization and the sharing economy, the parallel evolution and integration of statistical concepts is required in order to fully capture economic transformations.

1.1 What is a “form” of employment?

1.9 The present Handbook focuses solely on the statistical category of employment – one of the five categories of *work* defined by 19th ICLS *Resolution concerning statistics on work, employment and labour underutilization*. The Resolution defines employment as “work performed for others in exchange for pay or profit” ([ILO, 2013a, paragraph 7\(b\)](#)).

1.10 Forms of employment are, first and foremost, distinct clusters of features associated with the way employment is organized, supervised, compensated and performed. Forms of employment may have a basis in labour law, collective bargaining agreements or only exist as organizational practices. For example, most countries establish a distinction between paid employment carried out for an employer and employment conducted for profit. However, in other cases, forms of employment only exist as company practices and lack an official definition.

1.11 Ongoing change in the forms of employment found in national labour markets is often, but not always, the result of strategies implemented by businesses to increase flexibility ([Eurofound, 2015, p. 135](#)). There are two broad types of flexibility. Business, or employer-led flexibility refers to the ability for businesses to operate with fewer constraints in relation to governmental regulations, time and space, while worker-led flexibility refers to the ability for workers to exert greater control over different aspects of their employment such as their work location and maintaining a balance between their work and personal life. Innovations introduced by organizations to become more flexible can play an important role in increasing productivity and in decreasing transaction costs, and may provide new opportunities for workers to achieve greater work-life balance. At the same time, employer-led flexibility can increase working time instability and expose workers to greater economic risk.

1.12 While flexibility and forms of employment can be defined from the perspective of workers or businesses, the Handbook is aligned with existing international statistical standards on employment by focusing on the classification of forms of employment from the perspective of workers. As such it builds up from the statistical unit of employment, capturing the diverse circumstances which characterize work for pay or profit around the world, and its implications for workers.

1.2 Classifying forms of employment

1.13 Classifying forms of employment requires addressing three key challenges (see [Cappelli and Keller, 2013](#)). The first is to ensure that forms of one type are more similar to each other than forms of a different type. While this may seem relatively straightforward, in practice, challenges arise when forms of employment are considered from different angles. For example, different types of employees may be more similar to each other than independent workers (see Box 1.1) when using a classification based on autonomy, but some employees may have more characteristics in common with some types of independent workers (see Box 1.1) when considering their situation in terms of stability and permanence. As such, the selection of attributes to classify forms of employment are central to the development of a consistent and durable Conceptual Framework.

1.14 The second challenge is to develop well-defined boundaries that ensure that categories of forms of employment are clearly distinct from each other. Forms of employment are discrete categories rather than points on a continuous or ordinal scale, and specific forms have common attributes which distinguishes them from others.

1.15 The third challenge is to ensure that forms of employment can be classified into categories that remain relatively stable and relevant over time. The labour market is in constant evolution, and new forms of employment continuously emerge in response to technological, legislative, and economic change. As such, it is important for a Conceptual Framework to offer a set of categories that can capture ongoing change within the labour market, while remaining informative about the specific properties which characterize each employment form.

1.16 In addition to the challenges identified by Cappelli and Keller, the classification of forms of employment should be associated with measurable phenomena that can serve as the basis for data collection and the statistical measurement of forms of employment.

1.17 While classifications are typically hierarchical in nature, with broader categories covering more detailed sub-dimensions, the Conceptual Framework on Forms of Employment is based on a two-dimensional approach which reflects the distinction between **work relationships** and **work modalities**.

1.3 The Conceptual framework: a two-dimensional classification

1.18 To accurately capture the growing diversity of forms of employment, it is necessary not only to consider the work relationships, but also the way in which employment is conducted. Therefore, the Conceptual Framework is organized around both work relationships and an additional dimension: the concept of work modalities². This dimension refers to the ways in which work is coordinated, performed, and compensated over time and space.

1.19 The idea of developing a multi-dimensional system for the classification of forms of employment is not new. In Eurofound's (2015; 2020) conceptualization of new forms of employment in Europe, the concept of "work patterns" was introduced to describe emerging forms of employment that involve aspects other than the work relationship itself and concerns "the way in which work is conducted" (Eurofound, 2015, p.7). Similarly, as part of its review of the French system of employment measurement in 2016, the Conseil national de l'information statistique (CNIS) in France independently put forward the concept of "modalities of the performance of employment" ("modalités d'exercice de l'emploi") (CNIS, 2016) to describe phenomena which relate to the way in which work is conducted.

1.20 **Work relationships** refer to the relationship between workers and the economic unit for which they work. According to the International Labour Organization (ILO) (2020a, paragraph 7) "statistics on work relationships provide important information on the nature of the economic risk and authority that individuals experience at work, and on the strength and nature of the attachment of workers to the economic units in which or for which they work."

² NSOs and researchers may also use the terms "work pattern" or "work arrangement" if deemed more relevant to the national context or closer to existing terminology in the national language.

Box 1.1

From “self-employed” to “independent” workers

Throughout the text, the concept of *independent worker* is used instead of *self-employed*. Despite its widespread use, the term “self-employment” has an ambiguous meaning. In the System of National Accounts (SNA), self-employment refers to the working owners of unincorporated enterprises who are not in paid employment (they receive mixed income, which contains elements of both labour remuneration and capital returns), while in the previous version of ICSE (ICSE-93), self-employment referred to all workers who are not employees, independent of the exact form of remuneration. In addition, some workers who are treated as self-employed in ICSE-93 – namely contributing family workers and dependent contractors – are not truly independent since they depend on an economic unit they do not own or control for their employment. Annex A provides a detailed explanation of self-employment in the SNA.

For this reason, the ICSE-18 classification based on authority (ICSE-18-A) treats dependent contractors and contributing family workers as distinct types of work relationships which are included in the broader group of *dependent workers*. Employers and independent workers without employees are classified as *independent workers*.

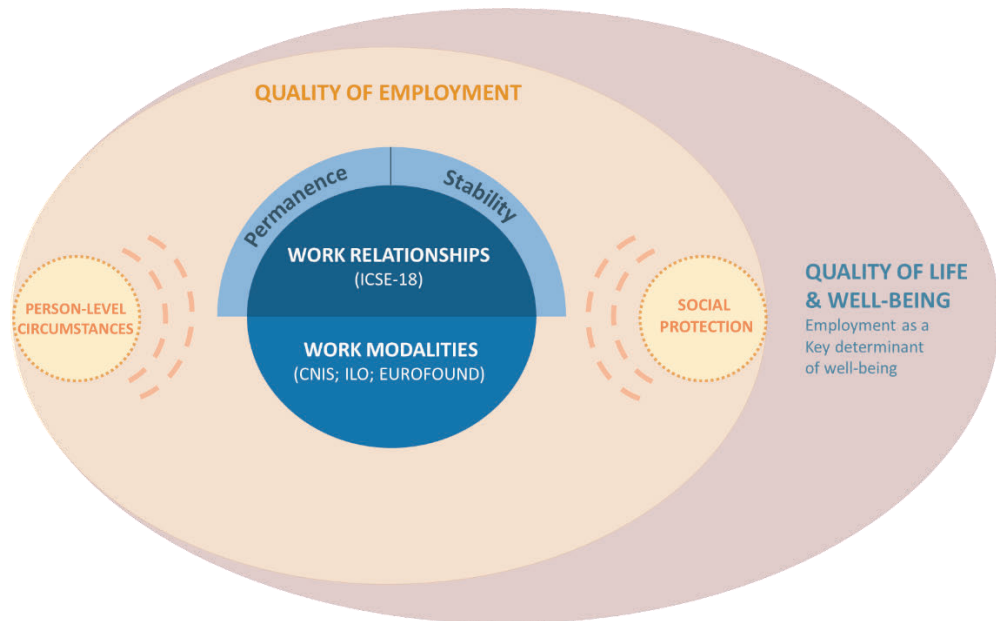
For the purposes of providing data to SNA, ICSE-18-R should be used. This version of ICSE-18 is based on the broad distinction between *employment for profit*, which includes dependent contractors, independent workers in household market enterprises, and contributing family workers, and *employment for pay*, which includes employees and the owner-operators of corporations.

1.21 The international statistical standard for statistics on work relationships is the International Classification of Status in Employment 2018 (ICSE-18). ICSE-18 includes two classifications: ICSE-18-R which classifies work relationships according to the type of economic risk and ICSE-18-A which classifies work relationships according to the type of authority. The status in employment categories described by ICSE-18-A include, for example, employees, employers, independent workers without employees, and dependent contractors.

1.22 While there is no international statistical standard governing the concept of work modalities, a number of specific modalities, such as working time arrangements, are defined by ICLS resolutions.

1.23 The Conceptual Framework put forward in the Handbook is summarised in Figure 1.1. At the centre are the twin concepts of work relationships and work modalities, as discussed above.

Figure 1.1
Conceptual Framework on Forms of Employment



1.24 A full understanding of forms of employment involves additional considerations, including: (1) the level of **permanence and stability** associated with work relationships; (2) the **social protection system** in which the form of employment is found; (3) **the circumstances of persons** who are employed in the form of employment; and (4) the impact of forms of employment on individual well-being, as captured by the broader concept of **quality of employment**. Alongside the central considerations of work relationships and work modalities, these four additional dimensions help support a comprehensive Conceptual Framework for measuring forms of employment and understanding their impact on well-being.

1.4 Integrating the dimensions in measurement

1.25 The relationship between work relationships and work modalities can be presented in the form of a grid (Figure 1.2). All forms of employment correspond to a single status in employment category that can be associated with one or more modalities.

1.26 The length of work hours, the main work location, and digital platforms are presented as examples of work modalities. While all combinations of these modalities and ICSE-18 categories are possible, some modalities only apply to a few or one type of work relationship. For example, some forms of remuneration, such as wages and salaries, only apply to employees and owner-operators of corporations. A more complete mapping of possible combinations of work modalities and status in employment categories is presented in Annex C.

Figure 1.2
The relationship between work relationships and work modalities at the level of the job

Work relationships (ICSE-18)		Work modalities: Example					
		Working-time		Working location		Digital platforms	
		Length of work hours		Main work location		Works through a digital platform	
Main ICSE-18 categories		Part-time	Full-time	At home	Outside the home	Yes	No
Employees							
Dependent contractors							
Employers in corporations							
Employers in household market enterprises							
Owner-operators of corporations without employees							
Own-account workers in household market enterprises without employees							
Contributing family workers							

1.27 Measuring the degree of permanence or stability workers experience in their jobs may also be of interest to NSOs and researchers. While permanence in employment refers to the existence of an open-ended guarantee of continuous employment, stability refers to the length of the duration of employment (tenure) and the regularity at which workers were able to remain employed or engage in income-generating tasks over this period. Permanence and stability should be understood as subdimensions of the broad categories of work relationships in ICSE-18 with more or less permanent or stable jobs existing within each category. While ICSE-18 includes a subclassification of employees based on permanence and stability that reflects the degree to which employees are exposed to economic risk, it does not offer guidance on the measurement of the two dimensions in other types of work relationships. However, independent workers, dependent contractors and contributing family workers may also face different levels of permanence and stability. This can be captured by additional indicators which are described in Chapter 4.

1.28 Indicators of permanence and stability can be combined with the classification of work relationships and work modalities to create a grid covering all major dimensions of interest for the measurement of forms of employment, as illustrated in Figure 1.3.

Figure 1.3
Work relationships, work modalities, and permanence and stability

Work relationships (ICSE-18)		Work modalities: Example					
		Permanence and stability	Working-time		Working location		Digital platforms
			Length of work hours	Main work location	Works through a digital platform		
Main ICSE-18 categories		Part-time	Full-time	At home	Outside the home	Yes	No
Employees	Permanent						
	Fixed-term						
	Short-term and casual						
	Paid apprentices, trainees and interns						
Dependent contractors	More permanent or stable						
	Less permanent or stable						
Employers in corporations	More permanent or stable						
	Less permanent or stable						
Employers in household market enterprises	More permanent or stable						
	Less permanent or stable						
Owner-operators of corporations without employees	More permanent or stable						
	Less permanent or stable						
Own-account workers in household market enterprises without employees	More permanent or stable						
	Less permanent or stable						
Contributing family workers	More permanent or stable						
	Less permanent or stable						

1.29 While statistical indicators could reflect a specific cell within the table (e.g. fixed-term employees working part-time), in many cases a combination of status in employment categories, a specific work modality, or even a mix of modalities and status in employment categories are

used to build indicators. For example, NSOs interested in measuring the use of digital platforms among independent workers without employees who work from home would combine two statuses in employment categories (own-account workers in household market enterprises without employees and owner-operators of corporations without employees) with two modalities.

1.30 When social insurance programs are tied to jobs rather than provided universally, social protection can be added as an additional dimension to the grid. The statistical relationship between forms of employment and social protection is highly dependent on the design of laws and social programs within a country.

1.31 The classification and statistical measurement of forms of employment is conducted at the level of the job. However, a person may have multiple jobs, and the job may have a different impact on the person depending on their situation. As such, the interaction between the form of employment and person-level characteristics should be treated as separate level of analysis.

1.5 Organization of the Handbook

1.32 In this first, introductory chapter, the main dimensions of the Conceptual Framework and their interrelationships were presented and defined. Each subsequent chapter of the Handbook elaborates on these main dimensions.

1.33 *Chapter 2* describes in greater detail the concept of work relationships, building on the statistical units of employment and “job”, as defined by ICLS Resolutions. The Chapter also provides definitions of the main status in employment categories in ICSE-18 and introduces the concept of multi-party work relationships.

1.34 *Chapter 3* introduces five broad work modality aspects as well as the concept of informality and provides definitions for many modalities increasingly relevant in the context of a digitized and globalized world such as telework and digital platform employment.

1.35 *Chapter 4* presents definitions of stability and permanence based on ICSE-18 and introduces possible criteria for assessing stability and permanence among independent workers and dependent contractors. In addition, it proposes a definition of “gig work”, in order to help NSOs capture new forms of employment that are based on short tasks rather than well-defined positions.

1.36 *Chapter 5* describes concepts and indicators that can be used to measure and understand the relationship between forms of employment and person-level circumstances.

1.37 *Chapter 6* provides a discussion of core concepts related to social protection and describes how social protection should be measured in relation to forms of employment.

1.38 *Chapter 7* outlines the link between the Conceptual Framework on Forms of Employment and Quality of Employment.

1.39 *Chapter 8* offers a description of possible data sources as well as recommendations on indicators to prioritize in relation to the statistical measurement of forms of employment.

1.40 *Annex A* addresses the conceptual and statistical relationships between forms of employment and the System of National Accounts (SNA).

1.41 *Annex B* presents an overview of emerging forms of employment in CES countries based on research by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) complemented by the results of a survey carried out by the Task Force on Forms of Employment in 2021.

1.42 *Annex C* provides a more detailed conceptual mapping of the relationship between work relationships and work modalities.

1.6 Topics and considerations for further work

1.43 The Handbook reflects consensus reached by task force members on a wide range of issues, including a broad framework to classify and understand forms of employment, definitions of key concepts such as work relationships and work modalities, as well as a list of key indicators that can help NSOs track changes in forms of employment over time and understand their impact. The Handbook does not include a comprehensive list of all forms of employment, nor does it attempt to map all possible combinations of work modalities and work relationships. Rather, it provides general principles and guidelines that can help NSOs and researchers classify and measure diverse forms of employment that are relevant to their national context. Since the Handbook focuses on concepts and statistical definitions, in most cases specific measurement guidance (e.g., examples of questions for household surveys) and recommendations on the frequency of measurement are not provided. Hence, further work on forms of employment should consider the development of practical guidance on data collection and measurement challenges. Sharing of experiences and good practices in measuring new and emerging forms of employment among countries will also be helpful. Additionally, as some of the topics raised in the Handbook are on the cutting edge of labour statistics, further work should be aligned with the conceptual and methodological development of those topics.

Chapter 2 Work relationships

2.1 The emergence of a variety of new contractual arrangements and the increasing uncertainty around the boundaries between different categories of workers underlines the need to provide data that can monitor this development ([ILO, 2015a](#)). Flexible or ambiguous work relationships are not new phenomena. They have existed historically, for example, in countries characterised by less regulated, or highly informal labour markets. The new International Classification of Status in Employment (ICSE-18), which has replaced the old classification of status in employment (ICSE-93), provides an improved statistical framework that better meets the need for statistical information to monitor the changes in employment arrangements that are taking place in many countries.

2.2 The following chapter provides an overview of the new International Classification of Status in Employment as defined by the *Resolution concerning statistics on work relationships* adopted at the 20th International Conference of Labour Statisticians (ICLS) in 2018. The focus is on how ICSE-18 can be used and applied to forms of employment that might emerge due to changes in the labour market.

2.3 Section 2.1 discusses the concept of employment as defined by the *Resolution concerning statistics on work, employment and labour underutilization* adopted at the 19th ICLS in 2013. This is followed by a discussion of the concept of jobs, highlighting the statistical concept of a job as a reference unit for statistics on work modalities and the characteristics of work relationships.

2.4 Section 2.2 describes ICSE-18 and its two underlying dimensions: *type of economic risk* and *type of authority*. The two dimensions are used to derive the ten mutually exclusive categories of *status in employment* included in ICSE-18 and are used for organizing ICSE-18 according to its two different hierarchies. The section also includes definitions of the aggregated categories *Employers*, *Own-account workers*, *Dependent contractors*, *Employees* and *Contributing family workers*, as well as their different detailed categories.

2.5 Section 2.3 discusses how ICSE-18 and the two dimensions of type of authority and economic risk can be used to classify forms of employment that might not strictly match the definitions of the 10 employment categories in ICSE-18. For example, this could include situations where a work relationship is characterised by a specific work modality that extends across multiple statuses in employment or where a new form of work relationship emerges in a specific country. It also discusses the differences between legal classifications and statistical classifications, stressing that even if the legal classification impacts the statistical classification the two classifications are essentially different. Finally, the section presents different types of multi-party work relationships.

2.1 Employment and jobs

2.6 The first step in developing statistics on different forms of employment, and thus also for different forms of work relationships or jobs, is to ensure that the activities are correctly identified as employment in the first place. The 19th ICLS *Resolution concerning statistics on work, employment and labour underutilization* ([ILO, 2013a](#)) provides statistical definitions for

five different forms of paid as well as unpaid work, including employment³. The identification of the activities defined as employment is a pre-condition to provide statistics on jobs, the characteristics of the jobs and work modalities.

2.7 In the ICLS standard, employment is defined as work performed in return for pay or profit, which reflects the fact that the intention of activities defined as employment is to receive remuneration in some form. This is independent of whether the remuneration is actually received by the person performing the work. An independent worker (i.e., employer or own-account worker) might incur a loss and an employee might not receive the agreed payment. These situations would still be counted as employment since the main intention behind the activity is to receive remuneration.

2.8 The employed population is measured in relation to a short reference period of one week, to produce a direct picture of employment at a given point in time. For operational reasons, a criterion of “one hour” of work for pay or profit is used to determine whether an employed person can be regarded as being at work. The “low threshold” of one hour during the reference week ensures that all types of jobs, including sporadic, short-term, and temporary work is included in employment statistics. It does, however, also require that jobs with few hours and of a short duration are properly identified and measured, even if challenging.

2.9 In addition to employed persons at work, employment also consists of those who are absent from their job in the short reference period, for example due to sick leave, annual leave, maternity leave, compensatory leave for overtime etc., but still maintain attachment to the job. A job attachment is perceived to exist based on the reason for the absence, the continued receipt of remuneration, and/or the total duration of the absence (less or more than three months). Or in the case of independent workers, whether the worker has conducted any activities related to the business within the last three months and/or whether the worker intends to pick up the work within a three-month period ([ILO, 2013a, paragraph 29](#)).

2.1.1 What is a job?

2.10 While employment as one of the five forms of work describes the status of a person regarding being employed or not, the term job is used to describe the activities performed and their characteristics.

2.11 A *job* is defined as a set of tasks and duties performed (or meant to be performed) by one person for a single economic unit in relation to activities defined as employment ([ILO, 2018b, paragraph 8](#)). All activities carried out by a person and defined as employment can be linked to one or more jobs. This includes situations where persons might not themselves consider the activities carried out for pay or profit as a “job”. Some activities may be very sporadic, for just a few hours, or may be viewed as a hobby or to earn some additional income. A person who spends just a few hours on an activity to earn additional income in a given reference period should be counted as employed and the activities would be linked to one or multiple jobs. This is essential from a statistical perspective because such an approach allows the categorization of different types of jobs and the characterization of those jobs (e. g. working hours, industry, whether the job is seasonal, formal, or informal etc.). In other words, the job is a reference unit which facilitates the grouping of different typical forms of employment by their characteristics and a meaningful description of the structure of employment in a country.

³ The five forms of work include *Employment, Unpaid trainee work, Volunteer work, Own-use production work and Other work activities* as defined by the 19th ICLS Resolution concerning statistics on work, employment and labour underutilization ([ILO, 2013a](#)).

2.12 Persons may have several jobs during a given reference period. The separation between multiple jobs carried out by the same person is closely linked to the type of job the person has, and to the concept of economic units. Dependent workers (i.e., employees, contributing family workers and dependent contractors) have as many jobs as economic units on which the worker depends ([ILO, 2018b](#)). For example, an employee would have two different jobs if carrying out work for two different employers (i.e., two different economic units). Independent workers however, (i.e., employers and independent workers without employees), have as many jobs as economic units they own and operate. An independent worker that owns and operates two different businesses would therefore have two different jobs. People can also have multiple jobs that fall into different categories of status in employment. The same person can, for example, be an independent worker in one job and an employee in the other if the person has an enterprise and also works for an employer as an employee. When a person has multiple jobs, the main job is the job for which the worker usually works the most hours, or if this information is not available, the job from which the worker receives the highest income.

2.13 The separation between different jobs held by the same person is in many cases relatively straightforward. An employee with two different employers would be conceived by most as having two different jobs. Similarly, a person with a registered enterprise who has a second job as an employee would typically be considered to have two different jobs. However, the separation between jobs might become more challenging in relation to independent workers working in an informal context. Informal independent workers (i.e., for example independent workers that have not registered their enterprise) can still carry out a diverse set of activities; for example, drive a taxi during the week and sell fruit at the market during the weekend. Due to the fact that the activities are informal, there are no formal economic units to link the different activities to. Therefore, it is not a given whether these different activities should be considered one job or multiple jobs. The current statistical standards defining the concept of job⁴ do not as such address these situations. Further work on this is currently being conducted by the ILO as part of the revision of the statistical standards on informality. In the current context, a pragmatic approach would be to allow for activities carried out by the same person that involve different kinds of productive activities, as defined by the classification of industries (e.g. ISIC), and with different skill requirements and occupations, as defined by the classification of occupations (e.g. ISCO), to be defined as separate economic units and therefore different jobs ([ILO, 2021a](#)).

2.14 Even if the independent worker does not carry out different activities, there are cases when the concept of economic unit may also be challenging to establish. This could be the case when the activities are very sporadic or conducted for only a few hours and do not involve any significant investment in a business. Examples include a homemaker who sporadically receives some material to assemble, a person who sporadically sells homemade candles at a local artisan market, or a person providing services through a digital platform to earn extra income. In these situations, persons may not perceive that they are operating a business or enterprise, and no significant financial or material investments may have been made. Thus, the economic unit and the worker are in a sense the same unit, and the worker does not have an enterprise or business as such. Therefore, in these cases, the economic unit becomes a statistical construction rather than de-facto “physical” or legal business or enterprise.

2.15 However, even in such cases the concept of economic unit is still essential for identifying the job, for categorizing the status in employment and for distinguishing between multiple jobs if relevant. If the activities carried out by the person that sells homemade candles at the market or by the person that provides services through a digital platform fulfils the requirements for being defined as employment, then these activities are linked to the statistical unit of a job. If

⁴ The concept of job is defined in the 19th ICLS *Resolution concerning statistics on work, employment and labour underutilization* ([ILO, 2013a](#)) and in the 20th ICLS *Resolution concerning statistics on work relationships* ([ILO, 2018b](#)).

the worker is not engaged as a dependent worker by another economic unit to carry out these activities, then these activities would be carried out for an economic unit owned and operated by the person, even if the economic unit is a statistical construction rather than an “actual enterprise”. This underlines how all activities defined as employment are linked to a job, which is based on the work relationship between the person that carries out the activities and the economic unit for which the work is carried out. The job, in turn, becomes the reference unit for the statistical collection and description of the characteristics of the employment and the work modalities attached to the job.

2.2 ICSE-18: a statistical standard for categorizing jobs

2.16 To develop internationally comparable data on the employed population, the ILO introduced a classification of different types of work relationships, the International Classification of Status in Employment (ICSE). ICSE is thus a ‘tool’ for classifying different forms of employment, and more specifically, different types of jobs. The previous ICSE was introduced in 1993 (ICSE-93). Due to the changing structure of the labour market, there was a need to provide a more detailed and relevant classification to better reflect work relationships in the labour market. To meet this need a new version of ICSE was introduced in 2018 (ICSE-18) at the 20th ICLS with the adoption of the *Resolution concerning statistics on work relationships* ([ILO, 2018b](#)).

2.17 In ICSE-93 a distinction was made between paid employment jobs and self-employed jobs based on the concepts of economic risk and degree of authority, resulting in six types of employed groups. ICSE-18 is also based on the concepts of economic risk and degree of authority. However, an important change is that ICSE-18 can be organized along either of these two hierarchies as shown in Box 2.1.

2.18 Both ICSE-18-A and ICSE-18-R have two 1st level categories: independent/dependent workers in ICSE-18-A and workers for pay/profit in ICSE-18-R, five 2nd level categories (A-B-C-D-E and C-D-E-F-G) and ten 3rd level categories (11-51). The 3rd level categories are the same in both hierarchies but are grouped differently at the 1st and 2nd levels.

ICSE-18 and the two hierarchies

<p align="center"><u>Independent workers and dependent workers</u> According to type of authority (ICSE-18-A)</p>	<p align="center"><u>Workers in employment for profit and workers in employment for pay</u> According to type of economic risk (ICSE-18-R)</p>
<p><u>Independent workers</u></p> <p>A. Employers 11 – Employers in corporations 12 – Employers in household market enterprises</p> <p>B. Independent workers without employees 21 – Owner-operators of corporations without employees 22 – Own-account workers in household market enterprises without employees</p> <p><u>Dependent workers</u></p> <p>C. Dependent contractors 30 – Dependent contractors</p> <p>D. Employees 41 – Permanent employees 42 – Fixed-term employees 43 – Short-term and casual employees 44 – Paid apprentices, trainees and interns</p> <p>E. Contributing family workers 51 – Contributing family workers</p>	<p><u>Workers in employment for profit</u></p> <p>F. Independent workers in household market enterprises 12 – Employers in household market enterprises 22 – Own-account workers in household market enterprises without employees</p> <p>C. Dependent contractors 30 – Dependent contractors</p> <p>E. Contributing family workers 51 – Contributing family workers</p> <p><u>Workers in employment for pay</u></p> <p>G. Owner-operators of corporations 11 – Employers in corporations 21 – Owner-operators of corporations without employees</p> <p>D. Employees 41 – Permanent employees 42 – Fixed-term employees 43 – Short-term and casual employees 44 – Paid apprentices, trainees and interns</p>

2.2.1 Key concepts in the ICSE-18 framework

Authority

2.19 ICSE-18-A uses authority as an organizing dimension, which creates a dichotomy between independent workers and dependent workers. Authority is related to the presence or absence of dependency on an employer, client, or principal. The type of authority refers to the nature of control that a worker has over the organization of his or her work, the nature of the authority that he or she exercises over the economic unit for which the work is performed (including its activities and transactions), and the extent to which the worker is dependent on another person or economic unit for the organization of the work and/or for access to the market. ICSE-18-A is suitable for various types of labour market analysis, including analysis of the impact of economic cycles on the labour market, and of government policies related to employment creation and regulation. It is also the most suitable hierarchy to use as an input variable in the compilation of statistics classified by socio-economic status.

Economic risk

2.20 ICSE-18-R classifies ICSE categories according to the type of economic risk, which provides a dichotomy between workers in employment for pay and workers in employment for profit. Economic risk refers to the extent to which a worker may (1) be exposed to the loss of financial or other resources in pursuance of an activity; and (2) experience unreliability of remuneration in cash or in kind or receive no remuneration. Workers in employment for profit have a higher economic risk than workers in employment for pay. Meaning that when, for example, a person in employment for profit has periods with no or little work, he/she will generate less income. This is not the case for workers in employment for pay: in periods when their employer has less work, they are not at a direct risk of incurring losses. This dichotomy is analogous to the traditional distinction between paid employment and self-employment, used for example in the System of National Accounts (SNA). ICSE-18-R is suitable for the provision of data for national accounts, for the identification of wage employment and its distribution, for analysis of the impact of economic cycles and government policies on the labour market from the perspective of economic risk, and for the production and analysis of statistics on wages, earnings, and labour costs.

2.2.2 The main categories of ICSE-18 according to type of authority

Independent workers

2.21 Independent workers own the economic unit for which they work and control its activities. They decide over the activities of the economic unit and the organization of their work and are not supervised by other workers. Independent workers may work on their own account or in partnership with others and may or may not provide work for others.

Employers

2.22 Employers are managing owners or co-owners of an economic unit and have employees on a regular basis. They are independent, meaning that they have full authority over organizing and controlling work processes in their enterprise and to make economic and strategic decisions regarding their enterprise, either alone or in consent with their owning partners.

2.23 According to ICSE-18, employing a person on a regular basis means that at least one person must be employed during the reference week and at least in two out of the three preceding weeks. The category of employers comprises jobs with a significant variety of characteristics and conditions. It ranges from owners of small enterprises with one regular employee to independent workers with a controlling stake in a multinational company with several thousand employees.

2.24 ICSE-18 allows for a further differentiation of this group based on the distinction between owners of incorporated enterprises, i.e., *Employers in corporations*, and owners of unincorporated enterprises, i.e., *Employers in household market enterprises*. In the former case, the enterprise has a separate legal identity, and all economic transactions, assets and contracts are thereby legally separated from the owner. These employers are in *employment for pay* as they are employed by the corporation they own and may therefore receive remuneration for time worked. The separate legal identity of the enterprise and the reduced liability implies a reduced economic risk for these workers compared to owners of (unincorporated) household market enterprises who have full liability and are therefore in *employment for profit*.

Independent workers without employees (own-account workers)

2.25 Own-account workers or *independent workers without employees* – the term used in ICSE-18 – are managing owners of an economic unit who, in contrast to employers, do not have employees on a regular basis. This does not mean however, that own-account workers necessarily carry out their work solely on their own. They can still run their business together with other co-owners and have household members or other family members outside the household working for them in a family business. In addition, they can also hire employees occasionally for a short duration.

2.26 Employed persons in this category can run a household market enterprise, i.e., *Own-account workers in household market enterprises without employees*, meaning that they are legally responsible for all transactions of the company and carry full economic risk, or they can be owners and managers of a corporation with a separate legal identity, i.e., *Owner-operators of corporations without employees*. While owner-operators of household market enterprises are *workers in employment for profit*, owner-operators of corporations have limited liability and reduced economic risk according to ICSE-18 and are therefore defined as *workers in employment for pay*.

2.27 Own-account workers are independent workers according to ICSE-18, meaning that they (together with possible co-owners) have full authority over the economic decisions as well as the organization of the work in their enterprise. If the own-account worker has an unincorporated enterprise and the entrepreneurial freedom is limited significantly by another economic unit, the worker should be classified as a “dependent contractor” (for detailed criteria see next paragraph).

Dependent workers

2.28 Dependent workers are workers who do not have complete authority or control over the economic unit for which they work. Dependent workers thus work under the authority of another economic unit. This includes working for an employer in cases where the worker is an employee, and otherwise, where another economic unit determines for example the working times and the place where the dependent worker should work.

Dependent contractors

2.29 Dependent contractors are a new category in ICSE-18. The terms dependent and contractor may seem contradictory. Contractors are typically understood as workers with commercial agreements which are usually classified as independent. However, due to growing labour market flexibilization, grey areas have expanded, leading to situations where workers in self-employment arrangements work in a hierarchical relationship of dependency towards a client, creating dependent contractors. Globalization and digitalization drive and facilitate new ways of organising production and employment, and new and more flexible types of work relationships are likely to grow in importance. At the same time, these grey areas are not necessarily new phenomena. For example, dependent contractors have existed historically even if they have not been statistically identified and they are likely to have been a prevalent group of workers in low-income, developing countries with flexible labour markets due to the presence of a large informal economy. These types of work relationship might also become more common due to increased labour market flexibility in countries where this has been less common historically. Different terms such as disguised employment, false or dependent self-employment, have been used to describe workers who are on the boundary between dependent and independent employment. They are in employment for profit, work through commercial

agreements, take on a high degree of economic risk, and work for their own account, but at the same time share characteristics with employees.

2.30 ICSE-18 provides a statistical definition for this type of worker. According to ICSE-18, dependent contractors are defined as (1) having contractual arrangements of a commercial nature; (2) being paid by commercial transactions; (3) in employment for profit; (4) do not have an incorporated enterprise and (5) do not employ one or more persons as an employee.

2.31 These five characteristics are all shared with independent workers. But in addition, dependent contractors are also (6) operationally and/or economically dependent on another entity that exercises control over their productive activities and directly benefits from the work they perform: A characteristic they share with dependent workers, and most notably employees. This dependency can, for example, be in relation to a main client, an intermediary of clients, or a single supplier etc.

2.32 In the literature, different forms of dependency can be distinguished and the most common are economical dependency, and organizational dependency⁵, which both typically relate to a single main client ([Böheim & Mühlberger, 2009](#); [Kösters & Smits, 2021](#)). Economical dependency refers to who the employed person is dependent on for all or most of their income. Organizational dependency refers to who decides on how, where and when the work must be performed. The idea behind the dependency criterion is that firms (economic units) have an incentive to contract out work previously performed by employees to independent workers in order to save on labour costs and social security contributions ([Kautonen et al., 2010](#)). If these independent workers perform tasks within the hierarchy of the firm, this work arrangement is comparable to a hierarchical employer-employee work relationship, in which the independent worker becomes a dependent worker as he or she depends on the firm for his or her work and income.

Employees

2.33 Employees are formally or informally employed by an economic unit and receive (or expect to receive) remuneration in return for time worked or for each good or service produced. The unit employing the employee can be a market or non-market unit or a household (for example as a domestic employee). Employed persons that have a commercial contract with an economic unit for the provision of goods or services are not considered employees. Usually, they should be classified as own-account workers in household market enterprises without employees or dependent contractors.

2.34 Employees are dependent workers and thus have limited or no authority over the economic unit for which they work. The extent of their influence depends on the position of the employee in that unit. High-level managers may have far-reaching influence on strategic or economic decisions of an enterprise, but they are still accountable to its owner or board. Supervisors and managers at different levels have limited authority over the section they are responsible for but have a supervisor to report to. Employees in small craft shops, for example, may be allowed to make certain economic transactions for the business but are still accountable to the owner.

2.35 With few exceptions⁶, employees are not liable for the economic activities of the unit they work for, and consequently have a reduced economic risk. National legislation and social

⁵ Sometimes the term legal dependency is also used, which refers to whether an employed person is able to hire others (whether they make that decision to hire by themselves) ([Eurofound, 2017](#)).

⁶ If part of an employee's income is based on profit – such as situations where the employee has stock options or is given a small number of shares by their employer – employees will be partly exposed to gains or losses based on the

insurance may give them further protection in terms of income stability. But there are variations in the level of economic risk to which employees are exposed depending on the type of employment contract, and ICSE-18 defines corresponding sub-groups. Permanent employees have a lower economic risk as they have a guaranteed amount of weekly work with a corresponding remuneration and no predefined ending of the employment relationship. For fixed-term employees, the labour contract has a predefined ending, i.e., after a fixed period of time or a finalised task. Even more insecure is the income for short-term and casual employees who have either a fixed-term employment of less than three months or no guaranteed amount of work providing a reliable salary. The last sub-group of employees are apprentices, trainees and interns who perform their work with the purpose of acquiring knowledge and skills and who are paid for that activity.

Contributing family workers

2.36 Persons who assist a family member or household member in their business, or in their job as an employee or dependent contractor, and who do not receive regular payments such as a wage or salary in return for the work they perform are classified as contributing family workers. Contributing family workers do not receive a regular payment for their work but may indirectly benefit from the profit or salary of the family/household member. Further, they do not take part in the essential decisions affecting the enterprise and do not have responsibility for it.

2.3 Classifying challenging forms of employment

2.37 ICSE-18 enables a classification of all jobs into one of its mutually exclusive categories and in most cases, this classification is straightforward. A worker with a permanent employment contract who receives a wage for time worked would be an employee of the enterprise that hired the worker, and a person who owns a registered enterprise and carries out work for that enterprise would be an independent worker. However, there are also several situations where the classification of the job is more challenging and less straightforward. As previously discussed, this could include cases where the activity is of such short duration or involves so few hours that it is not perceived to be a “job” as commonly understood, or it could be that a specific (new or emerging) form of employment within a country – such as dependent contractors – is on the boundary between different categories of status in employment. These cases will differ between countries and regions and change over time due to the transformation and evolution of the labour market. It is, therefore, not possible within this Handbook to give extensive recommendations on how to treat all specific situations in relation to ICSE-18. However, the two core dimensions of economic risk and authority are a useful starting point for assessing how a specific form of employment should be categorized, even if this may be challenging. The two dimensions are not only two different ways in which ICSE-18 can be organized, but also constitute the underlying dimensions on which mutually exclusive categories are defined. As such, the dimensions can be used as the boundaries between different statuses in employment.

2.3.1 Classification of jobs according to economic risk and authority

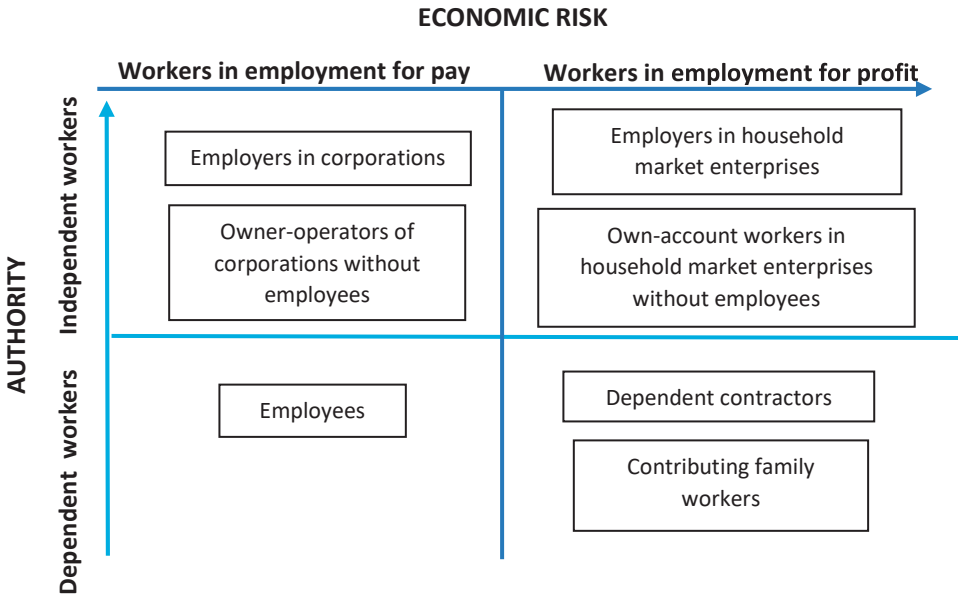
2.38 The degree of economic risk and authority can be used to decide in what category of status in employment a given form of employment should be categorized. The starting point

performance of the company for which they work. However, their economic risk is lower than independent workers or dependent contractors since employees who own shares are also paid for time worked.

consists of the boundaries between the different categories of status in employment, as can be seen in Figure 2.1. The boundary between, for example, employees and dependent contractors is set by the degree of economic risk in terms of the type of remuneration the worker receives – e.g. paid a wage or salary or remuneration based on profit. Both categories of workers experience dependency exercised by the economic unit on which they depend. However, while employees receive payment for time worked, or in some cases for the number of goods or services produced, the dependent contractor works on a commercial basis or has a commercial agreement and therefore makes a profit or a potential loss. In a situation where it is unclear whether a worker in one specific form of employment should be classified as an employee or dependent contractor, the aspect of economic risk (i.e., the type of agreement: commercial or agreement of employment) and the type of remuneration needs to be established.

2.39 Similarly, the dimension of authority is essential to create the boundary between, for example, contributing family workers and independent workers. While independent workers have authority and control over their economic unit, contributing family workers do not make the most important decisions affecting the enterprise nor have responsibility for it. Assessing conceptually as well as empirically where on the axes a specific challenging case should be placed can therefore contribute to clarifying how to treat a specific form of employment in relation to ICSE.

Figure 2.1
Categorization of jobs according to type of economic risk and authority



2.3.2 Statistical classification versus legal classification

2.40 ICSE-18 is a statistical classification that aims to support the production and understanding of labour statistics. It is important to underline that this is different from the state’s legal treatment of different workers within the country. Most legal systems are built on the distinction between independent and dependent workers: Labour regulations typically address the situation of employees, while commercial laws and fiscal regulations target independent workers. By contrast, the statistical status is based on the de-facto characteristics of the work relationship with the aim to produce data that are harmonized between countries

and that can support policy debates. The legal status reflects which laws and regulations should apply to different workers.

2.41 At the same time, in many cases the legal status will have an impact on the statistical status because the legal status will typically have a strong influence on the characteristics of the work relationship. An example of this can be observed when a particular group of workers is legally (re)classified. For example, in countries where specific workers in digital platform employment are ruled to be employees by a court, this will not only have legal implications, but also a statistical impact. The worker would then no longer have a commercial agreement, but also an agreement of employment (if in-practice recognized as an employee by the employer), and the worker would therefore not only legally, but also statistically, be defined as an employee.

2.3.3 ICSE-18 and work modalities

2.42 Even though ICSE-18 enables the classification of all jobs into one of its categories it does not necessarily provide information regarding all forms of employment. The identification of forms of work which have emerged due to digitalization would be an example of this. Digital platform employment includes workers carrying out work through, or on, digital platforms. These workers can have different types of jobs that could potentially be classified under different status in employment categories depending on their characteristics. In other words, while ICSE-18 enables a classification of jobs held in relation to digital platform employment into the relevant ICSE categories, the ten ICSE categories cannot be used to identify digital platform workers. To this end, it will be necessary to establish the relevant work modalities that allow the statistical identification of these types of workers. From the perspective of ICSE-18 this can be viewed as either 1) a sub-category of a specific status in employment, or 2) an additional boundary based on a work modality that cuts across multiple statuses in employment.

2.43 An example of the former is a country where there is an interest in identifying so-called “employee sharing”, i.e., when an employee has multiple employers to conduct work for, but this is regulated by one single contract. Despite having multiple employers, and hence multiple jobs, these workers would all be categorized as employees in ICSE-18. However, the identification of these employees requires establishing and identifying the work modality of working for multiple employers as part of one single contract. The same approach applies to other “sub-groups” within the different ICSE categories. An example of a modality that cuts across several statuses in employment categories would be workers carrying out digital platform work. Workers within this modality can, in contrast to employee sharing, be found in different statuses in employment such as independent workers, dependent contractors etc., and digital platforms therefore cut across different statuses in employment. Again, these workers would have to be identified based on their work modalities and not solely in terms of their status in employment.

2.44 The 20th ICLS *Resolution concerning statistics on work relationship* ([ILO, 2018b](#)) acknowledge the need to provide additional information regarding the work relationships that cut across different statuses of employment i.e., the so-called “crosscutting variables”. However, these variables do not cover all the different characteristics and work modalities that could be relevant when compiling and providing data. There is, therefore, a need to identify specific forms of employment that go beyond the categories defined by ICSE-18 and the crosscutting variables. This requires statistical definitions of the relevant work modalities that allow for the statistical identification of workers in the corresponding new forms of employment. ICSE-18 is still of high relevance as part of creating a basic analytical grid, either for defining the boundary of the types of jobs that need to be differentiated further (for example when a work modality is restricted to a specific status in employment such as independent workers or employees only) or more

generally to provide essential information on the type of workers targeted, if the modality cuts across multiple status in employment categories.

2.3.4 Multi-party work relationships

2.45 There are situations where the work relationship is not restricted to the relationship between a person and a single economic unit but where multiple parties are involved. These multi-party work relationships include contractual arrangements where more than two parties participate and may have an impact on the distribution of responsibilities and obligations as well as on the characteristics of the job. A typical case of a multi-party work relationship is a triangular relationship involving an employee, the economic unit for which the work is done, and a third party. A multi-party work relationship is a particular feature of some employment relationships rather than a type of employment relationship. While an employment relationship is the relationship between the employer and the employee, the term multi-party work relationship is a broader concept that can also include arrangements involving workers employed for profit, such as dependent contractors (ILO, 2018b).

2.46 Identifying different groups of workers involved in multi-party work relationships is challenging from both a statistical and a legal perspective. The *Resolution concerning statistics on work relationships* (ILO, 2018b) identifies three main categories of multi-party work relationships among employees:

- (a) Agency workers
- (b) Employees providing outsourced services.
- (c) Workers in employment promotion schemes

2.47 A fourth group is also identified: i.e., dependent contractors in multi-party work relationships including in relation to digital platforms. The link between multi-party work relationships and digital platforms is not further explored in the *Resolution concerning statistics on work relationships* but is recognized as an area that requires further conceptual and methodological development as part of future work. Digital platform employment is of increasing interest and it would be useful to include it as a separate category of multi-party work relationships. The following groups of multi-party work relationships can thus be distinguished:

(1) Agency workers

2.48 Agency workers are supplied by an agency to work for another enterprise under the supervision of the user enterprise. The agencies, such as labour hire agencies, temporary employment agencies, or other labour providers, receive payment from the user enterprise in accordance with a commercial contract and pay the employee wages and social benefits under the employment contract. A work relationship, i.e., the job, arises between the employee and the agency where the agency, as an employer, mediates or acts as an intermediary between the worker and another enterprise.

(2) Dependent workers providing outsourced services

2.49 Dependent workers providing outsourced services are engaged by one enterprise to provide, on a regular basis, a specific service to a client (another enterprise or a household), usually under the partial supervision of this client. In this case, the employer is an outsourcing company that provides such services (for example, home or office cleaning services, security

services, and information technology services). The outsourcing company can control certain elements of the work and set service standards, while the client can also engage in day-to-day monitoring of the work performed. A commercial contract for the provision of services is concluded between the client and the outsourcing company, to which civil or commercial rather than labour law applies. The client does not hire workers, but only orders the service. In this way, a work relationship, i.e., the job, is established between the dependent worker and the outsourcing company providing the service to the client of the outsourcing company.

(3) Workers in employment promotion schemes

2.50 Workers in employment promotion schemes are workers provided by a government agency and paid by that government agency to perform work for another economic unit as part of a government-funded employment promotion programme. Excluded from this group are workers who are required to work as a condition of continued receipt of social benefits⁷. In these cases, a work relationship arises between the dependent worker and the economic unit that uses the worker's labour but with a work relationship conditioned and enabled by the government organization.

(4) Dependent contractors when an intermediary supplies raw material and receives the goods

2.51 In the case of dependent contractors, multi-party work arrangements can exist when a dependent contractor is engaged by an entity to provide goods to an intermediary and where the intermediary also provides the raw material for the production. This could for example be a homemaker that is engaged by a company and where the dependent contractor receives the raw material for the production by a third party to which the finished goods are also delivered.

(5) Dependent contractors where the access to clients or work is controlled by a digital platform employment

2.52 Workers carrying out digital platform employment are workers whose work is based on the matching of supply and demand for paid labour through an online platform ([Eurofound, 2019](#)). Workers who use a digital platform to, for example, access clients have a contract or agreement with the owner and / or provider of the platform. However, the work relationship may differ depending on two main types of work organization:

Type 1 – if a worker enters a work relationship with an employer as an employee under an employment contract, and the employer uses a digital platform as a tool for the employee to interact with clients, then this would be a usual *bilateral employment relationship*.

Type 2 – a worker, either as an independent worker or dependent contractor, enters a commercial (non-labour) contract with the owner of the digital platform (provider) in order to use the platform and connect with customers. In the case of independent workers, the work relationship would exist between the independent worker and the economic unit owned and operated by the independent worker. The relationship with the owner (provider) of the digital platform as well as with the clients would be commercial relationships. Yet, certain market barriers may arise as part of the use of the platform (control of access to clients, price regulation, regulation of working conditions and payment).

⁷ Resolution concerning statistics on work relationships. ([ILO, 2018b, paragraph 116](#)).

In such cases, the owner (or provider) of the digital platform becomes a conditional “third party” in the work relationship. If sufficient control is exercised by the digital platform, the worker would be categorized as a dependent contractor, and the work relationship would thus become a multi-party work relationship between the dependent contractor, the digital platform and the clients. Independent workers that have complete economic and organizational authority over their economic unit, could still be in a triangular relationship but would not be in a multi-party work relationship.

2.53 The fact that workers with both commercial agreements and agreements of employment can participate in multi-party relationships is an important aspect that needs to be considered when identifying multi-party work relationships statistically. Thus, economic relations arising in the field of employment can be regulated by both labour and commercial contracts. Accordingly, workers involved in multi-party work relationships can be both independent and dependent workers as illustrated in Figure 2.2.

Figure 2.2

Groups of workers involved in multi-party work relationships

Groups of workers involved in multi-party work relationships	Dependent workers	Independent workers
(1) Agency workers	Employees	No
(2) Dependent workers providing outsourced services	Employees Dependent contractor	No
(3) Workers in employment promotion	Employees Dependent contractor	No
(4) Dependent contractors when an intermediary supplies raw material and receives the goods	Dependent contractor	No
(5) Dependent contractors where the access to clients or work is controlled by a digital platform	Dependent contractor	Independent workers (commercial relationships, in a triangular relationship but not a multi-party work relationship)

2.54 The distribution of economic risk associated with workers' participation in multi-party work relationships is an important factor to better understand these types of relationships. On one hand, multi-party work relationships provide workers with easy access to the labour market, sources of additional income, and diversification of employment opportunities. On the other hand, multi-party relationships impact the distribution of economic risk and authority over the work between the different involved parties. Identifying the distribution of responsibility for non-payment or incomplete payment for work carried out among workers involved in multi-party relations can contribute to better understanding of the distribution of economic risk between the parties to the relationship. Figure 2.3 summarises the distribution of economic risk in multi-party work relationships.

Figure 2.3

Responsibility for economic risk in multi-party work relationships

Groups of workers involved in multi-party work relationships	Responsibility for economic risk (exposure to potential losses)
(1) Agency workers	Responsibility of the agency However, shared authority over the agency worker between the agency and the user enterprise
(2) Dependent workers providing outsourced services	Responsibility of the outsourcing company if the worker is an employee Or shared responsibility when the worker is a dependent contractor
(3) Workers in employment promotion	The responsibility of the company that uses the labour with the financial support of a government organization Or shared responsibility when independent workers are involved
(4) Dependent contractors when an intermediary supplies raw material and receives the goods	Shared responsibility between the worker and the enterprise who engages the worker
(5) Dependent contractors providing work through a digital platform	Shared responsibility of worker and platform owner

Chapter 3 Work modalities

3.1 Labour markets across the world are not only characterised by a growing diversity of status in employment categories – diverging from the traditional binary concept of employee versus independent worker – as discussed in Chapter 2, but also by a diversification of work modalities, patterns or arrangements. This refers to the how, when and where employees, other dependent workers, and independent workers carry out their work activities and its organisation within and across economic units. While some developments have been ongoing for a long time (e.g. trends related to the length of working time and scheduling, or work organisation within and across teams), others are newly emerging or gaining in importance due to the widely cited impact of ‘mega-trends’ on the labour market. Technological change and digitalisation, for example, have been observed to affect working time and have the potential to change practices related to employee monitoring and surveillance. In combination with the COVID-19 pandemic, its impact on the place of work has been clearly shown, through the surge of telework to cushion as much as possible the negative effects of the health crisis on the economy and the labour market. Similarly, the transition to a climate-neutral economy as well as globalisation trends have some potential to affect the place of work, due to considerations for the carbon footprint, for example by reducing commuting time by availing of working from home or by sourcing, producing and selling more locally, with impacts on the location of economic units. Societal developments, like ageing, female participation in the labour market, educational trends and preferences as regards work-life balance impact modalities such as working time, place of work, work organisation and forms of remuneration.

3.2 In this sense, the concept of work modality complements the classification of work relationships based on ICSE-18 and provides greater clarity as to the nature of forms of employment that exist or are emerging in any given country. Together, the two concepts provide the main basis for the classification of forms of employment.

3.3 The purpose of the Chapter which follows is to define and delimit the concept of work modalities, and to present its most important aspects. Not all modalities described in the Chapter should necessarily be treated as a priority for data collection. Rather, the Chapter proposes a structure that may help NSOs understand and categorize distinctive aspects of the way in which work is conducted. While many of the modalities discussed in the Chapter reflect new or established areas of interest for researchers and policymakers, the contents are not meant to be exhaustive, and more modalities may be added in the future. Readers interested in obtaining suggestions for possible indicators to prioritize are invited to consult section 8.2. The Chapter begins in section 3.1 by providing a definition of work modalities and discussing how it relates to other statistical concepts. The discussion notes that while work modalities largely concern the statistical category of employment, some modalities are also relevant to other forms of work, such as volunteer work.

3.4 In section 3.2, the key statistical properties of work modalities are discussed. While all broad aspects of work modalities are relevant to each ICSE-18 category, some specific modalities only concern a subset of status in employment categories. Furthermore, unlike the classification of work relationships found in ICSE-18, which consists of mutually exclusive categories, work modalities are not mutually exclusive, and one job can be associated with multiple modalities.

3.5 In section 3.3, the discussion turns to describing the five broad aspects of work modalities relevant to the measurement of forms of employment:

- 1) Working time
- 2) Work location
- 3) The electronic allocation and supervision of work tasks

- 4) Forms of remuneration and payment
- 5) Cooperation within and across organizations

3.6 Each aspect is potentially related to distinct working conditions and quality of employment outcomes, and is hence relevant to identify and separate out for meaningful measurement. A subsection is dedicated to each, offering a detailed discussion of specific modalities and relevant sub dimensions. Finally, section 3.4 addresses the concept of informality. Informality occupies a unique position within the forms of employment framework, since it can be an aspect of either the economic unit (informal sector) or the job (informal employment) and reflects whether the economic unit and the job are effectively recognized and covered by formal arrangements such as commercial law, labour law and the social protection system. However, informality has the same statistical properties as a work modality since it cross-cuts status in employment categories. The discussion addresses key concepts related to informality, including the informal sector, informal employment and the type of employment agreement.

3.1 Definition and relationship with other statistical concepts

3.7 The term “work modality⁸” refers to the ways in which work is coordinated, performed, and compensated over time and space. This excludes aspects of the work relationship itself, including the “nature of the economic risk and authority that individuals experience at work” and “the strength and nature of the attachment of workers to the economic units in which or for which they work” which are covered by the International Classification of Status in Employment 2018 (ICSE-18) (see [ILO, 2020a, paragraph 7](#)).

3.8 It should be noted that while the discussion presented in this Handbook focuses on modalities that apply to the statistical category of employment, many work modalities are also relevant to the statistical category of work, as defined by the 20th ICLS *Resolution concerning statistics on work relationships* ([ILO, 2018b](#)). They include, for example, aspects of working time, work location, and the electronic allocation and supervision of work tasks. However, other modalities, such as forms of remuneration and payment only apply to employment.

3.9 For employees, some of the elements that will be discussed in this Chapter are partly or fully regulated by labour law or collective agreements in many countries (e.g. place and time of work, forms of remuneration), while others remain at the discretion of the contractual arrangement between employer and employee (e.g. teamwork) or are based on informal agreements between the involved parties without any legal basis (e.g. telework). For contributing family workers, work modalities are always determined by informal agreements or arrangements.

3.10 Independent workers, in contrast, tend not to be bound by employment or labour regulations with respect to the aspects discussed below. However, other regulatory frameworks, such as commercial and civil law, competition law or data protection regulations can be relevant. Accordingly, while independent workers tend to have more discretion to design their work modalities – depending on their field of activity, market position and relationships with clients, suppliers and business partners – in some cases, they will not have full autonomy in deciding on these aspects. As noted in Chapter 2, for independent workers in household market enterprises, a lack of control over working time may offer an indication that the worker is in fact a dependent contractor.

⁸ NSOs and researchers may also use the terms “work pattern” or “work arrangement” if deemed more relevant to the national context or closer to existing terminology in the national language.

3.2 Statistical properties

3.11 Unlike status in employment categories, an important feature of work modalities is the additive property of its main aspects – the ability to consider a combination of modalities as part of statistical measurement. In other words, a job could be classified in terms of each broad modality. As an example, a dependent contractor’s job could be first classified as digital platform employment, to which could be added the characteristics of the usual work location, the usual duration of the work week, whether the job involves cooperation with other workers in an umbrella organization, and the basis on which the payment is made (e.g. by the piece). However, mutually exclusive categories are found within each work modality sub dimension. For instance, within the sub dimension length of weekly work hours, the categories of full-time employment and part-time employment are mutually exclusive.

3.12 This approach provides a high degree of flexibility as it allows NSOs and researchers to develop indicators by combining work modalities and status in employment categories which have some common elements, but consist of conceptually distinct phenomena. As an example, a researcher interested in developing an indicator of forms of employment with a potential for earnings instability could combine specific status in employment categories (e.g. short-term and casual employees) with different modalities such as on-call work and payments by the piece.

3.13 While each broad work modality aspect discussed in the Chapter is relevant to all status in employment categories, a few specific modalities only apply to some. For example, some forms of payment only concern employees or independent workers, and contributing family workers are always classified as being informally employed.

3.14 Depending on the purpose of the exercise, data collection and reporting on work modalities could refer primarily to the modalities present in the main job of the person, as these are likely to be most influential for the worker in terms of quality of employment (e.g. health and well-being, income) and for society as a whole (e.g. social security aspects, risk of deprivation or poverty). In situations where a person has more than one job, data on work modalities can also be collected separately for each job if the purpose is to obtain a more comprehensive picture at the individual level (e.g. requirements to take on additional jobs due to low pay in the first job) or of the labour market (overall employment quality). Further, some modalities – such as digital platform employment – are particularly likely to exist in second or other jobs (see [Pesole et al., 2018, p. 14](#)), and in such cases, data collection focusing on all jobs is required in order to obtain accurate estimates of prevalence.

3.3 The main aspects of work modalities

3.3.1 Working-time

3.15 Working time modalities have continued to diversify over the past several decades. The growing use of information and communication technologies (ICT) and remote arrangements also raises new questions about the clarity of the demarcation between working time and personal life. Nevertheless, the *Resolution concerning the measurement of working-time* (hereafter, “the *ICLS Working-time Resolution*”) of the 18th ICLS notes that working-time arrangements related to any job are typically characterized by two key dimensions, namely: (1) the way in which working-time is organized in terms of length and timing, and (2) how working-time is scheduled in terms of the stability and flexibility of working hours in a given job ([ILO, 2008](#)). The *ICLS Working-time Resolution* identified a total of 17 formalized working-time

modalities based on how they were either scheduled and/or organized⁹. The discussion which follows builds on the concepts of the 18th ICLS Resolution, but focuses on the length, timing, flexibility and variability of working-time exclusively from the perspective of the worker.

3.16 It should be noted that most working-time modalities can exist across various types of status in employment categories. For example, both an employee and an independent worker can have variable hours, work at night, or work very long or short hours. However, in practice, independent workers tend to have more discretion in choosing their schedules and working time. While the working time of employees is based on labour laws, collective agreements, or the individual employment contract or agreement, independent workers and dependent contractors may be subject to their agreements with clients or other business partners¹⁰, which – depending on their market position, business relationship and authority – they can more flexibly arrange.

3.17 Statistics on working hours collected by social surveys are commonly measured either in terms of “usual” or “actual” practices with reference to a specific time period ([ILO, 2015b](#)). For the purposes of measuring employment, an important distinction should also be made between the regulatory or contractual basis of working time and actual working time realised by the employee. For instance, employees may usually or temporarily work fewer or more hours than foreseen in labour law, collective agreements or their individual employment contracts or agreements. In addition, certain arrangements may be available to a worker as part of their collective bargaining agreement or employment contract, but not used on a regular basis.

3.18 Statistics on contractual, usual or actual working time modalities and their relationship with laws and regulations may all be relevant depending on the objective of the data collection and analysis.

Length of Work Hours

3.19 The typical length of the work week, including the distinction between part-time and full-time employment, is a key dimension of working-time modalities.

3.20 **Part-time versus full-time employment.** The definition of part-time and full-time employment among employees can be based on regulations or legislation, contractual hours of work, or usual work hours depending on the context. Accordingly, the understanding of the “demarcation line” between part-time and full-time employment may differ across countries, and even between sectors and occupations within a country. Since independent workers are not covered by labour regulations, part-time status should be determined on the basis of the hours usually worked. Although there is no internationally accepted definition of part-time work, there are two distinct approaches for conceptualizing and measuring part-time work.

3.21 First, part-time work can be conceptualized in relation to full-time work; an approach that is prevalent across legal frameworks in many countries ([ILO, 2021b](#)). The ILO’s *Part-Time Work Convention, 1994 (No.175)* ([ILO, 1994](#)) serves as an example of this type of approach, where a part-time worker is understood as an “employed person whose normal hours of work are less than those of comparable full-time workers”. Here, full-time employment is taken as the benchmark¹¹, while part-time employment is described in comparison to it. The approach is

⁹ The names of these working-time arrangements may vary from country-to-country; however, the overarching characteristics of these arrangements are the same across contexts ([ILO, 2008](#))

¹⁰ In some instances, commercial or competition law can affect the working time of independent workers, dependent family workers, and contributing family workers: e.g. if opening hours, production or service provision times are regulated.

¹¹ The approach does not offer a specific definition of full-time work either since national statistical definitions for full-time work vary ([ILO, 2015b, p.15](#)).

implicit in the way part-time employment is measured in some Labour Force Surveys such as the EU-LFS, where respondents are asked directly if they work part-time or full-time.

3.22 The second approach for measuring part-time employment is through the use of specific hourly thresholds ([ILO, 2021b](#); [ILO, 2004a](#)). Thresholds that divide full-time work from part-time work vary across jurisdictions, sectors and occupations. A commonly applied threshold refers to 30 hours per week, but this should not necessarily be taken as the default and the particularities of the form of employment to be measured should be considered. For example, there are differences in the extent of part-time work, which can range from very low hours (e.g. up to 5 hours per week) to near full-time (e.g. 29 hours per week).

3.23 Examinations of practices in different countries¹² suggest there is a degree of consensus that for an employee to be considered part-time they should usually be working less than 30 hours per week— but many countries also consider workers who usually work between 30 and 34 hours per week to be working part-time¹³ ([ILO, 2004a](#); [ILO, 2016a](#)). While this offers a basis for comparable estimates across countries, NSOs and researchers may also choose to publish statistics that reflect national definitions.

3.24 **Job Sharing.** A special variation of part-time employment among employees is job sharing¹⁴ where the responsibilities typically assigned to one worker are split into two (or more) part-time positions ([ILO, 2004a](#)). Job-sharing is a voluntary arrangement between employees and the employer that creates space for a better work-life balance ([ILO, 2004b](#)). It allows flexibility to schedule work within a timeframe conducive to a worker’s personal schedule ([ILO, 2004b](#)). Job sharing is typically defined on a contractual basis.

3.25 **Overtime hours of work.** Work that is completed beyond the normal working hours during a day or week is called overtime ([ILO, 2008](#)). According to the *ICLS Working-time Resolution*, overtime hours of work are defined as:

- (a) the hours stipulated as overtime in a contract during a specified short reference period, plus hours actually worked in excess of contractual hours of work, if these exist; or
- (b) the hours actually worked in excess of hours usually worked in a job where no contractual hours exist ([ILO, 2008, paragraph 16\(1\)](#)).

3.26 In most countries, regulatory definitions of overtime work only apply to employees. In some jurisdictions, specific categories of employees, such as part-time employees or salaried employees are excluded. However, based on the definitions of the *ICLS Working-time Resolution* ([ILO, 2008](#)), as a statistical concept, overtime hours also apply to independent workers, dependent contractors and contributing family workers. Depending on the national context, it may be relevant to report overtime hours for categories of workers for which the concept applies in a legal or regulatory sense, as well as for all workers, broken down by broad status in employment categories.

3.27 In many countries overtime work among employees is compensated by premium pay¹⁵ – or compensated via time in lieu of – beyond what employees would receive for working normal hours. Further, employees may also complete unpaid hours in excess of their contractual hours of work. While the *ICLS Working Time Resolution* ([ILO, 2008](#)) defines such situations as unpaid

¹² See [ILO \(2004a\)](#), [ILO \(2016a\)](#), and [Van Bastelaer, Lemaître & Marianna \(1997\)](#) for a detailed examination.

¹³ More recently, there has been a push to classify particular sub-categories of part-time employment. The [ILO \(2021a\)](#) differentiates between three subgroups: (1) *substantial part-time*, characterized by an employee usually working between 21 to 34 hours per week; (2) *short part time*, where an employee usually works 20 hours or less; and (3) “marginal” part-time, where an employee works fewer than 15 hours per week.

¹⁴ Job sharing should not be confused with *work-sharing* which is an “*intentional* reduction in an employee’s work hours to spread work over a larger number of workers to avoid layoffs or increase employment” ([ILO, 2004b, p.1](#)).

¹⁵ In some jurisdictions, this excludes part-time workers.

overtime, in many countries unpaid additional work hours are not legally defined as overtime. For this reason, NSOs and researchers should clearly distinguish between paid overtime and unpaid excess work hours. Specific consideration could also be given to employees who have flexible work hours and may work slightly more or fewer hours in any given week. In such cases, measurement could focus on whether the employee is operating within the normal flexible working hours schedule.

Timing of the work day

3.28 A second aspect of working time associated with any job is the specific time period during which work is completed, including the overall structure and organization of the timing. Employment is often discussed in terms of the “standard working week” which typically encompasses full-time employment arrangements where an employee works for a fixed number of core hours each day¹⁶ ([ILO, 2016a](#); [ILO, 2018a](#)). In a standard work week, employees work at least seven to eight hours per day for five days (usually Monday to Friday between 6 a.m. and 6 p.m., but designated days of rest may vary by country)¹⁷ ([ILO, 2011](#); [ILO, 2015b](#); [ILO, 2016a](#); [OECD, 2021](#); [UNECE, 2010](#)). The “standard working week” structure is normally classified as **daytime work** because it consists of working daytime shifts.

3.29 Work can also take place during alternate hours, outside of the boundaries of standard daytime hours (6 a.m. to 6 p.m.) and the standard workweek (Monday to Friday) ([ILO, 2011](#)). **Night and evening work** is an example of this type of alternate assignment. The ILO’s Night Work Convention, 1990 (No. 171), defines night work as “all work which is performed during a period of not less than seven consecutive hours, including the interval from midnight to 5 a.m.” ([ILO, 1990, article 1a](#); [ILO, 2004c](#)). A wider definition of night work can also refer to any work carried out between midnight and 5 am, regardless of the number of hours. Evening work typically takes place between 7 p.m. and midnight.

3.30 **Weekend work** is another example of alternate work-hours; conceptualized as work performed on days of rest ([ILO, 2004d](#); [ILO, 2019](#)). The definition of “days of rest” may vary based on the geographical region. For example, within most Western countries, Sunday and/or Saturday are considered days of rest; whereas, Friday is considered the main day of rest in Arab countries ([ILO, 2019](#); [ILO, 2004d](#)). Within many industrialized nations, weekend work is compensated with a premium, or extra payment bonus on top of the worker’s regular wage ([ILO, 2004d](#)).

3.31 Finally, **split shift arrangements** refer to schedules characterized by multiple blocks of working periods—each with a distinct start and end point—within the same day that are interrupted by long unpaid non-working period¹⁸ ([California Department of Industrial Relations, 2018](#); [Kullander & Eklund, 2010](#)). Split shifts refer to a schedule assigned by an employer rather than being at the discretion of the worker. Part of the split shift may occur during the day, in the evening, or at night.

¹⁶ In general, there is no internationally accepted definition of the *standard working week*; however, the definition provided is the most common.

¹⁷ The number of hours worked in a “standard” work week in one country could be higher than the global benchmark accepted in a statistical sense. In addition, days of rest may vary by country (see section on weekend work for more detail).

¹⁸ An employee may or may not earn a premium on top of their regular wage for working a split shift depending on the particular legal frameworks and collective agreements within the given jurisdiction ([California Department of Industrial Relations, 2018](#)).

Flexibility of working time

3.32 The third characteristic that differentiates between working-time modalities is the level of worker-led flexibility allowed in daily and weekly hours worked.

3.33 As noted previously, the level of flexibility in a worker's working time is first dependent on the amount of control that the worker can exert over his or her schedule and total working hours. The ability to exert control depends on the worker's status in employment, as well as their occupation and the type of tasks carried out. Individuals classified as independent workers tend to have greater flexibility in their work schedules than those who are dependent workers.

3.34 For employees, it is important to differentiate who decides upon these aspects. Labour law, collective agreements and individual employment contracts can foresee different regimes, such as:

- 1) Full control by the employer within the bounds of labour law or collective agreements with the employee having to accept all terms
- 2) Full control by the worker within the bounds of labour law or collective agreements
- 3) Length and stability of working time as well as scheduling determined in bilateral agreement between the employer and employee based on predefined processes and procedures or a minimum requirement (e.g. working a certain number of hours during a pay period).

3.35 Employers may provide diverse working-time arrangements as part of a strategy to offer more flexible options to employees (e.g., part-time work, job sharing, weekend work etc.), but a flexible working-time modality is only present when the employee has at least some degree of freedom to choose when to complete their work hours (whether on a daily, weekly or monthly basis) (see [ILO, 2008](#)). As such, a part-time worker who does not have any flexibility to vary his or her hours or start times on a weekly or daily basis does not have a flexible work arrangement. A wide variety of distinct practices can be observed across countries, sectors and occupations, with different degrees of control and flexibility exercised by the employer and employee, respectively. When measuring the flexibility of working time, an important aspect to consider in this context is the workers' ability to take time off for personal reasons (e.g. care responsibilities) on short notice.

3.36 In order to identify the prevalence of flexible working-time arrangements among employees, data should be first collected on whether the employee has access to a specific arrangement, and second, how often the arrangement is used in practice.

3.37 The *ICLS Working-time Resolution* ([ILO, 2008](#)) describes several modalities involving flexibility in work hours among employees, such as:

- ▶ shift-change work arrangements¹⁹
- ▶ compressed work week
- ▶ working time banking arrangement
- ▶ time-saving account arrangement

Variability of working time

3.38 The fourth dimension that characterizes different working time modalities is the variability of working time. Variability refers to the degree to which total hours or the work schedule vary from one week to the next. In general, the standard work week with a fixed

¹⁹ This is a variation of the shift-work arrangement (see [ILO, 2004e](#) for more details).

number of work hours per day is considered stable working time. There are, however, a number of working time arrangements that involve irregular or unpredictable work hours where the number of hours worked per week, and/or the time when work is carried out can fluctuate significantly. Often, workers with highly variable and unpredictable schedules have little to no control over the hours they work, but some workers, including independent workers, may adopt an irregular schedule voluntarily as part of the weekly or daily organization of their work hours. Irregular hours have different implications for independent workers due to the greater control exercised by the worker, but may remain of interest to researchers in the context of examining the relationship between work hours and work-life balance.

3.39 There are two dimensions to the variability of working time: variability in hours and variability in scheduling. Variability in hours refers to the total number of hours worked, while variability in scheduling refers to situations where the time of day or days of the week worked vary. There are four possible combinations based on these dimensions:

- ▶ Total hours are stable and schedule does not vary (stable working time)
- ▶ Total hours vary within certain limits but schedule is stable (only relevant to workers with minor variations in their total hours, such as employees with flexible schedules)
- ▶ Total hours are stable but schedule varies (variable schedule)
- ▶ Total hours and schedule varies

3.40 In addition, among dependent workers variable hours can be scheduled in advance or ad hoc. For example, the employment contract of a retail worker that foresees that the employee works longer hours during a busy period to meet higher customer demand is an example stemming from advance scheduling. On the other hand, a healthcare worker in an emergency unit having to work longer hours in the event of a large accident is an example of more variable hours on an ad hoc basis. This, as indicated in the introduction of the Chapter, highlights the need to differentiate between regulatory, usual, and actual working time aspects as well as whether it is the employer or the worker (or a combination) who decides on variations in working time when defining employment forms and measuring employment.

3.41 Among employees, an important subcategory of working-time arrangements that often involve variable hours and variable scheduling are on-call or “as and when required” arrangements. It should be noted that when a job does not guarantee a minimum number of hours, on-call arrangements are part of a distinct status in employment category and should not be treated as a work modality. Employer-employee arrangements where employees are not guaranteed any hours – including, for example, zero-hours contracts²⁰ – should be classified as “short-term and casual employees” in ICSE-18. However, on-call work may be also present where the employee is guaranteed a minimum number of hours. In such cases, the presence of an on-call schedule is a work modality and can apply to permanent and fixed-term employees. On-call arrangements with minimum guaranteed hours can function on an “as needed basis” without a predictable daily or weekly schedule where the total hours worked are often very short and depend largely on the availability of work ([ILO, 2004f](#); [ILO, 2021b](#)). In such cases, workers are, however, required to be available to work whenever called upon with an established amount of notice, and work for as many hours as required by the employer²¹ ([ILO,](#)

²⁰ Zero-hours contracts are prevalent in the United Kingdom ([Adams & Prassl, 2018](#)). Although zero-hours contracts do not offer any minimum number of hours of work or pay to employees, the worker is also not obligated to accept the work that is offered to them ([Adams & Prassl, 2018](#)). There is jurisdictional variation in the construction of zero-hours contracts; for example, under certain contractual agreements, workers are expected to be available and willing to work during specific designated periods, while this is not an expectation in other cases ([Adams & Prassl, 2018](#)). Zero-hours is an example of casual employment where there are no guaranteed hours for the worker.

²¹ In accordance with legal and contractual hour limits.

2008). On-call arrangements may also exist in some occupations such as medical professionals, where the worker has some regularly scheduled hours, as well as periods where they are not guaranteed any hours, but are expected to be available.

3.42 **Min-max arrangements**, which may be classified as a sub-type of on-call work, contractually guarantee a minimum and maximum number of hours for an employee to work during a given period of time (e.g., a week, month, year etc.). This approach does not stipulate a specific structure to the hours worked; rather, hours depend on the needs of the employer and the worker is obligated to be available to work. At the same time, the employer guarantees a minimum number of work hours for the employee.

Measuring working time variability

3.43 Two broad indicators of variability in working time consist of the proportion of workers whose total work hours usually vary from week to week and the proportion of workers whose schedule usually varies from week to week.

$$\text{Variable hours} = \frac{\text{Workers whose total hours vary from week to week in their main job}}{\text{Total number of workers}}$$

$$\text{Variable schedule} = \frac{\text{Workers who work on different days or at different times from week to week}}{\text{Total number of workers}}$$

3.44 However, this is insufficient to capture changes in forms of employment in a country given that a variety of forms may have such features. At the least, these indicators should be measured separately for independent and dependent workers to capture the broad implications of variable hours for workers in terms of control over working time. In particular, variability in total hours worked among dependent workers should be captured by additional indicators measuring the extent to which the variability is determined by the worker or the employer, and is scheduled or ad hoc.

3.45 Among dependent workers whose total hours vary from week to week a further distinction should be made between those whose:

- (1) Variable hours are due to flex time or other flexible arrangements
- (2) Variable hours are determined by the employer

Group (2) can be broken-down into 3 additional categories:

- i. Employees who are not guaranteed a minimum number of hours each week, and are therefore in the status in employment category of “short-term and casual employees”
- ii. Employees who are guaranteed a minimum number of hours each week
 - On-call schedules with a minimum number of hours
 - Min-max contracts
 - Other variable schedules
- iii. Dependent contractors and contributing family workers with variable hours

3.46 A separate indicator is the proportion of dependent workers who are called in to work at short notice at least once per week, which can provide an indication of the prevalence of ad

hoc, unstable hours that are outside the control of the worker. Some jobs may also involve being contacted by an employer or clients outside working hours without necessarily requiring immediate action. Both indicators can help provide information on the extent to which workers experience a spill-over of work into their personal life.

3.47 Data on the variability of working time should be considered alongside information on the stability of the work relationship. For more information on this topic see Chapter 4, section 4.3.2.

Figure 3.1
Summary of sub dimensions of the working time modality with key examples

Organization and scheduling of working time					
Length of weekly work hours			Timing of the work day		
Part-time	Full-time		Day	Evening	Night
Overtime			Split shift		
Variability of work hours			Flexibility of work hours		
Variable hours	Fixed hours		Worker-determined	Negotiated	Employer-determined
Variable schedule	Fixed schedule				

3.3.2 Work location

3.48 A common feature of the work relationships of dependent workers in industrialized and advanced economies is the performance of work on a site under the control of the economic unit on which they are dependent. While working from home or other forms of remote work (like a consultant’s visits to a client’s premises or outworkers in the manufacturing sector) has persisted historically among some dependent workers, the advent of modern ICT has opened new possibilities for working remotely. The COVID-19 pandemic has highlighted how some sectors of activity are able to operate with a mostly remote workforce ([Sostero et al., 2020](#); [Dey et al. 2020](#)). Quite naturally, ‘teleworkability’ depends on the task content of the job, with varying degrees of tasks that can be realised remotely across sectors and occupations. For example, jobs that require physical presence or a high level of social or physical interaction with other staff in the company or with clients or business partners – like many occupations offering in-person services such as retail assistants or hairdressers – will find limited possibilities for telework. Similarly, jobs that are place-bound, such as working on a construction site, in agriculture or in emergency services like fire fighters, show little potential for telework.

3.49 While some employees are entirely free to choose where they work, others may be restricted to locations determined by the employer. Independent workers typically retain greater flexibility in deciding where to work but may face limitations stemming from the nature of the occupation or economic activity in which they are engaged.

Main concepts and key resources

3.50 Statistics on work location are organized around four core concepts: **types of workplaces, alternative work locations, frequency, and the degree of mobility**. In addition, statistics may be collected on the jurisdictions or countries in which employees, employers and clients are located.

3.51 Detailed guidance on the statistical measurement of types of workplaces and work location patterns are available in three key ILO documents:

- 1) The 20th ICLS *Resolution concerning statistics on work relationships* ([ILO, 2018b](#))
- 2) The *Conceptual Framework for Statistics on Work Relationships* ([ILO, 2020a](#)), which provides further guidance on the concepts of the Resolution
- 3) *Defining and measuring remote work, telework, work at home and home-based work* ([ILO, 2020b](#))

Types of workplaces

3.52 The *Resolution concerning statistics on work relationships* ([ILO, 2018b](#)) describes three broad types of workplaces in which work may be conducted, and several subcategories within each type. Detailed definitions and guidance are available in paragraphs 268 to 282 of the *Conceptual Framework for Statistics on Work Relationships* ([ILO, 2020a](#)).

- ▶ The first large group of locations are **fixed places of work outside the home**. Workers who move around in their job or work activity but have a fixed-base location to which they report daily are included in this broad category. The main workplaces in this group are:
 - Employer’s workplace or site
 - Own business premises
 - Client’s workplace or site
 - Client’s or employer’s home
- ▶ A second group is covered by the concept of **no fixed place of work**. Workers who move around in their job or work activity but have a fixed-base location to which they report daily are excluded from this broad category. The main locations in this group are:
 - Water, air or land-based vehicle
 - Door-to-door
 - Street or other public space
 - Market (except fixed stalls or other structures)
 - No single type of location (applies when the work is usually performed in more than one type of location)
- ▶ The third type of location is **work at home**, which includes the key distinction between residential spaces and own household farms.
 - Own home (or area outside)
 - Own household farm

3.53 Work at home also excludes separate business premises that are adjacent to the home. Nevertheless, the distinction between own household farm, own business premises adjacent to the home, and the home itself is important for the measurement of the concepts of “home-based work” and “work at home” as these refer to the more restricted concept of the worker’s own home (or area outside).

3.54 Data may also be collected on types of workplaces not mentioned by the *Resolution concerning statistics on work relationships*. This includes, for example, co-working spaces; a shared location where independent workers or employees working remotely can carry out their work. For more information on co-working spaces, see paragraph 3.126.

3.55 For forms of employment performed entirely online, such as microtasks carried out through a digital platform, the type of workplace should be determined based on the location where the Internet is accessed.

Measuring the type of workplace

3.56 For the purposes of publishing indicators on work location, it is first important to establish what is the main type of workplace associated with a worker's job – that is, the type of location where the worker usually spends most of their work hours. If relevant to the national context, workers who spend an equal amount of time in two or more types of workplaces could also be considered in data collection.

3.57 It should also be noted that a type of workplace may involve working in different physical locations. For example, the main workplace of an independent worker who works in multiple clients' homes as a plumber would be "client's or employer's home" rather than "no fixed place of work".

3.58 NSOs and researchers may also consider measuring whether workers who work in a fixed type of workplace usually work in multiple physical locations. This variable can provide an additional layer of information about workers who move around in their jobs.

Alternative work locations

Default place of work

3.59 The starting point for the measurement of arrangements that involve working from an alternative location is to identify the **default place of work**: the location where work is typically expected to be carried out given the status and profession of the worker ([ILO, 2020b](#)). NSOs are not expected to publish statistics on the default place of work. Rather, the concept is the logical starting point to obtain statistics on arrangements that involve working from an alternative location, such as remote work or telework.

3.60 In some cases, the default place of work may correspond to the location where the worker usually spends most of their working hours. However, in other cases, such as employees who usually telework from home, the default place of work is the location owned or controlled by the economic unit which employs them. A default place of work can also be a non-fixed location or a public place, if duties associated with the job are expected to be carried out in such a location.

3.61 As a result of the COVID-19 pandemic, expectations regarding the default place of work may have shifted. Under such circumstances, some dependent workers may have greater freedom to work at a location other than the premises controlled by an employer. The default place of work for this group of workers should be defined as the business address associated with the employer which could consist of premises owned or controlled by the employer, the address where a company is registered but where no work is actually carried out or a hybrid workplace where only some dependent workers carry out work in person.

3.62 For independent workers, the default place of work consists of the premises, facilities or sites controlled by the independent worker for the purpose of carrying out the work (such as the worker's own office, a construction site, a farm or a workshop, client's facilities or sites (such as a client's homes, shops, offices or factories), or public spaces (if this is the nature of the work such as street vendor, taxi driver or performance artist, for example).

Remote work

3.63 Remote work is defined as “situations where the work is fully or partly carried out on an alternative worksite other than the default place of work.” ([ILO, 2020b, p.5](#)). This concept only applies to employees and dependent contractors, as well as to independent workers who either have fixed premises used for carrying out their work or who mainly work from their own home. Other independent workers are excluded as they do not have a clear default place of work from which they could work remotely²².

3.64 In cases where independent workers have a fixed premises or mainly work at home, remote work is present when the independent worker is conducting work in an alternative location. An example would be a shop owner who occasionally works from home. Dependent workers working at a site other than the default place of work – or premises owned or controlled by the employer when there is no default place of work – are considered to be working remotely.

Box 3.1

Telework

- Telework is a subcategory of remote work where personal electronic devices such as a computer, tablet or telephone (mobile or landline) are used to perform the work, and where the use of the personal electronic device is an essential part of the work.
- In some countries there may be considerable overlap between home-based work and telework. Indeed, many teleworkers work from home and many home-based workers are teleworkers. However, the two concepts are distinct and home-based workers are not necessarily teleworkers or vice-versa. For example, a baker working from their own kitchen is a home-based worker but not a teleworker. For a more detailed of on this distinction see [ILO \(2020b\)](#).

Hybrid work and hybrid workplaces

3.65 Hybrid workplaces are a type of workplace that have become more common since the beginning of the COVID-19 pandemic. Hybrid workplaces are premises under the control of an employer that have been set up to allow for a mix of in person and remote work. At any given time, some workers may be completing their work hours at the hybrid workplace while others work remotely from home or from another alternate location. This type of workplace is maintained by employers for their own employees or contractors and excludes co-working spaces shared by workers who work for different economic units.

3.66 Hybrid workers are those who regularly make use of the flexibility provided by hybrid workplaces. They usually spend some work hours at their employer’s workplace or work site and some hours at home or in a third location. Hybrid workers are identified based on their usual work location pattern. Dependent workers who work exclusively at home or at their employer’s premises are not hybrid workers, even if their employer operates a hybrid workplace. Although the concept of hybrid worker is most relevant to employees, independent workers with a clear default work location outside the home can also be included if they also usually work some hours at home or in a third location.

²² Contributing family workers who work for a family business that has no fixed premises for performing the work are also excluded.

Frequency and mobility

Frequency of remote work, telework and work at home

3.67 In addition to identifying whether workers mainly work in a specific type of workplace, or mainly engage in remote work or telework, NSOs and researchers may also wish to collect data on regular or occasional work location patterns. Doing so provides a more comprehensive picture of the impact of digitalization, ICT and other societal changes on work location patterns.

Box 3.2

Frequency of work location patterns

Can refer to either a type of workplace, or practices such as remote work or telework

- **Mainly** - understood as usually or most frequently
- **Regularly** - at least once a week in the last four weeks
- **Occasionally** - at least once in the last four weeks

See [ILO \(2020b, p. 7-8\)](#)

Mobility of remote workers

3.68 The mobility of remote workers refers to the number of workplaces where remote workers carry out their work. It distinguishes between workers who “carry out work in several different places (high-mobility remote workers)” as opposed to carrying out work “in a more limited number of places with less frequency (low-mobility remote workers)” ([Eurofound and ILO, 2017, p. 7](#)). Workers who do not have a default location and move around in their job are not covered by this modality.

- ▶ **High-mobility remote workers** are workers who carry out remote work or telework at least twice a week in two or more locations other than the default place of work in a four-week period.
- ▶ **Low-mobility remote workers** are workers who perform remote work or telework in at least one location other than the default place of work over a four-week period, but do so less frequently than high-mobility remote workers.
- ▶ **ICT-based mobile work** refers to teleworkers (workers who use ICT always, or almost all the time to complete their work) who are less place-bound than home-based teleworkers ([Eurofound, 2020, p. 7](#)). Different criteria could be used to identify ICT-based mobile work depending on national needs: for example, teleworkers who worked in at least one location other than the default place of work or their home during a four-week period. ICT-based mobile workers can have either high or low mobility.

Country of residence and country of work

3.69 An additional component of statistics on work location which may be of interest to NSOs and researchers concerns the jurisdiction or country in which the workers’ home, their usual workplace and their default place of work are located. Before the advent of ICT, cross-border work only occurred as a result of workers physically crossing an international border to reach a particular work location. However, digital platforms and other information technologies facilitate cross-border work location patterns.

3.70 NSOs collecting data on this topic should ensure that measuring the geographical location of workers and their default place of work remains aligned with core work location concepts. For example, employees whose employer is located in a different country may be either a remote worker, or working in their default work location but crossing a national border on a daily basis. Some workers, such as seasonal workers and consultants working on a specific project, may also cross international borders on a less regular basis. The location of a worker may also have implications for economic statistics, including national accounts. For more information on this topic see Annex A.

3.3.3 Electronic allocation and supervision of work tasks

3.71 Modern technologies, including algorithms, may intervene in the way tasks are distributed between workers and how workers are monitored at the workplace and beyond. The growing role of technology may affect both the distribution and supervision of tasks within an economic unit, or between economic units in the case of dependent contractors and independent workers.

Algorithmic management

3.72 In general, dependent employment is not only realized in terms of the subordination of workers in relation to an organization, but also with respect to the position of the worker in a hierarchical structure in terms of task assignment, performance monitoring and surveillance. While this is not new, digitalisation and technological progress add a newly emerging dimension of management through technologies involving algorithms or automation.

3.73 Indeed, the concept of ‘algorithmic management’ is increasingly discussed at both a policy and operational level and refers to “computer-programmed procedures that use input data to remotely manage workers and coordinate work tasks in order to obtain a desired output” (adapted from [Wood \(2021\)](#), [Kellogg et al. \(2020\)](#)).

3.74 A unique development associated with algorithmic management is a reduction in the intervention of human actors as part of a process towards “automated or semi-automated decision-making” ([Mateescu and Nguyen, 2019, p.1](#)). However, [Wood \(2021\)](#) notes that, at the present time, most algorithms are unable to operate without at least some intervention from human managers.

3.75 Algorithmic management is associated with digital platforms, such as Uber and Amazon Turk which use algorithms as part of the matching process between workers and clients and to assess the performance of workers. However, algorithms are also used by non-platform employers ([Mateescu and Nguyen, 2019](#); [Kellogg et al. 2020](#); [Wood, 2021](#)).

3.76 According to [Kellogg et al \(2020\)](#), see also [Wood, 2021](#), algorithms serve three distinct functions as part of algorithmic management: 1) direction, 2) monitoring and surveillance (evaluation²³) and 3) sanctions/penalties (discipline). Each may be of unique interest in order to fully understand the impact of algorithms on various aspects of employment.

²³ The concepts used by [Kellogg et al. \(2020\)](#) are in brackets.

Box 3.3

Functions of algorithmic management

The three main functions of algorithmic management are described by [Kellogg et al. \(2020\)](#) and summarized by [Wood \(2021\)](#):

- **Algorithmic direction** refers to the automation of processes that determine the tasks to be completed, the order of those tasks, and the time frame for their completion.
- **Monitoring or surveillance (algorithmic evaluation)** refers to the use of algorithms to evaluate the performance of workers based on a variety of data such as the ratings provided by clients on digital platforms, keyboard presses, or the number of breaks.
- **Sanctions and penalties (algorithmic discipline)** is often tied to algorithmic evaluation and refers to the use of algorithms to discipline workers. Discipline can be applied either automatically based on worker ratings, or by human managers using worker ratings as a key input.

3.77 For the purpose of identifying specific work modalities involving algorithmic management, NSOs and researchers may want to gather and analyse the following statistical indicators:

- ▶ Prevalence of algorithmic/automated task assignment (yes/no; if yes: always/mainly, regularly, occasionally)
- ▶ Incidence of scheduling/assignment of shifts determined by technology (yes/no; if yes, frequency/intensity – rarely, sometimes, often, always)
- ▶ Incidence of pace of work determined by technology (yes/no; if yes, frequency/intensity – rarely, sometimes, often, always)
- ▶ Prevalence of algorithmic performance monitoring (yes/no; if yes: always/mainly, regularly, occasionally)
- ▶ Prevalence of sanctions/penalties based on algorithmic/automated performance monitoring (yes/no; if yes: always/mainly, regularly, occasionally)
- ▶ Incidence of use of data analytics by the employer or platform to monitor worker performance (yes/no; if yes, frequency/intensity – rarely, sometimes, often, always)

Digital platform employment

3.78 Digital platform employment refers to employment performed through an online tool or an app that matches supply and demand for employment, most often based on an algorithm. An important aspect to consider in this context is that digital platform employment is about the assignment of individual tasks (smaller or larger), rather than about jobs. Although many platforms treat workers as independent workers, as noted in Chapter 2, all status in employment categories are potentially relevant to digital platform employment, and classification depends on the nature of economic risk and authority experienced by workers in relation to the platform.

3.79 Digital platforms relevant to digital platform employment are defined as:

“digital interface[s] that generate economic and/or social value and that direct or indirect intermediates between three distinctive agents (the owner of the platform, the provider of labour services, and the final user of the goods and services produced). The digital

platform provides services and tools that remain under the control of the economic unit that owns it and enables that economic unit to exercise some degree of control over the productive activities (i.e. work) carried out by the provider and to monitor the work process on the digital platform.” ([OECD, forthcoming](#))

3.80 In general, digital platforms which mediate work and involve the provision of services have received more attention than other types of platforms as part of data collection and policy discussions. This includes “online web-based platforms”, such as Amazon Mechanical Turk and Upwork, where work is carried out remotely, and “location-based platforms” such as Uber and TaskRabbit, where the worker is required to perform in-person tasks (see [ILO, 2021c](#)). Some NSOs and researchers may focus exclusively on digital platforms mediating employment as part of their data collection and analysis on digital platform employment. However, as a work modality, the concept of digital platform also includes platforms that provide services to individual users (e.g. Airbnb) and business to business platforms which facilitate and mediate the exchange of goods (e.g. Alibaba, Amazon).

3.81 For further discussion on types of platforms and the relationship between digital platform employment and types of platforms, see:

- ▶ *2021 World Employment and Social Outlook: The role of digital labour platforms in transforming the world of work* ([ILO, 2021c](#))
- ▶ *Chapter 2, Handbook on the Measurement of Platform Employment and Work* ([OECD, forthcoming](#))

Type of control exercised by digital platforms

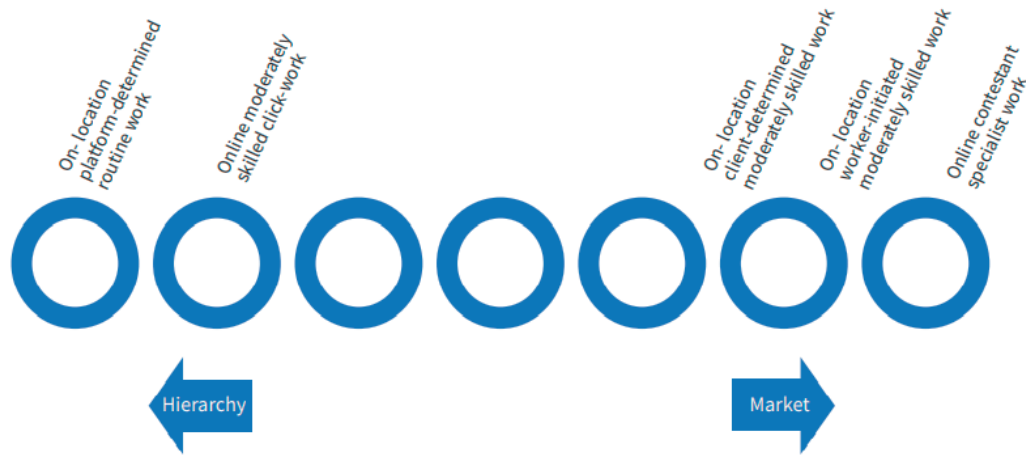
3.82 Platforms facilitating digital platform employment may exercise different degrees of control over workers. Some platforms play a minimal role, and simply serve as a marketplace to facilitate exchange. Others go beyond matching by becoming involved in the organisation of work, such as deciding on payment rates, place or time of work, and/or monitoring the worker or the task realisation. The degree of intervention in the organisation of the work, including surveillance, in practice differs from platform to platform and hence spans a spectrum from ‘market’ (in cases in which the platform limits its activities to the matching aspect) to ‘hierarchy’ (in cases in which the platform takes a similar role as a traditional employer, prescribing most if not all elements of work organisation and working conditions).

3.83 When discussing employment forms and measuring employment, the hierarchy/market distinction is important and has been proven to impact the working conditions experienced by workers who use digital platforms to provide services ([Eurofound, 2018](#)). While platforms facilitating the exchange of goods have received less attention in the context of regulating and measuring forms of employment, the market-hierarchy continuum is also relevant to understand the control exercised by the platform. Overall, the type of control exercised by digital platforms has important implications for work relationships as in most cases, platform workers are treated as independent contractors with the potential for misclassification increasing as the business model moves from the market towards the hierarchy continuum.

3.84 As discussed in Chapter 2, the degree of control exercised by the platform may be a factor in the statistical classification of status in employment. For instance, while most digital platforms pay workers as independent contractors, in some cases, digital platforms may exercise enough control over key aspects of the work so that workers would be classified as dependent contractors based on ICSE-18.

Figure 3.2

Market vs. hierarchy dichotomy for digital platforms facilitating the exchange of services



Source: [Eurofound, 2019](#)

3.85 In the market-hierarchy continuum, specific attention should be devoted to worker ratings, which – for the time-being – is a particularity of platform work. Next to algorithmic matching, applying some form of performance rating is a common feature across the diverse landscape of digital platform employment. In some business models, ratings are provided by clients, in others by the platform itself, often in an automated way. Irrespective of the type of rating, this type of ‘performance appraisal’ tends to be influential for the workers’ access to future tasks (and hence work and income generation opportunities) and/or the quality of the tasks assigned (notably in terms of earning levels).

3.86 Some digital platforms may use algorithms in a less prominent way. For example, if there is no automatic matching of workers and tasks, and no evaluation of workers, a digital platform involves a lower degree of algorithmic management. However, in practice most digital platform use algorithms, as computer programmed-procedures are at the root of the network effects generated by the platform business model ([OECD, forthcoming](#)).

Collection and dissemination of data on digital platform employment

Type of digital platform employment

3.87 Employment involving services provided through online web-based platforms and location-based platforms could be covered by data collection and dissemination. These two types of platforms typically involve workers who are likely to experience algorithmic management and are at risk of being economically dependent on the platform.

3.88 Where relevant, additional data collection and analysis could focus on employment carried out through other types of digital platforms, such as business to business platforms, platforms facilitating the exchange of goods, social media platforms or hybrid platforms (platforms which mediate work and provide other services).

3.89 From a statistical point of view, NSOs and researchers should also consider measuring:

- ▶ Whether the platform sets prices or pay rates (yes, no; if yes: always, mainly, regularly, occasionally)
- ▶ Whether it is the discretion of the worker to arrange working time/schedule (yes, no; if yes: always, mainly, regularly, occasionally)

- ▶ Prevalence of algorithmic/automated task assignment (yes/no; if yes: always/mainly, regularly, occasionally)
- ▶ Prevalence of algorithmic/automated performance monitoring (yes/no; if yes: always/mainly, regularly, occasionally)
- ▶ Prevalence of sanctions/penalties based on algorithmic/automated performance monitoring (yes/no; if yes: always/mainly, regularly, occasionally)

3.90 Other important elements to differentiate between the growing diversity of employment carried out through digital platforms include (see [Eurofound, 2018](#); [Eurofound, 2019](#)):

- ▶ The skill level required to perform the task (low, medium, high)
- ▶ Whether it involves the provision of goods or services
- ▶ The scale of the task (micro tasks versus larger projects)
- ▶ Whether the task assignment is initiated by the platform, the client or the worker
- ▶ The form of matching (offer versus contest)

3.91 Based on the combination of the above elements, Eurofound identified 120 types of platform work that could be performed through online web-based platforms and location-based platforms. For Europe, it was shown that as of 2017, 10 of these 120 potential types had a critical mass of active platforms and workers.

Table 3.1

Most common types of platform work providing services in Europe, 2017

Label	Service classification			Platform classification		Share of platforms in total number of platforms	Share of workers in total number of workers	Examples
	Skills level	Format of service provision	Scale of tasks	Selector	Form of matching			
On-location client-determined routine work	Low	On-location	Larger	Client	Offer	13.7%	1.3%	GoMore
On-location platform-determined routine work	Low	On-location	Larger	Platform	Offer	31.5%	31.2%	Uber
On-location client-determined moderately skilled work	Low to medium	On-location	Larger	Client	Offer	11.3%	10.9%	Oferia
On-location worker-initiated moderately skilled work	Low to medium	On-location	Larger	Worker	Offer	4.2%	5.5%	ListMinut
Online moderately skilled click-work	Low to medium	Online	Micro	Platform	Offer	0.6%	5.3%	CrowdFlower
On-location client-determined higher-skilled work	Medium	On-location	Larger	Client	Offer	2.4%	3.3%	appJobber
On-location platform-determined higher-skilled work	Medium	On-location	Larger	Platform	Offer	1.2%	4.2%	Be My Eyes
Online platform-determined higher-skilled work	Medium	Online	Larger	Platform	Offer	0.6%	1.9%	Clickworker
Online client-determined specialist work	Medium to high	Online	Larger	Client	Offer	5.4%	30.3%	Freelancer
Online contestant specialist work	High	Online	Larger	Client	Contest	5.4%	4.6%	99designs

Source: [Eurofound, 2018](#)

Reference periods

3.92 Finally, since digital platform employment is often done sporadically, the measurement of employment through labour force surveys based on a 1-week reference period may not fully capture the extent to which people engage in digital platform employment in a country. As such, NSOs and researchers are encouraged to collect data reflecting a longer reference period (3, 6 or 12 months) and to consider measuring the following indicators:

- ▶ Persons who have conducted digital platform employment during the longer reference period
- ▶ Persons who have received some income from digital platform employment (see [OECD, forthcoming](#))

3.93 Indicators based on a longer reference period are likely to provide more encompassing estimates of the number of people who carry out digital platform employment in a country and the extent to which it represents a source of income. However, care should be taken to avoid presenting results as equivalent to employment as defined by the 19th ICLS *Resolution concerning statistics of work, employment and labour underutilization* ([ILO, 2013a](#)).

Data collection

3.94 Different sources may be used to collect data on digital platform employment, including household surveys. For more information on possible data collection strategies, see Chapter 4 of the Handbook on the Measurement of Platform Employment and Work ([OECD, forthcoming](#)).

3.3.4 Forms of remuneration and payment

3.95 The way in which employment is compensated can evolve alongside changes in legislation, business practices and technology. This broad work modality aspect covers three sub dimensions: forms of remuneration, variable remuneration schemes, and forms of payment.

3.96 Identifying forms of remuneration – the basis on which payments are made – is required as part of the identification of status in employment categories in ICSE-18. As discussed in Chapter 2, the distinction between employment for pay and employment for profit is at the centre of the variant of ICSE-18 based on economic risk. As such, not all forms of remuneration are relevant to all status in employment categories. For example, being paid for time worked on the basis of a wage or salary distinguishes employees from dependent contractors. While both categories of workers are economically dependent on an economic entity they do not own or control themselves, only employees are paid for time worked.

3.97 However, other forms of remuneration such as payment by the piece, commissions, tips from clients, as well as compensation determined by profit or loss, can occur across many statuses in employment categories, and can provide additional insights on topics such as the stability of earnings.

3.98 Two additional concepts are helpful to fully understand the various ways in which employment is compensated and their implications for workers. The first concerns variable remuneration schemes, which refer to schemes which reward employees on the basis of results, performance, or the profit or losses incurred by the economic unit for which they are employed. The second is the form of payment, which refers to the means by which workers are compensated.

3.99 Forms of remuneration and payment represent a distinct set of concepts from employment-related earnings. The latter refers to the monetary value of remuneration and is

governed by the 16th ICLS *Resolution concerning the measurement of employment-related income* ([ILO, 1998](#)).

Forms of remuneration

3.100 A form of remuneration refers to the basis on which a payment is made, rather than the method of payment itself (e.g. cash, in-kind, bank transfer). Section 6.5 of the *Conceptual Framework for Statistics on Work Relationships* ([ILO, 2020a](#)) describes the main forms of remuneration that should be covered by data collection programs:

- ▶ for time worked (including wage or salary)
 - wage
 - salary
- ▶ by the piece
- ▶ commission
- ▶ fee for services
- ▶ determined by profit or loss
- ▶ tips from clients
- ▶ other

3.101 Key considerations are mentioned below, with further detail available in the Conceptual Framework:

- ▶ Remuneration for time worked through a wage or salary is restricted to employees and owner-operators of corporations.
- ▶ In general, workers who receive remuneration by the piece or commission, should be classified as employees. However, there are cases when such forms of remuneration are present among independent workers and dependent contractors, such as when payments are made “according to the terms of a commercial contract with a fee schedule calculated on the basis of the number of goods produced, services provided or sales made” ([ILO, 2020a, p.54](#)).
- ▶ Remuneration among independent workers in household market enterprises, dependent contractors, and contributing family workers is wholly or partly determined by profit or loss. Employees and independent workers in corporations may also receive part of their remuneration on the basis of profit or loss through share options or other profit-related remuneration schemes.

3.102 As part of data collection requirements for ICSE-18, information must be collected on all forms of remuneration related to a specific job in order to identify any worker who receives a wage or salary (even if it is not the main form of remuneration). Data on the main form of remuneration associated with a job is complementary and can help researchers and NSOs improve their understanding of forms of remuneration.

Variable remuneration schemes

3.103 The remuneration of independent workers in household market enterprises, dependent contractors, contributing family workers, and owner-operators of corporations is variable by definition as a result of being partly or entirely determined by profit or loss ([ILO, 2020a](#)). However, employees may also receive variable remuneration through schemes that reward

workers based on results, performance, or profit. Variable pay schemes are explicitly designed to be variable in order to incentivize greater worker output and effort ([Prendergast, 1999](#)).

3.104 It may be useful for NSOs and researchers to identify employees who are wholly or partly remunerated on the basis of variable pay schemes in order to fully capture the degree of exposure to economic risk among employees. Such schemes may be broadly divided between those that reward workers on the basis of their individual output or performance; those which reward group performance – including team or company performance; and those which remunerate workers on the basis of profit or loss.

(1) Individual output or performance

- ▶ payment by results
 - by the piece
 - commissions
 - other
- ▶ pay linked to individual performance following management appraisal;

(2) Group performance

- ▶ pay linked to group performance (of the team, working group or department);

(3) Determined by profit or loss

- ▶ profit-sharing schemes (pay linked to the results of the company or establishment);
- ▶ share-ownership schemes offered by the company.

3.105 A broader definition of variable remuneration could also cover all employees for whom at least part of the remuneration package is variable for any given reason. This would include tips, overtime pay, scheduling and shift pay. However, due to its heterogeneity, this broader measure may offer ambiguous results.

3.106 The publication *Changes in remuneration and reward systems* ([Eurofound, 2016](#)) provides a more detailed discussion of variable remuneration schemes, as well as results from the 2013 European Company Survey ([Eurofound, n.d.1](#)).

Forms of payment

3.107 Forms of payment refer to the means by which workers are compensated. Although not essential for the measurement of status in employment categories, data collection on forms of payment may help identify potential risks for workers, particularly when payments are made in kind or in cash, as this may be associated with the avoidance of social security contributions and informal employment ([ILO, 2021d](#)). Payments in kind involve additional considerations, such as their equivalent monetary value for the purpose of calculating statistics on wages, and considerations as to the eligibility of such payments under minimum wage legislation (see [ILO, 2016b](#); [ILO, 2021d](#)).

3.108 Forms of payment include:

- ▶ In cash
- ▶ In kind
- ▶ Cheque
- ▶ Digital wage payments (e.g. bank transfers)
- ▶ Cryptocurrency
- ▶ Vouchers
- ▶ Gift certificates
- ▶ Other (e.g. stock options)

3.109 *Voucher-based employment* is a form of employment where the worker is paid through a voucher purchased from an authorised organisation that covers both pay and social security contributions. Vouchers are typically issued by a government authority and aim to encourage legal employment by reducing administrative burden. For more information on this form of payment, consult Eurofound’s publications on new forms of employment ([2015](#); [2020](#)).

3.3.5 Cooperation within and across organizations

3.110 Another dimension NSOs may wish to consider when distinguishing between different forms of employment is the way in which workers collaborate with each other as part of their work. Several new forms of employment, such as umbrella organizations for independent workers and co-working spaces, fall under this dimension. In this sense, cooperation forms a distinct modality that has implications for working conditions. However, some NSOs may place less importance on collecting and disseminating data on this modality, particularly if a specific form of cooperation is relatively uncommon in the country.

3.111 The most prominent types of cooperation within and across organisations are discussed in more detail below. Due to their unique implications for social protection and the quality of personal relationships at work, greater focus could be placed on worker and producer cooperatives, co-working, and umbrella organizations.

3.112 Both dependent and independent workers can perform their work within structures that provide differing degrees of opportunities for collaboration. The theoretical spectrum ranges from conducting the entirety of tasks in full isolation to realising each and every task in cooperation with others, within and across the organisation. In practice, the two extremes will be rare as it is likely that both dependent and independent workers will work with other individuals for at least some of their tasks, as exemplified in Table 3.2.

Table 3.2

Examples of potential cooperation for dependent and independent workers

	<i>Employees and contributing family workers*</i>	<i>Independent workers and dependent contractors</i>
Cooperation within the organisation	<ul style="list-style-type: none"> ▪ Peers in the same team ▪ Peers in the same unit/department ▪ Peers in other teams/units/departments of the same organisation ▪ Superiors/subordinates ▪ Worker cooperatives 	<ul style="list-style-type: none"> ▪ Other independent workers or dependent contractors, e.g. partners, co-owners, co-managers in varying legal forms, such as partnerships, cooperatives etc. ▪ Staff/subordinates (including employees and contributing family workers)
Cooperation across organisations	<ul style="list-style-type: none"> ▪ Business partners ▪ Clients ▪ Suppliers 	<ul style="list-style-type: none"> ▪ Business partners ▪ Clients ▪ Suppliers ▪ Other independent workers or dependent contractors who are neither of the above, e.g. in co-working spaces ▪ Administrative structures, e.g. in umbrella organizations

Note: *Formal teams and departments are unlikely to apply to contributing family workers

Cooperatives

3.113 The Guidelines on statistics of cooperatives of the 20th ICLS defines a cooperative as:

“an autonomous association of persons and/or legal entities united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.” ([ILO, 2018c, paragraph 6](#)).

Worker cooperatives

3.114 While the understanding of the concept of cooperatives and their characteristics differs across countries, for the purpose of differentiating employment forms and measuring employment, worker cooperatives are most important. In general, these refer to ‘jointly owned and democratically controlled organisations characterised by intensive cooperation among members in the fields of production, marketing and strategic management’ ([Eurofound, 2015; Eurofound, 2020](#)). In addition, “members share an interest in the work which is provided or ensured through the cooperative” ([ILO, 2018c, paragraph 14](#)).

3.115 In practice, this means that members of a worker cooperative are co-owners and co-managers in terms of having influence in all decisions of the organisation, i.e. business decisions as well as decisions on work and employment, including for example payment schemes. Accordingly, this means that members have a degree of control over the economic unit that is similar to independent workers, but cannot make decisions autonomously and in isolation, and rather do so in concerted action with the other members.

3.116 Depending on the national legal framework, workers in cooperatives can have a legal status as independent workers, employees, or ‘in-between’ when establishing their rights and entitlements related to working conditions or social protection.

3.117 However, the statistical relationship between membership in worker cooperatives and status in employment categories is provided by the *Conceptual Framework for Statistics on Work Relationships* which states that members of worker cooperatives should be classified as either employees or dependent contractors depending on whether or not they are paid for time worked ([ILO, 2020a, Section 7.5](#)).

Other cooperatives

3.118 Distinct from worker cooperatives are **producer cooperatives**, whose membership is based on their production activity “as enterprises in their own right” ([ILO, 2018c, paragraph 13](#)). Members of producer cooperatives are “producer-members” who are the owner-operators of enterprises that are members of producer cooperatives. Producer-members are generally classified as independent workers but could also be dependent contractors if they are economically dependent on the cooperative (see [ILO, 2020a, section 7.5](#)).

3.119 Other types of cooperatives which may also be of interest are **consumer-member** and **multi-stakeholder cooperatives** ([ILO, 2018c](#)). Consumer cooperatives involve more limited control by workers since voting rights are shared with other members who are customers rather than workers. As such, working conditions are more likely to resemble those of employees in economic units that are not cooperatives.

3.120 For more information on indicators, including the important distinction between statistics on membership and employment in cooperatives see:

- ▶ *Guidelines concerning statistics of cooperatives* ([ILO, 2018c](#))

Cooperation of employees within and across organizations

3.121 The basic differentiation with regards to the cooperation of employees within an organisation refers to the presence or absence of teamwork. Eurofound's European Company Survey defines a team as 'a group of people working together with a shared responsibility for the execution of allocated tasks' (see [Eurofound, n.d.1](#)).

3.122 In an economy and labour market increasingly characterised by globalisation and the transition to the digital age, some employees (and contributing family workers) are not only cooperating with staff of their own organisation, but also with representatives of other organisations. This cooperation can take place along the value chain (suppliers or clients or both) or with other business partners (e.g. related to R&D, marketing and promotion, etc.). Exposure to such work patterns can have implications for working time, work intensity, stress levels and other dimensions of the quality of employment.

Cooperation of independent workers and dependent contractors

Value chains

3.123 Similar to the cooperation of employees across organizations, the working conditions of independent workers and dependent contractors can be affected by cooperation within a value chain.

3.124 It should be noted that some sources of economic dependence are related to the position of the worker in a value chain. For example, an independent worker without employees who is economically dependent on a supplier could be classified as a dependent contractor based on ICSE-18 depending on the degree of control exercised by the supplier.

Umbrella organizations

3.125 Umbrella organisations are 'tools' that aim to improve the situation of independent workers or dependent contractors by offering specific administrative services (such as invoicing, filing documents with tax or social protection authorities etc.). Workers maintain their legal status as well as their autonomy and responsibility for the economic activity, including identifying and approaching potential clients, negotiating employment and working conditions, and fulfilling commercial contracts ([Eurofound, 2015](#); [Eurofound, 2020](#)). With this understanding, the concept of umbrella organisation does not cover temporary work agencies or 'pay-as-you-earn' recruitment companies that charge employees for establishing temporary employment contracts with third parties or act as an intermediary in hiring workers and leasing them out to third parties.

Cooperation of independent workers and employees: Co-working spaces

3.126 Co-working typically refers to independent workers without employees who rent a space or office in a designed workspace that also provides back-office services (e.g. reception, IT infrastructure like printers) and in many cases support services (e.g. training, networking with potential investors) ([Eurofound, 2015](#); [Eurofound, 2020](#)). Increasingly, other workers, such as employees working remotely, also use co-working spaces. Workers active in co-working spaces benefit from informal exchanges with other co-workers. This not only helps overcome personal and professional isolation experienced in some types of work, but can also foster business activities through the easier identification of cooperation opportunities or the creation of new (joint) business ideas.

3.4 Informality

3.127 The informal economy broadly refers to “all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements” ([ILO, 2015c, Section I, paragraph 2\(a\)](#)). The informal economy does not cover illicit activities such as the sale, possession, or use of goods forbidden by law, money laundering and trafficking in persons ([ILO, 2015c, Section I, paragraph 2\(b\)](#)). The specific activities which are considered illegal varies from country to country.

3.128 From a conceptual perspective, informality can be an aspect of the economic unit (informal sector) or of the job (informal employment, type of employment agreement). However, informality cuts across status in employment categories, and has the same statistical properties as a work modality.

3.129 In emerging and developing countries, informal employment often accounts for a large share of the economy. The ILO estimated that in 2016, among the population aged 15 and over, two billion persons, or 61.2 percent of global employment, were employed informally ([ILO, 2018d, p. 13](#)).

3.130 Moreover, in developed economies, some new forms of employment raise concerns precisely because they challenge labour market regulations and social protection programs and provide fewer protections than permanent employer-employee relationships ([OECD, 2019, p. 52](#)). In such contexts, NSOs and researchers may find the concept of informality useful in order to fully capture the impact of new forms of employment on the labour market.

3.131 Informality is a major concern for many national governments and international organizations due to its association with deficits in terms of rights at work and social protection, and its “negative impact on the development of sustainable enterprises” ([ILO, 2015c](#); [ILO, 2018d, p. 1](#)). Informality can occur across any ICSE-18 status in employment category, but is higher, or always present, in some categories. For example, based on the 17th ICLS resolution, contributing family workers are, by definition, always informally employed, and informality is particularly high among own-account workers ([ILO, 2018d, p. 17](#)).

3.132 Statistically, informality is measured through the distinct concepts of “informal sector” and “informal employment”. The first represents a classification of economic units according to whether they operate in the informal sector or not, while the second considers persons in informal jobs, whether carried out in the informal sector or not.

3.133 At the 20th ICLS in 2018 ([ILO, 2018b](#)) there was a strong consensus that a revision of the current statistical standards on informality was needed. Based on this mandate, the ILO has initialized work on developing a new set of standards on informality that will draw from existing definitions and country practices and be aligned with the most recent statistical standards for measuring work, contributing to increased global coverage and harmonisation. The new set of standards is expected to be presented and discussed at the 21st ICLS in 2023 (For more information, see [ILO, 2021e](#)).

Informal sector

3.134 The statistical measurement of the **informal sector** is based on the characteristics of the production units (enterprises) in which the activities take place ([ILO, 2013b, p. 15](#)). According to the 15th ICLS *Resolution concerning statistics of employment in the informal sector* ([ILO, 1993](#)), the informal sector is inside the production boundary of the System of National Accounts (SNA),

is classified as part of the household sector, and consists of unincorporated enterprises owned by households which:

“operate at a low level of organisation, with little or no division between labour and capital as factors of production and on a small scale. Labour relations – where they exist – are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.” ([ILO, 1993, paragraph 5\(1\)](#)).

3.135 From an employment perspective, the most relevant indicator is the **population employed in the informal sector**, that is: “all persons who, during a given reference period, are employed in at least one informal sector enterprise, irrespective of their status in employment or whether it is their main or secondary job” ([ILO, 2013b, p. 32](#)).

3.136 The informal sector is comprised of *informal own-account enterprises* and the *enterprises of informal employers*. It includes enterprises that are not incorporated (i.e., do not have a separate legal identity), do not hold a complete set of accounts (i.e., are not quasi-corporations), are not registered in a nationally-established business register or similar, and/or are below a given size. For more information on the measurement of the informal sector and the population employed in the informal sector, see:

- ▶ 15th ICLS *Resolution concerning statistics on employment in the informal sector* ([ILO, 1993](#))
- ▶ *Measuring informality: A statistical manual on the informal sector and informal employment* ([ILO, 2013b](#))

Informal employment

3.137 According to the *17th ICLS guidelines concerning a statistical definition of informal employment*, informal employment is the total number of informal jobs, “whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period,” ([ILO, 2003, paragraph 3\(1\)](#)).

3.138 The guidelines propose different criteria to classify jobs as being informal or formal depending on the status in employment category associated with the job.

- ▶ **Contributing family workers** are all in informal employment, regardless of the formality of the enterprise
- ▶ **Employers and own-account workers** are classified as having formal or informal jobs depending on whether they work in an informal or formal sector
- ▶ **Employees have an informal job if:** “their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.,” ([ILO, 2003, paragraph 3\(5\)](#)).

3.139 The 17th ICLS Guidelines offer a useful summary of the relationship between status in employment categories based on ICSE-93 and informal employment (Figure 3.3).

Figure 3.3

Informality and status in employment categories based on ICSE-93

Production units by Type	Employer		Own account workers		Employees		Contributing family workers	
	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal
Formal sector enterprise	Per definition, not a possible combination	Formal employment	Per definition, not a possible combination	Formal employment	Informal employment	Formal employment	Informal employment	Per definition, not a possible combination
Informal sector enterprise	Informal employment	Per definition, not a possible combination	Informal employment	Per definition, not a possible combination	Informal employment	Formal employment	Informal employment	Per definition, not a possible combination

Source: Adapted from [ILO, \(2003\)](#)

3.140 More information on the measurement of informal employment is available in:

- ▶ 17th ICLS *guidelines concerning a statistical definition of informal employment* ([ILO, 2003](#))
- ▶ *Measuring informality: A statistical manual on the informal sector and informal employment* ([ILO, 2013b](#))

Type of employment agreement

3.141 The *Conceptual Framework for Statistics on Work Relationships* defines the **type of employment agreement** as a concept that is distinct from informal employment (see [ILO, 2020a, section 6.4](#)). It applies only to employees, which are categorized according to whether they have:

- ▶ no contract
- ▶ an oral agreement
- ▶ a written contract

3.142 The type of employment agreement should not be used directly to measure informal employment, since workers with oral agreements may be covered by social protection, and workers with written contracts may or may not meet the criteria for formality. However, it may provide additional information on the level of security associated with a work relationship in some countries.

Chapter 4 Stability and permanence in work relationships

4.1 The Chapter which follows provides guidance to countries interested in measuring the permanence and stability of work relationships based on the International Classification of Status in Employment (ICSE-18). The Chapter also proposes criteria to capture differences in permanence and stability found among diverse forms of employment. In this context, the Chapter also provides a framework for the concept of “gig work” that aims to capture employment based on short term tasks or projects that individuals obtain on their own.

4.2 In alignment with the remainder of the Handbook, the Chapter aims to promote the coherence and integration of concepts for the purpose of deepening knowledge and data collection on forms of employment and on changes that are occurring in labour markets globally. Although permanence and stability are addressed by the 20th ICLS Resolution ([ILO, 2018b](#)) with the inclusion of several categories of employees based on their degree of exposure to economic risk, international statistical standards and other existing studies do not currently provide specific definitions of the two concepts that are applicable to all status in employment categories. This has resulted in some confusion, as both terms are often used interchangeably and lack clear statistical boundaries. The Chapter seeks to give clarity and precision to the concepts of permanence and stability, and to make them operational for statistical measurement. In addition, while ICSE-18 includes specific boundaries defining permanence among employees, it does not offer guidance for other status in employment categories. The Chapter introduces additional indicators that can help NSOs and researchers identify less permanent and stable jobs among independent workers, dependent contractors, and contributing family workers.

4.3 The Chapter begins with a short discussion of the context in which concerns regarding the stability and permanence of work relationships have emerged. Section 4.2 briefly revisits the types of work relationships found in ICSE-18 as a starting point for the rest of the discussion. In section 4.3 the broad concepts of permanence and stability are presented and described in relation to each type of work relationship. Section 4.4 introduces the concept of gig work and proposes statistical boundaries to identify this form of employment. Statistical criteria to identify and measure permanence and stability are described in more detail in section 4.5, while sections 4.6 and 4.7 present examples of questions that could be used to capture key dimensions of permanence and stability through household surveys.

4.1 Background

4.4 In the 1980s, the term flexibilisation was coined to refer to transformations that were occurring in the organization of work relationships and labour relations at an international level among both industrially advanced and recently industrialized countries ([Rodgers, 2007](#)). Flexibilisation is linked to several developments within the labour market, including new forms of work organization, transformations of social security systems, collective bargaining and labour laws ([Van Eyck, 2003](#)), which have diverse implications for the permanence and stability of work relationships.

4.5 National labour markets across the world have continued to undergo important structural changes due to the accelerated incorporation of communication technologies, globalization and demographic changes, promoting the transformation of work processes and

the integration of technology as part of the provision of services (UNECE, 2021; OECD, 2019). The OECD has pointed out that while permanent full-time employment remains the most common form of employment across its member countries, many have recently noticed growth in new forms of employment that are less stable and permanent, raising new concerns about vulnerable workers who may fall outside the traditional scope of labour legislation (OECD, 2019). Trends towards less permanent and stable employment may also be due to worker-led flexibility, with workers seeking jobs where they have freedom to choose when and where to work.

4.6 The latest revision of the International Classification of Status in Employment provides for the first time an international statistical standard for the classification of employees based on permanence and stability, reflecting the degree of exposure to economic risk experienced by different types of employees.

4.2 Types of work relationships

4.7 As noted in Chapter 2, the International Classification of Status in Employment (ICSE-18) classifies work relationships into ten categories, aggregated into two alternative classification hierarchies based on type of authority (ICSE-18-A) and type of economic risk (ICSE-18-R). ICSE-18-A establishes a dichotomy between independent workers and dependent workers. The detailed categories organized according to the type of authority are presented in table 4.1.

4.8 ICSE-18-A is taken as a starting point to describe how permanence and stability interact with economic dependence. Stability and permanence have distinct sources depending on the level of authority the worker exercises over the economic unit for which they work. For instance, among employees, stability and permanence are largely determined by the type of work relationship or work arrangement offered by the employer, while for independent workers, the two dimensions are based on the characteristics and market position of the economic unit itself.

Table 4.1
ICSE-18-A

ICSE-18-A				
Independent workers		Dependent workers		
Employers	Independent workers without employees	Dependent contractors	Employees	Contributing family workers
<ul style="list-style-type: none"> ▶ Incorporations ▶ In household market enterprises 	<ul style="list-style-type: none"> ▶ Owner-operators of corporations without employees ▶ Own-account workers in household market enterprises without employees 	<ul style="list-style-type: none"> ▶ Dependent contractors 	<ul style="list-style-type: none"> ▶ Permanent employees ▶ Fixed-term employees ▶ Short-term and casual employees ▶ Paid apprentices, trainees and interns 	<ul style="list-style-type: none"> ▶ Contributing family workers

4.3 Towards a definition of permanence and stability in work relationships

4.3.1 Definition of permanence in work relationships

Permanence among employees

4.9 The 20th ICLS *Resolution concerning statistics on work relationships* provides a definition of permanence in employment associated with employees. In ICSE-18 (see [ILO, 2018b](#)), employees are disaggregated by the degree of permanence of the employment relationship and the stability of working time in the following groups:

1. Permanent employees
2. Fixed-term employees
3. Short-term and casual employees
4. Paid apprentices, trainees and interns

4.10 Specifically, **permanent employees** are defined as “employees who are guaranteed a minimum number of working hours and are employed continuously or indefinitely. They are paid workers, employed full-time or part-time, in formal or informal jobs, who have employment agreements whereby:

- a) no date or event is specified on which employment ends, except for the age or time of retirement applicable in the economic unit concerned;
- b) the employer agrees to provide work and remuneration for a specified number of hours, or to pay for the amount of goods or services produced in a given period of time, and
- c) the worker agrees to work for at least the specified number of hours or for the time required to produce a given quantity of goods or services” ([ILO, 2018b, paragraph 46](#)).

4.11 **Permanence in employment** is defined as any employment relationship between an employer and an employee for an indefinite period during which the employer undertakes to provide a minimum of work and remuneration or pay for the production of goods or services. In this sense, permanence is a forward-looking concept based on an implicit or explicit guarantee of continuous work.

4.12 Following this definition of permanence, the work relationship that characterizes fixed-term employees; short-term and casual employees; and paid apprentices, trainees and interns, can be considered “**non-permanent**” given the fixed duration of the employment relationship or the absence of a guarantee of pay.

4.13 In ICSE-18, short-term employees and fixed-term employees are distinguished in terms of the duration of the work agreement – that is, “the period of time from the beginning to the end of a written or oral work contract” ([ILO, 2020a, paragraph 208](#)). Workers are classified as short-term employees if their jobs are associated with a work agreement of less than 3 months. However, more detailed information about the duration of the work agreement is also useful to distinguish between fixed-term employees who have shorter or longer agreements. For example, fixed-term employees with a work agreement of 3 to 11 months have less permanence than fixed-term employees with a work agreement of 1 year or more.

4.14 The *Conceptual Framework for Statistics on Work Relationships* (ILO, 2020a) offers detailed guidance on the measurement of the duration of the work agreement and the classification of different categories of non-permanent employees based on ICSE-18.

Permanence in other status in employment categories

4.15 ICSE-18 does not provide specific guidance on the measurement of permanence for jobs that do not involve an employer-employee relationship. This is partly because of the absence of an open-ended guarantee of continuous employment in most commercial agreements or transactions which serve as the basis through which independent workers, dependent contractors and contributing family workers are employed. In addition, among independent workers, the permanence of the entrepreneurial activity – and by extension, of employment – may not correspond to a specific economic unit. For example, workers may operate their economic unit with a non-permanent outlook as part of a plan to sell the business and reinvest profits into a new, separate economic unit. [Conen and Schippers \(2019, p.13\)](#) also point out that “insecurity and attitudes towards risk have a different connotation” among independent workers²⁴, and that losing a specific job may not have the same meaning compared with employees. Finally, data limitations pose a challenge since information on commercial contracting agreements and their duration in the case of dependent contractors and independent workers is less frequently investigated and available.

4.16 Yet, previous studies have highlighted the diversity of situations experienced by independent workers in terms of permanence (see [Cunningham and Maloney, 2001](#); [Muñoz-Bullón and Cueto 2010](#)), drawing attention to the need for more precise data collection and analysis on this topic across all status in employment categories. While there is no clear line of demarcation between permanence and non-permanence analogous to indefinite employment contracts among employees, some statistical indicators can help identify independent workers, dependent contractors and contributing family workers whose jobs are less permanent. This may include, for example, (1) the absence of existing commercial contracts (2) an unreliable client base (3) or expectations that the economic unit will only operate temporarily.

4.17 The last factor may provide a relatively general indicator of non-permanence among workers who are not employees. Indeed, expectations that the worker will continue working at their current arrangement for one year or less has been collected by the Contingent Worker Supplement of the Current Population Survey (CPS) in the United States since its inception in 1995 and the 2019 pilot of National Survey of Occupation and Employment in Mexico. Additionally, in the labour force survey in Finland, workers who are not employees are asked if their job is permanent, seasonal, or short-term or temporary. While indicators of this type cannot be used to identify permanence as such, they can provide an indication of the number of jobs that are clearly not permanent. Additional considerations for other specific status in employment categories are discussed below.

Permanence among contributing family workers

4.18 Contributing family workers work in a household market enterprise belonging to a family member and do not receive payment for time worked such as a wage or salary. Given the nature of this arrangement and generally undetermined or flexible working time, these characteristics point to a “non-permanent” employment relationship due to the absence of open-ended guarantee of continuous work.

²⁴ While the authors’ discussion refers to self-employment, the context of the discussion point particularly to the situation of independent workers and dependent contractors.

4.19 However, the presence of family ties may create a context that is distinct from the relationship between dependent contractors or employees and the economic unit on which it is dependent. For instance, the contributing family worker may directly benefit from the profit generated by a family business through intra-household transfers. In addition, the contributing family worker may be affected by losses in the same way. As such, the permanence of the work relationship of a contributing family worker is at least partly related to the characteristics of the economic unit on which it is dependent. A contributing family worker working for an economic unit that has characteristics associated with greater permanence may have a relatively more permanent job.

Permanence among dependent contractors

4.20 The employment relationship of dependent contractors is characterized by a contractual agreement of a commercial nature to provide goods or services for or through another economic unit, which exercises control over their productive activities and directly benefits from the work they perform. Unlike independent workers, access to a regular or sustained client base is of little relevance since dependent contractors are, by definition, economically dependent on another economic unit for access to the market, income or the organization of their work.

4.21 While permanent employees can be generally considered to have a more permanent arrangement than dependent contractors due to the security provided by employment protection legislation in most countries, there may be notable differences within the category of dependent contractors. Since dependent contractors work for a single main client or intermediary, the explicit or implicit duration of the agreement with the economic unit on which they are dependent is likely to have implications for permanence. For example, the situation of a dependent contractor who has a contract for the provision of a service for one year, contrasts in terms of permanence with the situation of a dependent contractor who depends on an intermediary to gain access to clients, but has an agreement of an indefinite duration.

4.22 The *Resolution concerning statistics on work relationships* of the 20th ICLS ([ILO, 2018b](#)) indicates that the duration of the work agreement can apply to dependent contractors. This variable can help identify cases where dependent contractors have an explicitly non-permanent commercial agreement.

4.23 Unlike for employees, an indefinite work agreement is insufficient to establish if a dependent contractor has a permanent job, since dependent contractors are not guaranteed any work by the economic unit on which they are dependent, can incur losses, and in many cases there are no protections or recourses for the worker if the work relationship is terminated. As such, while some indicators can provide information about dependent contractors who have less permanent arrangements, there is no single criteria to identify dependent contractors with a permanent job.

Permanence among independent workers

4.24 Independent workers are, by definition, not economically dependent on another economic unit, and are able to obtain income from multiple clients. As such, other than the intentions of the worker, factors associated with greater permanence among independent workers are largely based on economic conditions in the market in which the economic unit operates as well as the position of their economic unit in that market. Other factors may include existing financial resources, access to financing (see for example, [Cunningham and Maloney, 2001](#)), or membership in social networks or associations. Overall, there are no specific statistical boundaries which can clearly determine if an independent worker has a permanent job.

4.25 ICSE-18 also distinguishes between independent workers who operate an incorporated enterprise and those who operate a household market enterprise. While incorporation may be associated with a more permanent outlook and independent workers operating an incorporated enterprise may experience lower economic risk as a result of reduced liability ([ILO, 2020a, paragraph 65](#)), the absence of incorporation should not be necessarily treated as an indicator of lower permanence. For instance, a household market enterprise may have a client base that allows it to remain profitable indefinitely, while an incorporated economic unit may be unprofitable or on the verge of closure. Nonetheless, publishing statistics on whether the economic unit is incorporated or not provides valuable information about the level of exposure to economic risk among independent workers, and represents an essential component of statistical reporting on forms of employment.

Independent workers without employees

4.26 A wide of range of indicators can be used to identify characteristics associated with greater permanence among independent workers without employees. In addition to the intention or expectation of continuing to carry out the economic activity permanently or over the next 12 months, the type of clients and business relationships, as well as the presence of a sustainable client base can be assessed to identify independent workers whose jobs have characteristics associated with greater or lesser permanence.

4.27 In some settings, independent workers without employees who have commercial clients may have a greater degree of permanence than independent workers who only work with individual customers or with family members. In a study of micro-enterprises in Mexico, [Cunningham and Maloney \(2001\)](#) found that having smaller and less formal clients was one of the characteristics of a cluster of economic units with lower profitability, weaker connections to formal financing, and fewer hours worked. However, in many cases, it is not only the presence of commercial clients, but also the maintenance of long-term business relationships that is important to ensure profitability (see [Tsiros et al., 2009](#); [Kumar, 2002](#)). Commercial contracts may also include clauses which compensate independent workers or their enterprises in the event of early termination.

4.28 Yet the absence of long-standing commercial clients is not necessarily an indication that the economic unit is less permanent. For example, portfolio work (see [Eurofound, 2015](#); [Eurofound, 2020](#)) – small-scale contracting by micro enterprises or independent workers without employees who work for a large number of different clients – could be carried out indefinitely if the worker has a regular and stable client base.

4.29 As such, a key point to consider when measuring permanence among independent workers is the regularity of the client base. A regular client base can be measured in terms of the presence of recurring clients, combined with the ease at which the economic unit is able to attract new clients. It should be noted that even if the independent worker has a regular client base, he or she may choose to operate temporarily for voluntary reasons.

4.30 The absence of both long-term commercial clients and a regular client base does, however, provide some indication that the independent worker's job lacks some characteristics associated with greater permanence.

Employers

4.31 In addition to indicators of permanence applicable to independent workers, an additional criterion for employers concerns whether the employer hires at least one employee permanently. In the *Resolution concerning statistics on work relationships*, establishing whether

a worker is an employer or an independent worker is based on whether the independent worker employs one or more persons to work as an employee “on a regular basis” ([ILO, 2018b, paragraph 26](#))²⁵. Employers therefore include independent workers who hire employees for a short period, as well as employers with thousands of permanent employees. As such, having an employee cannot be used as a clear indicator of permanence. However, the hiring of permanent employees can provide an indication of the need for the employer to meet the demand for goods and services from its customers on a more permanent basis.

4.3.2 Definition of stability in work relationships

4.32 The existing literature as well as current ICLS resolutions refer to the stability of work relationships in two main ways. A first group can be distinguished that defines stability in employment according to the amount of time a worker has spent with their current employer or economic unit, while the second takes as a reference the tendency for workers to have worked regularly while maintaining the same work relationship. For example, [Cazes and Tonin \(2010\)](#), refer to the length of tenure (duration of employment) to measure and define stability, while ICSE-18 also considers the stability of working time. These two definitions do not need to be regarded as alternatives. Both may be of importance.

4.33 The *Resolution concerning statistics on work relationships* also points out that together with information on the duration of the work agreement, the duration of employment provides an “understanding of the temporal stability of work relationships and [helps] to assess the extent to which workers without permanent employment relationships have ongoing employment and income security ([ILO, 2018b, paragraph 77](#)).

4.34 Unlike permanence, the concept of stability is relevant to all status in employment categories. Indeed, both independent and dependent workers can experience obstacles in their ability to work continuously at the same job or business, and current labor markets conditions can encourage either longer and stable work relationships or a shorter duration of employment.

Duration of employment

4.35 The definition of stability in employment from the perspective of the duration of employment refers to the time elapsed since the worker began to work for a particular economic unit, an approach that can be generalized to all status in employment categories, including cases where employees have a series of contracts with the same economic unit.

4.36 According to the *Resolution concerning statistics on work relationships*, when an employee has had a number of temporary contracts renewed with the same economic unit, the duration of employment in that economic unit should be based on the total duration since the first contract, provided that gaps between contracts are shorter than one month ([ILO, 2018b](#)). Identifying the duration of employment of independent workers requires taking a slightly different approach and must take as a reference when the worker first started to work for their own economic unit, regardless of when the first client was served or the first profit was generated. Finally, the duration of employment among dependent contractors should be measured from the time the worker started working for the economic unit on which they are dependent. More information on the measurement of the duration of employment can be found in the *Conceptual Framework for Statistics on Work Relationships* (see [ILO, 2020a, section 6.1](#)).

²⁵ Paragraph 26 of Resolution I of the 20th ICLS notes that: “If there is a need to test for regularity, this should be interpreted as having at least one employee during the reference period and at least two of the three weeks immediately preceding the reference period, even if one or more employees were engaged only for a short period.”

4.37 As a general rule, the longer the duration of employment in the current economic unit, the more stable the work relationship will be. However, defining a particular moment when a work relationship becomes stable is not a simple task, since the total length of the duration of employment cannot be determined on the basis of information about the past and the work relationship can end for many different reasons which are not necessarily indicative of instability. In addition, the duration of employment is related to the voluntary and involuntary movements of workers, some of which are linked to the age of the worker – with greater mobility at younger ages – or factors such as confidence in labour market conditions or the institutional environment (Cazes and Auer, 2003). These elements can make it difficult to identify a specific threshold for defining stability in employment that provides a comparable indicator between countries and across different forms of employment.

4.38 Reporting duration of employment by bands has been proposed as a way to examine stability in employment (see ILO, 2013c; UNECE, 2015) without identifying a specific threshold of stability. However, in order to strike a balance between the achievement of a minimum of social protection and income security (Cazes and Tonin, 2010; Cazes and Auer, 2003) and a duration that is not implausible to attain at younger ages, a duration of employment of at least 3 years is proposed as a threshold to identify work relationships that are more stable. In addition, the threshold of three years is aligned with the longest employment duration band recommended for dissemination by ICSE-18 (i.e., 3 years or more).

4.39 While comparing the proportion of workers with durations of employment longer or shorter than 3 years across different forms of employment can provide important information on their stability, consideration should be given to relevant contextual factors. For instance, the analysis should be performed by age group and should consider the macro-economic context since the proportion of jobs with short tenure tends to decrease during recessions as a result of “reduced hiring and lay-offs of newly-hired workers” (UNECE, 2015, p. 40).

Regularity of employment

4.40 While durations of employment of at least 3 years provide an indication of the share of more stable work relationships found within the labour market, it does not fully capture the degree to which the worker maintains stable employment over the course of the same work relationship.

4.41 Based on ICSE-18, an employee experiencing gaps in employment of less than one month maintains a continuous duration of employment. As such, not all types of instability are captured by indicators based on the duration of employment. For example, temporary agency workers can maintain a continuous relationship with the economic unit which employs them, but experience less stability due to the existence of breaks between contracts. Casual employees – employees who are not guaranteed a minimum number of hours per week – may also experience instability if they are not regularly called in for work. In order to capture instability of this type, various indicators may be considered. For instance, information on the number of weeks when casual employees and temporary agency workers do not work at all despite being available could be collected.

4.42 As noted in Chapter 3, some permanent and fixed-term employees who are paid by the hour may also experience variable hours as a result of having an on-call schedule or a min-max contract. For example, hourly-paid workers guaranteed a minimum of 3 hours of work per week may still have relatively high levels of variability in their work hours from week to week. Despite having stable employment, workers with a job featuring such a modality may experience relatively unstable earnings. For this reason, fully capturing the stability of hours and earnings among employees requires identifying the type of work relationship as well as the presence of

specific working time modalities that may be associated with variable hours (see Chapter 3, section 3.3.1)

4.43 Finally, a person-level approach should be adopted to capture gaps in employment longer than a month, since a person could have several casual jobs or short contracts with different employers interspersed with periods of unemployment. More information on the longitudinal person-level approach to studying stability can be found in Chapter 5, section 5.7.

4.44 Some dependent contractors, particularly those carrying out their work through digital platforms or who are paid by the piece, may spend significant periods of time looking for income-generating tasks or projects rather than completing tasks that are directly remunerated (see [ILO, 2018e](#)). This situation may also characterize the circumstances of some independent workers without employees or employers. Street vendors, for example, may only complete a limited number of transactions resulting in payment over the course of several hours of looking for, or waiting for clients. Time spent looking for clients or waiting for clients should be counted as part of a worker's work hours since it consists of time spent on an activity intended to generate profit. However, measuring the regularity at which income-generating tasks are completed is highly relevant in order to measure the stability of the income associated with a specific job.

4.45 Finally, for all workers, an important point to consider is whether the economic unit or worker carries out its economic activity most of the year, either because market conditions so require, or because it depends on a periodicity established by the activity itself. Seasonal workers can be considered to have less stable employment since, by definition, they do not work continuously at the same job. This variable is therefore an important condition that must be considered to determine whether a work relationship is stable or not.

4.3.3 Distinction between permanence and stability

4.46 In sum, ICSE-18 provides a clear definition of permanence among employees. It refers to employment relationships with no specific end-date with an explicit or implicit guarantee that an employer will undertake to provide work and remuneration or to pay for the goods or services produced over the course of the agreement. The statistical boundary between permanence and non-permanence is less clear among other status in employment categories, and a wider range of criteria should be considered as part of data collection and analysis on this topic.

4.47 In contrast, stability has two dimensions: the duration of employment and the regularity at which a worker engages in paid employment or income-generating tasks while maintaining a continuous duration of employment. A general indicator of stability in terms of duration is the proportion of workers with a duration of employment of at least three years. However, several indicators are required to capture regularity, and specific considerations should be given to the type of work relationship associated with irregular employment.

4.48 It is worth mentioning that due to the prospective nature of permanence, guarantees of employment for the future are considered, while indicators of stability are based on retrospective measures which provide information about the length of the work relationship between workers and their economic unit and the presence of periods where a worker has been unable to, or voluntarily chose not to work or to engage in income-generating tasks.

4.4 Gig work

4.49 Gig work is a concept often used to describe a form of employment involving very short-term work. Gig work may overlap with new forms of employment, but in other cases, it may describe forms of employment that have always existed. The term “gig” has become increasingly popular in the context of the emergence and growth of digital platform employment. Indeed, regardless of their status in employment, workers who use digital platforms tend to carry out their work on the basis of short tasks rather than longer employment or commercial contracts. Yet working in this way is not necessarily new, and digital platform employment shares many common elements with older forms of short-term employment such as day labour, outwork, or small seasonal businesses. As such, the concept of gig work is a broader category that describes employment organised on the basis of short term-tasks, projects or jobs. Operationalizing and measuring gig work may help NSOs track the share of employment that has no guarantee of permanence and a high potential for instability.

4.50 While gig work is a popular term, most NSOs have not defined it. There are several work relationship components, listed below, that should be considered when defining gig workers. To be considered a gig worker, all three components should be met. Gig work is defined in terms of the short duration of the income-generating task, project, or job rather than with regard to the duration of the work relationship. Gig workers may have a variety of different durations of employment (tenure) in their situation.

1) Gig workers are people who accept short-term tasks, projects, or jobs.

Gig work involves distinct, self-contained short-term tasks, projects or jobs, often done for different customers or employers. The definition of short term may differ among NSOs. For example, ICSE-18 proposes a boundary of three months for distinguishing fixed-term employees from short-term employees. Other NSOs may desire shorter time periods, such as two months, to exclude many seasonal workers from the concept of gig work.

Another consideration for NSOs concerns whether to limit gig work to the provision of labour services or to broaden the definition to include ancillary activities associated with investment income such as the rental of property or the selling of personal goods online, provided that such activities correspond to the definition of employment²⁶.

2) Gig workers are paid per unit of work delivered

Gig workers are paid separately for each job, project, or task completed. Short-term or casual employees paid by the hour may also be included if deemed relevant to the national context.

3) Gig workers have no assurance of steady employment and must make specific efforts on their own to obtain each task, project, or job

Gig workers must take action on their own to find each separate task, project or job. Examples of actions may include turning on an app or advertising their services. Gig workers have no guarantee of continued employment with an

²⁶ For example, income earned when a person did not carry out work for at least 1h during a reference period would be excluded (see paragraph 2.7 for the definition of employment).

employer, customer, or client after completing a task, project, or job; for example, gig workers do not have a supervisor assigning other work.

4.51 Gig workers can work steadily by finding successive or concurrent short-term tasks, projects, or jobs. However, they have no guarantee of steady employment or permanence. NSOs may differ on what they use as evidence of assurance of steady employment and what constitutes making a specific effort on ones' own to obtain short-term tasks, projects or jobs. Possible approaches to identify evidence of a guarantee of steady employment include a worker having a commercial contract or a worker having re-occurring customers to whom they provide a service on a regular schedule. Other evidence of workers expecting to have steady employment include having a commercial space or employing other workers to assist them. Examples of workers having re-occurring customers on a regularly scheduled basis or employing workers to assist them include many hairdressers, house cleaners and doctors. While workers in these occupations often provide short-term services to customers and are often paid by the task, they also often are regularly scheduled to see the same customers, have a commercial space to provide the service, and hire other workers to assist them in the provision of services.

4.52 Further, even if NSOs decide to use the existence of a commercial contract to exclude a person from being classified as a gig worker, NSOs may also differ on how long a contract must be to be evidence of assured employment. The duration selected, should, however, be consistent with a NSO's definition of "short term" in item 1. NSOs also may differ on what proportion of a worker's re-occurring customers constitutes steady employment, if a NSO chooses to use the existence of re-occurring customers as a criterion to exclude people from being classified as gig workers.

4.53 In sum, NSOs are encouraged to conduct further work and methodological testing to identify appropriate statistical boundaries to identify gig workers. More specific measurement guidance on gig work may be provided in the future as NSOs and researchers develop new survey questions and data collection strategies.

4.54 There are several ways a gig worker might locate or arrange to work. For example, they could use a digital labour platform, social media pages, classified ads, word-of-mouth referrals, or contact potential customers directly to generate their next task, project, or job. Obtaining tasks, projects, or jobs to be completed by a worker turning on an app that algorithmically assigns workers tasks would be evidence of a worker taking an action to find work on their own. These workers are free to choose when they work, and they will not have work unless they turn on the app.

4.55 The characteristics outlined above in items 1-3 are what determine whether someone is a gig worker. Consequently, gig workers can be found in several of the types of employment statuses defined by ICSE-18. Although the characteristics of gig workers are similar across employment statuses, NSOs may choose to tailor questions to the different statuses when measuring gig workers.

4.56 Examples of gig workers include but are not limited to: construction workers, substitute teachers, drivers using digital platforms to obtain customers, freelance computer programmers, translators and designers.

4.57 In many occupations there may be both gig and non-gig workers. For example, translators who obtain work by selecting translating projects from a webpage would be gig workers. Translators who work for an agency that assigns them projects and who will continue to work for the agency once their current translating projects are completed would not be gig workers.

4.58 Similarly, the use of platforms, applications or algorithms by an employer does not necessarily make a person a gig worker. Companies can use platforms, applications or algorithms

as part of their business processes without the worker being a gig worker. For example, truck drivers who are guaranteed continued employment by companies that use digital platforms to advertise for customers would not be gig workers.

4.5 Measurement of stability and permanence in work relationships

4.5.1 Measures relevant to all status in employment categories

4.59 As noted in the previous section, the measurement of stability on the basis of the duration of employment is applicable to all status in employment categories. In addition to the proportion of workers with a duration of employment of less than three years, more detailed analysis and dissemination could be conducted on the basis of standardized bands. The *Resolution concerning statistics on work relationships* ([ILO, 2018b](#)) recommends that the duration of employment be regularly reported according to the following categories:

- ▶ less than one month;
- ▶ one to less than three months;
- ▶ three to less than six months;
- ▶ six to less than 12 months;
- ▶ 12 to less than 18 months;
- ▶ 18 to less than 24 months;
- ▶ 24 to less than 36 months;
- ▶ three years or more;

4.60 In addition, the [UNECE Quality of Employment Framework \(2015\)](#) and the [ILO Decent work framework \(2013c\)](#) propose that NSOs or other researchers report duration of employment according to the following bands:

- ▶ Less than one year
- ▶ one year to less than five years
- ▶ five years to less than ten years
- ▶ more than 10 years

4.61 Together, these measures provide detailed information on the range of possible durations of employment associated with different forms of employment.

4.5.2 Measures relevant to dependent workers

(a) Employees

4.62 As noted previously, in ICSE-18 the broad category of non-permanent employees consists of:

- ▶ **Fixed-term employees** who are guaranteed a number of working hours and are hired for a limited period of time of at least three months.
- ▶ **Short-term and casual employees** who have short-term contracts (less than 3 months) and/or are not guaranteed a minimum number of hours.

- ▶ **Paid apprentices, trainees and interns** who work for pay with the aim of acquiring experience in the workplace, either in a trade or a profession, and who also receive remuneration for this activity.

4.63 The three categories of non-permanent employees can be combined to provide an indication of the number and proportion of employees who are not permanent. Together, this group of workers can be referred to as “temporary employees”. However, collecting and disseminating data on each category separately is also recommended as it provides important information on the level of permanence, and the degree to which employees are exposed to economic risk. ICSE-18 also recommends that the duration of the work agreement be reported for employees according to the following categories:

- ▶ less than one month;
- ▶ one to less than three months;
- ▶ three to less than six months;
- ▶ six to less than 12 months;
- ▶ 12 to less than 18 months;
- ▶ 18 to less than 24 months;
- ▶ 24 to less than 36 months;
- ▶ three years or more;
- ▶ without stated limit of time²⁷.

4.64 Additional data collection and dissemination for the category of short-term and casual employees should be considered in order to provide more detailed statistics on the number of employees who experience instability.

- ▶ Among short-term and casual employees, the subcategory of **casual employees** – employees who are not guaranteed a minimum number of hours of work or pay – could be collected and disseminated separately.
- ▶ Among casual employees, consideration can also be given to the number of weeks the employee actually worked over the previous month (or other reference period) to distinguish between casual workers who work irregularly as opposed to those who are not guaranteed any hours but work regularly.
- ▶ Finally, where relevant to the national context, researchers and NSOs may choose to collect and publish data on different types of casual employees. This includes **zero-hours contracts**²⁸, where the employee has an indefinite work agreement or contract, but where the employer does not commit to provide any paid hours or to call in the worker, or **intermittent work** where an employer approaches the worker on a regular or irregular basis to conduct a specific task, often related to an individual project (see [Eurofound, 2020](#)).

4.65 As noted in section 4.3.2, the variability of work hours among permanent employees and fixed-term employees who are paid by the hour may also have implications for the stability of their earnings (see Chapter 3, section 3.3.1).

4.66 Finally, ICSE-18 requires that data on seasonal work be collected among non-permanent employees. This can be done by collecting information on the reasons for non-permanent work,

²⁷ All permanent employees will be in this category. Casual employees who do not have an arrangement with a specific end date will also be classified as “without stated limit of time”.

²⁸ In some countries, the term “on-call” may be used to describe both zero-hours contracts as well as scheduling arrangements where workers are guaranteed a minimum amount of work hours or payment per week but also have periods where they are not guaranteed any hours and are expected to be available for work.

including seasonality. Seasonal work can be a feature of all three categories of non-permanent employees.

(b) Dependent contractors

4.67 As mentioned in the previous section, two criteria should be considered when measuring the degree of permanence of dependent contractor relationships. The first is the duration of the work agreement. This can help identify dependent contractors who carry out their work through commercial contracts with a specific end date. The second concerns expectations and intentions of permanence. Dependent contractors who expect that they will not be able to continue working at their job for economic reasons for longer than a year or do not intend their job to be permanent are likely to have a non-permanent job. As such, an indicator of non-permanence can be constructed as follows:

- ▶ The dependent contractor has a work agreement with a specific end date with their main client or supplier
- OR
- ▶ The dependent contractor does not consider the job to be permanent OR does not expect to continue working in the current job for more than a year for economic reasons.

4.68 However, this measure is insufficient to establish permanence among workers who do not meet these criteria given the fact that dependent contractor relationships do not guarantee a minimum amount of work hours or pay per week and expose the worker to potential economic losses. As such, while permanence among dependent contractors cannot be established in terms of a specific statistical boundary, indicators can be constructed to identify work relationships that are non-permanent.

4.69 Additional indicators can provide information on the regularity at which dependent contractors are able to engage in income-generating tasks.

- ▶ How regularly the dependent contractor is assigned income-generating tasks or projects by the economic unit on which it is dependent. This can be established by identifying whether the dependent contractor has a contract for services which guarantees paid work over a specific period of time.
- ▶ For dependent contractors who are never or irregularly assigned tasks, additional indicators to assess the stability of their employment should be considered, including what proportion of their work hours are spent looking for tasks or clients without being paid. This indicator may be particularly relevant to understand the stability of different forms of digital platform employment.
- ▶ Collecting data on whether dependent contractors work throughout the year, for most of the year, or for part of the year can provide additional information about the regularity at which the worker is employed. For dependent contractors who do not work for most of the year, additional information should be collected in order to assess if this is due to seasonality.

(c) Contributing family workers

4.70 Information on the permanence and stability of the economic unit on which the contributing family worker is dependent may be challenging to collect since family workers are not responsible for the most important decisions affecting the economic unit.

4.71 As such, there are two approaches for measuring permanence among contributing family workers. The first focuses on the lack of permanence provided by the work relationship and treats all contributing family workers as non-permanent in the same way that all contributing family workers are considered to have informal jobs (see Chapter 3, section 3.4). The second approach considers the possibility that some contributing family workers have an arrangement of an indefinite nature. In this case, non-permanence can be identified based on the following criteria:

The contributing family worker does not consider their job to be permanent OR the contributing family worker does not expect to continue working at their current job for more than a year for economic reasons.

4.72 In terms of stability, indicators similar to those applicable to casual employees can also be used. For example, the number of weeks worked over a specified period (e.g. one month) can provide valuable information about the regularity of the job.

4.5.3 Measures relevant to independent workers

(a) Independent workers without employees

4.73 Identifying independent workers without employees who have a less permanent job requires applying several statistical criteria. In a similar fashion to dependent contractors and contributing family workers, a first group can be identified based on expectations or intentions of non-permanence. However, a lack of permanence can also be the result of characteristics of the independent worker's own economic unit which are independent of the worker's intentions. As such, consideration should be given to the absence of long-term commercial clients or of a regular client base:

- ▶ The independent worker does not consider their job to be permanent OR the independent worker does not expect to continue working for their own economic unit for more than a year for economic reasons.

OR

- ▶ The independent worker does not have long-term commercial client

AND

- ▶ The independent worker does not have multiple clients that provide a regular client base

4.74 Independent workers without employees who meet these criteria have characteristics associated with lower permanence. However, independent workers without employees who do not meet these criteria do not necessarily have a permanent job given that they lack a guarantee of being continuously remunerated for their work and are exposed to potential economic losses.

4.75 In addition to the duration of employment, stability can be measured by collecting data on whether work is carried out throughout the year or most of it. ICSE-18 also recommends that NSOs and researchers collect data on independent workers without employees who have a seasonal business.

4.76 Finally, for specific industries, or for independent workers without employees who carry out their work through digital platforms, it may be relevant to ask about the proportion of hours the independent worker usually spends looking or waiting for income-generating tasks as opposed to directly engaging in those tasks.

(b) Employers

4.77 The same criteria used to identify independent workers without employees who have characteristics of lower permanence are also applicable to employers. In addition, NSOs and researchers should consider if the employer has at least one permanent employee.

4.78 Finally, data about seasonality and whether the employer operates for most or all of the year should be collected to obtain information on stability.

Table 4.2

Criteria to identify characteristics of non-permanence or instability by status in employment categories

LESS PERMANENT	LESS STABLE
EMPLOYERS	
<ul style="list-style-type: none"> ▶ Does not consider their job to be permanent OR ▶ Expects to continue working at their current job for less than 12 months for economic reasons OR ▶ Does not have at least one long-term commercial client AND ▶ Does not have a regular client base that would allow the economic unit to continue operating indefinitely AND ▶ Does not have any permanent employees 	<ul style="list-style-type: none"> ▶ Worker has operated their economic unit for less than three years ▶ Worker does not work throughout the year or for most of the year
INDEPENDENT WORKERS WITHOUT EMPLOYEES	
<ul style="list-style-type: none"> ▶ Does not consider their job to be permanent OR ▶ Expects to continue working at their current job for less than 12 months for economic reasons OR ▶ Does not have at least one long-term commercial client AND ▶ Does not have a regular client base that would allow the economic unit to continue operating indefinitely 	<ul style="list-style-type: none"> ▶ Worker has operated their economic unit for less than three years ▶ Worker does not work throughout the year or for most of the year
DEPENDENT CONTRACTORS	
<ul style="list-style-type: none"> ▶ Has a commercial contract or agreement with a fixed duration 	<ul style="list-style-type: none"> ▶ Worker has operated economic unit for less than three years

LESS PERMANENT	LESS STABLE
<p>OR</p> <ul style="list-style-type: none"> ▶ Does not consider their job to be permanent <p>OR</p> <ul style="list-style-type: none"> ▶ Expects to continue working at their current job for less than 12 months for economic reasons 	<ul style="list-style-type: none"> ▶ Worker does not work throughout the year or for most of the year ▶ Worker is not provided regular work by the economic unit on which he or she is dependent
EMPLOYEES	
<ul style="list-style-type: none"> ▶ Absence of permanent or indefinite employment contract or agreement <p>AND</p> <ul style="list-style-type: none"> ▶ No guarantee of a minimum of 1h of paid work per week 	<ul style="list-style-type: none"> ▶ Worker has an employment duration of less than three years ▶ Worker does not work throughout the year or for most of the year ▶ Worker is a casual employee
CONTRIBUTING FAMILY WORKERS	
<ul style="list-style-type: none"> ▶ Does not consider their job to be permanent <p>OR</p> <ul style="list-style-type: none"> ▶ Expects to continue working at their current job for less than 12 months for economic reasons 	<ul style="list-style-type: none"> ▶ Worker has an employment duration of less than three years ▶ Worker does not work throughout the year or for most of the year ▶ Worker does not work every week

4.6 Questions that could be used for the measurement of permanence

4.79 Guidance on several variables needed for the measurement of permanence and stability is provided by the *Conceptual Framework for Statistics on Work Relationships* (ILO, 2020a) and *Data Collection Guidelines for ICSE-18* (ILO, 2018f). This includes the duration of employment, the duration of work agreements, and the variables required to derive categories of non-permanent employees. The following section provides examples of additional questions that could be collected through the LFS or other household surveys to construct the main indicators of permanence and stability described in the Chapter. These questions are not mandatory and NSOs may consider other approaches for data collection on permanence and stability.

(a) Presence of permanent employees among employers

4.80 To determine if an employer has permanent employees, it is recommended to refer to a reference period such as the previous month to facilitate collection and encourage conceptual alignment between countries.

4.81 Survey questions may vary by country but should be constructed in a way that reduces the risk of respondents counting other workers such as unpaid apprentices or interns and contributing family workers as permanent employees.

4.82 The question examples below could be added as a follow-up to the regular questions used to identify if an independent worker has employees.

<p>Over the past four weeks, which of the following types of workers have worked at your business (select all that apply)</p> <ul style="list-style-type: none"> – family members who are not paid – workers from a government-funded employment promotion program – non-family apprentice, trainee or intern who is not paid – partners who work with you – permanent workers you pay – temporary workers you pay – You don't have workers and there are no people to help you in the business 	<p>Do your permanent employees work:</p> <ul style="list-style-type: none"> – all year round – most of the year – occasionally or on request – during a specific season of the year – For a few months
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(b) Expectations and intentions of permanence

4.83 Among dependent contractors, independent workers and contributing family workers, expectations about the permanence of the job can help identify work relationships that are non-permanent.

Intention of permanence

4.84 Questions on self-perceived permanence are straightforward and rely on the intentions of the worker. Statistics Finland currently asks the following question to LFS respondents who are not employees:

What is your current job type:

- Permanent
- Seasonal or
- Short-term or temporary?

Expectations of continuous employment in the job

4.85 Questions on expectations of continuous employment in the job have been collected by the Bureau of Labour Statistics (BLS) in the United States as well as INEGI in Mexico. If possible, NSOs should also collect information on the reasons why a worker does not expect to stay in their job to exclude cases where the worker is leaving their job voluntarily or for personal reasons.

How much longer do you expect to work in your current job?

- 1 year or less
- More than one year

What is the main reason you expect to work at this business/job for 1 year or less?

- Excess debt
- Low sales
- The business is less profitable than expected
- Non-compliance of the clients (lack of payment)
- Non-compliance of supplier
- Lack of access to finance
- Other economic reasons
- To accept another job with more income
- To accept another job with social security
- Attending school
- Family responsibilities

- Retirement
- Health
- Other personal reasons

4.86 Response categories for the second question should be adapted for specific status in employment categories such as contributing family workers, and different national contexts.

(c) Presence of longer-term commercial clients

4.87 Two questions could be asked to identify the presence of at least one commercial client (e.g. who is another economic unit) and the longevity of the relationship with the commercial client(s):

<p><i>Does your business currently have a contract or agreement with any of the following types of organizations (select all that applies) :</i></p> <ul style="list-style-type: none"> – a corporation or another business? – an institution or association? – an intermediary? 	<p><i>Do you have a long-term business relationship with any of these clients? e.g. with no specific end date</i></p> <ul style="list-style-type: none"> – Yes – No
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(d) Presence of a regular client base

4.88 There are two elements to consider in order to assess if an independent worker has a regular client base. The first consists of asking if the independent worker has returning clients that would allow them to continue operating the business indefinitely. The second follows the approach of the 2015 European Working Conditions Survey and asks the independent worker if it is easy to find new customers.

<p><i>Do you have returning clients that would allow you to continue operating your business indefinitely?</i></p> <ul style="list-style-type: none"> – Yes – No
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<p><i>To what extent do you agree or disagree with the following statements?</i></p> <p><i>It is easy for me to find new customers</i></p> <ul style="list-style-type: none"> – Strongly agree – Tend to agree – Neither agree nor disagree – Tend to disagree – Strongly disagree
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Source: [Eurofound \(n.d.2\)](#)

4.7 Questions that could be used for the measurement of job stability

a) Task assignment among dependent contractors

4.89 Survey questions can help differentiate between dependent contractors who are guaranteed regular work and those who face more uncertainty and instability because they are

responsible for finding their own clients or tasks. It should be noted that some data collection approaches for the measurement of dependent contractors may already include information that can help derive a measure of this type (see [ILO, 2018f](#)). Variations on these questions are possible if the dependent contractor is dependent on an intermediary instead of a main client.

Do you have a commercial agreement with your main client which guarantees you work or payment over the course of its duration?

- Yes
- No

b) Time spent looking for clients

4.90 A question on the amount of time a worker spends looking for tasks or clients can provide valuable information on the stability and regularity of the income of dependent contractors who are entirely responsible for finding their own clients as well as some categories of independent workers without employees.

Over the past four weeks what proportion of your work hours did you spend looking for customers or tasks without being paid?

- None
- Less than 25%
- 25% to less 50%
- 50% to less 75%
- 75% or more

c) Gaps in employment among dependent contractors, casual employees, contributing family workers, and temporary agency workers

4.91 A single question can be used to capture situations where dependent contractors, contributing family workers, casual employees and workers in a multi-party work relationship with a temporary work agency were available for work but did not work during the previous month. An important note is that the question is only relevant to workers who were employed during the reference week. If the respondent did not work for pay or profit and was not absent from their job, this person should be classified as being either unemployed or not in the labour force based on the concepts of Resolution I of the 19th ICLS.

During the last four weeks, how many weeks were you available for work but did not get called in or did not receive any tasks, assignments or jobs?

- 1 week
- 2 weeks
- 3 weeks

d) Worker is employed throughout the year or most of the year

4.92 Knowing if workers carry out their work during most of the year provides important information about the stability of their work relationship in terms of the regularity of their employment.

4.93 It should be considered that the economic activity is carried out **most of the year** when it is conducted for more than six months during a given year. This question can also be used to identify seasonal workers.

In this job, do you work

- *all year round?*
- *most of the year (more than 6 months)?*
- *occasionally or on request?*
- *during a specific season of the year?*
- *For a few months?*

Chapter 5 Measuring interactions with personal circumstances and characteristics

5.1 The previous chapters of this Handbook have mainly considered the job-level characteristics of different forms of employment. However, different forms of employment may have different consequences for individuals based on their personal characteristics or circumstances and how these interact with the characteristics of their jobs. For example, two people with the exact same job may not have the same view on the quality and sustainability of that form of employment. A job which does not have fixed hours and where the employer can call on the employee at short notice may suit someone combining work with studying but not someone with family or financial commitments.

5.2 This Chapter presents some of the personal characteristics and circumstances that may be relevant to obtain a full understanding of the implications of different forms of employment and discusses how they might be measured. Section 5.1 introduces personal, job and employer characteristics as different levels of analysis, and describes potential data sources for each level. Sections 5.2 to 5.5 discuss relevant personal and household or family characteristics in greater detail with examples. Then, section 5.6 discusses the concept of precarious employment from the perspective of the interaction between personal characteristics and the form of employment. Finally, person-level trajectories within the labour market in terms of constrained labour supply and persistence in the form of employment are discussed in section 5.7. More details on measurement techniques and challenges, as well as a list of indicators that countries may consider collecting, are included in Chapter 8.

5.1 Personal, job and employer characteristics

5.3 There are different ways of measuring employment in the labour market which can be divided between job, employer, and personal (worker) characteristics. Data on these characteristics can be obtained from various sources, including administrative data, employers, or individuals. The decision to choose the most appropriate source will depend on the type of information required and/or how the data will be used.

5.4 One point to note is that for some job or personal characteristics there may be differences in the way information is reported depending on its source. Some examples are given below:

- ▶ Sector – Consider someone employed by a private sector cleaning company but who carries out their role in a public sector office. On administrative data and employer surveys they will be classified as “private sector”. However, on an individual or household survey this individual may classify themselves as “public sector”. In the UK the number of people employed in the public sector in the Labour Force Survey (LFS) is around 20% higher compared with administrative/employer data.
- ▶ Contract type – The type of contract (and potentially the form of employment) may also differ between administrative, employer and individual data. For example, in the UK, the number of people on “zero-hours contracts” is different based on data from employers compared with data collected from individuals via the LFS. This may be due to employees not being fully aware of the terms of their employment and/or error introduced through proxy survey responses. The

perspective of businesses and workers also matters when measuring permanence. For instance, a company that hires a worker through an outsourcing company may consider the worker to be a temporary member of the organisation. At the same time, the same worker may have a permanent employment contract with the outsourcing company.

5.1.1 Job characteristics

5.5 The concepts and the measurements discussed earlier in Chapter 2, Chapter 3 and Chapter 4 of the Handbook refer exclusively to job characteristics. They include attributes specific to the job (e.g., contracted hours, occupation and contract type). This information may be available from administrative data but will mainly be collected from household surveys such as the LFS. Information on job characteristics at the individual level is less likely to be available in business surveys, as these generally collect aggregated data. However, there are some examples of information about individuals that are collected from employers, such as the Annual Survey of Hours and Earnings in the UK and Eurofound's European Company Survey.

5.6 The characteristics of a job are separate and independent of the person in that job. Nevertheless, in determining the impact of a form of employment on an individual, the interaction between job characteristics and personal characteristics needs to be considered.

5.1.2 Employer characteristics

5.7 Employer characteristics are linked to job characteristics but cover other elements such as the industry and the size of the business. This information will generally be collected from businesses or administrative data but can also be collected through household surveys, like the LFS.

5.8 While business survey data will generally provide information about employers or aggregated information on employees, in some cases they can provide useful information about the prevalence of different forms of employment. For example:

- ▶ Number or proportion of employers offering remote work
- ▶ Number of employees by contract type (permanent, fixed-term, casual)

5.1.3 Personal, household and family characteristics

5.9 Personal, household and family characteristics relate to the individual in employment and are independent of job and employer characteristics. The majority will be collected through household surveys like the LFS with many characteristics being self-reported. Personal, household and family characteristics can be segmented between:

- ▶ those relating to the individual (and independent of the job they are doing), such as age, gender, disability);
- ▶ those relating to the household or family (and independent of the job), such as housing tenure and family structure;
- ▶ those relating to the fit between the worker and the job;
- ▶ those relating to wider labour market and economic participation, such as multiple job holding, and income obtained from other sources.

5.2 Examples of individual personal characteristics

5.2.1 Age

5.10 Age can be collected from household surveys (e.g. LFS) or administrative data, generally based on the date of birth. Working age is defined by the ILO's *Minimum Wage Convention* as ages 15 and above (ILO, 1973). However, the target population can vary between countries depending on local standards for participation in education and work eligibility. There may also be a need to focus on specific age groups (e.g., younger or older workers).

5.2.2 Gender or sex

5.11 Sex at birth and/or gender are sometimes available in administrative data but are generally collected from household sources (LFS).

5.2.3 Nationality/Migrant status

5.12 Depending on what is available or required, nationality and migrant status can be one or a combination of:

- ▶ Country of birth of the person or of the person's parents
- ▶ Passport(s) held (citizenship)
- ▶ National identity
- ▶ Permanent residency or equivalent

5.13 The advantage of country of birth is that it does not change over a person's lifetime. However, many people who are naturalised citizens or whose parents were citizens working abroad are recorded as belonging to another country. Passports held can provide an indication of current citizenship, but as with country of birth, this approach may assign individuals who are long-term residents in one country as being from another country. National identity is often used, yet, as this is self-reported, it may not match passports held. Finally, in some countries, permanent residency can help identify immigrants who are permanently established in their country of residence but excludes immigrants who are in a country temporarily as well as those who intend to stay permanently but have yet to receive this status.

5.2.4 Race/ethnic group

5.14 Information about race or ethnic group is generally not available in administrative data, it is instead usually self-reported and collected from household or labour force surveys. The measurement of race/ethnic group is carried out in many countries, but may not be commonly done in others. Data collection on this topic may be related to the designation of race/ethnic group as a protected characteristics under human rights or anti-discrimination legislation.

5.2.5 Disability

5.15 For many people, a long-term illness or disability may impact the type of activities they can perform and the suitability of a specific form of employment. According to the UN

Convention of Rights of Persons with Disabilities (UN, 2006), this includes “those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”. However, countries may have legislation that provides a different definition of disabled, in such cases, the definition that is common to the country context can be used. Disability can be measured using a household survey and will generally be self-assessed²⁹. Finally, NSOs may also consider the interaction between different types of disability (e.g. physical or mental) and the employment situation of the person.

5.2.6 Education status

5.16 There are two aspects to education status:

- ▶ Current status – if someone is currently in education and if education is full-time or part-time. This can be important in assessing how well a particular form of employment suits a person’s circumstances. For example, a person may be looking for employment that they can fit around their studies. This may mean that they are able to take on employment that has lower stability and are less affected by changes at short notice. Per contra, the need to conform with an educational timetable may work in the opposite direction and hamper ability to accept employment opportunities.
- ▶ Highest qualification – The highest qualification obtained by a person. This can be used as a proxy for skills and whether someone is over- or under-qualified for a job.

5.3 Examples of household and family characteristics

5.17 As explained above, the impact of different forms of employment can depend not only on personal characteristics but also on the type of household a person lives in or the family structure. A household is defined as “a group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food” ([ILO, 2020a, paragraph 86](#)). A family within the household is defined as “those members of the household who are related, to a specified degree, through blood, adoption or marriage” ([UN, 2017](#)). The characteristics of both statistical units may be relevant depending on the purpose of the analysis and the structure of the household³⁰. This section outlines some measures that can be collected as part of household surveys such as the LFS but is not intended to be a definitive list.

5.3.1 Housing tenure

5.18 The type of housing someone lives in can have different implications for a person depending on their form of employment and vice-versa. For example, youth with a non-permanent job are likely to experience less financial insecurity if they are living with their parents and do not need to keep up with rent or a mortgage. In addition, having a part-time or

²⁹ ILO recommends NSOs to use the Washington Group on Disability Statistics questions when identifying persons with disabilities in LFS. <https://www.washingtongroup-disability.com/implementation/implementation-guidelines/>

³⁰ For example, when there are multiple families within the same household.

lower-paying job may affect the ability to live in a particular type of housing. However, since the proportion of different types of home ownership and occupation can vary between countries the overall housing pattern should also be considered. The main categories of housing tenure are: owned outright, owned with a mortgage/loan, renting, and living rent-free.

5.3.2 Dependent children

5.19 The presence of dependent children is both a personal and a household or family characteristic. For example, an individual's responsibility for the care of a child and the number of dependent children in a person's household can affect the impact of different forms of employment. Depending on the ages of the children, there may be a need for employment flexibility to cover childcare commitments. However, the lack of fixed hours may also have an impact if the employee needs to make child-care arrangements in advance. There is also the issue of whether the job provides sufficient income (in combination with state benefits) to support the family. The age of the youngest child gives an indication of the level of support needed. For example, whether the youngest child is below the age for compulsory education or is above the age when she or he can legally be left alone in a house.

5.3.3 Type of household or family

5.20 The mix of people within a house can also be an indicator of the potential impact of different forms of employment. Examples include households with one person in employment, houses with multiple people in employment, houses where everyone is in full-time education (student houses) and households where no one is employed (jobless household).

5.4 Examples of the fit between people and jobs

5.21 While many people actively choose to work part-time or in a temporary job, there will be some for whom this is not a choice. Identifying people who are working in these types of employment through necessity can help identify potential under-employment (part-time) or involuntary temporary employment. One way of identifying people in this situation is to ask why they are working part-time or in a temporary position and whether it was because no full-time or permanent position was available or whether this was a choice. Further definitions can be found in the 20th ICLS *Resolution concerning statistics on work relationships* (temporary work) ([ILO, 2018b](#)) and the *UNECE Handbook on Measuring Quality of Employment* (part-time) ([UNECE, 2015](#)).

5.5 Examples of characteristics of wider labour market and economic participation

5.5.1 Income and earnings (including all sources)

5.22 The earnings someone receives as an employee from a single job can most reliably be measured from administrative data or surveys of businesses. The earnings of independent

workers are more rarely covered, but may be available in some administrative data, such as tax data. Household surveys are a possible option but may provide estimates that are less precise. At the same time, household surveys are essential to calculate measures based on the ratio of earnings to hours worked such as hourly wages.

5.23 Looking at income more widely can provide an indication of whether earnings are enough to cover living expenses. In its simplest form, this can include asking people whether they receive any income in addition to their employment earnings, such as a secondary job as an independent worker, investment income or from benefits. For benefits this can also be subdivided by reason, e.g., whether they are in-work benefits to supplement income, pensions, benefits relating to children etc.

5.5.2 Multiple jobs

5.24 An individual can also have more than one job at a time. It is important to capture this information to assess the potential impact of different forms of employment on individuals. In addition to capturing the number of jobs someone holds, it is also useful to identify which job is considered their primary employment. An individual's main job is the job with the longest hours usually worked, or in the absence of information regarding hours usually worked, other information such as income from each job could be used as a proxy for identifying the main job. ([ILO, 2018b, paragraph 8\(b\)](#))

5.6 Personal characteristics and precarious employment

5.25 Precarious employment is a term often used to describe forms of employment that are associated with greater insecurity for the worker. There is no universally agreed definition of "precarious employment" but according to the ILO ([2016a](#)) it is generally work that is:

- ▶ Low paid
- ▶ Insecure
- ▶ Has minimal worker control
- ▶ Unprotected

This can come in several forms including:

- ▶ Agency work
- ▶ Temporary work
- ▶ Casual or "on-call" work
- ▶ Seasonal work
- ▶ Part-time work (if not voluntary)

5.26 The present Handbook does not offer a specific definition of precarious employment due to variations in the possible impact the same form of employment may have on different persons and in different contexts. Namely, the impact of different forms of employment also depends on the personal circumstances of the job holder, as the example in Box 5.1 illustrates:

Box 5.1

Example of personal characteristics and precarious employment

Job – A part-time job in a bar/restaurant. There are no fixed hours and shifts can be offered at short notice depending on the number of bookings (and cancelled at short notice too).

Person A – A full-time student, funding their studies and living expenses through a combination of loans and family support and living in shared accommodation. Works to supplement their income and fund their social activities.

Impact of job – Little impact if the hours requested fit around studying commitments.

Person B – Lives in a rented property with a partner working full-time, paid at a level that qualifies for government in-work benefits, and two dependent children, aged 7 and 9.

Impact of job – The lack of fixed hours for this job has a potentially negative effect. Arranging childcare at short notice could be an issue. Additionally, the fluctuation in income may impact the entitlement to in-work benefits and the ability to cover rent and living expenses.

5.7 Person-level trajectories and constraints in the supply of labour

5.27 Some forms of employment, such as casual work, gig work, or short temporary contracts may increase the likelihood that a worker experiences periods of underemployment, unemployment, or of wanting to work while not being part of the labour force. Growth in less permanent or stable forms employment within a country may result in an increase in the proportion of the population experiencing such constraints in their supply of labour.

5.28 The longitudinal component of many Labour Force Surveys (LFS), as well as some administrative data sources, can provide information about trajectories within the labour market over time, including periods of underemployment or unemployment. While the experience of a constraint in the supply of labour may occur in relation to the same job – for example, a period of underemployment – indicators capturing this dynamic are measured at the level of the person since a period of unemployment can occur between two different jobs (e.g. two distinct short-term contracts).

5.29 NSOs may consider different statistical definitions of the concept of “constrained labour supply”, but categories may include unemployment as defined by the 19th ICLS resolution ([ILO, 2013a](#)), involuntary part-time work, as well as workers who are not employed or unemployed, but wanted to work during the LFS reference week.

5.7.1 Constrained labour supply and forms of employment

5.30 A general measure of constraint in the supply of labour includes persons who were never employed. It is based on information collected during the entire period when a person is an LFS respondent³¹, and is defined as the total number of persons who experienced a period of underemployment, unemployment, or of being out of the labour force while wanting to work,

³¹ Differences in the design of the LFS mean that this period may vary by country (e.g. 6 quarters or 6 months)

expressed as a ratio to all persons who had a period of employment, unemployment, or were out of the labour force while wanting to work:

$$\text{Rate of constrained labour supply} = \frac{\text{persons (underemployed or unemployed or wanted to work) for at least one period}}{\text{persons (employed or unemployed or wanted to work) for at least one period}}$$

5.31 While this measure may be relevant to understand patterns of labour underutilisation and constraints in the supply of labour in a country by personal and household characteristics such as sex and education, it is not directly tied to the impact of specific forms of employment because it includes persons who never worked and for whom, by default, there is no information about the form of employment.

5.32 To explore the relationship between forms of employment and constraints in the supply of labour, the indicator can be restricted to those who are employed at the time of their first LFS interview or for whom information is available about their previous job. Information on the status in employment of the person's main job during their first LFS interview³² can be used, while for respondents who are not employed during their first interview the characteristics of the most recent form of employment can be used.

5.33 The indicator can then be compared between different forms of employment to explore if a particular form is associated with a higher proportion of workers experiencing a period of constrained labour supply in the following months. Of particular interest may be comparisons between employees and independent workers or workers who work through digital platforms. [Babet and Picart \(2020\)](#) conducted analysis of this type in France for the period 1991 to 2002 and 2004 to 2018 and showed for example that while employees were more likely to experience a constraint in their supply of labour during this period, the proportion of independent workers who experienced a constraint grew between 2004 and 2018.

5.34 Differences between forms of employment can also be explored in terms of the specific type of constraint: for example, whether the constraint is the result of underemployment or alternating periods of employment and unemployment.

5.7.2 Persistence in the form of employment

5.35 A longitudinal approach also offers the possibility to measure the probability that a person remains employed in a particular form of employment over a period of time (e.g. one year). For example, a person working as a dependent contractor may be more likely to leave this form of employment than a permanent employee given the absence of a guarantee of permanence in their job. The longitudinal design of the LFS can be used to obtain the proportion of workers who have persisted in a form of employment:

$$\text{Proportion of workers who have persisted in a form of employment} = \frac{\text{Persons employed at the beginning and at the end of the period}}{\text{persons employed at the beginning of the period}}$$

5.36 Depending on the goal of the analysis some reasons for leaving the job such as retirement could be excluded in the above rate calculation. The rate is comparable to the probability of staying in the same condition between the beginning and the end of a given

³² An alternative approach is to conduct the analysis based on the status in employment a year before the LFS interview (see [Babet and Picart, 2020](#))

period. However, the indicator does not take into account any exits from the condition if the individual returns to the initial condition by the end of the period. For example, an individual who is employed at the beginning of the period, loses his job during this period, but returns to the same type of job at the end of the period, is counted as having persisted in their job. Identifying the type of transition (e.g. from independent worker to employee) would also provide valuable information about trajectories within the labour market.

5.7.3 Use of administrative data and further longitudinal analysis

5.37 Similar analyses can also be performed with administrative databases, or linkages between administrative data and the LFS or other surveys. Such an approach may provide additional information about the situation of the person such as their total income. More precise data about the number of weeks spent working in a particular form of employment may also be available to capture employment stability in more detail. For example, [Anitori et al. \(2019\)](#) used a linkage of the Italian LFS with administrative data to analyse the trajectories of private sector employees for the period 2014 to 2017. Among other factors, their analysis showed that the likelihood of experiencing a break in employment was higher among workers who had a non-permanent job at the beginning of the period under study.

Chapter 6: Employment and Social Protection

6.1 A consideration relevant to the categorisation of diverse forms of employment is the degree to which workers are covered by social insurance schemes or other social protection schemes and programmes. Access to social protection is often dependent on how different types of work relationships are addressed in national policy and legal frameworks (see Chapter 2). In countries where some types of social insurance are provided through the job, social protection is an important element of the quality of employment (see Chapter 7). In most social protection systems, full-time, permanent employment is often considered to be the default form of employment. Workers in other forms of employment, including some categories of temporary, part-time and independent workers are often not, or not to the same extent, covered. Categories of workers who tend to face significant gaps in social protection include those who are casual employees, marginal part-time employment, dependent contractors, and independent workers.

6.2 After presenting a brief definition of social protection (Section 6.1), Section 6.2 provides an overview of social protection issues for different forms of employment. Section 6.3 outlines the importance of social protection statistics in a national context, highlighting the relevance of measuring social protection coverage and adequacy for workers in different forms of employment. Section 6.4 presents key dimensions of social protection measures in terms of levels, duration and coverage of social benefits and lists some indicators of social protection and health coverage from the Sustainable Development Goals (SDGs) framework as well as from the Statistical Framework for Measuring Quality of Employment. Finally, section 6.5 presents the main data sources for social protection statistics.

6.1 Social protection: definition and key concepts

6.3 Social protection is an important element of decent work. The ILO defines social protection, or social security³³, as: “the set of policies and programmes designed to reduce and prevent poverty, vulnerability and social exclusion throughout the life cycle. Social protection includes nine main areas: child and family benefits, maternity protection, unemployment support, employment injury benefits, sickness benefits, health protection (medical care), old-age benefits, invalidity/ disability benefits, and survivors’ benefits. National social protection systems address all these policy areas by a mix of contributory schemes (social insurance) and non-contributory tax-financed benefits (including social assistance)” ([ILO, 2021k, p. 226](#)) (see Box 6.1 for more detail). International social security standards, in particular the *Social Security (Minimum Standards) Convention, 1952* (No. 102) ([ILO, 1952](#)) and the *Social Protection Floors Recommendation, 2012* (No. 202) ([ILO, 2012](#)), provide guidance for national social protection

³³ In many contexts, the terms “social security” and “social protection”, are largely interchangeable, and the ILO and other United Nations institutions use both in discussions with their constituents and in the provision of relevant advice to them, especially when referring to the human right to social security, and to social protection systems consisting of a set of contributory and non-contributory schemes and programmes. However, the term “social protection” is sometimes used to cover a broader range of services than “social security”, including protection provided between members of the family or members of a local community; on other occasions it is also used with a narrower meaning, understood as comprising only measures addressed to the poorest, most vulnerable or excluded members of society

systems, including floors³⁴. These standards comprise principles and minimum requirements regarding the extent of coverage, levels and quality of benefits, eligibility conditions, as well as their financing and governance, including their monitoring (ILO, 2021f). International recommendations on developing statistics on social protection are contained in the *Resolution concerning the development of social security statistics*, adopted by the Ninth ICLS in 1957 (ILO, 1957). Recommendation No. 202 also includes guidance on the monitoring of social protection systems including statistics (ILO, 2012, paragraph 19-24).

Box 6.1

Key social protection concepts

Contributory schemes are based on contributions made by protected persons (actual or potential beneficiaries) or on their behalf, which directly determine entitlement to benefits (acquired rights). Contributory schemes can be entirely financed through contributions, or by a combination of contributions and taxes (partial contributory schemes).

- **Social insurance schemes** guarantee protection through an insurance mechanism, based on: (1) the payment of contributions before the occurrence of the insured contingency; (2) the sharing or “pooling” of risk; and (3) the notion of a guarantee. The (usually **mandatory**) **contributions** paid by (or on behalf of) insured people are pooled together, and the resulting fund is used to cover the expenses incurred exclusively by those individuals affected by the occurrence of the relevant (clearly defined) contingency or contingencies. In contrast to commercial private insurance, risk-pooling in social insurance is based on the principle of solidarity, with contributions typically related to people’s capacity to pay (e.g. proportional to earnings) as opposed to premiums that reflect individual risks. In the case of social insurance schemes for those in wage or salaried employment, contributions are usually paid by both employees and employers (employment injury schemes are generally fully financed by employers). Social insurance schemes may be partly financed from taxation or other sources; this may be done through a subsidy to cover a deficit, or through a general subsidy supplanting contributions altogether, or through subsidies directed specifically at certain groups of contributors or beneficiaries (for example, those not contributing because they are caring for children, studying, in military service or unemployed, or have too low a level of income to make full contributions, or receive benefits below a certain threshold because of low contributions in the past).
- **Provident funds** usually provide a mandated savings mechanism to pay a lump sum to beneficiaries when specific contingencies occur (typically old age, invalidity or death) which may in some cases be transformed into an annuity. They usually provide no or limited risk pooling or guarantees.
- **Private insurance** is usually voluntary, based on premiums that reflect individual risks, with no or limited risk pooling and guarantees. While government regulations may prescribe certain elements of risk-pooling, such as unisex mortality tables or minimum rates of return, these remain more limited than in social insurance schemes. For this reason, in most countries, private insurance plays a complementary role to supplement statutory provision through public social protection systems.

Non-contributory (usually tax-financed) schemes require no direct contribution from beneficiaries or their employers as a condition of entitlement to receive relevant benefits. They are usually financed through taxes or other state revenues, or, in certain cases, through external grants or loans. The term covers a broad range of schemes:

³⁴ A social protection floor is a nationally defined set of basic social security guarantees which secure protection aimed at preventing or alleviating poverty, vulnerability and social exclusion. These guarantees should ensure, at a minimum, that over the life cycle all in need have effective access to at least essential healthcare and basic income security (ILO, 2021f, p. 226–227).

- **Universal schemes** provide benefits under the single condition of residence, and often refer to two different types of schemes:
 - **universal schemes for all residents**, such as national health services or a universal basic income.
 - **categorical** schemes provide benefits to certain broad categories of the population without a means-test or a proxy means test. The most common forms of such schemes are those that transfer income to older people above a certain age (universal pensions), to all people with disabilities, or to children below a certain age (universal child benefits). Some categorical schemes also target households with specific structures (one-parent households, for example) or occupational groups (such as agricultural workers).
- **Social assistance** schemes/programmes provide benefits to vulnerable groups of the population, especially households living in poverty. Most social assistance schemes are **means-tested**, that is, they provide benefits upon proof of need. In certain contexts, other targeting mechanisms are used to determine eligibility, such as identifying areas with high levels of deprivation (geographic targeting), using proxy indicators to identify beneficiaries (proxy-means tests), involving communities (community-based targeting).

Source: Based on the glossary in the annex of the *World Social Protection Report 2020-22* ([ILO, 2021k, p. 225–229](#)).

6.2 Employment and social protection

6.4 The social protection of workers is closely related to the design of the national social protection system, and to the form of employment workers are engaged in. Both are strongly dependent on national policy and legal frameworks. Understanding this relationship is key for the purpose of categorising forms of employment and in collecting data to measure their size.

6.5 Two key questions are particularly important in this respect: First, what are the existing social protection mechanisms that are available to workers, and how are they connected to employment (or not)? Second, how well are workers in different forms of employment covered? These two questions will be addressed in the sections which follow.

6.2.1 Social protection mechanisms and employment

6.6 National social protection systems are structured in different ways, consisting of different schemes and programmes that may be connected to employment in different ways, or not at all. In order to assess the relationship between employment and social protection, it is important to understand these differences, as they may have implications for the quality of social protection coverage, as well as for the functioning of labour markets.

6.7 Table 6.1 provides an overview of the different types of social protection schemes and programmes and their relationship with employment.

Table 6.1

How are different types of social protection (potentially) linked to employment?

Link to employment	Types of schemes and programmes (examples)	Typical provider	Financing mechanism	
STRONG	Employment contract with specific employer	<i>Employer liability for paid maternity leave, sick leave or employment injury; severance pay, employer-provided/-sponsored health insurance or pension funds</i>	<i>Individual employer or private insurance</i>	<i>Individual employer</i>
	Employment in specific sector or occupation	<i>Occupational/sector-specific schemes: occupational pensions; some microinsurance schemes</i>	<i>Mutual funds</i>	<i>Contributions by employers and/or workers</i>
	All employees	General social insurance limited to employees: (un)employment insurance, pensions, social health insurance	Social security institution	Contributions by employers and workers (including payroll taxes), sometimes complemented by general taxation
		<i>Private insurance; individual savings accounts</i>	<i>Private insurance, individual employer</i>	<i>Employer and worker contributions to savings, premiums</i>
WEAK	Gainful employment (including independent workers)	General social insurance including independent workers: (un)employment insurance, pensions, social/national health insurance	Social security institution	Contributions by employers and workers, taxes
		<i>Private insurance; individual savings accounts</i>	<i>Private insurance</i>	<i>Workers, via premiums, savings</i>
	Not related to employment (in some cases excluding those in employment)	Non-means-tested (universal or categorical) schemes for broad categories of the population: universal old age pensions, universal child benefits; national health service, universal basic income	Ministry, agency, social security institution or tax office	General taxation
Means-tested schemes for those living in poverty: social assistance, "safety net programmes".		Government agency or municipality	General taxation	

Note: Examples shown in bold are usually considered as core elements of social protection systems; examples shown in italics usually play a secondary role, complementing protection provided by public social protection schemes.

Source: Based on [ILO \(2016a, p. 299–309\)](#) and [Behrendt, Nguyen and Rani \(2019, p. 27–29\)](#).

6.8 The strongest link between employment and social protection exists for benefits that are linked to a specific employment contract and are directly provided or sponsored by the individual employer. Such forms of protection benefit employees with long job tenure but can carry risks of exclusion for those with short job tenures. In addition, such mechanisms can

generate challenges for small enterprises and may have adverse implications for labour market mobility.

6.9 Types of social protection schemes and programmes that are based on collective solutions, in particular social insurance, provide for broader risk-sharing among employers and workers, which tends to be more favourable for smaller enterprises and workers with shorter job tenures, and present less barriers for labour mobility. Social protection schemes and programmes linked to employment in a specific sector or occupation carry the risk that workers lose benefits if they move to another sector or occupation, unless coordination measures are in place to ensure the portability of acquired rights and entitlements ([ILO, 2021i](#)).

6.10 Schemes and programmes that are not related to employment are usually financed through general taxation. In some cases, such programs may even exclude those who are in employment, as is the case for some social assistance programmes.

6.2.2 How well are workers in different forms of employment protected?

6.11 Depending on the design of national policy and legal frameworks governing social protection systems, workers in some forms of employment may not be, or only partially protected. Although this question is related to the availability of different social protection mechanisms (see section 6.2.1), additional aspects need to be considered regarding the extent to which national legal frameworks cover workers in different forms of employment (legal coverage), and the extent to which this translates into actual coverage and access to benefits (effective coverage).

6.12 Depending on national policy and legal frameworks and practices, some of the following challenges can be found in many countries ([ILO, 2016a](#)) (see also Figure 6.1):

- ▶ While many workers who are **permanent full-time employees**³⁵ tend to be relatively well-covered, some workers may still face gaps in social protection coverage. This could relate, for example, to the exclusion of certain sectors or occupational categories from legal coverage (such as agricultural or domestic workers, workers in micro-enterprises below a certain minimum threshold), non-compliance with legal frameworks (lack of effective coverage). Challenges may also exist regarding the adequacy of benefits, often related to low wages or the under-declaration of wages.
- ▶ The social protection coverage of **employees on temporary contracts** depends on the minimum thresholds regarding the length of their contract set out in the national labour and social security legislation. While most workers on contracts that last two months or longer would be covered, there are significant challenges for casual and seasonal workers.
- ▶ The extent to which workers in **multiparty employment relationships** (such as the case of work mediated by private employment agencies) are covered, and whether there exist coverage gaps compared with other workers depends strongly on how national legislation is defined and enforced.
- ▶ The coverage of **part-time employees** is often dependent on legal minimum thresholds regarding hours of work. Typically, most regular part-time employees would be covered (at least those working 20 or more hours per week), but there are significant coverage and adequacy gaps for those who work for only a few

³⁵ Such work relationships are sometimes referred to as “standard” forms of employment; however, there is no consistent definition of this concept.

hours per week or month (marginal part-time work), or those working on “zero-hour” contracts. In addition, there are challenges for categories of employees who often work for several employers, such as domestic workers ([ILO, 2021g](#); [ILO, 2021j](#)).

- ▶ A significant challenge exists for **dependent contractors** for whom the prevention of a misclassification of their employment relationships is critical. In some countries, specific regulations exist to ensure, where necessary, that dependent contractors are covered in a comparable way to employees. In other cases, there are no regulations differentiating between dependent contractors and independent workers in terms of social protection coverage.
- ▶ For **independent workers**, there is a wide variety of situations. Some countries provide for social protection coverage of independent workers, at least for some sectors and type of professions, to ensure their access to health care and income security, but many countries face major coverage gaps ([ILO, 2021h](#); [Spasova et al. 2021](#)). Yet, in light of the COVID-19 pandemic, many countries have recognized the challenges related to coverage and adequacy gaps, including through the [European Pillar of Social Rights](#)³⁶ and reflected in recent [G20 declarations](#)³⁷.

³⁶ <https://ec.europa.eu/social/main.jsp?catId=1226&langId=en>

³⁷ <https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/multilateral-system/g20/lang--en/index.htm>

Figure 6.1

Social protection coverage of workers in different forms of employment

Form of employment		Typical challenges for social protection coverage
Dependent employment	Full-time permanent employees	<ul style="list-style-type: none"> ▶ Depends on legal coverage of sector of employment and type of enterprise ▶ High exclusion risk: employees in micro-enterprises, excluded sectors or occupations, employees with low pay and without written contracts
	Temporary employees	<ul style="list-style-type: none"> ▶ Depends on minimum thresholds with regard to the length of employment ▶ High exclusion risk: casual employment
	Part-time employees	<ul style="list-style-type: none"> ▶ Depends on minimum thresholds with regard to regular working time ▶ Critical: marginal part-time work, zero-hour contracts
	Multi-party employment relationships	<ul style="list-style-type: none"> ▶ Depends on regulation with regard to the responsibility of each party ▶ High exclusion risk: casual employees, marginal part-time work
	Dependent contractors	<ul style="list-style-type: none"> ▶ Depends on mechanisms to ensure correct classification of employment relationships; in some countries there are specific rules for dependent contractors ▶ Risks: inadequate regulation and enforcement
Independent employment	Independent workers	<ul style="list-style-type: none"> ▶ Depends on modalities for legal coverage by sector and type of occupation/profession ▶ Challenges: lack of coverage or voluntary coverage; adapted mechanisms to take into account contributory capacities; complex administrative procedures; fragmentation of the system

Source: Based on (ILO, 2016a)

6.13 Forms of employment may evolve more quickly than labour and social security legislation. Legal provisions that exclude certain forms of employment from social security contributions can provide incentives to employ workers in less protected forms of employment. This may impact the development in observed forms of employment. NSOs need to be aware of such issues.

6.3 Social protection and employment forms

6.14 Fully capturing the characteristics of social protection systems is outside the bounds of the statistical measurement of forms of employment. However, the degree and types of social protection available in different forms of employment is an important element of quality of employment. Social protection coverage can also create incentives for employers and workers to favour one form of employment over another. Well-developed national statistics and monitoring mechanisms help to assess the availability and coverage of social protection schemes. It is therefore important for labour statisticians to understand the statistical

frameworks related to social protection systems, so that they can utilise the information relevant to classifying and measuring employment forms.

6.4 Indicators on social protection (including health protection)

6.15 Key social protection indicators include legal and effective coverage, level of benefits, duration and expenditure and revenue. To effectively collect data on social protection for workers in different forms of employment, NSOs and researchers might consider analysing social protection functions and areas linked to the coverage of risks within the working age population, namely: maternity, paternity and parental leave, healthcare, contributions to pension schemes, unemployment insurance coverage, sickness benefits/paid sick leave, employment injury benefit, survivor/death benefits and disability benefits (invalidity) (for more detail see Box 6.2).

6.16 Most of these functions are included under the relevant indicators under SDG 1.3.1 and 3.8.1 (see section 6.4.3), which require regular monitoring at the national level. While most indicators are based on administrative records, some countries use additional data sources. Establishment and Labour Force Surveys are one possible source of information for these variables. Assessing the extent to which existing Labour Force Surveys can meet data needs and adding relevant questions in future survey instruments can be very useful, particularly for the measurement of social protection among workers in different forms of employment (see section 6.5).

6.17 To fully capture national social protection systems, social protection indicators that extend beyond statistics on forms of employment, such as social protection benefit and administrative expenditure, legal and effective coverage, as well as the level and duration of benefits for population groups who are not of working age, such as children and older persons, should be published. However, for most NSOs many statistics on social protection are outside the bounds of the statistical measurement of forms of employment.

6.4.1 Dimensions relevant to social protection indicators

6.18 **Benefit levels** relate to the amount of payments provided to the beneficiary by social protection schemes and programmes, and can also be expressed in the form of **replacement rates**.

- ▶ Assessment of benefit level adequacy for non-contributory benefits can be done by comparing the benefit to minimum wages, national poverty lines, subsistence levels and other thresholds available at the national level such as the wage in the previous job. Additionally, assessment of the duration of these benefits and sustainability of the programmes is critical to obtain a full picture.

6.19 **Benefit duration** refers to the period during which the benefit payments and services are received, and can be classified as follows:

- ▶ Long-term benefits - types of benefit that are aimed at replacing earned income in the case of the more or less permanent loss of earnings resulting from old age, disability or the death of the breadwinner (survivor benefits).
- ▶ Short-term benefits - types of benefit that are aimed at replacing earned income in case of a temporary loss of earnings resulting from sickness, maternity or unemployment.

6.20 **Coverage** relates to the extent and scope of coverage provided for in national legislation and in practice (see for more detail [Table A2.1 in ILO, 2021k](#)).

- ▶ Measurements of **legal coverage** relates to the scope, extent and level of provision according to the national legislation.
- ▶ Estimates of the **scope** of legal coverage usually measure the number of social security areas (branches) by which – according to existing national legislation – a population or specific groups within it is or are covered.
- ▶ The **extent** of legal coverage relies on both information on the groups covered by statutory schemes for a given social security area (branch) in national legislation and available statistical information quantifying the number of people concerned at the national level.
- ▶ The **level** of legal coverage for specific branches of social security is usually measured for cash benefits by benefit ratios or replacement ratios calculated for specified categories of beneficiaries, using benefit formulas or benefit amounts specified in the legislation.
- ▶ Measurements of **effective coverage** should reflect how the legal provisions are implemented in reality. Effective coverage is usually different from (and usually lower than) legal coverage because of non-compliance, problems with enforcement of legal provisions, or other deviations of actual policies from the text of the legislation. Indicators of effective coverage (see section 6.4.2 for more details) are essential for assessing social protection for workers in different forms of employment.
- ▶ Measurements of the **scope** of effective coverage in a country reveal the number of social security areas (branches) for which there is relevant legislation that is actually enforced.
- ▶ When measuring the **extent** of effective coverage, a distinction has to be made between measurement in terms of **protected persons** and in terms of **actual beneficiaries**. Protected persons are those who have benefits guaranteed but are not necessarily currently receiving them at present (including contributors and other affiliated persons)³⁸, while actual beneficiaries describe the population who actually receive the appropriate social protection benefits at a point in time.
- ▶ Measurements of the **level** of effective coverage relate to benefit amounts actually paid, relating for example to average payment amounts by sex.
- ▶ Measuring social protection coverage is a complex task. Several dimensions need to be considered to arrive at a comprehensive assessment, and distinction must be made between legal and effective coverage. SDG 1.3.1 and its components are examples of the effective coverage indicators.
- ▶ In addition to the indicators mentioned above, the measurement of social protection **expenditure** and **revenues** is also essential (see for more detail [ILO, 2021k, p. 235–237](#))

³⁸ For example: Proportion of labour force actively contributing to the pension scheme: ratio of active contributors to the labour force. This indicator can be modified using the working-age population instead of the labour force.

6.4.2 Social protection indicators as part of quality of employment

6.21 The Handbook on Measuring Quality of Employment: A Statistical Framework ([UNECE, 2015](#)) divides quality of employment into seven dimensions and twelve sub-dimensions. Sub-dimension 4b) of the framework proposes the following indicators for measuring social protection:

- ▶ 4b1 Pension insurance coverage (Percentage of employed persons who are active)
- ▶ 4b2 Unemployment insurance coverage (Percentage of employees that are active contributors to an unemployment insurance scheme)
- ▶ 4b3 Medical insurance coverage (Percentage of employed persons who are active contributors to a medical insurance plan/scheme related to their employment)

6.22 For each of the indicators, the framework provides detailed guidance on definitions, data sources and compilation methods. The statistical framework is described in more detail in Chapter 7.

6.4.3 Social protection and health coverage indicators in the SDG framework

6.23 The various components of **SDG indicator 1.3.1** reflect the proportion of persons effectively covered by social protection systems, including social protection floors. Calculations include separate indicators to distinguish effective coverage of social protection cash benefits for children, unemployed people, older people and people with disabilities, pregnant women and mothers with new-borns, those who have suffered injury at work, the poor and the vulnerable. For each case, coverage is expressed as a proportion of the respective population group.

6.24 SDG components are calculated as described below³⁹.

6.25 Indicators directly linked to different forms of employment:

- a) Proportion of women giving birth covered by maternity benefits: ratio of women receiving cash maternity benefits to women giving birth in the same year (estimated based on age-specific fertility rates published in the UN's World Population Prospects or on the number of live births corrected for the share of twin and triplet births).
- b) Proportion of unemployed receiving benefits: ratio of recipients of unemployment cash benefits to the number of unemployed persons.
- c) Proportion of workers covered in case of employment injury: ratio of workers protected by injury insurance to total employment or the labour force.
- d) Proportion of persons with disabilities receiving benefits: ratio of persons receiving disability cash benefits to persons with severe disabilities. The latter is calculated as the product of disability ratios (published for each country group by the WHO) and each country's population.

³⁹ For the detailed metadata, visit <https://unstats.un.org/sdgs/metadata/files/Metadata-01-03-01a.pdf>.

- e) Proportion of the labour force/working-age population contributing to the pension system: ratio of the labour force (or working-age population) contributing to the existing pension schemes in the country.

6.26 Other indicators to assess social protection systems include:

- f) Proportion of the population covered by at least one social protection cash benefit: Ratio of the population receiving cash benefits⁴⁰ under at least one of the contingencies/social protection functions (contributory or non-contributory benefit) or actively contributing to at least one social security scheme to the total population.
- g) Proportion of children covered by social protection benefits: ratio of children/households receiving child or family cash benefits to the total number of children/households with children.
- h) Proportion of older persons receiving a pension: ratio of persons above statutory retirement age receiving an old-age pension (including contributory and non-contributory) to persons above statutory retirement age.
- i) Proportion of vulnerable persons receiving benefits: ratio of social assistance cash benefits recipients to the total number of vulnerable persons. The latter are calculated by subtracting from total population all people of working age who are contributing to a social insurance scheme or receiving contributory benefits, and all persons above retirement age receiving contributory benefits.

6.27 **Health coverage** is referenced under SDG indicators 3.8.1 and 3.8.2⁴¹:

- ▶ Indicator 3.8.1: Coverage of essential health service
- ▶ Indicator 3.8.2: Proportion of the population with large household expenditures on health as a share of total household expenditure or income

6.28 For health benefits, even in contributory schemes, the protection granted usually extends to the dependants of the contributor; hence, for healthcare benefits, the protected persons coverage ratio represents the percentage of the population protected by a scheme, regardless of whether they are contributing or not.

6.4.4 Data requirements

6.29 In order to produce timely, accurate and comparable indicators on social protection, data may be disaggregated by social protection function (e.g. unemployment insurance, sickness benefits), sex, age and include sufficient metadata (see Box 6.2).

⁴⁰ Excluding healthcare and sickness benefits.

⁴¹ <https://unstats.un.org/sdgs/metadata/?Text=&Goal=3&Target=3.8>

Box 6.2

Considerations for data compilation

At scheme and benefit levels the following information may be relevant:

1. Number of recipients / beneficiaries disaggregated by social protection function, sex and age
2. Number of contributors (or persons affiliated to the scheme) by sex, age and status in employment
3. Contributions by worker/employer or provision by employer
4. Receipts and expenditure (total and excluding administrative expenditure) of the scheme level of benefits paid under the scheme – minimum and average

The indicators can be disaggregated by social protection function:

- ▶ Maternity, paternity and parental leave and related benefits
- ▶ Full or supplementary medical insurance
- ▶ National/public pension schemes and complementary schemes such as occupational schemes
- ▶ Unemployment insurance
- ▶ Sickness benefits/paid sick leave
- ▶ Employment injury benefit
- ▶ Survivor/death benefits
- ▶ Disability benefits (invalidity)
- ▶ Family/child benefits (in some countries contributory)

Relevant scheme and benefit-related metadata include the following characteristics of the scheme/benefit:

- ▶ Contributory or non-contributory
- ▶ Public or private
- ▶ Statutory scheme or programme
- ▶ Mandatory or voluntary scheme
- ▶ Universal scheme or means-tested
- ▶ Function: Risk or contingency covered (medical care, old age, invalidity, survivors, employment accidents, unemployment family/children, maternity, poverty and social exclusion)
- ▶ Benefits in cash or in kind
- ▶ Periodic benefits vs. ad-hoc/one-off benefits
- ▶ Means-tested or non-means-tested benefits
- ▶ “Supplementary” or “basic” benefit
- ▶ Eligibility criteria and qualifying conditions

6.5 Data sources

6.30 Several data sources can be used to compile social protection indicators: administrative records are used for the regular monitoring of social protection indicators, including SDG 1.3.1; household survey data (including labour force surveys and household income and expenditure surveys) are used for in-depth impact assessment and analysis of social protection coverage and benefit levels by status in employment and different forms of employment. In other countries, establishment surveys are also used to collect data on social protection.

6.31 **Administrative data** are usually obtained from the administrative records of the institutions managing social protection schemes. At the international level, the *ILO Social*

Security Inquiry (ILO, 2016c)⁴² is an important data collection instrument, and the data are published in the ILO World Social Protection Database⁴³ which also feeds into SDG indicator 1.3.1. Administrative data is often the primary source of data, which are regularly collected and often published by the institutions administering social security programmes. The use of administrative data requires thorough work before producing estimates, including mapping of the social protection schemes in the country, multiple metadata compilation (eligibility criteria, groups of population covered, information on the design of the scheme, etc.) and identification of possible overlaps in beneficiaries among the schemes to avoid double-counting. ILO collects data through the online Social Security Inquiry questionnaire, which is used for the annual collection of administrative data from national ministries of labour, social security, welfare, finance and others. The data and indicators are disseminated through the World Social Protection Data Dashboards.

6.32 **Household survey data** are an important complement to administrative data, particularly regarding identifying existing gaps in coverage, information about potential beneficiaries, analysing the causes and effects of the absence of coverage, the impact of social protection on household income distribution, the link between status in employment and coverage, and level of benefits. Ensuring that relevant questions in national survey instruments are included can help to improve the evidence base for employment and social protection policies, especially if sample sizes are sufficiently large to allow for analysis of the situation of specific groups.

6.33 The **Labour Force Survey** (LFS) is a particularly important source of information on social protection, especially for measuring effective coverage, as it allows for the possibility to link (cross-tabulate) social protection coverage with information on employment status, working hours, duration of work agreement etc. The ILO has been working with several countries on the inclusion of questions on social protection as part of the regular LFS data collection. The main difficulty in current surveys is the placement of relevant questions, as very often social protection questions are only asked to employees, which leads to the exclusion of self-employed and unemployed persons as well as persons outside the labour force. To obtain the most detailed results, the questions on social protection should be asked to all respondents independent of their age, sex or employment status, and should be carefully adapted to the national context by taking into consideration the main relevant programmes existing in the country. This will allow cross-tabulation of information on social protection coverage and the level of benefits with status in employment, working hours, duration of the work agreement, etc.

6.34 **Household income and expenditure surveys** (e.g. EU-SILC, surveys included in the Luxembourg Income Database) provide detailed information on different types of benefits received and contributions paid by individuals and households, as well as important context information regarding household composition, incomes and expenditures; such surveys allow for a detailed analysis of social protection coverage and adequacy, yet the availability of variables on labour market participation and employment is often limited.

6.35 Household income and expenditure surveys are designed to produce information on households' expenditure, income as well as information about diverse features related to household living conditions with the objective to study the living standards of households. These surveys provide data required to assess the level, structure and trends of the economic well-being of households and individuals, and to estimate the distribution of economic resources by measuring poverty, inequality and social exclusion. The data are widely used for the formulation and monitoring of economic and social welfare policies, especially for particular segments of the

⁴² <https://www.social-protection.org/gimi/WSPDB.action?id=41>

⁴³ <https://www.social-protection.org/gimi/WSPDB.action?id=19>

population, such as the older persons, persons with disabilities, low-income households, population groups in vulnerable situations, etc.

Chapter 7 Forms of Employment and Quality of Employment

7.1 Quality of employment is an important element of well-being and affects the lives of individual workers and members of their households. The dynamic development of labour markets has been accompanied by growing interest in quality of employment and demands from policy makers, governments and researchers for more systematic information on quality of employment to complement established employment statistics.

7.2 The emergence of new and diverse forms of employment is likely to have an impact on quality of employment. Quality of employment covers a broad range of dimensions and indicators related to employment, including the working environment, income, work-life balance, social security, work motivation and development opportunities. Adopting a quality of employment lens involves considering all dimensions of employment from the perspective of their possible impact on well-being. Quality of employment covers several aspects of forms of employment, which have been previously discussed in the Handbook, but organized in a way that highlights the relationship between these aspects and well-being. Other dimensions of quality of employment such as income and social dialogue are distinct from the form of employment itself. The Chapter draws mainly on the *Handbook on Measuring Quality of Employment: A Statistical Framework* (UNECE, 2015), the *Framework for Measuring and Assessing Job Quality* (OECD, 2016) and ILO's Decent Work Framework (ILO, 2013c).

7.3 Section 7.1 presents the concept of quality of employment. Section 7.2 describes in more detail seven key dimensions of quality of employment and gives examples of quality of employment indicators for each dimension. Section 7.3 presents the two main dimensions of forms of employment – work relationships and work modalities – and their relationship with quality of employment as indicators. Section 7.4 describes how forms of employment can also be drivers of quality of employment. Finally, Section 7.5 discusses how some quality of employment indicators are measured at the level of a person or society and only have an indirect relationship with forms of employment. A full list of indicators that countries may consider to complement statistics on forms of employment is presented in Chapter 8.

7.1 Quality of Employment

7.4 There are several dimensions that should be considered when measuring quality of employment. Based on an assessment of human needs that may be satisfied through employment, the UNECE statistical framework on measuring quality of employment identifies seven dimensions of quality of employment:

1. Safety and ethics of employment
2. Income and benefits from employment
3. Working time and work-life balance
4. Security of employment and social protection
5. Social dialogue
6. Skills development and training
7. Employment-related relationships and work motivation

7.5 The statistical framework defines quality of employment from the viewpoint of the employed person. It refers to the entirety of aspects of employment that may affect the well-being of employed persons. This may differ from the point of view of the employer or the society

as a whole. High quality employment for the society may refer to employment adequate to the qualifications of the labour force, leading to high productivity rates and enhancing social cohesion. From the employer point of view, high quality employment may correspond to having a skilled and efficient workforce. In contrast, individual workers may rate the quality of their employment highly if certain conditions such as safety and health at work or security of employment are met and if the remuneration is favourable.

7.6 Any assessment of quality of employment will to some degree depend on the point of view taken and may differ between countries and from person to person. An employment characteristic may be perceived as highly rewarding by one worker and as stressful by another. For example, some might see working part-time as an opportunity to combine work and family life, whereas others might emphasise the reduced income opportunities of part-time jobs.

7.7 The UNECE Quality of Employment Framework presents 67 individual statistical indicators distributed on the seven dimensions of quality of employment. This includes indicators that reflect the form of employment itself (work relationships or work modalities) as well as a range of additional aspects including the work environment, social protection and industrial relations. For each indicator, the framework suggests definitions and guidelines for compiling and interpreting the indicator. The framework includes both “objective” and “subjective” indicators. Objective indicators describe the actual conditions shaping the quality of employment (for example, the number of hours worked). Subjective indicators aim to measure how workers perceive certain aspects of quality of employment (e.g., in relation to work intensity or job autonomy). The framework does not assign value judgements to the indicators. Whether a development in an indicator should be considered favourable will depend on the perspective adopted, and it is left to users to make interpretations whether a development in an indicator should be considered favourable or not favourable.

7.8 Other existing quality of employment frameworks, such as the OECD Job Quality Framework (OECD, 2016) and the ILO’s Decent Work Indicators (ILO, 2013c) have slightly different approaches. The OECD Job Quality Framework focuses largely on job quality outcomes while the ILO’s Decent Work Indicators also includes “legal framework indicators” which describe relevant national legislation, policies and institutions, including information on qualifying conditions, benefit financing, evidence of implementation effectiveness (as recorded by ILO supervisory bodies, estimates of de facto and de jure coverage of workers and information on the ratification of relevant ILO Conventions). Despite their differences, all existing quality of employment frameworks focus on aspects of employment which broadly relate to human needs.

7.2 The dimensions of quality of employment

7.9 This section briefly presents the seven dimensions of the UNECE statistical framework for measuring quality of employment. For further details and explanations, readers are referred to the UNECE Handbook on Quality of employment.

1. Safety and ethics of employment

7.10 The dimension on safety and ethics of employment is divided in three sub-dimensions: 1a) Safety at work, 1b) Child labour and forced labour, and 1c) Fair treatment in employment. It focuses on physical safety and conditions at work, physical health and mental well-being, as well as the rights and treatment of the person in employment. The indicators under this dimension

provide general information on workplace injuries, forms of labour such as child and forced labour, and unfair treatment.

2. Income and benefits from employment

7.11 Income and benefits from employment will be important components of quality of employment for most workers. While some indicators under this dimension are related to social protection, they can be drawn out to describe variations in income and benefits that are specifically due to the form of employment. The dimension is divided in two sub-dimensions: 2a) Income, and 2b) Non-wage pecuniary benefits. Most workers depend on income from employment for their material well-being. Moreover, people also consider the leave, health coverage and other benefits provided by their work. Income from employment is defined broadly to include the earnings of employees (wages and salaries as well as non-wage benefits such as paid leave) and income related to independent employment. Hence, this dimension includes indicators on earnings and non-wage benefits such as paid leave and paid sick leave entitlement.

3. Working time and work-life balance

7.12 Dimension 3 consists of three sub-dimensions: 3a) Working hours, 3b) Working time arrangements, and 3c) Work-life balance. Working time refers to the time associated with employment and the arrangement of this time during a specified reference period. As such, several indicators found under this dimension capture the presence or absence of specific working time modalities which have been shown to relate to human needs. Work-life balance encompasses indicators related to the decision to work for pay or profit – in relation, for example, to the constraints associated with having children – and measures of time allocation between time spent in a job(s) and time spent in private life are also included.

4. Security of employment and social protection

7.13 The dimension of security of employment and social protection assesses the threats to employment security as well as coverage by social insurance programs that can offset possible risks that come with short or long spells of unemployment or being outside the labour force, health problems and retirement. Indicators based on specific types of work relationships are proposed as key indicators of quality of employment. It is divided in two sub-dimensions. Sub-dimension 4a) on security of employment, which refers to how likely a person is to lose his or her job(s), involves indicators on the degree of permanence and tenure of the job, the status in employment and the formal or informal nature of employment. As discussed in Chapter 6, social protection, dealt with in sub-dimension 4b), is measured through indicators of unemployment insurance, pensions and health insurance. The components of social protection covered here are distinct from those in Income and benefits from employment, as the former are more directly linked with the security of employment (e.g., likelihood of pregnant women losing employment) and often the cost of these benefits is not solely borne by the employer.

5. Social dialogue

7.14 The degree to which workers are able to join organizations of their own choosing and on a collective basis enter into social dialogue with employers (and their organizations) and the government is an important aspect of quality of employment that facilitates the improvement of employment conditions covered in the other dimensions of the statistical framework. Social dialogue encompasses freedom of association and the right to organize and bargain collectively.

The indicators in this dimension are not considered to be always relevant to understand quality of employment across different forms of employment since collective bargaining is restricted to some categories of workers in most countries (e.g. employees). There may also be multiple reasons for higher or lower trade union or collective bargaining coverage within a country, such as the legal and institutional context and the composition of employment by industry. However, the dimension includes possible indicators that may be considered to understand the context associated with a particular form of employment, for instance, the collective bargaining coverage rate.

6. Skills development and training

7.15 The match between the skills of the worker and the demands of the job, as well as the opportunity to further develop skills, play an important role for quality of employment. It has been argued that while there is a long-term trend of rising average levels of workers' skills, one can also observe a trend towards skill polarisation. Workers with a lower skill level may have increasing problems finding employment opportunities and may have to make concessions regarding their salary, employment security and working conditions. The dimension provides possible indicators on training and learning at work.

7. Employment-related relationships and work motivation

7.16 Employment-related relationships and work motivation are important elements of quality of employment. Empirical research has shown that they directly affect the well-being of the employed person. The dimension is divided into two sub-dimensions. Sub-dimension 7a) on employment-related relationships focuses on inter-employee dialogue and relationships as well as communication between employees and their supervisors. Sub-dimension 7b) on work motivation addresses characteristics determining work motivation, including the degree to which the employee has independence, freedom and discretion in carrying out the job (job autonomy), the degree to which workers receive regular feedback from their supervisor, the degree to which the job has to be carried out under pressure (work intensity) as well as the degree to which employed persons are given the opportunity to influence organizational decisions regarding their work.

7.17 The labour statistician should refer to the UNECE statistical framework for measuring quality of employment that includes the full set of possible indicators that could be considered. For each indicator, the framework provides detailed guidance on definitions, data sources and compilation methods.

7.3 Forms of employment as indicators of quality of employment

7.18 Forms of employment are mainly characterized by work relationships (classified according to ICSE-18) and work modalities. The prevalence of different types of work relationships and work modalities can represent important indicators of quality of employment by themselves.

7.3.1 Work relationships as indicators of quality of employment

7.19 The proportion of jobs in certain categories such as independent workers without employees and temporary employment agency workers could be an indicator of the quality of employment in a country. This is because different types of work relationships have inherent characteristics that are associated with specific dimensions of quality of employment. For instance, permanent employees typically have more security than dependent contractors or independent workers without employees.

7.20 In the UNECE framework, indicators based on work relationships are all classified under the sub-dimension of security in employment and reflect the status in employment categories of ICSE-93⁴⁴:

- ▶ 4a1 Fixed-term contracts⁴⁵ (Percentage of employed persons 25 years and older with a fixed term contract)
- ▶ 4a3 Own account workers⁴⁶ (Percentage of employed persons who are own-account workers)
- ▶ 4a4 Self-employed⁴⁷ with only one client (Percentage of self-employed workers with only one client)
- ▶ 4a6 Temporary employment agency workers (Percentage of employed persons employed via a temporary employment agency)

7.3.2 Work modalities as indicators of quality of employment

7.21 As discussed in Chapter 3, the term ‘work modality’ refers to the way in which work is coordinated, performed and compensated over time and space. This could include the length of work hours (part-time versus full-time, job sharing, overtime), work carried out at different times of the day, different days of the week, (weekend, night work), flexibility and stability in working hours and work location (office, home, remote work).

7.22 Work modalities can be indicators of quality of employment. Modalities are mostly associated with the working time and work-life balance dimension of the UNECE Quality of Employment Framework. This dimension includes the following modalities as indicators:

- ▶ 3a4 Distribution of weekly working hours (Employment by weekly hours usually worked (hours in standardised hour bands)
- ▶ 3b1 Night work (Percentage of employed persons who usually work at night)
- ▶ 3b2 Evening work (Percentage of employed persons who usually work in the evening)
- ▶ 3b3 Weekend work (Percentage of employed persons who usually work on the weekend)
- ▶ 3b4 Flexible work schedules (Percentage of employees with a flexible work schedule)

⁴⁴ NSOs are encouraged to adapt the indicators to reflect the categories found in ICSE-18.

⁴⁵ According to the UNECE Handbook, “employees with a fixed-term contract are employees whose employment contract specifies a particular date of termination” (2015, p. 309). This indicator may change based on the concepts of ICSE-18.

⁴⁶ This category is roughly equivalent to independent workers without employees in ICSE-18.

⁴⁷ This category is equivalent to the combination of independent workers and dependent contractors. To ensure alignment with ICSE-18, this indicator can be reported separately for the two groups.

- ▶ 3c2 Possibility of working from home (Percentage of employed persons whose working arrangements offer the possibility to work at home)

7.23 For example, excessively long or short hours of work may have a significant impact on quality of employment. Similarly, working on night shifts, or over weekends for a prolonged period can adversely affect an individual's health and quality of life. However, in instances where a person is working part-time, he or she might be doing so for individual flexibility.

7.24 In addition, some work modalities are associated with the security of employment dimension, including:

- ▶ 4ax2 Informal employment rate (Percentage of employed persons in informal employment) (experimental indicator)

7.25 Workers in informal employment are more likely to experience greater instability and to lack access to basic rights such as paid leave or breaks. Hence, a relatively higher proportion of workers who have jobs featuring informality could signal lower quality of employment in a country.

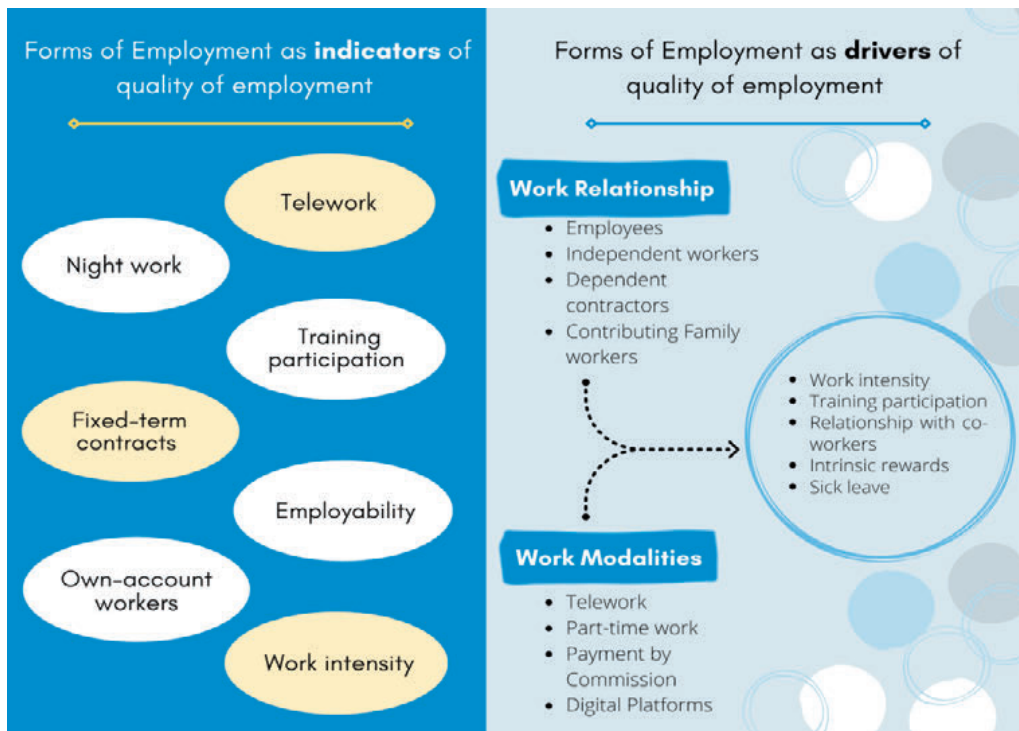
7.4 Forms of employment as drivers of quality of employment

7.26 While work relationships and work modalities can be indicators of quality of employment they are also important drivers of quality of employment (see Figure 7.1). This is because different work modalities or work relationships may be associated with distinct outcomes in terms of other dimensions of quality of employment. For example, some forms of employment are associated with lower or higher earnings or a higher chance of receiving informal training. To compare the quality of employment associated with different forms of employment, it is important to use indicators that can be measured at the level of the job. Analysis at this level focuses on evaluating whether different modalities or relationships are associated with a higher or lower quality of employment.

7.27 Capturing key trends in the quality of employment can also involve tracking differences in the prevalence of different modalities across status in employment categories (e.g. evening or night work among dependent contractors) or the co-occurrence of two modalities (e.g. short hours and digital platform employment). This type of analysis is particularly relevant when a work modality has clear implications for quality of employment and when two modalities, or a work relationship and a modality, tend to appear together in the context of the same job.

Figure 7.1

Forms of employment as drivers and indicators of quality of employment



7.28 Many of the indicators at the job level such as training and learning at work, social support at work, physical health risk factors, work intensity, and work autonomy overlap with those covered under the OECD concept of the quality of the “working environment”. The “working environment” is understood in this context as the combination of job characteristics defining the setting in which workers operate (OECD, 2017).

7.29 The impact of specific work modalities and work relationships on quality of employment can be assessed by using indicators of the different dimensions of the quality of employment framework. A good starting point when evaluating the impact of a particular form of employment is to consider its implications for the seven broad dimensions of quality of employment and to use relevant indicators to compare the form of employment of interest with other forms (e.g. training participation for fixed-term employees compared with permanent employees). As an example, indicators pertaining to income, work intensity, autonomy, and mental health risk factors could be used to characterize the quality of employment associated with digital platform employment. For instance, platform workers who work via international digital platforms may be at risk of lower income due to high competition and little security of work (ILO, 2018e). On platforms where algorithmic monitoring and surveillance is high, workers may also experience less autonomy than other independent workers. To measure the extent to which digital platform employment may have an impact on these aspects, the results for digital platform workers should be compared with the results for workers who do not carry out their work through a platform.

7.30 Another example is telework. New information and communication technologies have revolutionised work life and led to a growing number of workers engaging in telework and ICT-based mobile work. From the perspective of workers, benefits may include reduced commuting time, more flexibility in terms of working time and better overall work–life balance. Disadvantages could include a tendency towards longer working hours and overlap between work and personal life (work–home interference). From the perspective of companies, telework can lead to increased motivation and enhanced productivity and efficiency (Eurofound and ILO,

[2017](#)). In some cases, however, the reverse may be true, if lack of personal interaction impedes efficiency and team-work.

7.31 Quality of employment indicators relevant to understanding forms of employment as drivers of quality of employment are presented in Chapter 8.

7.5 Society-level and person-level indicators

7.32 Some indicators from the UNECE framework on quality of employment are not measured at the level of the job, nor do they describe a specific job. In such cases, the analysis is no longer strictly about evaluating the impact of a specific form of employment on quality of employment, but instead concerns assessing person-level or society-level indicators which might have an indirect relationship with forms of employment.

7.33 For example, while a type of work modality (e.g. part-time employment) can be a factor explaining why a person is likely to have more than one job, multiple job holding situations are often not only related to the characteristics of either job (pay, working hours) but also the personal circumstances of the person (e.g. sole breadwinner).

7.34 Similarly, a pay gap between men and women could be due to the concentration of one group in a specific type of work relationships (e.g. fixed-term contracts), which is less highly paid, but other person-level factors such as education and child caring responsibilities, as well as discrimination based on a person's characteristics may also represent dimensions of the explanation.

7.35 Person-level indicators of quality of employment include:

- ▶ 3a3 Involuntary part-time rate (Percentage of employed persons working part time for the main reason that they did not find a full-time job)
- ▶ 3a5 Multiple job holders (Percentage of employed persons who have more than one job)
- ▶ 6.5 Employability (Percentage of employed persons who believe their work experience and job skills would be helpful to find another job)

7.36 Like person-level indicators, societal indicators are also pertinent to the quality of employment. These indicators cover areas related to fair treatment in employment such as pay gaps, as well as indicators which take as a reference point the labour market as a whole. The ILO Decent Work Indicators ([ILO, 2013c](#)) also include legal framework indicators which refer to the presence of specific laws or government programs. Indicators of this type should be considered as part of the comprehensive measurement of quality of employment, but are only indirectly related to the measurement of forms of employment or fall entirely outside its scope.

7.37 Examples of society-level indicators of quality of employment in the UNECE Quality of Employment Framework include:

- ▶ 1c1 Pay gap (Pay gap between subpopulation groups (e.g., gender wage ratio))
- ▶ 2a3 Earnings by deciles (Nominal monthly/hourly earnings of employees by deciles)

Chapter 8 Data sources and indicators

8.1 Consultations conducted among CES member countries as part of the *In-depth review on new forms of employment and quality of employment* in Fall 2020 indicated that demands for data on new forms of employment and quality of employment are growing across the UNECE region. NSOs pointed to the high level of interest in digital platform employment, gig work, and short employment contracts within their country. However, many NSOs and researchers face constraints in relation to the collection of data on forms of employment due to costs, response burden and limitations imposed by traditional survey collection methods ([UNECE, 2021](#)). To assist countries in collecting and disseminating data on forms of employment, Chapter 8 identifies possible data sources and provides recommendations for indicators to be prioritised for the statistical measurement of forms of employment.

8.2 NSOs cannot be expected to collect and disseminate data on all work relationships, work modalities, indicators of permanence or stability, and social protection every month or every quarter. Each NSO will need to consider its priorities in the light of available resources and other pressing needs. ICSE-18 includes recommendations on indicators that may be regularly collected and published. But the scope of data collection and its frequency will need to be determined based on national needs and the purpose of the analysis.

8.3 Section 8.1 discusses key data sources that may be considered as part of the collection of data on forms of employment such as labour force surveys, other household surveys, administrative data and censuses. Section 8.2 presents indicators based on ICSE-18 as well as indicators that capture work modalities, permanence and stability, and social protection. Some indicators that capture the fit between the person and their job as well as several aspects of quality of employment are also proposed. Finally, section 8.3 provides general recommendation on the frequency of data collection and dissemination for the indicators.

8.1 Data Sources

8.4 Statistics on forms of employment may be collected and compiled using a single or a variety of data sources: household surveys, establishment-based surveys, administrative records as well as ad hoc surveys on labour market issues fit for the intended purpose.

8.1.1 Household-based surveys

8.5 In general, household-based surveys are best suited for collecting statistics on employment covering the resident population of a country, their participation in main or all jobs, as well as other forms of work. Household-based surveys such as the labour force survey (LFS) will be critical sources of data for detailed statistics on work relationships based on ICSE-18⁴⁸ as well as working time arrangements and other work modalities of interest.

⁴⁸ A useful document describing recommendations for data collection by employment status is: *Data collection guidelines for ICSE-18*, ([ILO, 2018f](#)). The guidelines are based on the latest draft of 20th ICLS resolution concerning statistics on work relationships ([ILO, 2018b](#)).

a) Labour force survey

8.6 The labour force survey (LFS) is a sample survey that provides data at the level of the individual and the job and often consists of the main source of statistics for monitoring labour markets, including labour force status, status in employment and key dimensions of quality of employment. It is also a useful source when the objective is to capture general patterns of participation of the population in different forms of employment. In addition, short add-on modules or supplements may be attached to the LFS for completion by all or a subsample of respondents on a periodic or continuous basis, as appropriate, with due regard for respondent burden and overall survey quality, including sampling and non-sampling error.

8.7 While the LFS is usually based on a larger sample than other social surveys and the target population is the entire resident population of a country, small groups and employment phenomena can still be challenging to detect. For some issues, an ad hoc survey targeting a specific population could perform better, but in this case the identification of the target population can be difficult. In general, the LFS is fit to provide macro labour market information, consistent with population estimates. The LFS provides an overview of the quantitative aspect of the studied phenomena. When interested in more qualitative information, or information on small phenomena, an in-depth investigation with an ad hoc survey can provide more precise information.

8.8 A further limitation associated with the design of the LFS in many countries is the use of proxy respondents who answer on behalf of other household members. Some topics, such as detailed questions on the quality of the working environment, are not recommended for data collection by proxy as respondents may not have full knowledge of the working conditions experienced by other members of their household (OECD, 2017, p.191).

8.9 In the European Union, a new framework regulation governing the production of European Statistics on persons and households came into force on 1 January 2021 (informally known as the Integrated European Social Statistics Framework Regulation – IESS FR)⁴⁹. The IESS FR covers various domains of social statistics collected through household samples, including labour market statistics (EU Labour Force Survey – EU LFS) as well as income and living conditions, health, education and others.

8.10 The IESS framework regulation is accompanied by a number of implementing acts detailing, inter alia, the variables covered under different domains, the classifications used, the frequency of data collection and guidelines related to the quality of the data. The framework includes an Article on 'Elements common to several data collections' including a list and description of common variables describing the demographic and social characteristics of persons (i.e.: sex, age, level of education, citizenship, marital status), the labour status (employed, unemployed or outside the labour force) and for employed persons, status in employment⁵⁰ in the main job (based on ICSE). Other important variables in the EU-LFS describing persons in employment as well as their jobs include working time (in the main and second job) and working time arrangements⁵¹, occupation (in the main and second job), economic activity (industry) of the local unit (in the main job and second job) and the size of the company (number of employed persons in the local unit of the company). It is also possible to

⁴⁹ Regulation (EU) 2019/1700 of the European Parliament and of the Council: : [EUR-Lex - 32019R1700 - EN - EUR-Lex \(europa.eu\)](#), and its LFS specific Commission implementing regulation: [EUR-Lex - 32019R2240 - EN - EUR-Lex \(europa.eu\)](#)

⁵⁰ At present, the implemented classification of status in employment is ICSE-93 and a task force is currently working on the implementation of ICSE-18.

⁵¹ Including information about part-time and full-time work, permanent/temporary contracts, shifts works and the possibility to decide the time of start and ending daily work.

use information on household composition (intra-household relationships) and to identify employed persons who take care of young children⁵².

8.11 Since 2021, the EU-LFS also includes two variables useful to identify ‘dependent self-employment’ among the self-employed⁵³: (1) the number and importance of clients in the 12 months ending with the reference week; and (2) the ability to decide the start and end of working time.

8.12 Other countries and jurisdictions have adopted distinct approaches such as collecting data at different intervals or using slightly different definitions of concepts. In the United States, the survey equivalent to the LFS is the Current Population Survey (CPS) which measures status in employment, multiple job holding, as well as work hours in the main job and total work hours every month. In Canada, the United States and Mexico, industries are classified according to the North American Industry Classification System (NAICS).

(b) Labour force survey supplements and ad hoc modules

8.13 Supplementary modules have been an inherent part of the LFS for many NSOs in the UNECE region. In the United States, supplements to the Current Population Survey have been collected since the 1960s. In the European Union, supplementary modules have been collected through the EU-LFS since 1999. Until 2020, these modules were called "ad hoc modules". From 2021 onwards the EU-LFS modules are categorised as either "regular modules", when the variables have an eight-year periodicity, or "modules on an ad hoc subject" for variables not covered by the regular modules.

8.14 In the context of the Handbook on Forms of Employment relevant ad-hoc modules are: Work organisation and working time arrangements (collected in 2019), Self-employment (2017), Job skills (2022), Reconciliation between work and family life (collected in 2018 and planned for 2025)⁵⁴. In 2022, some EU countries will collect a pilot module named Digital Platform Employment (DPE) on measuring digital platform work through the EU-LFS. The exchange of goods as well as transport, delivery, accommodation and professional services carried out through platforms will be covered by the module. In addition, the module will include questions on social protection coverage and the flexibility and autonomy experienced by platform workers. The pilot has two goals: First, to respond to the data needs of policy makers related to the working conditions of platform workers and second, a longer-term view to develop an ad hoc module by 2026, with the possibility of including the module as an EU-LFS regular module in the future.

8.15 Supplements to the LFS are used by NSOs to collect more detailed data on forms of employment. Examples include the Contingent Worker Supplement to the Current Population Survey (CPS) in the United States, which collects detailed information on “contingent workers” – workers who experience less permanence or stability and workers in diverse employment arrangements including independent contractors, on-call (zero-hour contract) workers, temporary employment agency workers and contract company workers. Another example is the Characteristics of Employment Survey (CES) that is collected every August by the Australian Bureau of Statistics. The CES collects data on multiple job holding, on-call and casual work arrangements, and employment contracts. Supplements have the key advantage of being linked with responses to the LFS, thereby avoiding the need to repeat questions covered by the main questionnaire.

⁵² See [EU labour force survey - Statistics Explained \(europa.eu\)](#)

⁵³ Based on ICSE-93 concepts.

⁵⁴ The full list of EU-LFS modules is available at: [EU labour force survey - modules - Statistics Explained \(europa.eu\)](#)

(c) Specialized household surveys

8.16 Specialized household surveys on topics such as time-use, education and training, agriculture, use of information and communication technologies, child labour and labour migration may be more appropriate for comprehensive measurement and in-depth analysis of participation in specific forms of employment, or for focusing on subgroups of the population. Time-use surveys are a key source of statistics on time spent at work and on other types of activities. The methodology of time-use survey is based on the use of detailed time diaries to record how respondents allocate their time between different activities performed during one or several 24-hour days for a given reference period. This makes them particularly well-suited to capture work and non-work activities performed simultaneously or intermittently. Time-use surveys are thus a potentially useful source for developing estimates of total working time covering different forms of employment. They may also be used to evaluate the quality of estimates obtained from other surveys, and to refine other household-based survey questionnaires and vice-versa.

8.17 In the European Union, since 2021 other specialized surveys such as the Income and Living Conditions Survey (EU-SILC), the Household Budget Survey (HBS) and the Adult Education Survey (AES), are also covered by the IESS FR. Examples of other specialized surveys outside the EU include Consumer Expenditure Surveys in the United States and the Canadian Internet Use Survey.

8.18 Generally, household surveys covering related topics such as living standards, household income and expenditures and household budgets can be used to meet some data needs related to statistics on employment and the labour market by inclusion of dedicated modules, in so far as the sample permits calculation of estimates with an adequate level of precision. Such modules are a cost-effective way to collect information that can support analysis of the relationship between different forms of employment and households' economic and social circumstances.

(d) Other specialized studies

8.19 In addition to labour market surveys collected by NSOs, studies carried out by specialised agencies and research institutes can represent important sources of information. The importance of this work is demonstrated by Eurofound's research.

8.20 Eurofound is a tripartite⁵⁵ body of the European Union whose mandate is to contribute to social and employment policies through rigorous cross-national monitoring, data collection and knowledge. Three regular, pan-European surveys are an important outcome of this work: the European Company Survey (ECS, last edition in 2019), the European Quality of Life Surveys (EQLS, last edition in 2016) and the European Working Conditions Survey (EWCS, conducted since 1990, last in 2020 and in 2021 as an *extraordinary edition*). The surveys offer a unique source of comparative information on the quality of living and working conditions across the EU⁵⁶.

8.21 The European Working Conditions Survey (EWCS) is an important international data source on the quality of the working environment. The survey covers a wide range of topics and has been conducted every five years since 1990 in European countries. The target population consists of all residents of the surveyed countries aged 16 or older and in employment at the time of the survey. In the EWCS, persons were considered to be in employment if they worked for pay or profit for at least an hour in the week preceding the interview (according to the ILO

⁵⁵ EU institutions and bodies, governments and social partners.

⁵⁶ See [Eurofound | \(europa.eu\)](https://eurofound.europa.eu)

definition). Themes covered include employment status, working time duration and organisation, work organisation, learning and training, physical and psychosocial risk factors, health and safety, work-life balance, worker participation, earnings and financial security, as well as work and health. Similar surveys have been collected in other countries, including the United States and the Republic of Korea, offering comparable estimates from several regions around the world. The main objectives of the survey are to:

- ▶ assess and quantify working conditions of both employees and self-employed workers across Europe on a harmonised basis
- ▶ analyse relationships between different aspects of working conditions
- ▶ identify groups at risk and issues of concern as well as of progress
- ▶ monitor trends by providing homogeneous indicators on these issues
- ▶ contribute to European policy development on quality of work and employment issues

8.22 Surveys covering a broad range of topics related to forms of employment and quality of employment have also been collected by some NSOs. These surveys offer the opportunity to conduct multi-variate analysis and evaluate the extent to which different forms of employment are associated with different outcomes in terms of the quality of employment.

(e) Population census

8.23 The population census is a main source of statistics for benchmarking purposes, for preparing sampling frames for household surveys and for producing estimates for small geographic areas and small groups. Censuses are particularly useful to collect data on non-nationals living in the country, persons living in collective living quarters and persons without fixed premises, as well as detailed occupational groups. Questionnaire space and operational considerations, however, place a limit on employment-related topics that can be included. As such, measurement may be limited to core questions establishing the labour force status and main form of employment of the population and capturing essential characteristics of persons in employment, in accordance with the latest international recommendations for this source.

8.1.2 Establishment-based surveys

8.24 Establishment-based surveys are a relevant source of data, particularly for employees – including non-usual residents working in resident producer units – for reference periods of a week, month, year or other pay period. Along with administrative records, they are essential for producing estimates of total jobs by industry, job vacancies, employee earnings and labour costs in a country. Difficulties can arise because of the different treatment of enterprises of different sizes: large enterprises can be fully covered, but small enterprises are sampled, and enterprises with no employees are often not covered at all. As a result, information on independent workers is not reliable or absent. In addition, the personal characteristics of workers are often missing, and some classifications are not comparable, for example not all ICSE-18 categories are covered.

8.25 In the European Statistical System, the Structure of Earnings Survey (SES) is an important establishment-based survey which is carried out through a representative sample of companies with at least 10 employed persons. The required frequency of data collection is every four years (in some countries, like Poland, the SES is carried out every second year). The SES allows for detailed analysis of monthly and hourly wage differences among different groups of employees, and considers the characteristics of individuals, such as sex, age, level of education, seniority,

occupation, as well as the characteristics of their workplaces, such as the type of activity, the industry, the size of the establishment and the geographical location. Based on results from the SES, measures of wage distribution and wage differences between groups of employees are also developed.

8.26 Another example of an establishment-based survey is the European Company Survey (ECS), conducted by Eurofound⁵⁷. The ECS is a questionnaire-based representative sample survey of business establishments with at least 10 employed persons. Interviews take place with the manager responsible for human resources in the establishment, and when possible, with an employee representative.

8.1.3 Administrative records-based statistics

8.27 Administrative records may be useful for producing frequent and detailed statistics to support the analysis of flows – that is the movement of persons between different labour force statuses or types of jobs. Registers such as those based on employment services, pension schemes, social security and tax systems, as well as vocational education and training programmes provide statistics for persons who are registered or covered by the scheme for any reference period: one month, quarter or year. Depending on national circumstances, the statistics may cover employed persons in formal market and non-market units, participants in employment promotion programmes and in paid and unpaid apprenticeship schemes, as well as in organized paid and unpaid traineeship programmes. Statistics on usual residents who are cross-border workers, short-term workers or contract migrant workers abroad may be obtained from overseas employment administrations, and on work permit holders from labour offices if countries are willing and able to share this information. A key challenge with register-based statistics is that, even if designed for statistical purposes, they are usually very specific and designed to reflect national laws and circumstances. Some administrative data also can be subject to fraud and changes in legislation which could affect comparability across time. As such, it is difficult to obtain harmonised information across countries and domains: definitions and classifications are not homogenous. For example, labour status is usually based on the legal situation and is not comparable with ILO definitions. The same applies to status in employment whereby only some ICSE-18 categories are covered.

8.1.4 Ad hoc surveys

8.28 Ad hoc surveys sponsored by NSOs on labour market issues can provide additional information on the qualitative aspects of employment. Such surveys can be used to collect information on specific issues, but present design challenges, including their specificity, the reference population, the methodology and, in general, the statistical tools used for collection and estimation. This makes the design phase very delicate to ensure that estimates can be statistically representative. Moreover, samples are often smaller in size compared with traditional official statistical surveys, and because many ad hoc surveys rely on non-traditional statistical tools, they require a long experimental phase to ensure that accurate estimates can be obtained. An interesting example is the Collaborative Economy and Employment Research Project (COLLEEM)⁵⁸, launched by the European Commission in 2017. COLLEEM aims to collect and disseminate data on digital platform employment and to examine the characteristics of the persons who carry out this form of employment, how frequently they do so, as well as their motivations, earnings, and coverage by the social protection system. The COLLEEM survey was

⁵⁷ See [Eurofound | \(europa.eu\)](https://eurofound.europa.eu)

⁵⁸ See <https://ec.europa.eu/jrc/en/colleem>

collected in 2017 and 2018 using an online panel representative of Internet users aged 16 to 74 in fourteen and sixteen EU member states respectively ([Pesole et al., 2018](#); [Urzi Brancati et al., 2020](#)). While surveys targeting Internet users can be valuable to obtain detailed information on digital platform employment, they are not representative of the population as whole, particularly in countries where Internet use is less widespread.

8.2 Indicators

8.29 In section 8.2.1 a set of essential indicators are proposed that consider the recommendations of the 20th ICLS ([ILO, 2018b](#)) for the International Classification of status in employment (ICSE-18). Additional indicators that relate to other elements of the Conceptual Framework on Forms of Employment are presented in section 8.2.2.

8.2.1 Statistical measurement of workers based on ICSE-18

8.30 ICSE-18 classifies employment according to two hierarchies: the type of authority (ICSE-18-A) and the type of economic risk (ICSE-18-R). Both hierarchies should have equal priority when producing statistics. Statistics based on labour force surveys and other sources should be compiled on a regular basis according to both hierarchies.

8.31 Countries should select indicators that are relevant for their national context and aligned with the periodicity of data sources for statistics on employment such as the LFS. To capture labour market circumstances within a country, indicators should be selected for monitoring “labour market performance, the stability of employment relationships, exposure of the employed population to economic risk, and participation in non-standard forms of employment and new and emerging forms of work” ([ILO, 2020a, paragraph 379](#)). The following paragraphs present indicators based on ICSE-18.

ICSE-18 Employment categories

8.32 For categories of workers at the 1st, 2nd and 3rd level of aggregation in ICSE-18-A and ICSE-18-R, the following statistics should be produced: Headcounts, average number of hours usually worked and actually worked per week in the main job, and the ratio of headcounts to the total number of persons employed. The ICSE-18 categories are shown in Box 2.1 in Chapter 2, which also provides an in-depth discussion and explanations of the categories.

Multiple job holders

- ▶ Headcounts of all persons with more than one job and their ratio to total persons in employment.
- ▶ Particular sub-categories of persons based on their status in employment in the second job, as a share of all persons with more than one job:
 - dependent contractors in second job
 - own-account workers in household market enterprises without employees in second job
 - fixed-term employees in second job
 - short-term and casual employees in second job

Dependent contractors

- ▶ Ratios of dependent contractors in the main job to employees and to independent workers without employees.

Sub-categories of employees

- ▶ Sub-categories of employees (41-44 in box 2.1) as a share of all employees.

Duration of work agreement

8.33 Duration of work agreement for:

- ▶ fixed-term employees
- ▶ short-term and casual employees

Duration of employment

- ▶ Duration of employment in the current economic unit for all statuses in employment (see Chapter 4, section 4.5.1 for more detail).

Social protection for employees

- ▶ Employees with job-dependent social protection as a share of all employees.

8.34 The indicators should be calculated for the employed population as a whole – or other relevant target group – and disaggregated by sex, age groups (including separate categories for youth), educational attainment, geographic region, urban and rural areas, and other relevant characteristics factoring considerations for data quality and precision ([ILO, 2020a, paragraph 378](#)). The nature of this measure may vary by national context depending on the specific types of social protection that are provided through the job.

Industry and occupation

8.35 Given the diverse nature of economic activities in which different forms of employment are found, it is also recommended to present data on forms of employment by occupational group (according to ISCO) and by type of activity (industry) of the economic unit (according to ISIC/NACE/NAICS).

8.2.2 Statistical measurement of forms of employment not based on ICSE-18

8.36 To provide complete statistics on forms of employment and work relationships, information is needed on the characteristics of jobs and work activities that are not measured within ICSE-18 (in other words, phenomena that are not work relationships according to the type of economic risk and type of authority). To capture the diversity of forms of employment, work modalities should be considered (for further explanations see Chapter 2 and 3). To present a full picture of forms of employment, information on the level of permanence and stability, the social protection system, the circumstance of persons and aspects of quality of employment are also recommended.

8.37 The indicators listed in table 8.1 are recommended and not required for NSOs to implement. At the same time the recommended indicators are not all encompassing nor do consist of the only indicators NSOs may want to implement. NSOs may produce the indicators that are in accord with their countries' needs and budget. To obtain more detail on the measurement or concepts, NSOs are invited to consult the relevant section of the Handbook or the associated source.

Table 8.1

List of recommended indicators

Category/ sub-category		Indicator/ sub-indicator	Description	Source
Multi-party relationships		4a6 Temporary employment agency workers	Headcounts and percentage (%) of employed persons	UNECE QoE Indicator
Working time & Working time arrangements	Length of work hours	The measurement of part-time work may vary depending on national definitions. Usually based on either: -A specific threshold of weekly hours (30 or 35 hours per week) -Self-declared part-time workers	Headcounts and percentage (%) of employed persons	
		Part-time employees who are job-sharing	Headcounts and percentage (%) of part-time employees	
		3a4 Employment in hours bands based on usual and actual hours	Headcounts and percentage (%) of employed persons	UNECE QoE indicator
	Time of day worked	3b1, 3b2, 3b3 Night, evening or weekend work	Headcounts and percentage (%) of employed persons	UNECE QoE indicator
		Employees who work split shifts	Headcounts and percentage (%) of employees	
	Working time flexibility (employees only)	Employees with hours set by the employer with no possibility for change	Headcounts and percentage (%) of employees	
		Employees who can choose between several fixed working schedules determined by the company/organisation or whose schedule is negotiated with the employer	Headcounts and percentage (%) of employees	
		Employees whose work hours are entirely determined by themselves	Headcounts and percentage (%) of employees	
		3b4 Employees who can vary the start and end of their work day	Headcounts and percentage (%) of employees	UNECE QoE indicator
		Employees who can take time off for personal reasons	Headcounts and percentage (%) of employees	

Category/ sub-category		Indicator/ sub-indicator		Description	Source
	Working time variability	Workers whose total hours vary from week to week by ICSE-18 categories (Variable hours)		Headcounts and percentage (%) of employed persons	
		Workers who work on different days or at different times from week to week by ICSE-18 categories (Variable schedule)		Headcounts and percentage (%) of employed persons	
		Dependent workers with variable hours	Dependent workers whose variable hours are determined by the worker	Headcounts and percentage (%) of dependent workers	
			Dependent workers whose variable hours are determined by the employer	Headcounts and percentage (%) of dependent workers	
		Other indicators for dependent workers and employees	Dependent workers who are called-in to work at short notice more than once per month	Headcounts and percentage (%) of dependent workers	
Work location	Workers by main work location		Headcounts and percentage (%) of employed persons	20 th ICLS resolution	
	3c2 Possibility to work at home		Percentage (%) of employed persons	UNECE QoE indicator	
	Home-based workers		Percentage (%) of employed persons	20 th ICLS resolution	
	Workers who occasionally work from home		Percentage (%) of employed persons		
	Employees who usually or occasionally telework		Headcounts and percentage (%) of employees		
	Employees who are hybrid workers		Headcounts and percentage (%) of employees		
	Employees who are high-mobility teleworkers		Headcounts and percentage (%) of employees		
Electronic allocation and supervision of work tasks	Workers who performed digital platform employment in the last 12 months/6 month/week	by main or other job	Headcounts and percentage (%) of the population and employed persons		
		by in-person or online tasks			
		by services/goods			
	Workers whose schedule is determined by an algorithm or software		Percentage (%) of dependent workers		
	Workers who are assigned tasks based on an algorithm or software		Percentage (%) of dependent workers		
	Workers whose performance is monitored by an algorithm or software		Percentage (%) of dependent workers		

Category/ sub-category	Indicator/ sub-indicator	Description	Source
Forms of remuneration and payment	Main forms of remuneration: -for time worked (i.e., wage/salary) -by the piece -commission -tips from clients -fee for services -determined by profit or loss	Headcounts and percentage (%) of employed persons	20 th ICLS resolution
	Employees who have a variable remuneration scheme	Percentage (%) of employees	
Informality	Informal employment	Headcounts and percentage (%) of employed persons	17 th ICLS guidelines and SDG 8.3.1
	Employees without job-related statutory social insurance	Headcounts and percentage (%) of employees	
	Independent workers without registered enterprises	Headcounts and percentage (%) of independent workers	
Permanence	Workers who have characteristics of lower permanence by ICSE-18 categories (see Chapter 4, section 4.5 for operationalisation)	Percentage (%) of employed persons	
	Workers who do not expect to continue working at the same job for the next 12 months for economic reasons	Percentage (%) of employed persons	
Stability	Workers with a tenure of 3 years or more -Means and medians may also be useful when comparing forms of employment.	Headcounts and percentage (%) of employed persons	
	Workers who work throughout most of the year	Headcounts and percentage (%) of employed persons	
	Employees who are casual workers (not guaranteed a minimum number of hours of work per week)	Headcounts and percentage (%) of employees	20 th ICLS resolution
Gig workers	Workers who are gig workers (in their main/second job)	Headcounts and percentage (%) of employed persons	
	Persons who have conducted gig work over the previous 12 months	Headcounts and percentage (%) of the population and employed persons	
Person-level indicators	Main reasons for part-time employment	Headcounts and percentage (%) of part-time workers	20 th ICLS resolution
	3a3 Involuntary part-time work rate	Percentage (%) of employed persons	UNECE QoE indicator
	Non-permanent employees who want a permanent job	Percentage (%) of non-permanent employees	20 th ICLS resolution

Category/ sub-category	Indicator/ sub-indicator	Description	Source	
Impact of forms of employment on quality of employment	1a: Safety at work	1a3 Employed persons who are exposed to physical health risk factors at work	Percentage (%)	UNECE QoE indicator
		1a4 Employed persons who are exposed to mental well-being risk factors at work	Percentage (%)	UNECE QoE indicator
	2a: Income from employment	2a1 Nominal monthly / hourly earnings of employees (local currency)	Mean	UNECE QoE indicator
	2b: Non-wage pecuniary benefits	2b1 Employees entitled to paid annual leave	Percentage (%)	UNECE QoE indicator
		2b4 Employees entitled to paid sick leave	Percentage (%)	UNECE QoE indicator
	3a: Working hours	3a2 Employed persons usually working 49 hours or more per week	Percentage (%)	UNECE QoE indicator
	4a: Security of employment	4a2 Job tenure (by standardized bands)	Percentage (%)	UNECE QoE indicator
		4a5 Employed persons who might lose their job in the next six months	Percentage (%)	UNECE QoE indicator
	4b: Social protection	4b1 Employed persons who are active contributors to a pension scheme	Percentage (%)	UNECE QoE indicator
		4b2 Employees that are active contributors to an unemployment insurance scheme	Percentage (%)	UNECE QoE indicator
		4b3 Employed persons who are active contributors to a medical insurance plan/scheme related to their employment	Percentage (%)	UNECE QoE indicator
	6: Skills development and training	6.1 Employed persons having received job-related non-formal education and training in the past twelve months	Percentage (%)	UNECE QoE indicator
		6.4 Employed persons whose job involves improving their skills	Percentage (%)	UNECE QoE indicator
	7a: Employment-related relationships	7a1 Employed persons who have a good relationship with their co-workers	Percentage (%)	UNECE QoE indicator
	7b: Work motivation	7b1 Job autonomy	Percentage (%)	UNECE QoE indicator
		7b5 Employed persons who are able to choose their methods of work or to influence their pace of work	Percentage (%)	UNECE QoE indicator

Category/ sub-category	Indicator/ sub-indicator	Description	Source
Other wage and salary indicators	Low-wage earners (based on UNECE indicator 2a2 Employees with low pay or other national definition)	Percentage (%) of employees or employed persons	UNECE QoE indicator
	Monthly minimum wages	Ratio of minimum wage to average monthly earnings	
	Employees receiving minimum wages/salaries	Percentage (%) of employees	
	Nominal monthly / weekly earnings of independent workers and dependent contractors (local currency) *	Mean	

Note: *Due to their exposure to economic risk, the earnings of independent workers and dependent contractors may be negative.

8.3 Recommendations on frequency

8.38 As far as possible, the collection of data for ICSE-18 should follow the same frequency as the measurement of employment. An exception is the status in employment in the second job. Since the measurement of ICSE-18 is more complex than ICSE-93, a simplified version of ICSE can be applied for second jobs to reduce response burden. In general, the level of detail may vary depending on the statistical source, and on descriptive and analytical needs.

8.39 If a category at any level of ICSE-18 is not common enough in a country and statistically meaningful estimates cannot be obtained due to a small sample size, or if a stable operational method for measurement has not been established at a regional or national level, it may not be appropriate to collect or compile statistics on that category on a regular basis by means of traditional surveys such as the LFS. Nevertheless, these phenomena can be of interest either because they are considered new emerging phenomena that will become more significant in the future and should be analysed during their early appearance, or because they represent a policy concern with respect to working conditions. In such cases, NSOs should consider collecting an ad hoc survey to study emerging trends. The same applies to studying new forms of employment such as digital platform employment. In any case, the decision not to collect statistics on a particular group should be empirical: evidence that the group of interest is either 1) too small to be statistically significant in a large survey or 2) part of a larger group which is too small to be subdivided should be provided and confirmed periodically.

8.40 For the other recommended indicators, it is good for the data to be collected and disseminated with a certain regularity to track changes in forms of employment and quality of employment over time. In general, a policy for the frequency of data collection should be established and communicated to users, based on the relevance of the phenomena, its evolution over time (phenomena with a slow pace of change can be collected less frequently) and the policy needs for information.

Annex A. Employment in national accounts

Labour is at the heart of production, forming a primary input alongside capital and intermediate consumption. The System of National Accounts 2008 (2008 SNA) does not provide employment indicators directly but references them as an important adjunct to the accounts ([UN, 2009, paragraph 2.156-2.158](#)), and linkages to productivity are set out in Chapter 19 in the 2008 SNA. Chapter 19 also provides definitions of employees and self-employed persons – the two categories of labour input in the national accounts – residency and production conventions and describes standardized labour measures. Furthermore, it underlines that for productivity⁵⁹ measures, the preference is to estimate total hours actually worked, thus, consistency between e.g., employment, full time equivalent (FTE) and hours worked is needed. In alignment with the 2008 SNA, the European System of Accounts (ESA 2010) also discusses employment in Chapter 11 ([Eurostat, 2013](#)).

As part of SNA, countries report data, e.g., to Eurostat and the OECD, on employment in resident production units (persons and hours worked, as well as the number of jobs, the latter on a voluntary basis) and on employment of residents. In addition, employment and hours worked are split by self-employed and employees.

As labour input variables are considered mainly from the perspective of productivity measures in the 2008 SNA, e.g., for calculating ratios between measures of output or value added and labour input, the concept of labour that is applied must be coherent with the coverage of production in the SNA. This is also confirmed by the relevant standards on employment, which are maintained by the International Labour Organization (ILO) and adopted by the International Conference of Labour Statisticians (ICLS). The 2008 SNA ([UN, 2009, paragraph 19.5](#)) underlines that the 18th ICLS Resolution – an amendment of the 13th Resolution – confirms that the “economically active population is defined in terms of individuals willing to supply labour to undertake an activity included in the SNA production boundary”.

Definitions in the SNA

SNA production boundary

The production boundary is designed for a wide range of analytical and political needs. It includes ([UN, 2009, paragraph 6.27](#)):

- The production of goods and services that are supplied, or intended to be supplied, to units other than their producers.
- The own-account production of all goods that are retained by the producer for own final use.
- The own-account production of knowledge-capturing products that are retained by their producers for own final consumption or gross fixed capital formation.
- The own account production of housing services by owner-occupiers.
- The production of domestic and personal services by employing paid domestic staff.

⁵⁹ Productivity can be measured in many ways, with the simplest being labour productivity measured as volume of GDP (value added) per hours worked ([UN, 2009, paragraph 19.4](#)).

The production boundary in SNA covers both activities that are directly observable and those that are non-observable. Hence, illegal activities (only where the economic transaction is undertaken by mutual agreement by both parties), hidden or underground activities (where transactions themselves are not illegal but concealed from public authorities to avoid the payment of taxes, social security contributions or to avoid having to meet certain standards), and informal activities (productive activities that are usually carried out by small unincorporated units and do not require a formal registration) are included. Illegal activities where either of the parties are not willing participants (e.g., theft) are not economic transactions in the SNA sense and so fall outside the production boundary.

The production boundary defined in the 2008 SNA is more restrictive than the *general production boundary* as it excludes direct volunteer work providing services such as babysitting the neighbour's children and households' production of services for own consumption such as washing, gardening, preparing a meal, etc. (see Figure A.1). This is due to different factors and the fact that household production entails a simultaneous decision to consume the service. Since such services are not produced for the market, there will also be significant difficulties in providing meaningful estimates which may easily "obscure" traditional GDP estimates because of its size.

Employment

In the SNA, the labour force consists of those who are actively prepared to make their labour available during any reference period for producing goods and services that are included within the production boundary of the SNA. The labour force is further divided into those who are employed and those who are unemployed. Thus, the population of the country can be subdivided into three categories; *employed*, *unemployed* and *not in the labour force*. In national accounts, the concept of unemployment is not required, only the employed population contributing to productive economic activity is of interest.

Furthermore, the split of employment or labour input into employees and self-employed is important for national accounts as these two categories of workers are considered to be receiving different types of income: wages and salaries (compensation of employees) for the former and mixed income for the latter.

Accordingly, employment in the SNA is defined as all persons, both employees and self-employed, engaged in productive activity within the production boundary that is undertaken by a resident institutional unit.

Employees

Employees are persons who, by agreement, work for a resident institutional unit and receive remuneration for their labour. This remuneration is recorded as compensation of employees in the SNA. Employees include armed forces, consisting of those who have enlisted for both long and short engagements as well as conscripts. Included are also owners of corporations and quasi-corporations if they work in these enterprises (i.e., if they receive remuneration in the form of compensation of employees), students who have a formal commitment to contribute labour input into an enterprise's production process in return for remuneration and (or) education etc. Persons temporarily not at work (because of illness or injury, holiday or vacation, strike or lockout, educational or training leave, parental leave, reduction in economic activity, etc.) are also considered to be employees provided they have a formal job attachment. For some purposes (e.g., the compilation of hours worked), it may be useful to distinguish employees temporarily not at work if possible.

Self-employed persons

Self-employed are persons who are the sole or joint owners of the unincorporated enterprises in which they work, and who are not in paid employment. Contributing family workers working without pay in unincorporated enterprises are also treated as self-employed. Unlike the ICLS definition which covers under this category all registered unincorporated enterprises, some unincorporated units in the SNA would be (re)classified as quasi-corporations (e.g., producer cooperatives) and the workers would be classified as employees ([UN, 2009, paragraph 19.28](#)).

When the income components of GDP are compiled, the unincorporated enterprises in the household sector are deemed to receive “mixed income”⁶⁰. This income from self-employment has characteristics of remuneration for work done by the owner or other members of the household, and characteristics of profit due to the return to the owner as an entrepreneur.

Self-employed persons include outworkers whose income is a function of the value of the outputs, regardless of how much or little work was put in. However, if there is an explicit agreement that the outworker is remunerated based on the work done (i.e., the amount of labour which is contributed as an input into some process of production), the outworker will be included as an employee. Self-employed also includes workers engaged in production undertaken entirely for their own final consumption or own capital formation, either individually or collectively.

Voluntary work

If workers are purely unpaid and voluntary, with no remuneration at all, not even in kind, but working within a recognized institutional unit, then these individuals are still regarded as being employed in SNA terms (self-employed), but there is no entry for compensation of employees (or mixed income) for them. Individuals providing services to groups of other individuals, such as coaching a children’s football team, without any associated infrastructure are not regarded as employed but rather engaging in a leisure pursuit, however worthy their efforts might be ([UN, 2009, paragraph 19.39](#)). Those volunteers working for token amounts or income in kind (whatever little remuneration is received) are classified as employees.

Residence

Employees do not have to be residents in the economy where they work. The results of the activity of producer units are consistent in coverage with employment if the latter includes both the residents and the non-residents who work for resident producer units. This includes non-resident border workers (sometimes called frontier workers); non-resident seasonal workers, that is, persons who move into the economic territory and stay there for less than one year in order to work in industries which periodically require additional labour; members of the country’s armed forces stationed in the rest of the world; nationals who are on the staff of national scientific bases established outside the geographic territory of the country; nationals who are on the staff of diplomatic missions abroad; members of the crews of fishing boats, other ships, aircraft and floating platforms operated by resident units; employees of general government bodies situated outside the geographic territory, for example embassies; students undertaking employment are included or not according to their classification as resident or non-resident. Employees living in country A but working remotely for a unit in country B and receiving wages and salaries in return, are counted as employees in country B. If the remote worker in country A is self-employed or an outworker, the worker is part of employment in country A and selling a service (export of services) to the unit in country B (import of services).

⁶⁰ Received as a balancing item of the Generation of income account ([UN, 2009, paragraph 7.9](#)).

The non-observed economy

National accountants are particularly concerned with ensuring that the whole of economic activity within the SNA production boundary is measured comprehensively. This is often referred to as the “exhaustiveness” of the coverage of the national accounts. In practice, it means ensuring that the value of production activities that are illegal or hidden (that is, the “underground economy” or the “hidden economy”) as well as those that are simply described as informal is included in the accounts.

Data sources

The relevant standards on labour force statistics are maintained by the International Labour Organisation (ILO). There are three main sources for employment data. These might be used singly or in combination especially when the periodicity of each differs. The three data sources are: a. household surveys, such as a labour force survey; b. establishment surveys; and c. administrative data (for example, employment associated with a payroll tax).

Links between SNA and ICLS

The 2008 SNA definition of labour input or employment corresponds to the definition of employment defined by the 13th ICLS *Resolution concerning statistics of the economically active population*, employment, unemployment and underemployment (ILO, 1982). This resolution was replaced with the 19th ICLS *Resolution concerning statistics on work, employment and labour underutilization* (ILO, 2013a). The 19th ICLS Resolution recognizes five different forms of work related to activities within the SNA production boundary as well as outside the SNA production boundary but within the general production boundary. The productive activities included in the SNA production boundary involve the following types of work defined in the 19th ICLS: a part of own-use production work, employment, unpaid trainee work, a part of volunteer work and other work activities (if remuneration is received). The links between the activities within the SNA production boundary and forms of work can be seen in Figure A.1.

Figure A.1
Forms of work and the System of National Accounts 2008

<i>Intended destination of production</i>	<i>for own final use</i>		<i>for use by others</i>				
<i>Forms of work</i>	Own-use production work		Employment (work for pay or profit)	Unpaid trainee work	Other work activities	Volunteer work	
	of services	of goods				in market and non-market units	in households producing
			goods	services			
<i>Relation to 2008 SNA</i>	Activities within the SNA production boundary						
	Activities inside the General production boundary						

It has to be noted that while SNA aims to provide a comprehensive measure of production, employment related to own-use production will not normally be included. “Other work activities” according to the *Conceptual Framework for Statistics on Work Relationships* (ILO, 2020a) include activities such as unpaid community service and unpaid work by prisoners, when ordered by a court or similar authority, and unpaid military or alternative civilian service, which may be treated as a distinct form of work for measurement (such as compulsory work performed

without pay). Persons involved in such activities will not be included within employment in the national accounts unless remuneration (in cash or in kind) is provided to those working.

ICSE-18 is narrower in scope than ICSE-93, upon which the SNA is based. This is due to the fact that ICSE-18 is aligned with the concept of employment as defined by the 19th ICLS Resolution ([ILO, 2013a](#)) and, therefore, explicitly excludes own-account production of goods for own use, volunteer work, unpaid trainee work and compulsory unpaid work from the concept of employment. These different activities are instead recognized as distinct forms of work in the 19th ICLS resolution and covered in the extended International Classification of status at work (ICSaW-18) in the 20th ICLS resolution ([ILO, 2018b](#)).

Based on the above points, **employees** in the SNA will differ from the definition of workers in employment for pay as defined in the 20th ICLS resolution ([ILO, 2018b](#)) due to the following inclusions:

- Managers of corporations are treated in the SNA as employees ([UN, 2009, paragraph 19.24](#)). Accordingly, owners of some unincorporated units that in the SNA would be (re)classified as quasi- corporations (e.g., producer's cooperative) will be treated as employees if they work in the enterprises and receive remuneration in the form of compensation of employees.
- Trainees who have a formal commitment to contribute labour as an input to an enterprise's process of production in return for remuneration in cash or in kind such as education.
- Volunteers in the SNA working for token amounts or income in kind (whatever little remuneration is received) are classified as employees.

Regarding **self-employed** in the SNA and ICLS:

- In the SNA there is no recording of employment related to the household's production of goods for own final use, unless this production is a significant part of their final use ([Eurostat, 2013, paragraph 11.16](#)). Thus, this practice is in general in accordance with the 19th ICLS Resolution ([ILO, 2013a](#)).
- Pure volunteers with no remuneration working within recognized institutional units are regarded as being employed in SNA terms, however without any entry for compensation for employees or mixed income. Unpaid volunteers involved in activities resulting in goods are included within self-employed persons. In practice, there will normally be no available data sources allowing the inclusion of volunteer workers.

Finally, it should be noted that although the services households provide to themselves as owners of their dwellings are included within the national accounts production boundary, there is no labour input in the production of these services, hence, owner-occupiers of dwellings are not considered to be self-employed.

Update of the SNA 2020 – 2025

As mentioned above, the current SNA does not provide guidance for a detailed presentation of employment statistics in the core accounts. The labour inputs are presented only indirectly through total labour compensation or as an adjunct indicator for the calculation of productivity measures. The European System of Accounts is more explicit in highlighting labour input indicators on a comparable basis with national accounts aggregates. Data on employment forms part of the regular Eurostat transmission programme and internationally comparable statistics on persons and hours worked are regularly published.

The 2008 System of National Accounts is under review. The update process was officially launched by the United Nations Statistical Commission in March 2020 and the expected release of the revised standard is March 2025. While no changes in the scope and definition of employment types are foreseen, the SNA research agenda includes several issues that aim at enhancing labour market data in the core accounts. It also aims to highlight certain aspects of employment through supplementary tables or additional breakdowns. The text below includes draft proposals on employment that are being reviewed and may change as a result of the discussion by expert groups and the global consultation of the guidance note drafted in the context of the SNA Update.

A. Labour accounts

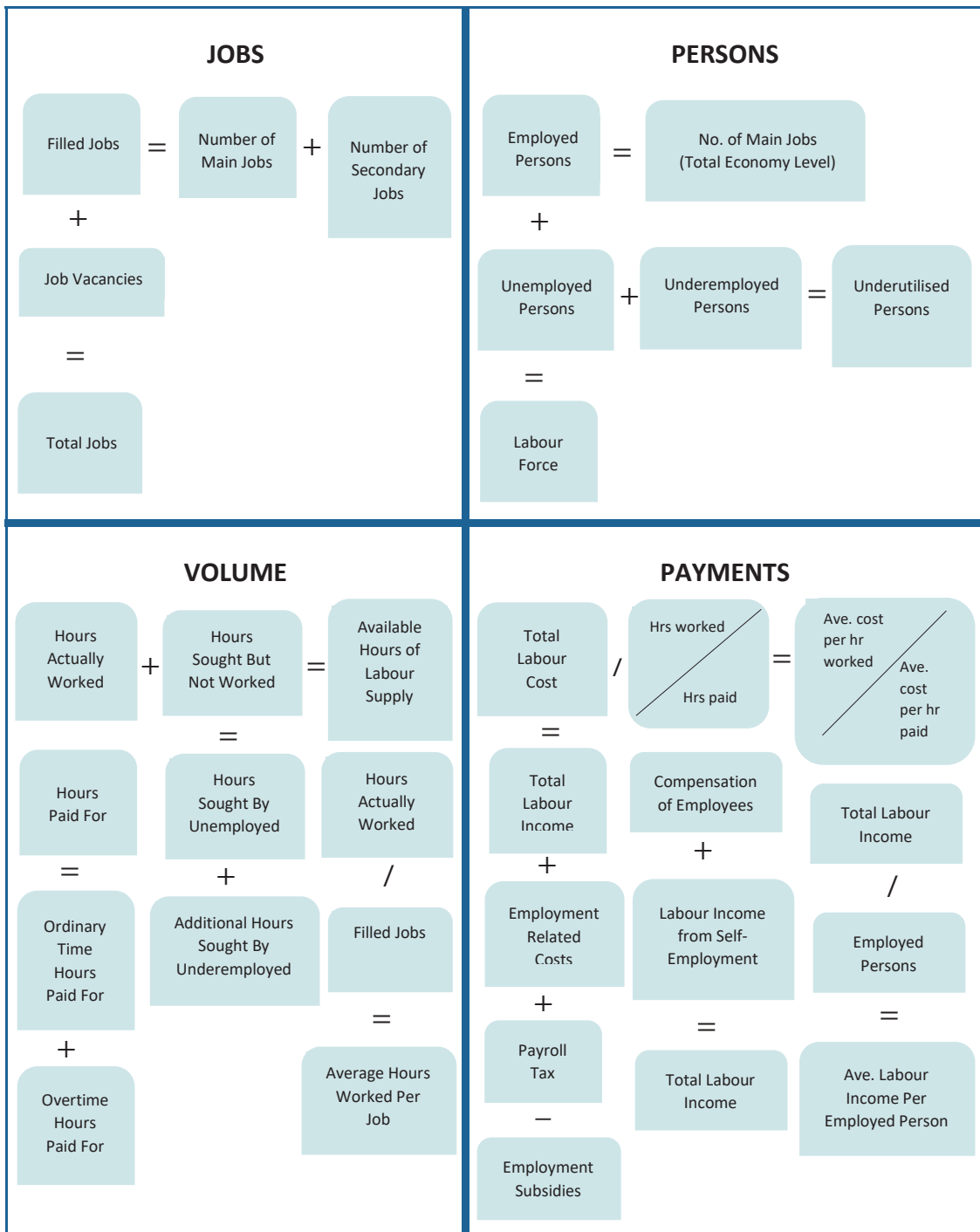
The revised System of National Accounts should include labour accounts as part of the central framework. These accounts would be described in a new additional chapter of the SNA, placed between the current Chapter 9 “The use of income accounts” and Chapter 10 “The capital accounts”.

The labour accounts will apply the SNA production and residency conventions, i.e., the accounts will cover the activities of all establishments’ resident within the economic territory and engaged in the production of goods and services that fall within the scope of the national accounts production boundary. The accounts should, as a minimum, capture remunerated work captured through the four dimensions of: jobs, persons (both employees and self-employed), volume (hours worked), and payments.

Figure A.2 presents the four quadrants of the proposed labour accounts. The persons quadrant will include demographic breakdowns by sex, age and educational attainment. Both monetary and non-monetary (for example number of jobs, number of hours etc.) variables will be included.

The proposed labour accounts will pull together in one place aggregates and concepts that are currently presented across different accounts and will complement them with additional items to allow for better analysis of the labour market. All items will be aligned with existing national accounts definitions. The accounts will reflect existing aggregates for many components of the volume (e.g., hours worked) and payments (e.g., compensation of employees) quadrants. New aggregates will be presented in the Jobs and Persons quadrants. Jobs are in this context defined as *“an explicit or implicit contract between a person and a resident institutional unit to perform work in return for compensation for a defined period or until further notice”* ([Eurostat, 2013, paragraph 11.22](#)). Compensation here should be interpreted in a wide sense, including mixed income of self-employed persons. This means that the definition of a job covers both employee and self-employment jobs, i.e. an employee job if the person belongs to another institutional unit than the employer and a self-employment job if the person belongs to the same institutional unit as the employer.

Figure A.2
Labour accounts: identity relationships



One of the most important measures for the SNA, at least when it comes to measuring productivity, is hours actually worked. According to the 2008 SNA (UN, 2009, paragraph 19.51), this concept covers direct hours, i.e., the time spent carrying out the tasks and duties of a job regardless of the amount of time agreed contractually between the employer and employees, and including travelling on work assignments, job training, etc. Hours worked excludes all type of leave (annual, public holidays, sick leaves, parental leave, etc.).

B. Unpaid household services

Another proposal for the SNA Update is to include a measure of unpaid household services in the extended accounts of the SNA (not in the core accounts as suggested for the labour accounts presented under A) to provide a better overview of total economic growth and living standards.

The third-party criterion should be used when defining the scope of activities to be covered, i.e., unpaid household service work is broadly defined as unpaid work performed within the household sector, which could be contracted out to a market service provider under regular conditions. This corresponds to the 19th ICLS (ILO, 2013a) concept of own-use production of services work and would provide for valuation of the activities that are excluded from the SNA production boundary but form part of the general production boundary. In contrast to the SNA production boundary, which is used for the core accounts and GDP calculation, the general production boundary also includes own account production of services by households. Including them in an alternative GDP measure and providing the number of hours worked on unpaid household work will complement the standard core national accounts' measures with more inclusive measures of economic growth and wellbeing, see figure A.1 showing the relationship between forms of work and the System of National accounts.

C. Informal economy

The informal economy has always attracted considerable interest, and even more so during the COVID-19 crisis. However, a well-established statistical framework for its measurement and presentation is missing in existing statistical manuals. The development of a framework, including informal employment, is part of the SNA Update. The work builds on the analytical framework and definitions developed by the ILO working group on the revision of informality and the 2002 International Labour Conference on informal economy (ILO, 2002), the changes in labour statistics standards following the 19th (ILO, 2013a) and 20th ICLS (ILO, 2018b), and the revisions of the International Classification of Status in Employment (ICSE) and International Classification of Status at Work (ICSaW)⁶¹.

The proposed framework will provide a presentation that combines both the perspective of workers (ILO standards) and economic units (SNA perspective). It will cover all informal activities within the general production boundary and will be broader than the concept of informality described in Chapter 3.

Three domains are conditionally defined depending on whether the respective economic units are formally recognised and if their production is intended for the market: formal sector, informal sector and household own use production. The informal economy will cover the following productive activities within these three domains:

- informal productive activities carried out by economic units in the informal sector (i.e., by informal household market enterprises).
- household informal production for own final use (household production of goods and services and direct volunteer work).
- informal productive activities carried out in the formal sector (limited to informal labour inputs engaged within formal economic units).

⁶¹ For more information, see: <https://ilostat.ilo.org/resources/concepts-and-definitions/classification-status-at-work/>

Annex B. Prevalence of new forms of employment in CES countries

This Annex presents an overview of emerging forms of employment in CES countries based on research by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) complemented by the results of a survey carried out by the Task Force on Forms of Employment in 2021. The Annex offers a preliminary assessment and mapping of the different forms of employment emerging in the CES region, highlighting the relevance of each form for data collection across the region.

Eurofound's study of new forms of employment

In 2015, Eurofound published *New forms of employment*, a report on new forms of employment that had emerged or become more common across the EU, Norway and the United Kingdom since 2000 (Eurofound, 2015). The study identified nine new forms of employment. The typology drew on a mapping exercise conducted by Eurofound in 2013, which involved a survey among its Network of Correspondents about new forms of employment in their countries, as well as case studies and an in-house literature review. Drawing particularly on the case studies, the report examined the characteristics of each of these forms of employment, their implications for the labour market and for working conditions, as well as the drivers of, and barriers to their proliferation. In the 2020 update to this publication, the Eurofound Network of Correspondents confirmed that nearly all nine forms of employment exist to varying degrees in most member states (Eurofound, 2020). No new forms of employment were identified beyond the nine described in the 2015 report.

CES consultation

The UNECE Task Force on Forms of Employment sought to evaluate the prevalence of these nine forms of employment identified by Eurofound across the broader membership of the Conference of European Statisticians (CES). For this purpose, an online survey was distributed to national statistical offices (NSOs) of CES member countries outside the EU-27, Norway and the UK in autumn 2021. The survey asked about the presence of the nine new forms of employment identified by Eurofound, as well as two forms which had seen notable growth since the beginning of the COVID-19 pandemic: telework and hybrid workplaces (see Figure B.1). Countries were also asked about the prevalence, the date of establishment and basis for the form of employment (legal, collective bargaining, company practice). Finally, NSOs were offered the opportunity to share information about any other form of employment that had recently emerged or was about to emerge in their country.

Figure B.1
New forms of employment

New forms of employment identified by Eurofound	Other new forms of employment
<ul style="list-style-type: none"> • Employee sharing • Job sharing • Voucher-based work • Interim management • Casual work • ICT-based mobile work • Digital platform employment • Portfolio work • Collaborative employment 	<ul style="list-style-type: none"> • Telework from home • Hybrid workplaces

Definitions of the forms of employment that were covered by the questionnaire are available on the [UNECE website](#)⁶².

General prevalence

The presence of the 11 forms of employment in the 23 member countries who participated in the consultations are presented in Figure B.2⁶³. The results obtained by Eurofound for the EU-27, the UK and Norway in 2020 are included for comparison. Overall, there is generally a correlation between the new forms of employment that are most commonly found in the EU-27, the UK and Norway, and the forms of employment that currently exist in the wider CES region.

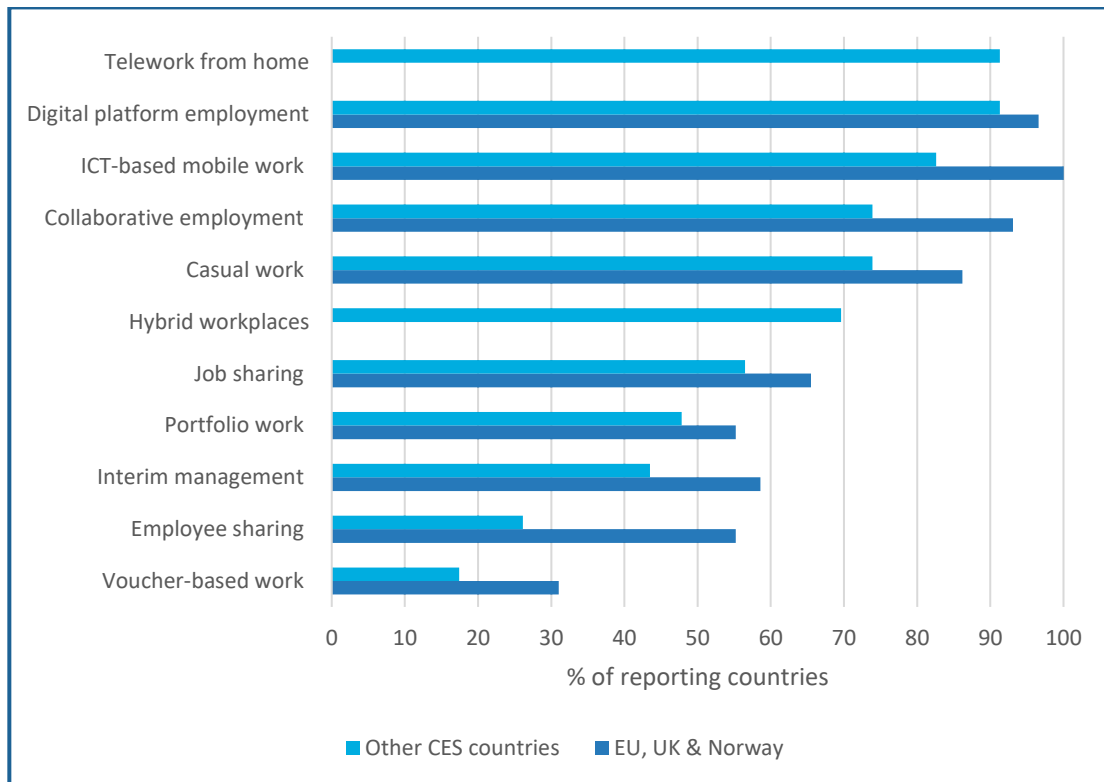
Although the results are not directly comparable due to differences in the methodology of the two studies, some important differences are worth highlighting. For example, employee sharing is more commonly found in the EU-27, the UK and Norway (55.2%) than in the rest of the CES region (26.1%). Collaborative employment is also less common outside the EU (73.9%) than in the EU-27, the UK and Norway (93.1%).

⁶² <https://unece.org/sites/default/files/2022-01/Forms%20of%20employment.pdf>

⁶³ The questionnaire was shared with 42 CES member countries outside the EU-27, Norway and the UK. Responses were received from 23 countries: Argentina, Australia, Belarus, Bosnia and Herzegovina, Canada, Chile, China, Colombia, Costa Rica, Georgia, Israel, Japan, Kazakhstan, Mexico, New Zealand, Republic of Moldova, Russian Federation, Serbia, Switzerland, Turkey, Ukraine, United States of America and Vietnam.

Figure B.2

Prevalence of forms of employment in the CES region



Note: Hybrid work and telework from home were not included in Eurofound’s new forms of employment study.

Source: CES consultations and [Eurofound \(2020, table 1\)](#).

Digitalization: a key driver of new forms of employment

Overall, the new forms of employment that are most common in CES member countries outside the EU-27, Norway and the UK were telework from home (91.3%), digital platform employment (87.0%), and ICT-based mobile work (82.6%). The degree of penetration of these forms is similar to Europe, where the most common forms in 2020 were ICT-based mobile work (100%) and digital platform employment (96.6%)⁶⁴.

These results highlight how digitalization and the development of ICT, combined with the impact of public health measures adopted in response to the COVID-19 pandemic, have been among of the most important drivers of the recent change in the organization of work relationships and work modalities around the world.

Voucher-based work and employee sharing least common across the CES region

In both the EU-27, the UK and Norway (31.0%), as well as the broader CES region (17.4%), voucher-based work was the least common new form of employment. This may be related to

⁶⁴ Telework from home was not included in the consultations conducted by Eurofound.

the fact that voucher-based work often requires a specific government policy to be established, while other new forms of employment more often emerge without government intervention.

Employee sharing was also relatively uncommon in the wider CES region (26.1%) compared with the EU-27, the UK and Norway (55.2%). As noted by [Eurofound \(2020\)](#) employee sharing requires coordination among employers and is covered by governmental regulations in a few countries. In addition, although employee sharing is present in most EU countries, the number of workers in this form of employment in each country is generally small.

Prevalence of new forms of employment varies across countries⁶⁵

While only a small number of countries provided information about the prevalence of each form of employment, this information is still useful to understand the scale of the emergence of new forms of employment in the CES region.

In some cases, the proportion of the form of employment in relation to overall employment is relatively small. For example, in the Republic of Moldova, 0.4% of workers in 2020 worked in a cooperative, job sharing only concerned 3.7% of employees in Switzerland in 2016 and Israel reported having 0.2% of total employees working in interim management in 2020. ICT-based mobile work has also yet to gain prevalence in Kazakhstan which reported that 0,9% of workers were in this type of employment in the second quarter of 2021.

Certain forms of employment are more common in some countries than others. For example, in Australia, on-call work – defined as “A shift arrangement, for being available, when not at work, to be contacted to resume work” – is a common form of employment which accounted for 22% of employment in the country in 2019. In Costa Rica on-call work concerned only 3,3% of total employees in 2021 and 1.7% in the United States in 2017.

However, in several countries, telework – which is often captured by the proxy measure of work at home – was highly prevalent. Costa Rica, which measures telework directly, reported that teleworkers accounted for 14% of national employment in the third quarter of 2021. In Japan, a government survey carried out in 2021 reveals that the share of teleworking employees is 23.0%. In Canada, 26.4% of employees worked most of their hours at home during the LFS reference week in September 2021, while this was the case for 19.0% of employees in Israel from September to December 2020 (monthly average). The context of the COVID-19 pandemic likely explains the high share of telework and work at home found across CES member countries at the time of the consultations.

Legal and policy frameworks

In general, most new forms of employment covered by the consultations exist only as company practices and are not defined by specific legislation or collective bargaining agreements. Employment in cooperatives was the form most likely to be defined in legislation (at least 40% of countries who reported that the form was present), while digital platform employment and coworking were among the least likely to have a legal definition or a basis in collective bargaining

⁶⁵ A part of the prevalence variation among countries could also be attributed to different definitions and measurements, reference periods and methods adopted by different NSOs.

agreements. While cooperatives have existed for a hundred years or more in many countries, co-working and digital platform employment have emerged only in recent decades.

Other emerging forms of employment and future plans

A few countries also described other forms of employment which had recently emerged or had recently attracted more attention. Colombia, for example, described a new form of employment where employees sub-contract their tasks to another person who then completes the work the employee was initially hired to carry out (e.g. a teacher who subcontracts marking to an assistant). Finally, several countries highlighted their recent interest in collecting more data on the topic of digital platform employment, as well as upcoming plans by their national governments to regulate this form of employment.

Annex C. Possible combinations of work relationships and work modalities

Table C1: Relationship between ICSE-18 and working time modality

Work relationships (ICSE-18)	Working-time modality															
	Length of weekly work hours				Timing of the work day			Flexibility of working time			Variability of working time					
	Part-time	Full-time	Overtime	Day time work	Evening work	Night work	Weekend work	Split-shift	Working time determined by worker	Working time negotiated ¹ with employer ²	Working time determined by employer ² with no flexibility	Hours are stable and schedule does not vary	Hours vary within certain limits but schedule is stable	Variable schedules		Worker regularly called into work at short notice
Job-sharing	Yes	No								Determined by employer ²	Yes	No	Yes ³	No		
Employees																
Permanent employees																
Fixed-term employees																
Short-term and casual employees																
Paid apprentices, trainees and interns																
Dependent contractors																
Employers in corporations																
Employers in household market enterprises																
Owner-operators of corporations without employees																
Own-account workers in household market enterprises without employees																
Contributing family workers																
	May apply in a limited number of circumstances															
	Never applies															

¹Several specific working time arrangements fall in this category, including: absence-leave scheduling, shift-change work arrangements, compressed work week, working time banking arrangement

²For contributing family workers and dependent contractors, employer refers to the economic unit on which the worker is dependent

³If the worker is an employee and there is no guarantee of work, the job should be classified in the ICSE-18 category of "short-term and casual employees"

Table C2: Relationship between ICSE-18 and the work location modality

Work relationships (ICSE-18)	Work-location modality							
	Types of workplaces			Alternative work locations			Jurisdiction or country of work relative to residence	
	<u>Fixed places of work outside the home</u>	<u>No fixed place of work</u>	<u>Work at home</u>	<u>Telework</u>	<u>Remote work</u> <u>Hybrid work</u>	<u>ICT-based mobile work</u>	<u>In the same country</u>	<u>In a different country</u>
<u>Detailed ICSE-18 categories</u>								
Employees								
Permanent employees								
Fixed-term employees								
Short-term and casual employees								
Paid apprentices, trainees and interns								
Dependent contractors								
Employers in corporations								
Employers in household market enterprises								
Owner-operators of corporations without employees								
Own-account workers in household market enterprises without employees								
Contributing family workers								

Only applies when the worker has a clear default work location

Table C3: Relationship between ICSE-18 and the electronic allocations and supervision of work tasks

Work relationships (ICSE-18)	Electronic allocation and supervision of work tasks								
	Algorithmic management		Digital platforms						
	Direction	Monitoring and surveillance	Sanctions or penalties	Online web-based platforms	Labour platforms	Location-based platforms	Providing services to individual users	Providing services to businesses (B2B)	Hybrid platforms
Employees									
Permanent employees									
Fixed-term employees									
Short-term and casual employees									
Paid apprentices, trainees and interns									
Dependent contractors									
Employers in corporations									
Employers in household market enterprises									
Owner-operators of corporations without employees									
Own-account workers in household market enterprises without employees									
Contributing family workers									
	May apply in a limited number of circumstances								
	Never applies								

Table C4: Relationship between ICSE-18 and Cooperation within and across the organization

Work relationships (ICSE-18)	Cooperation within the organization						Cooperation across organizations			
	Teamwork	Cooperatives		Cooperation of employees across organizations	Cooperation in Value chains	Umbrella organizations	Co-working spaces			
		Worker cooperatives	Producer cooperatives							
<u>Detailed ICSE-18 categories</u>										
Employees										
Permanent employees										
Fixed-term employees										
Short-term and casual employees										
Paid apprentices, trainees and interns										
Dependent contractors										
Employers in corporations										
Employers in household market enterprises										
Owner-operators of corporations without employees										
Own-account workers in household market enterprises without employees										
Contributing family workers										

May apply in a limited number of circumstances

Never applies

Table C5: Relationship between ICSE-18 and forms of payment and remuneration

Work relationships (ICSE-18)	Forms of remuneration and payment																			
	Forms of remuneration							Variable remuneration schemes							Forms of payment					
	For time worked	By the piece		Commission	Fee for services	Determined by profit or loss	Tips from clients	Individual output or performance	Group performance	Determined by profit or loss	In cash	In kind	Cheque	Digital wage payments	Cryptocurrency	Vouchers	Gift certificates			
Wage	Salary																			
Detailed ICSE-18 categories																				
Employees																				
Permanent employees																				
Fixed-term employees																				
Short-term and casual employees																				
Paid apprentices, trainees and interns																				
Dependent contractors																				
Employers in corporations																				
Employers in household market enterprises																				
Owner-operators of corporations without employees																				
Own-account workers in household market enterprises without employees																				
Contributing family workers																				

May apply in a limited number of circumstances

Never applies

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Handbook on Forms of Employment

In recent years, many countries have witnessed the emergence and growth of new forms of employment, driven by economic changes, the adoption of new business models, technological advancement, and continuing digitalization. New ways of organising work and production have been accelerated by the COVID-19 pandemic, leading to a further increase in the scale and scope of new forms of employment. These new forms of employment, often characterised by unconventional work relationships and modalities, and the growing number of workers involved in them sparked discussions among policymakers on the development of diverse forms of employment and their potential impact on social protection and working conditions.

To assist statistical offices in producing relevant, coherent and internationally comparable statistics on forms of employment, the Bureau of the Conference of European Statisticians established a Task Force to develop a conceptual framework on forms of employment. The Handbook on Forms of Employment is the result of its efforts. The Handbook presents a broad framework to classify and understand forms of employment. It provides definitions of key concepts, general principles and guidelines as well as a list of key recommended indicators with the goal of facilitating national statistical efforts to classify, measure and track diverse forms of employment relevant to their national context.

An electronic version of the Handbook is available from the UNECE Statistical Division's website, <https://unece.org/statistics>.

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