

## Industrial relations

# Representativeness of the **European** social partner organisations: ICT-telecommunications sector



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Authors: Josee Lamers (Lamers ICM Consultancy bv), Georg Adam (FORBA), Peter Kerckhofs (Eurofound)

Research Manager: Peter Kerckhofs

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#### **European Foundation for the Improvement of Living and Working Conditions**

Telephone: (+353 1) 204 31 00

Email: information@eurofound.europa.eu

Web: www.eurofound.europa.eu

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#### List of acronyms used in the report

5G: fifth generation of mobile networks

DSM: digital single market

ETNO: European Telecommunications Network Operators' Association

EU: European Union

OECD: Organisation for Economic Co-operation and Development

OTT: over-the-top

SME: Small and medium-sized enterprise

VoIP: Voice over Internet Protocol

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#### Introduction

The aim of this representativeness study is to identify the relevant national and supranational social partners (that is, the trade unions and employer organisations) in the field of industrial relations in the telecommunications sector and the ICT sector, and to show how they relate to the sector's European interest associations representing the employees and the employers. The report is divided into three parts: an overview of the economic specificities and the employment trends in the ICT and telecommunications sectors; an analysis of the social partner organisations in all 28 EU Member States; and an analysis of the relevant European organisations, in particular their membership composition and capacity to negotiate.

In this chapter, the objectives of the study are presented along with an introduction to the applied methodology. The context of this study is the European sectoral social dialogue committee (ESSDC) for the telecommunications sector, which was formally established in 2000 by UNI Europa and the European Telecommunications Network Operators' Association (ETNO). Before 2000, UNI Europa and ETNO had been involved in an informal working group which was established in 1990. This is the historical background of this study. Since then, the ICT and telecommunications sectors have converged. Therefore, both sectors are analysed in this report.

Specific to the telecommunications sector is the importance of large telecommunications companies. ETNO is an association of a number of those large telecommunications companies; it does not have any employer organisations in its membership. This study, however, with its bottom-up approach to data collection, considers both these large corporations as well as the sectoral employer organisations (see the second and third chapters) in the telecommunications and ICT sectors. As a result, the European DIGITAL SME Alliance and DigitalEurope are included in the fourth chapter along with ETNO.

#### **Objectives of the study**

Representativeness studies are conducted for three reasons:

- to identify the representative social partner associations to be consulted under Article 154 of the Treaty on the Functioning of the European Union (TFEU)
- representativeness is a criterion for being eligible for the setting up of an ESSDC, or the participation in one of them
- to analyse the social partner associations' capacity to negotiate agreements that can lead to an implementation by Council decision as provided by Article 155 of the TFEU

Representativeness is defined by the European Commission Decision on the establishment of Sectoral Social Dialogue Committees promoting the Dialogue between the social partners at European level (98/500/EC) (European Commission, 1998). It includes the following requirements for a European social partner organisation to be representative:

- to relate to specific sectors or categories and be organised at European level
- to consist of organisations that are themselves an integral and recognised part of Member States' social partner structures and have the capacity to negotiate agreements, and are representative of several Member States

 to have adequate structures to ensure their effective participation in the work of the sectoral social dialogue committees

To accomplish the aim of the study, it first identifies the relevant national social partner organisations in the telecommunications sector and the ICT sector before analysing the structure of the sector's relevant European organisations, in particular their membership composition. This involves clarifying the unit of analysis at both the national and European levels of interest representation. The study includes only organisations whose membership domain is classed as related to the telecommunications sector and/or ICT sector. In terms of territorial coverage, the study includes the 28 EU Member States where the sector is present, mapping the situation according to how it was in 2018.

## **European sectoral social dialogue for the telecommunications sector**

In 1992 an informal social dialogue for the telecommunications sector started. This was the same year that the European Telecommunications Network Operators' Association (ETNO) was established. With the European Commission Decision of 1998, the question arose whether this informal social dialogue could be transformed into a formal European sectoral social dialogue committee. The ETNO Executive Board voted unanimously in favour of this in 2000, a decision that had been more than a year in the making (Colclough, 2005, p. 391). As of July 2019, ETNO is the only employer organisation recognised by the European Commission as a legitimate European social partner for the ESSDC of the telecommunications sector, along with UNI Europa on the trade union side.

Prior to this, telecommunications social dialogue, trade unions only met on a bilateral basis. Colclough (2005) describes how European social dialogue brought opportunities for multilateral trade union cooperation, but also notes that unions do not automatically become allies across a north—south or east—west divide. From the employer perspective, the companies affiliated to ETNO in some cases also compete in some markets, which may influence the willingness of ETNO to support, implement or initiate common goals (Colclough, 2005, p. 395). The context in which the European Sectoral Social Dialogue Committee operates makes it easy for employers to decline certain suggestions made by the unions and steer the joint activities in the Committee more towards common lobbying of the European Commission (Colclough, 2005, p. 395). Differences and different interests are thus enacted both between the social partners and within their ranks.

In the early years of the European Sectoral Social Dialogue Committee in the telecommunications sector, there were four working groups, overarched by one annual plenary meeting. These four working groups were:

- Work organisation and working conditions
- Diversity and anti-discrimination
- Health and safety
- Skills and training

As of July 2019, the European Sectoral Social Dialogue Committee for the telecommunications sector no longer works with separate working groups; all issues are now discussed jointly in the plenary meetings.

In the work organisation working group, two main achievements have been realised: first, the 2001 Guidelines for Telework in Europe; second, the Guidelines for Customer Contact Centres, setting business standards. In the working group on diversity, only information has been gathered – first in a 2004 survey and subsequently in a 2005 audit identifying good practices, that were promoted in a seminar. Within the health and safety working group, research was commissioned on musculoskeletal disorders, leading to a joint declaration on this matter. In 2000, a joint declaration was made on the necessary skills for transformation, growth and competitiveness in the information society. Since then, follow-up has been developed (European Commission, 2010). In the years prior to the 2004 EU enlargement, there was also a working group on this, which led to a joint statement in May 2003, stating that the

employers and trade unions will work together to undertake any activities necessary to integrate the social partners in both the existing EU countries and the enlargement countries into the existing social dialogue structure and processes

(Colclough, 2005, p. 393)

This enlargement working group no longer exists. In the following chapters of this report, the reader will be able to assess its lasting success.

In terms of output, the social partners agreed on 30 joint texts in the telecommunications ESSDC, most of which focused on the impact of liberalisation. Other issues included the development of teleworking, call centres, health and safety topics and musculoskeletal disorders. During the next, much longer period, from 2000 to 2011, ETNO and UNI Europa delivered 13 joint opinions. See Table 41 for an overview of the texts agreed in the Committee.

As of July 2019, the Telecommunications Committee focuses on:

- health, safety and quality of life at work follow-up on Good Work–Good Health guidelines
- future skills and training needs, including gender diversity for example, in the ICT sector
- digitisation and impact on culture, work and management, new technologies and working from home
- quality of services and work
- economic performance

In recent years, UNI Europa and ETNO have collaborated on a project called 'Filling the future ICT skills gap in the telecommunications sector (FITS)'. In February 2018, UNI Europa and ETNO joined the Digital Skills and Jobs Coalition. The coalition was first launched by the European Commission in December 2016 to help meet the high demand for digital skills across Europe. ETNO and UNI Europa joined this initiative and want to link it to their ongoing activities as social partners in the telecommunications sector.

A 2015 study which focused on the (changing) boundaries of the telecommunications and ICT sectors indicates that 'we can no longer speak of telecommunications in separation from the ICT sector'

because of technological convergence and the developments in economic activities in the sectors (European Commission, 2015, p. 15). The two sectors are presently interlinked technologically, organisationally and in terms of stakeholders' sense of belonging to a specific sector.

As a result of the convergence between telecommunications and ICT (this trend is described in the next chapter), the ESSDC has also addressed issues related to ICT. For this, DIGITAL SME or DigitalEurope delegates have on occasion, as external guests, delivered presentations to the European Sectoral Social Dialogue Committee. Outside of the committee, UNI Europa has developed projects or informal cooperation with both organisations on various projects. DIGITAL SME has expressed interest in the European Sectoral Social Dialogue Committee, although DigitalEurope has not, even if there is ad hoc cooperation between UNI Europa and DigitalEurope, as well as between UNI Europa and DIGITAL SME.¹ In the context of converging ICT and telecommunications sectors, it is reasonable to include both DIGITAL SME and DigitalEurope in this representativeness study covering the ICT and telecommunications sectors. The inclusion of both organisations in this study and the assessment of their representativeness in the sector does not, however, make any assumptions on their respective positions or roles in relation to the European Sectoral Social Dialogue Committee, which depend on political decisions beyond the research findings analysed and presented in this report.

#### **Definitions and methodology**

The methodology applied in this study is determined by the conditions and criteria indicated by the European Commission (1998); that is, sector relatedness, membership and organisational capacity. For the purpose of this study, each of these criteria will be defined successively, starting with sector relatedness and the demarcation of the ICT-telecommunications sector.

For the demarcation of a specific sector, reference is made to a number of codes from the 'statistical classification of economic activities in the European Community' (NACE Rev. 2). In this study, NACE codes 58.2, 61, 62 and 63.1 define the ICT and telecommunications sector (Table 1). The repair of computers and communication equipment (NACE 95.1) and the activities of call centres (NACE 82.20) are excluded from this study, with the exception of call centres run by telecommunications companies (which are included).

Table 1: Demarcation of the ICT and telecommunications sectors with NACE codes

Sector	NACE code	NACE code description
Telecommunications	61	Telecommunications: wired, satellite and other telecommunications activities, maintenance of the network
ICT	58.2	Software publishing
	62	Computer programming, consultancy and related activities
	63.1	Data processing, hosting and related activities; web portals

Source: NACE Rev. 2.

-

<sup>&</sup>lt;sup>1</sup> An example of cooperation between UNI Europa and PIN-SME (now DIGITAL SME) was the joint project on 'Promoting social dialogue and cooperation between social partners in the ICT sector'. However, this project was outside of the telecommunications ESSDC.

Table 2 and Figure 1 present four different types of domain coverage. The membership domains of trade unions and employer organisations both fall within this demarcation of the sector, a type of sector relatedness that we call 'congruent'. If the membership domain of an organisation goes beyond the ICT-telecommunications sector as described here, we call that an 'overlapping' organisation. 'Sectional' describes an organisation that covers part of the ICT-telecommunications sector (and nothing else), whereas 'sectional overlapping' refers to an organisation that covers part of the ICT-telecommunications sector but also has membership in other sectors.

Table 2: Domain patterns of the members of an organisation

Domain pattern	Domain of organisation within the sector	Domain of organisation outside the sector		
	Does the domain of a trade union or employer organisation embrace all employees or companies in the ICT-telecommunications sector?	Does the trade union or employer organisation also represent employees or companies outside the ICT-telecommunications sector?		
Congruent	Yes	No		
Overlap	163	Yes		
Sectional	No	No		
Sectional overlap	1,10	Yes		

Figure 1 presents the four different types of domain coverage.

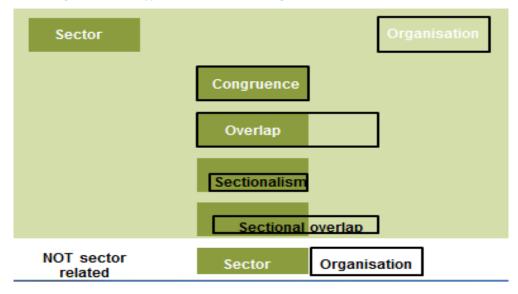


Figure 1: Four types of domain coverage

Membership constitutes another important aspect of representativeness. There are two levels of membership: first, the geographical coverage of the EU-level organisations (in how many Member States the respective EU-level trade unions or employer organisations have affiliates) and, second, the organisational density of the national affiliates. An important aspect to consider is the question of whether the EU-level players have as members most of the national-level players – or at least the strongest – or whether there are major gaps in their membership domains.

Membership in a social partner organisation requires the payment of membership fees. For the purpose of this study, the different membership types are not distinguished and, where possible, indirect membership is also taken into account.

**UNI Europa** is the regional organisation of UNI Global Union (formerly Union Network International). UNI Europa membership comprises those organisations in the region affiliated to UNI Global. Membership of UNI Europa is open to all members of national trade unions affiliated to the European Trade Union Confederation (ETUC) that fall within its scope. UNI Europa is recognised as a European Industry Federation of the ETUC.

On the employer side, **ETNO** rules of internal order govern full membership of organisations established in Europe that lawfully provide electronic communication networks. Moreover, organisations established in Europe that lawfully provide electronic communications services and identify themselves with the object of the association and want to contribute to its work may be admitted as associate members. The General Assembly makes the final decision to admit a member or associate member. ETNO's members are not the sectoral local employer organisations, but the corporations with electronic communication networks or services. Finally, the Executive Board can admit an organisation that is involved in the European or international Digital Economy to participate on an ad hoc basis as an observer.

**DigitalEurope** may accept as members non-governmental national associations representing the digital technology industry of a European country. A maximum of three is admitted per country; these should support the long-term goal of DigitalEurope to integrate all interests of the digital technology industry and, together, should cover the interests of the digital industry at national level. Second, DigitalEurope may accept as members companies that can be considered significant players in the European digital industry, have a centre of operations in a European country and engage in one or more of research and development, manufacturing or services and content. The company should be a member of the associations of those European countries in which it has major operations and should fully support the long-term objectives of Digital Europe.

The European DIGITAL SME Alliance, **DIGITAL SME** for short, has 'effective' and 'associate' members. Effective members are national or transnational associations of ICT small and medium-sized enterprises (SMEs) in EU Member States, any other organisation of ICT entrepreneurs and ICT SMEs in the countries of the EU and the founding members. Effective members have voting rights. Associate members are associations of ICT SMEs in countries that are not members of the EU as well as any other organisations not fulfilling the conditions of effective members but that are nevertheless linked in some way to ICT SMEs. Associate members may take part in the association's meeting, but they have no voting rights. In the case that a prospective member is from the same country as an existing member, the latter shall give preliminary agreement to the admission. The General Assembly sets the subscription fee annually.

The organisational capacity of the European social partners is analysed in terms of their ability to participate effectively, to commit themselves on behalf of their members and to conclude binding agreements or actions that can be implemented or monitored across the EU through the support of their affiliates. For this assessment of the capacity to negotiate, the actors' objectives and decision-making structures provided in their statutes are considered, as well as the outcome, in terms of agreed texts, and the processes through which the organisations obtained mandate, support and approval from their member organisations in the negotiation process.

The involvement of their members in national-level collective bargaining is important as it shows that the affiliates are able to obtain a mandate to negotiate on behalf of their members, to extend their mandate to the European-level organisation and to implement agreements or other jointly agreed texts in an autonomous way. The capacity to act autonomously is an important contribution to effective European sectoral social dialogue.

Finally, representativeness also depends upon the structures, resources and capacity of organisations to mobilise active participation of their members, to aggregate different interests of member organisations and their ability to act autonomously at European level. Internal structures within the European organisations to prepare European Sectoral Social Dialogue Committee meetings can increase efficiency and ensure that more organisations are represented than those participating directly in the meetings.

#### **Data collection**

The method for conducting the representativeness studies combines top-down and bottom-up approaches to identify national-level sector-related organisations in the ICT-telecommunications sector defined by NACE codes 61, 58.2, 62 and 63.1 (see Table 1). The top-down approach includes all the sector-related affiliates of the European associations ETNO, DigitalEurope, DIGITAL SME and UNI Europa. For ETNO, Digital Europe and DIGITAL SME, there are directly affiliated national associations and companies in the telecommunications and ICT sector. For UNI Europa, the European regional organisation, there are directly affiliated members of UNI Global Union. All these were included in the top-down approach in this study, for which Eurofound national correspondents (listed in Table 51 in the Annex) collected the necessary information. The bottom-up approach includes all other relevant associations; these are sector-related organisations with a membership domain in the sector involved in related collective bargaining and sector-related organisations of collective interest representation on behalf of labour and business with a significant membership base in the sector. This accommodates relevant interest organisations in countries without (or with only minor) sector-related collective bargaining structures.

The collection of quantitative data – on membership, for example – is essential for investigating the representativeness of the social partner organisations. Unless cited otherwise, this study draws on the country studies provided by the Network of Eurofound Correspondents. Where precise quantitative data could not be obtained, estimates are provided rather than leaving a question blank.

Thus, the quantitative data may stem from three sources; namely:

- official statistics and representative survey studies
- administrative data, such as membership figures provided by the respective organisations (e.g. to calculate density rates)
- estimates, expert opinions and assessments made by the Network of Eurofound Correspondents or representatives of the respective organisations

Also, a short questionnaire was sent to members of ETNO to request information about their cross-border operations in EU countries and data on employment. Additional sources of information have been listed in the Bibliography at the end of this report.

#### **Quality control measures**

To ensure the quality of the information gathered, several verification procedures and feedback loops were included in the process of drawing up this study.

First, combining the top-down with the bottom-up approach, information on the affiliates of the relevant EU-level social partners and other sector-related associations was collected from the reports prepared by the Network of Eurofound Correspondents in 2017. In January 2018 a presentation was given to the European Sectoral Social Dialogue Committee with the collected data, without ignoring any information still missing. Subsequently, Eurofound research managers and the authors of this report checked the consistency of the national contributions and, if necessary, asked the national correspondents to revise them during the first half of 2018. In June 2018, the national members of Eurofound's governing board were invited to check, in July 2018, the consistency of the information in this report to ensure that the bottom-up approach included all relevant sector-related organisations.

On that basis, this overview report was drafted in the second half of 2018 and finalised in the beginning of 2019. Draft versions of the overview report were shared with UNI Europa, ETNO, Digital SME, DigitalEurope and the European Commission for feedback and comments in May 2019. The final report, taking all feedback into account, was formally evaluated and approved on Monday 17 June 2019 in a meeting of Eurofound's Advisory Committee on Industrial Relations, which comprises representatives from industry, governments and the European Commission, in the presence of the sectoral social partner organisations identified in the report.

As different social partner organisations can see the reported information of other organisations in the same country and, if necessary, comment on the credibility or correctness of the information of other rival organisations, this process includes an element of mutual control and recognition.

#### Structure of the report

The first chapter examines economic developments and specificities of the ICT-telecommunications sector to better understand its industrial relations. The second chapter takes stock of the national sector-related trade unions and employer organisations to analyse the extent to which they cover the entire sector and their involvement in collective bargaining or social dialogue. The third chapter includes an assessment of the representativeness of the European social partners participating in the telecommunications ESSDC. The fourth chapter draws conclusions.

The purpose of this report is to reveal the organisational situation in the sector. As such, it will be of interest to social partners, the European Commission and other stakeholders to better understand the industrial relations landscape in the area, but the authors make no assumptions about the position of the sectoral social dialogue committee; aspects of a more political nature go beyond the remit of an analytical report.

# 1. Economic background and employment in the ICT-telecommunications sector

The telecommunications sector in Europe had a workforce of about 1 million in 2015–2016, while about 3.5–4 million employees worked in the ICT sector (see Tables 5 and 9). Over the same period, in terms of companies, there were about 46,600 telecommunications companies in the EU, but more than 700,000 ICT companies (see Table 3). The telecommunications sector is characterised by larger companies, a downward employment trend, well-established industrial relations actors and, at least in the past, a higher degree of collective bargaining coverage. While an ongoing trend in employment growth can be observed for the ICT sector, overall it has smaller companies, a lower organisational density of industrial relations actors and lower collective bargaining coverage. Despite these differences, both sectors are increasingly interconnected and to a certain extent converging. Many ICT workers are employed in other economic sectors which, strictly speaking, do not fall under the scope of the ICT sector, and with the implementation of 5G technologies, this is likely to increase the importance of ICT-telecommunications for the entire economy.

The telecommunications sector has evolved away from the historical monopolies of state-owned companies towards more contemporary competitive market structures. This is the result of changes in the regulatory framework and technological innovations, leading to privatisation, deregulation and liberalisation, and the creation of new products and services, producing large-scale restructuring in the sector (European Commission, 2010, p. 80). In this context, the Directorate-General for Competition has looked over state aid and mergers and acquisitions and whether these can be justified without harming competition. Current EU policies regarding ICT and telecommunications also aim at bringing economic growth, investment and innovation in other economic sectors. The availability of the necessary skills, training and human resources management to make these changes happen are, in this context, crucial topics for the European Sectoral Social Dialogue Committee.

The EU regulatory framework for telecommunications is a series of rules, with a package introduced in 2002 that was updated in 2009. More recently, in May 2015, the European Commission adopted a Digital Single Market strategy, with a number of political priorities that will lead to further developments of the ICT-telecommunications regulatory framework. In November 2015 a European regulation was adopted that reduced roaming charges, and in September 2016 the so-called 'connectivity package' and the proposed 'European Electronic Communications Code' are EU initiatives targeting additional changes to telecommunications rules.

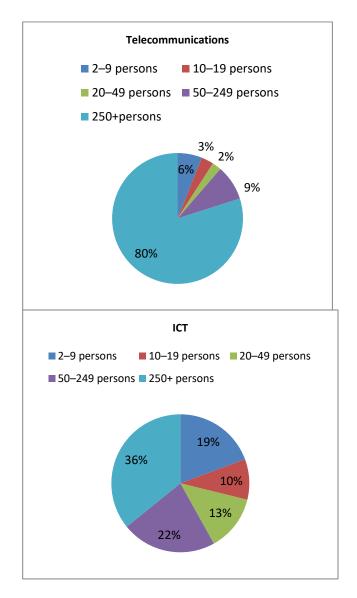
#### Types of companies and business structure of the sector

In the entire ICT-telecommunications sector there are about 773,750 companies, of which around 6% are telecommunications companies and 94% ICT companies. There are, thus, almost 16 times more ICT companies than telecommunications companies in the EU. The findings of this study show in Table 3 (in the far-right column) that in 2016 this ratio goes up to 40 or even 50 times more for Austria, the Netherlands and Slovakia.

Table 3 shows for each EU Member State the number of telecommunications companies and ICT companies, and the number of those companies in each sector with 250 employees or more. In the EU telecommunications sector, about 0.6% of the telecommunications companies have at least 250 employees, while these companies provide employment for 80% of the workers in the sector. Figure 2

illustrates that 80% of the telecommunications workforce is employed in companies with at least 250 employees and another 9% is in companies with between 50 and 249 employees. In other words, only 11% of telecommunications employees work in companies with fewer than 50 employees, while for the ICT sector, this is the case for 42% of the employees.

Figure 2: Proportions of employees in ICT and telecommunications companies by persons employed (%)



Source: Eurostat, Structural Business Statistics, NACE Rev. 2 (December 2018).

For ICT, about 0.18% of the European ICT companies have 250 employees or more. These companies provide 36% of the employment in the ICT sector. Compared to the telecommunications sector, a larger proportion of employees in the ICT sector work in smaller companies.

Table 3: Number of companies in telecommunications and ICT sectors

Member State	No. of telecoms companies	No. of telecoms companies with >250 employees	No. of ICT companies	No. of ICT companies with >250 employees	Member State	Ratio x times more than ICT companies
AT	339	5	14,424	29	AT	43
BE	3,979	8	28,872	33	BE	7
BG	672	12	6,541	21	BG	10
CY	137	3	728	1	CY	5
CZ	1,279	9	38,673	72	CZ	30
DE	3,135	40	92,945	311	DE	30
DK	367	6	11,846	22	DK	32
EE	191	4	3,197	5	EE	17
EL	843	-	4,067	_	EL	5
ES	4,438	26	38,503	167	ES	9
FI	433	4	6,792	19	FI	16
FR	5,382	39	104,105	164	FR	19
HR	316	5	4,439	4	HR	14
HU	1,101	7	26,305	24	HU	24
IE	770	_	13,687	40	IE	18
IT	4,293	19	78,946	98	IT	18
LT	273	4	4,193	6	LT	15
LU	89	_	1,932	_	LU	22
LV	592	4	4,442	8	LV	8
MT	30	0	748	_	MT	25
NL	1,215	10	62,185	60	NL	51
PL	9,701	13	62,730	43	PL	6
PT	750	5	11,058	35	PT	15
RO	2,319	17	13,762	51	RO	6
SE	1,331	12	41,120	60	SE	31
SI	271	4	4,164	1	SI	15
SK	319	8	15,132	15	SK	47
UK	2,071	_	31,579	_	UK	15
EU	46,636	264	727,115	1,289	EU	15.6

Notes: For Spain, the number of large companies corresponds to those with more than 200 employees rather than those with more than 250 employees. The numbers marked red are estimates: for Ireland, it was estimated that there would be around 750 companies in the telecommunications sector, as an extrapolation based on the data from other countries; for the UK, it is known that there are 337,850 companies in ICT and telecommunications together, so the

breakdown between ICT and telecommunications was done on the basis of the ratio known for the 26 EU Member States for which the data was available.

Source: Network of Eurofound Correspondents, 2017–2018; reference period: 2016<sup>2</sup>.

The workforce of the largest three telecommunications employers in each of the 28 EU Member States corresponds to 63% of the overall EU telecommunications workforce, while for the ICT sector, the three largest groups in each Member State employ about 12% of the overall EU ICT workforce. Variations of this concentration of employment in the top three companies are presented in Tables 4 and 5.

Table 4: Proportion of the sectoral workforce in the three largest companies

		>85%	70–84%	55–69%	40–54%	25–39%
Proportion of ICT	>30%	MT		EE	SK	
workforce in the three largest ICT	20–29%	CY				
companies	10–19%	DK	IT	BG, HR, HU, NL	EL, LV, PL	CZ
	<10%	DE, FI, LU	AT, BE, PT, SI	FR, LT, UK	RO, SE	ES

Source: Network of Eurofound Correspondents, 2017–2018; reference year: 2016.

For both the telecommunications and ICT sectors, Table 5 details both the sectoral workforce and the share of the three largest companies per country.

Table 5: Share of the sectoral workforce in the largest three companies

Member State	Top three telecoms companies (number of employees)	Total telecoms workforce (number)	%	Top three ICT companies (number of employees)	Total ICT workforce (number)	%
AT	10,758	14,847	72	3,709*	55,157	7%
BE	16,442	22,078	74	3,435	56,969	6%
BG	13,645	20,625	66	7,250*	44,335	16%
CY	2,919	3,382	86	730	3,505	21%
CZ	8,826	24,900	35	6,595	63,900	10%
DE	89,304**	59,472	-	51,500	701,312	7%
DK	11,100	13,120	85	6,450	53,283	12%
EE	2,733	4,276	64	5,429	10,565	51%
EL	11,946	26,392	45	2,414	22,471	11%
ES	28,618	114,500	25	11,784	288,100	4%
FI	7,951	+/-24,000	33	8,000	+/-90,000	9%
FR	102,200	167,292	61	55,731	441,491	13%

<sup>&</sup>lt;sup>2</sup> The employment and company data are the last available data at the end of 2017. In some countries the latest available data are from 2015, while in others the reference year is 2016. During the review in 2018, data were updated, so the reference year is 2016.

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HR	4,924	7,323	67	2,469	14,066	18%
HU	9,630	15,725	61	6,639	53,076	13%
IE	19,500	16,300	-	9,000	91,700	-
IT	65,825	80,929	81	17,403	298,920	6%
LT	3,443	5,684	61	1,054	17,690	6%
LU	4,812	4,940	97	650*	11,369	6%
LV	2,157	5,038	43	2,652	17,520	15%
MT	1,670	1,712	98	1,715	2,080	82%
NL	20,700	30,000	69	23,000	188,000	12%
PL	20,131	46,576	43	15,864	140,772	11%
PT	10,355	14,016	74	1,217	40,405	3%
RO	19,570	41,496	47	7,868	98,154	8%
SE	12,770	24,343	52	9,631	135,004	7%
SI	3,572	4,634	77	756	11,852	6%
SK	4,876	11,700	42	11,103	34,900	32%
UK	112,369	217,000	52	20,500	658,000	3%
EU total	622,746	1,022,300	63	294,548	3,664,596	12%

Notes: \* Data from one large ICT company is not available for Austria and Bulgaria; for Luxembourg, data are not available from two large ICT groups. \*\* For Germany, data from Deutsche Telekom probably include data from subsidiaries abroad; that is why the number of employed persons in the largest groups exceeds the workforce of the German telecommunications sector.

Source: Network of Eurofound Correspondents, 2017–2018; reference years: 2015–2016.

The traditional telecommunications industry comprised a few large companies or just one monopoly provider which owned the infrastructure and provided one single service: public switched telephone network telephony.

Since the early 1990s, the telecommunications sector has undergone a process of profound restructuring in the EU Member States. Originally organised as a kind of state monopoly, telecommunications have been transformed from a purely nationally organised service into an internationally exposed business sector as a result of deregulation of market entry and liberalisation of services, often accompanied by full or partial privatisation of the former monopoly provider. This restructuring from the early 1990s to the early 2000s implied that the number of companies in telecommunications increased in virtually all Member States, reflecting the opening-up of the market. Likewise, in this period, both total employment and the number of employees grew in most Member States (Eurofound, 2007). Restructuring was buttressed by very dynamic technological developments with regard to the construction of competitive telecommunications networks and the emergence of mobile telephony and the internet. In the longer term, since the mid-2000s, restructuring has in economic terms fostered labour productivity and at the same time brought about a reduction in the volume of labour in the EU (Adam, 2017).

While the traditional telecommunications industry consisted of just one monopoly provider, the structure of the ICT sector was similar in the 1990s, when the sector was dominated by a few large multinationals – like IBM, Apple and HP – which were engaged in both hardware and software

development. However, technological progress and innovation have fuelled the expansion of the new sector such that innumerable start-ups have arisen alongside the established incumbents in the sector.

In terms of business structure, the ICT sector is thus characterised by huge numbers of small and micro companies, far outnumbering those in the telecommunications sector, and micro companies (fewer than 10 people) prevail. Nevertheless, the ICT sector also has a higher number of large companies (>250 people) than the telecommunications sector, which means that a large number of small and micro companies coexist with a considerable number of large players in the sector (European Commission, 2015). The business structure of the telecommunications sector is built up in a more even way with a larger top, more medium-sized companies and fewer small companies with, altogether, an average of 24 employees per company. As mentioned above, the telecommunications sector is smaller than the ICT sector, with fewer companies and total employment around a quarter that of the ICT sector.

Table 6: Change in number of companies in the ICT and telecommunications sectors, 2012 to 2017

		Telecommunications								
		Large increase	Small or no increase (10% or less)	Small decrease	Large decrease					
ICT	Large increase	CZ, FI, LV, MT, PT	CY, EE, FR, HR, HU, LU, PL, SI, UK	DK, LT, NL, RO, SK	BE, ES					
	Small increase	SE	AT, IE, IT	BG, DE						
	Small decrease	EL								
	Large decrease									

Source: Network of Eurofound Correspondents, 2017–2018.

#### Recent employment trends in telecommunications and ICT

The development of employment is different for the ICT and telecommunications sectors (see Figure 3). Employment has increased within ICT, especially regarding software publishing and computer programming, while it has decreased in the telecommunications sector. The difference can perhaps be explained by software publishing and computer programming developing fast in this time of 'disruption', while the development in mobile telephony is more stable – although technology changes fast.<sup>3</sup>

in areas such [as] ... DevOps, data analysis, new language experts and community managers' (p. 77).

<sup>&</sup>lt;sup>3</sup> According to the European Commission (2015), 'employment in the sectors is changing. [...] the telecommunications sector was reduced with some 300,000 employees from 2008 to 2013, other sectors such as computer programming, consultancy and related activities experienced an increase of close to 400,000 employees. There has been a shift from the traditional low-level jobs in the telecommunications sector to jobs

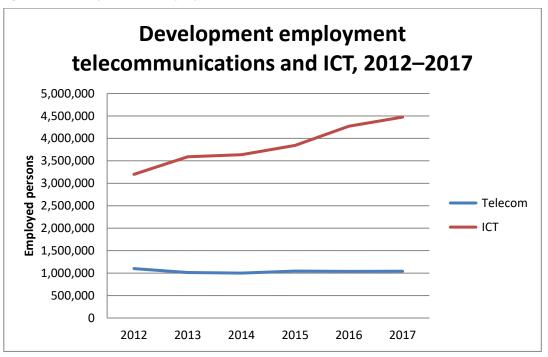


Figure 3: Development of employment in the ICT-telecommunications sector, 2012–2017

Notes: Eurostat has no data on NACE 58.20 (software publishing) for 2011, 2012, 2014 and 2015. Regarding NACE 62 (computer programming), most Eurostat data are estimated or labelled: definition differs, low reliability, is estimated or provisional.

Source: Eurostat, Structural Business Statistics, 2 January 2019, NACE Rev. 2 codes 61 (telecommunications) and 58.20, 62, 63.10 (ICT).

Table 7 shows decreasing employment in the telecommunications sector over the period 2012–2016 in most Member States (in 19 of the 25 countries for which data are available), while all countries record increasing employment in ICT. The reductions in employment in the telecommunications sector are mainly caused by concentration and consolidation processes, technological drivers and, not least, fierce global competition, sometimes leading to outsourcing of some activities to countries outside the EU (Holtgrewe and Schörpf, 2017). The notable decrease in telecommunications employment in Germany likely stems from the restructuring of Deutsche Telekom, involving early retirements, job transfers of civil servants and job cuts owing to outsourcing and downsizing.

The countries recording an increase in employment in the telecommunications sector are Estonia, Greece, Luxembourg, Malta, Portugal (greatest increase) and the United Kingdom (UK).

Table 7: Development of employment in the telecommunications and ICT sectors, 2012–2016 (percentage difference)

Member State	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU
Telecommunications	-10	-10	-2	-6	-26	-48	-12	5	8	-4	-2	n.a.	-3	-15
ICT	18	21	33	29	14	24	12	35	26	6	3	n.a.	22	42

Member State	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SL	SK	UK
Telecommunications	-21	-10	-11	6	-6	2	-3	-12	13	n.a.	n.a.	-1	-18	7
ICT	40	6	76	36	102	81	11	52	23	n.a.	n.a.	26	38	31

Note: n.a. = not available.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

The ICT sector continues to grow steadily and continuously despite strong global and technological competition. It can be assumed that expansion of the ICT sector is, in most countries, large enough to mitigate any decrease in telecommunications and so contributes to a positive result for the sector overall, since employment in ICT tends to be significantly higher than in telecommunications.

The four countries with the greatest increase in ICT employment are Latvia, Malta, Lithuania and Poland, and they are all located in south-eastern Europe. In Latvia, the ICT sector expanded with a more than 100% increase in employment, created first by computer programming, consultancy and related activities (NACE 62) and, second, by software publishing (NACE 58.20). Malta saw an increase for all ICT subsectors (NACE 58.20, 62 and 63.10), though the largest gains were in data processing, hosting, related activities and web portals and also from software publishing. In Poland, employment growth was achieved by developers of video games and by business software from the largest Polish companies, Comarch, Atos Poland and Capgemini. In Lithuania, the ICT workforce increased from 11,079 in 2011 to 19,505 in 2016. In the German ICT sector, the 24% increase in employment corresponds in absolute numbers to a very significant increase: from 635,000 in 2011 to 787,000 in 2016. This increase is mainly due to software development, in which SAP is a large European player, and from IT services. Thus, overall, software developers made significant contributions to the growth in employment.

Table 8 highlights the differing fortunes of the ICT and telecommunications sectors.

Table 8: Features of business structure and employment of the ICT and telecommunications sectors, 2016

	Telecommunications*	ICT**	ICT- telecommunications together
Countries with increasing employment	EE, EL, LU, MT, PT, UK	All countries	All countries
Countries with decreasing employment	AT, BE, BG, CY, CZ, DE, DK, ES, FI, HR, HU, IE, IT, LT, LV, NL, PL, SL, SK	0	0

*Notes:* \* n = 25. \*\* n = 28.

Source: Network of Eurofound Correspondents, 2017–2018.

Combined, the ICT and telecommunications sectors represent about 2% of the total EU workforce. Table 9 ranks the EU Member States by size of workforce in ICT and in telecommunications.

Table 9: Proportion of the EU sectoral workforce by EU Member State

Member State	Telecoms workforce (number)	Share of EU telecomsw orkforce (%)	ICT workforce (number)	Share of EU ICT workforce (%)	Ratio ICT: telecoms workforce	ICT-telecoms workforce	Share of EU ICT- telecomsw orkforce (%)
UK	217,000	21.6	658,000	18.0	3	875,000	19.2
DE	59,472	5.9	701,312	19.2	12	760,784	16.7
FR	167,292	16.6	441,491	12.1	3	741,000	13.4
ES	114,500	11.4	288,100	7.9	3	402,600	8.8
IT	80,929	8.1	298,920	8.2	4	379,849	8.3
NL	30,000	3.0	188,000	5.1	6	218,000	4.8
PL	46,576	4.6	140,772	3.8	3	187,348	4.1
SE	24,343	2.4	135,004	3.7	6	159,347	3.5
RO	41,496	4.1	98,154	2.7	2	139,650	3.1
FI	6,850	0.7	107,150	2.9	16	114,000	2.5
IE	16,300	1.6	91,700	2.5	6	108,000	2.4
CZ	24,900	2.5	63,900	1.7	3	88,800	1.9
BE	22,078	2.2	56,969	1.6	3	79,047	1.7
AT	14,847	1.5	55,157	1.5	4	70,004	1.5
HU	15,725	1.6	53,076	1.4	3	68,801	1.5
DK	13,120	1.3	53,283	1.5	4	66,403	1.5
BG	20,625	2.1	44,335	1.2	2	64,960	1.4
PT	14,016	1.4	40,405	1.1	3	54,421	1.2
EL	26,392	2.6	22,471	0.6	1	48,863	1.1
SK	11,700	1.2	34,900	1.0	3	46,600	1.0
LT	5,684	0.6	17,690	0.5	3	23,374	0.5
LV	5,038	0.5	17,520	0.5	3	22,558	0.5
HR	7,323	0.7	14,066	0.4	2	21,389	0.5
SL	4,634	0.5	11,852	0.3	3	16,486	0.4
LU	4,940	0.5	11,369	0.3	2	16,309	0.4
EE	4,276	0.4	10,565	0.3	2	14,841	0.3
CY	3,382	0.3	3,505	0.1	1	6,887	0.2
MT	1,712	0.2	2,080	0.1	1	3,792	0.1
EU 28	1,005,150	100	3,661,746	100	3.6	4,666,896	100

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

On average, the ICT sector has nearly four times more employees than the telecommunications sector. For Germany and Finland, this ratio increases to more than 10 times more ICT employees. For Germany, much of this can be explained by the restructuring and downsizing of Deutsche Telekom,

as explained earlier. On the other hand, in Greece and Cyprus, there are almost the same number of employees in both sectors. For Cyprus, this comes as a surprise since this country hosts the headquarters of international companies in the ICT sector, which would suggest an even stronger predominance of the ICT workforce compared to that of telecommunications. Major multinational firms in the ICT industry, including ICT consulting firms, maintain regional headquarters in Cyprus as a gateway in to and out of the EU for corporate services such as sales and marketing, project management, software development, systems integration, testing services, training and development (Microsoft, Oracle and NCR for some time, Wargaming, TSYS and Amdocs more recently). In Greece, the ICT and telecommunications sectors have been strongly affected by the 2008 financial crisis; in 2015 the domestic ICT market declined faster than the fall in GDP, losing 2.4% of its value.

Table 10 ranks the EU Member States by sectoral workforce in ICT-telecommunications as a proportion of the total workforce in the national economy.

Table 10: ICT-telecommunications workforce as a proportion of the total workforce by Member State

Member State	ICT-telecommunications workforce (number)	Total national workforce (number)	Percentage of national employees in the ICT- telecommunications sector		
LU	16,309	209,000	7.8		
IE	108,000	2,161,000	5.0		
FI	114,000	2,685,000	4.2		
SE	159,347	5,107,000	3.1		
UK	875,000	33,500,000	2.6		
BG	64,960	2,551,000	2.5		
NL	218,000	9,090,000	2.4		
DK	66,403	2,795,000	2.4		
LV	22,558	1,022,000	2.2		
EE	14,841	693,000	2.1		
MT	3,792	190,000	2.0		
FR	608,783	30,680,000	3.2		
AT	70,004	3,737,000	1.9		
SI	16,486	913,000	1.8		
ES	402,600	22,750,000	1.8		
SK	46,600	2,727,000	1.7		
CZ	88,800	5,304,000	1.7		
DE	760,784	45,900,000	1.7		
HU	68,801	4,263,000	1.6		
LT	23,374	1,452,000	1.6		
CY	6,887	444,000	1.6		
BE	79,047	5,150,000	1.5		
IT	379,849	25,940,000	1.5		
RO	139,650	9,450,000	1.5		
HR	21,389	1,715,000	1.2		
PL	187,348	17,600,000	1.1		

PT	54,421	5,395,000	1.0
EL	48,863	4,918,000	1.0
EU	4,666,896	248,341,000	1.9

Source: Network of Eurofound Correspondents, 2017–2018; reference year: 2016.

#### Characteristics of the workforce and working conditions

On average, about a third of the ICT-telecommunications workforce are female and two-thirds male. Female participation data indicate that a higher share of women work in the telecommunications sector than in ICT, except for Austria, Germany, Italy, Romania and Spain. In 12 other countries, female participation in ICT ranks lower than in telecommunications. The highest score can be found in Bulgaria in the telecommunications sector with 44% women at work. The findings also show that female participation is slightly higher in countries in the south and east of Europe than those in the west. An example of the industry's efforts to close the gender gap is the Tomorrow's Tech Leaders Today careers fair from the Women in IT Awards.<sup>4</sup>

Temporary agency work (TAW) features prominently in the telecommunications sector, particularly, but not exclusively, for activities related to call centres. A trade union representative from Austria estimates that around 10% of employees in that country's telecommunications sector are temporary agency workers and around 5% in the ICT sector are self-employed. Agencies like Manpower and Randstad transfer agency workers to big multinationals like HP, Oracle, T-Mobile and others. However, it is difficult to get an overview of the usage of TAW since the national statistics offices of the Member States do not all monitor TAW at sector level. Overall, according to the national reports provided by the Network of Eurofound Correspondents, TAW is mainly used in the telecommunications sector in the western European countries. Apart from TAW, other forms of mobile work arrangements (including home office) are widespread in both telecommunications and ICT sectors.

Self-employment also features subsectors of ICT (see Table 11), software publishing, consultancy and the video games business; it is much less prominent in tech sales, distribution and telecommunications services. Generally, increasing numbers of workers in the ICT sector are self-employed. Self-employment among professionals in ICT is associated with digital platform work, which has grown rapidly in importance in the sector in the 2000s.

information, see the Women in IT Awards home page.

<sup>&</sup>lt;sup>4</sup> The Women in IT Awards is the world's largest event dedicated to tackling the technology industry's gender imbalance. It does this by showcasing the achievements and innovation of women in technology, identifying new role models and promoting further dialogue around diversity among industry influencers. Attended by 1,200 businesses and tech leaders, the most recent event took place on 30 January 2019 in London. For further

Table 11: Number of self-employed individuals in telecommunications and ICT

Member	Self-en	nployed	Total em	oloyment	Year
State	Telecoms	ICT	Telecoms	ICT	
AT	292	13,770	15,139	68,927	2015
BE	66	1,232	22,144	58,201	2016
BG	314	3,874	20,939	48,209	2015
CY	13	35	3,395	3,540	2015
CZ	1,800	23,900	26,700	87,800	2016
DE	n.a.	NACE 58.2: 16,000	71,000	787,000	2016
		NACE 63: 62,000			
		Total: 78,000			
DK	73	5,962	13,193	59,255	2015
EE	n.a.	n.a.	4,337	11,626	2015
EL	615	3,012	27,337	26,537	2016
ES	11,200*	49,000	125,700	337,100	2016
FI	n.a.	n.a.	11,252	49,633	2016
FR	n.a.	n.a.	167,292*	441,491	2015
HR	n.a.	n.a.	9,298	18,543	2015
HU	1,340	312	15,778	53,589	2016
IE	n.a.	n.a.	15,600	NACE 58: 4,400	2016
				NACE 62: 51,100	
				NACE 63: 6,900	
				Total: 62,400	
IT	3,687	71,971	84,617	370,891	2015
LT	n.a.	n.a.	5,732	19,505	2015
LU	1	261	4,941	11,630	2016
LV	91	582	5,215	18,885	2015
MT	15	371	1,727	4,287	2015
NL	0	30,000	31,000	218,000	2016
PL	n.a.	n.a.	83,100	207,455	2015/2016
PT	n.a.	n.a.	16,705	59,560	2015
RO	n.a.	n.a.	41,496*	98,154*	2016
SE	n.a.	n.a.	24,343*	135,004	2016
SI	71	2,299	4,705	14,151	2016
SK	800	8,400	12,500	43,300	2016
UK	9,000	102,000	226,000**	760,000**	2016

Notes: n.a. = not available. \* = employees. \*\* The total employment figures for the UK include self-employed.

Source: Network of Eurofound Correspondents, 2017–2018; reference year: 2016.

Due to technological changes and innovations, there is a gap between the demand for ICT experts on the one hand and the supply of job seekers on the other. ICT experts make up one of the most indemand professions, and demand for programmers, developers, engineers and IT professionals continues to rise. Self-employment of professionals in the ICT sector is associated with digital platform work, which has grown rapidly in importance within the sector.

With regard to ICT, working on a part-time basis is more complicated than in other professions and the disadvantages are relatively extensive; most IT work is performed in teams where there is a strong requirement to discuss and solve various issues and to communicate effectively with other team members. Part-time IT jobs are, therefore, more appropriate for persons who work independently or on a self-employed basis (according to data from Network of Eurofound Correspondents in Czechia).

- 1. MAD (modular, agile, decentral) working is characteristic of the ICT industry (MT Magazine, 2018). Cutting processes and targets, products and services into modules helps to manage wide variety and complexity. This is a modular approach that can be supported by an agile process, which means working with short-term goals and taking small steps in the right direction. Organisations that work quickly grow quickly and respond promptly to a rapidly changing reality benefit from a decentralised approach by working in teams with quick access to knowledge and capacity. While teamwork is key in this process, new forms of employment contracts have, since around 2014, become increasingly widespread and mainly concern flexible cooperation models, such as bodyshopping, team leasing, outsourcing, transfer2core and insourcing. Bodyshopping involves the hiring of ICT professionals freelancers to work on specific IT projects with limited implementation times, varying from several months up to one year. This includes what used to be called posting of workers.
- 2. In recent years, there has also been a strong expansion in the ICT sector of working from home. The national-level social partners in Estonia promoted remote work by signing an agreement on teleworking in 2017 that specifies the rights and obligations of employers and employees (Network of Eurofound Correspondents, Estonia).

Another recent trend in the ICT sector, which is expected to continue in the future, is so-called 'digital nomadism'. Digital nomads are freelancers and one-person companies who work as programmers and who are hired for a particular job for a limited time, often for a fixed fee. They usually pick up assignments from digital platforms and organise their work in such a way that it allows them to work from anywhere in the world. Self-employed tech professionals use a number of platforms to secure work, such as PeoplePerHour, Fiverr, UpWork and Freelancer (Network of Eurofound Correspondents, national correspondents for Czechia and the UK).

Table 12 lists the forms of flexibility in the ICT sector.

Table 12: Overview of new flexibility forms in the ICT sector

Self-employed	Team leasing
Customised working schedules	Outsourcing
Remote working	Insourcing
Bodyshopping	Transfer2core
Digital platform work	Digital nomads

Source: Network of Eurofound Correspondents, 2017.

In both sectors, employment contracts are changing to accommodate different types of flexible work. This is a phenomenon that is mostly connected with digital work. As production costs have risen but

prices have remained stable, the sector has seen an increasing degree of offshoring and outsourcing (Holtgrewe and Schörpf, 2017). Increasingly, advanced tasks are now being relocated, mainly to the Asian labour market. Aside from costs, another reason for offshoring is the shortage of skills in various countries like Belgium, Germany, Slovenia and Sweden. Besides increased outsourcing, employment is also on the increase. This leads to shortages of labour as well as continued outsourcing of work, even high-level work, mainly to Asian countries, such as India.

#### **Converging sectors – bringing ICT and telecommunications together**

The convergence between the telecommunications and ICT sectors is mainly driven by developments in legal frameworks – for instance, liberalisation, which facilitates privatisation and cross-border mergers and, more recently, the development of new policies designed to promote a digital single market – and technological innovations, leading to the introduction of new products and services in the market. New services such as Voice over Internet Protocol (VoIP) telephony and over-the-top (OTT) use the existing telecommunications infrastructure. In short, VoIP means making voice calls via the internet. OTT is a term used to refer to content providers, like Netflix, that distribute streaming media as a standalone product directly to viewers over the internet, which indicates a link between the ICT-telecommunications sector and the audiovisual sector. With the implementation of 5G, there will be much greater linkage between ICT-telecommunications and other sectors; for example, there are already many ICT employees working in other sectors who are not considered employees of the ICT-telecommunications sector. According to a Joint Research Centre (JRC) report analysing developments in the ICT sector, it can be expected that this trend will continue (European Commission, 2018a).

With this in mind, it is no surprise that there are different understandings of the demarcation of the ICT-telecommunications sector. Some institutions, such as the OECD, the International Telecommunications Union and the JRC, include manufacturers of hardware in the telecommunications sector, although hardware manufacturing activities fall under NACE 26, which is covered by the ESSDC for the metal sector (European Commission, 2015, pp. 22-23). The staff employed in shops selling phones and subscriptions to services provided by telecommunications companies fall within the scope of the commerce sector European Sectoral Social Dialogue Committee. For employees that work in call centres or in the repair of telecommunications hardware, it is not fully clear which European Sectoral Social Dialogue Committee they are covered by. They are not, however, included in the scope of the ICT-telecommunications sector as analysed in this report.

The interconnection between ICT and telecommunications is related to economic activity, legal framework developments and technological developments. In economic terms, it has already been indicated that the telecommunications sector is characterised by a limited number of large companies. This is because these telecommunications companies need to invest heavily in the infrastructure of their networks. In the ICT sector, big changes started with the emergence of the internet and its numerous associated services, which consequently created a whole new sector of start-ups, SMEs and

<sup>&</sup>lt;sup>5</sup> The JRC classifies the ICT sector according to four subcategories: ICT manufacturing (NACE 261-264), telecommunications (NACE 61), computer services (NACE 5,820,62,631, 951) and ICT wholesale trade (NACE 465). This classification method follows the OECD (2007).

<sup>&</sup>lt;sup>6</sup> Unlike our representativeness study, the narrow official definition also includes the activities of call centres (NACE 82.20). The call centres use the tools of telecommunications and ICT rather than developing them, like the automotive sector uses internet applications; that is why NACE 82.20 is not included in this representativeness study.

<sup>&</sup>lt;sup>7</sup> The scope of the ICT-telecommunications sector covered by this study is defined in Table 1.

microbusinesses. The ICT sector is a relatively young sector and, compared to the telecommunications sector, the business structure is less regulated by law. To compete with the ICT service providers, the telecommunications companies have had to innovate and introduce new products and services, which often implies changing skills needs among their employees and inevitable restructuring. Simultaneously, existing activities have been outsourced on a large scale to eastern European and Asian countries (India in particular) to save costs and in response to domestic skills shortages. The new skills needed are often not easily identifiable or transposable; indeed, multinationals often develop their own staff training programmes. These issues have been on the agenda of the telecommunications social dialogue for several years. The employer organisations and trade unions emphasise the importance of promoting e-skills and improving conditions for reskilling outside companies (see, for instance, the 2014 Joint UNI Europa—ETNO declaration on future skills needs).

### 2. National level of interest representation

This chapter presents an overview of the 118 trade unions and 62 employer organisations that are active in the ICT-telecommunications sector. In each EU Member State apart from Croatia and Latvia, there is at least one trade union and at least one employer organisation. The largest number of sector-related trade unions can be found in France (11), Denmark and Italy (both 9); Italy also had the largest number of employer organisations in the ICT-telecommunications sector (12) (Table 13).

Table 13: ICT-telecommunications sector-related trade unions and employer organisations

Number	Trade unions	Employer organisations and business associations
0		HR, LV
1	EE, LT, LV, MT	CY, CZ, EE, HU, IE, LT, LU, MT, PL, PT, SI, SE, SK
2	AT, CZ, HR, HU, IE, SK	BE, DE, FI, NL, UK
3	BG	AT, EL, RO
4	DE, EL, LU, NL, RO, SI	BG, DK, ES
5	CY, FI, PT, UK	
6	PL, SE	FR
7	BE, ES	
8		
9	DK, IT	
10		
11	FR <sup>8</sup>	
12		IT
Total	118	62

Source: Network of Eurofound Correspondents, 2017–2018.

Not all trade unions and employer organisations represent members in both the telecommunications sector and the ICT sector. Of the 118 trade unions, 75 (64%) cover both subsectors, while among the employer organisations, this is the case for 25 (45%) of the 56 organisations for which information is available. In all EU Member States but Cyprus, there is a trade union covering (parts of) both sectors. For the employers, this is the case in 17 Member States.

Table 14 shows the Member States with the 25 trade unions that have only telecommunications employees and the 19 trade unions that only have ICT employees as members. There are thus more trade unions in more EU Member States that only represent telecommunications employees. In contrast, there are many more employer organisations that solely represent ICT interests, and only one with telecommunications companies as members. The French employer organisation Unetel-RST mainly covers telecommunications companies, although it also partly covers data processing and hosting activities in the ICT sector through its affiliated members, hence it represents both telecommunications and ICT interests.

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<sup>&</sup>lt;sup>8</sup> These 11 trade union organisations can be grouped under 5 confederations: CFDT, CGT, FO, CFE-CGC and CFTC. Unsa Telecommunications and SUD PTT (Solidaires) are not allowed to engage in sector-level MEB, as they are not considered as representative trade unions in the French industrial relations system. Both trade unions did however report to be involved in SEB in individual companies. In the evaluation process of this study, it was reported that for the telecommunications employees there is one trade union missing (CGT-FAPT) and for the ICT employees there are two other trade unions missing (FO-FEC and CGT-FSE).

Table 14: Number of trade unions and employer organisations covering the entire ICT-telecommunications sector, only telecommunications or only ICT, by Member State

Member		Trade union	s	Member		Employer	organisation	s
State	Only in telecoms	In both ICT and telecoms	Only in ICT	State	Only in telecoms	In both ICT and telecoms	Only in ICT	No information
AT		2		AT	1	1	1	
BE		7		BE		2		
BG	1	1	1	BG		1	1	2
СҮ	5			CY			1	
CZ		1	1	CZ			1	
DE	1	3		DE		1	1	
DK	2	3	4	DK		2	1	1
EE		1		EE		1		
EL	3	1		EL		2	1	
ES	1	5	1	ES			3	1
FI	2	3		FI		1	1	
FR	5	2	4	FR		1	4	
HR	1	1		HR				
HU	1	1		HU			1	
IE	1	1		IE		1		
IT		3	6	IT		5	7	
LT		1		LT		1		
LU	1	3		LU			1	
LV		1		LV				
MT		1		MT		1		
NL		4		NL		2		
PL		6		PL			1	
PT		5		PT		1		
RO		3	1	RO			3	
SE	1	5		SE		1		
SI		4		SI		1		
SK		2		SK		1		
UK		4	1	UK			1	1
EU	25 TUs in 13 Member States	74 TUs in 27 Member States	19 TUs in 8 Member States	EU	1 EO in 1 Member State	26 EOs in 18 Member	29 EOs in 16 Member	5 EOs
		Jules			27 40	States	States	
	99 telecoms TUs in 28 Member States				27 telecoms EOs in 18 Member States			

93 ICT TUs in 27 Member States 55 ICT EOs in 26 Member States

Notes: TU = trade union. EO = employer organisation. Information was not available for all employer organisations.

Source: Network of Eurofound Correspondents, 2017–2018; reference year: 2016.

In each of the EU Member States, there is at least one trade union with members in the telecommunications sector and in all Member States but Cyprus, at least one trade union with members in the ICT sector. For the employer organisations, there is at least one organisation with member companies in the ICT sector in all Member States apart from Croatia and Latvia, while no employer organisations with telecommunications companies as members could be identified in Croatia, Cyprus, Czechia, Hungary, Latvia, Luxembourg, Poland, Romania, Spain and the UK.

Summing the 74 trade unions that cover the entire ICT-telecommunications sector with the 25 trade unions that only cover the telecommunications sector, there is a total of 99 trade unions with members in the telecommunications sector. For the ICT sector, there are 93 trade unions with ICT employees in their membership.

## Sector coverage, sector relatedness and organisational density of trade unions

In ICT and telecommunications together, there are 118 trade unions, of which 99 are in the telecommunications sector, 93 are in the ICT sector and 74 cover both ICT and telecommunications. Not all 93 ICT sector-related trade unions cover all three ICT activities. Figure 4 shows that 91 trade unions have members in computer programming activities, 85 have members in data processing and data hosting and 68 have members employed in software publishing.

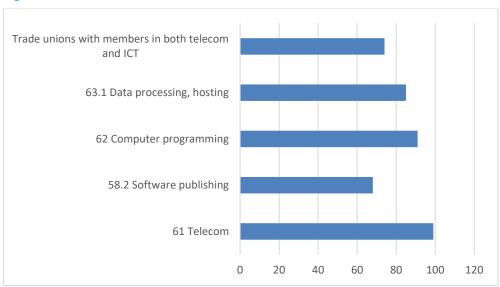


Figure 4: Number of trade unions with members in different sectoral activities

If trade unions cover the whole sector and nothing beyond, it means that the union is **congruent** with the sector. If the trade union covers only a part (section) of the sector and nothing beyond, we call it **sectional**. If the union covers the entire sector and beyond, we call it **overlap**. Finally, if the union covers a part (section) of the sector and beyond, we call it **sectional overlap**. Eurofound's model of sector relatedness or domain coverage with the four patterns, as described above, is explained in the first chapter under 'Definitions and methodology'. However, it is important to note that membership domain with regard to the sector matters not only in terms of business activities, but also in terms of geographical coverage and type of employee.<sup>9</sup>

Table 15: Domain coverage of trade unions in the ICT-telecommunications sector

Trade union domain coverage	ICT-telecommunications
Congruent	1
Overlap	19
Sectional	17
Sectional overlap	81
Total	118

Source: Network of Eurofound Correspondents, 2017–2018.

Information about domain coverage is available for all 118 trade unions (Table 15). Twenty trade unions from 13 different countries cover the entire sector. Of those 20, there is one union that has a membership domain congruent with the ICT-telecommunications sector: HST in Croatia. The other 19 unions have overlapping membership domains in that they cover the entire sector and beyond. These are in Estonia (ESTAL), France (CFDT F3C and UNSA Telecommunications), Germany (ver.di), Italy (SLC-CGIL), Latvia (LSAB), Luxembourg (OGBL SeE and LCGB CeS), Malta (GWU), the Netherlands (FNV), Poland (ZZ Kontra and NSZZ 'Solidarność' 80), Portugal (Sinttav and Sindetelco), Slovenia (SDPZ) and four unions in Spain: FeSMC UGT, USO Services, CGT and STC (Table 16).

Other than the above-mentioned unions that cover the entire sector in 13 different countries, 17 unions only cover a part of the sector in 9 countries. This sectional domain may comprise categories of members with a certain occupation or groups with a special status, like the Finnish Association of IT Sector Employees or the Danish PROSA — Union of IT Professionals. The majority of the five unions in Cyprus, for instance, represent only a part of the workforce in the sector. For example, three are only active in the Cyprus Telecommunications Authority (CYTA): one represents the scientific employees from CYTA (SEP-CYTA), another is an 'independent' trade union of CYTA (ASET-CYTA) and a third is called the Free Pancyprian Organisation of Employees in Telecommunications (EPOET-OHO-SEK). Much like CYTA in Cyprus, most unions with a sectional membership domain pattern are company unions which are active in the large, previously state-owned telecommunications companies covering telecommunications and often also ICT activities. Similarly, the six trade unions in Poland are mainly involved in the telecommunications company Orange Polska. These large telecommunications

<sup>&</sup>lt;sup>9</sup> For instance, when a trade union's domain covers the entire sector in terms of business activities but represents only a particular occupational group, its domain is sectional rather than congruent with regard to the sector.

companies usually have a large share of the employment in the sector, representing 33–50% of the telecommunications workforce.

If trade unions with a sectional membership domain pattern also represent members from outside the ICT-telecommunications sector, we call this sectional overlap. The vast majority of the trade unions, 81 (69%), have this domain pattern. All Austrian unions (representing blue- and white-collar workers), Belgian, Bulgarian, Irish, Swedish and UK trade unions and most of the Danish, Finnish, French, Italian and Portuguese trade unions cover at least a part of the ICT-telecommunications sector as well as parts of other sectors.

When the ICT-telecommunications sector in a certain country is only covered by unions with a sectional membership domain pattern based on a specific occupation, territory or category according to company size, there is a risk that parts of the sector have no trade union representation at all. In this regard, we should remember the large number of micro (<10 employees) and small companies in the ICT sector with low collective bargaining coverage overall. Here, the unions are most frequently engaged in the subsectors classified by NACE 62 (computer programming), NACE 63.1 (data processing, hosting, web portals) and NACE 58.2 (software publishing). For example, all six unions in Poland are involved in the subsectors classified by NACE 62 and 63.1, but only three are involved in the subsector classified by NACE 58.2.

Table 16 displays information about trade union membership and its relation to and coverage of the ICT-telecommunications sector. The table contains the numbers of total and sectoral union members and indicates the extent of presence in the ICT-telecommunications subsectors, distinguishing full presence (green) from full absence (red) and partial presence (yellow). The trade unions with the largest membership base overall are the two German unions IG Metall (2.27 million members) and ver.di (2.01 million members), followed by the Swedish Unionen (538,000 members). Unionen represents white-collar workers in the ICT-telecommunications sector.

Table 16: Trade union membership, domain coverage and NACE code coverage

Mem ber State	Trade union ICT-telecoms	Total members (number)	Sectoral members (number)	Domain coverage	Collective bargaining:SE B, MEB or both	NACE 61	NACE 58.2	NACE 62	NAC E 63.1
AT	GPA-djp	280,000	3,500	SO	MEB	Partly	Yes	Yes	Y es
	GPF	45,000	n.a.	SO	Both	Partly	Partly	Partly	Partl y
BE	LBC-NVK	320,000	n.a.	SO	Both	Partly	Yes	Yes	Yes
	CNE	165,000	n.a.	SO	Both	Partly	Yes	Yes	Yes
	BBTK-SETCA	425,000	n.a.	SO	Both	Partly	Yes	Yes	Yes
	ACLVB-CGSLB	295,000	n.a.	SO	Both	Partly	Yes	Yes	Yes
	ACV Transcom	90,000	n.a.	SO	SEB	Partly	No	Partly	Partl Y
	ACOD-CGSP	311,795	n.a.	SO	SEB	Partly	No	Partly	Partl y
	VSOA-SLFP	311,795	n.a.	SO	SEB	Partly	No	Partly	Partl y

Mem ber State	Trade union ICT-telecoms	Total members (number)	Sectoral members (number)	Domain coverage	Collective bargaining:SE B, MEB or both	NACE 61	NACE 58.2	NACE 62	NAC E 63.1
BG	TUFC	n.a.	410	SO	SEB	Partly	No	Partly	No
	SFOEMI	2,000	500	SO	SEB	No	No	Partly	Partl y
	FC CL Podkrepa	2,600	250	SO	SEB	Yes	No	No	No
СУ	EPOET	1,337	1,337	S	SEB	Yes	No	No	No
	SIDIKEK	3,400	407	SO	SEB	Partly	No	No	No
	PASE-ATHK	650	650	S	SEB	Partly	No	No	No
	ASET-CYTA	400	400	S	SEB	Partly	No	No	No
	SEP-CYTA	60	60	S	SEB	Partly	No	No	No
CZ	OS ZPTNS	12,013	n.a.	SO	SEB	Yes	Partly	Partly	Partl y
	OS PPP	8,385	380	SO	Both	No	No	Partly	Partl y
DE	ver.di	2,011,950	n.a.	0	Both	Yes	Yes	Yes	Yes
	IG Metall	2,274,033	n.a.	SO	Both	Partly	Partly	Partly	Partl y
	DPVKOM	37,400	n.a.	SO	MEB	Partly	Partly	Partly	Partl y
	CGPT	5,500	n.a.	SO	Yes	Yes	No	No	No
DK	Dansk Metal	75,426	4,000	SO	MEB	Yes	No	No	No
	HK/Samdata	187,027	n.a.	SO	MEB	No	Yes	Yes	Yes
	PROSA	9,608	9,608	S	Both	No	Yes	Yes	Yes
	Finansforbund et	39,711	n.a.	SO	MEB	No	No	Yes	Partl y
	TL	23,587	407	SO	MEB	Partly	Yes	Partly	Yes
	Dansk El- Forbund	22,328	500	SO	MEB	Yes	No	Yes	No
	IDA	64,022	n.a.	SO	No	Yes	Yes	Yes	Yes
	DJØF	54,550	578	SO	No	Yes	No	No	No
	DM	31,263	1,011	SO	No	No	Yes	Partly	Yes
EE	ESTAL	1,024	81	0	SEB	Yes	Yes	Yes	Yes
EL	OME OTE	8,000	8,000	S	SEB	Yes	No	No	No
	Unicosmo	1,700	1,700	S	SEB	Yes	No	No	No
	OIYE	55,000	n.a.	SO	No	Partly	Partly	Partly	Partl y
	PaseVodafone	n.a.	n.a.	S	SEB	Yes	No	No	No
ES	CCOO Servicios	9,000	5,500	SO	Both	No	Yes	Yes	Yes
	FSC-CCOO	n.a.	12,000	SO	SEB	Yes	No	No	No
	FeSMC UGT	n.a.	n.a.	0	SEB	Yes	Yes	Yes	Yes
	USO Services	n.a.	n.a.	0	SEB	Yes	Yes	Yes	Yes
	CGT	n.a.	n.a.	0	SEB	Yes	Yes	Yes	Yes

Mem ber State	Trade union ICT-telecoms	Total members (number)	Sectoral members (number)	Domain coverage	Collective bargaining:SE B, MEB or both	NACE 61	NACE 58.2	NACE 62	NAC E 63.1
	STC	n.a.	n.a.	0	SEB	Yes	Yes	Yes	Yes
	ELA STV	39,260	n.a.	SO	n.a.	Yes	Yes	Yes	Yes
FI	FEWU	19,300	200–300	SO	MEB	Partly	No	No	No
	FIU	90,000	1,800	SO	MEB	Partly	No	No	No
	Pro	100,000	7,000	SO	MEB	Yes	Partly	Partly	Partl y
	YTN	170,000	15,000	SO	MEB	Yes	Partly	Yes	Yes
	AITSE	7,000	7,000	S	MEB	Partly	Partly	Yes	Yes
FR	CFE-CGC-Fieci	n.a.	n.a.	SO	MEB	No	Yes	Yes	n.a.
	CFDT F3C	50,000	18,000	0	Both	Yes	Yes	Yes	Yes
	FSE-CGT	n.a.	5,000	SO	Both	No	n.a.	Yes	n.a.
	CFTC CSFV	n.a.	3,700	SO	Both	No	Yes	Yes	Yes
	FEC-FO	40,000	2,800	SO	Both	No	Yes	Yes	Yes
	FO-COM	55,000	30,000	SO	Both	Yes	No	No	No
	FPT-CFTC	n.a.	4,600	SO	Both	Yes	No	No	No
	FAPT-CGT	n.a.	3,800	SO	Both	Yes	No	No	No
	FCCS-CFE-CGC	n.a.	5,400	SO	Both	Yes	No	No	No
	SUD PTT	n.a.	<1,000	SO	SEB	Yes	No	No	No
	UNSA Telecommuni cations	<1,500	>1,000	0	SEB	Yes	Yes	Yes	Yes
HR	HST	3,000	3,000	С	SEB		Yes	Yes	Yes
	RSRH	6,500	500	SO	SEB		No	No	No
HU	HMTSZSZ	7,362	7,362	S	SEB	Yes	Partly	Partly	Partl y
	TAVSZAK	2,500	2,500	S	SEB	Yes	No	No	No
IE	CWU	14,000	3,500	SO	SEB	Yes	No	No	No
	Forsa	80,000	150	SO	SEB	Yes	No	Yes	Yes
IT	SLC-CGIL	94,997	n.a.	0	Both	Yes	Yes	Yes	Yes
	FISTEL-CISL	48,004	n.a.	SO	Both	Yes	No	Yes	Partl y
	Uilcom-UIL	40,116	n.a.	SO	Both	Yes	No	Yes	Partl y
	FIOM-CGIL	327,570	n.a.	SO	Both	No	No	Yes	Partl y
	FIM-CISL	220,786	10,100	SO	Both	No	No	Yes	Partl y
	UILM-UIL	91,939	n.a.	SO	Both	No	No	Yes	Partl y
	Filcams-CGIL	482,302	n.a.	SO	Both	No	Yes	Yes	No
	Fisascat-CISL	351,346	1,615	SO	Both	No	Yes	Yes	No
	Uiltucs-UIL	125,825	47,814	SO	Both	No	Yes	Yes	No

Mem ber State	Trade union ICT-telecoms	Total members (number)	Sectoral members (number)	Domain coverage	Collective bargaining:SE B, MEB or both	NACE 61	NACE 58.2	NACE 62	NAC E 63.1
LT	LRDPS	1,800	630	SO	SEB	Partly	No	Partly	Partl y
LU	OGBL SeE	72,000	n.a.	0	SEB	Yes	Yes	Yes	Yes
	LCGB CeS	42,153	n.a.	0	SEB	Yes	Yes	Yes	Yes
	ALEBA	10,000	n.a.	SO	SEB	Partly	Partly	Partly	Partl y
	Syndicat des P&T	2,000	1,500	SO	SEB	Yes	No	No	No
LV	LSAB	3,098	1,200	0	SEB	Yes	Yes	Yes	Yes
MT	GWU	41,921	n.a.	0	SEB	Yes	Yes	Yes	Yes
NL	CNV Connectief	175,000	911	SO	Both	Yes	No	Partly	Partl y
	CNV Vakmensen	160,000	3,000	SO	Both	Yes	Yes	Yes	Yes
	FNV	1,100,000	10,220	0	Both	Yes	Yes	Yes	Yes
	VHP2	n.a.	n.a.	SO	SEB	Partly	Partly	Partly	Partl y
PL	SL NSZZ Solidarność	15,600	2,600	SO	SEB	Yes	No	Yes	Yes
	FZZPT	2,800	2,800	S	SEB	Yes	No	Yes	Yes
	ZZIT	10,500	190	SO	SEB	Yes	Yes	Yes	Yes
	KZZPT	100	100	SO	SEB	Yes	No	Yes	Yes
	ZZ Kontra	40,000	50	0	SEB	Yes	Yes	Yes	Yes
	NSZZ Solidarność 80	60,000	570	0	SEB	Yes	Yes	Yes	Yes
PT	Sinttav	6,040	<6,000	0	SEB	Yes	Yes	Yes	Yes
	STPT	2,000	2,000	SO	SEB	Partly	Partly	Partly	Partl y
	Sindetelco	<6,000	<2,400	0	SEB	Yes	Yes	Yes	Yes
	SNTCT	7,226	<1,000	SO	SEB	Yes	No	Partly	Partl y
	SITESE	n.a.	n.a.	SO	SEB	Yes	Yes	Yes	Yes
RO	ANTIC	5,800	3,000	SO	SEB	Yes	Partly	Yes	Partl y
	FSTc	5,000	5,000	S	SEB	Yes	No	Yes	Yes
	SITT	n.a.	n.a.	S	SEB	No	Yes	Yes	Yes
	SL-TC	1,400	1,400	SO	SEB	Yes	No	Yes	No
SE	Unionen	550,000	50,000	SO	Both	Yes	Yes	Yes	Yes
	Sveriges Ingenjörer	145,500	6,500	SO	Both	Yes	Yes	Yes	Yes
	Civilekonomer na	44,000	900	SO	Both	Yes	Yes	Yes	Yes
	Jusek	63,000	n.a.	SO	Both	Yes	Yes	Yes	Yes
	Ledarna	91,451	550	SO	Both	Yes	Yes	Yes	Yes

Mem ber State	Trade union ICT-telecoms	Total members (number)	Sectoral members (number)	Domain coverage	Collective bargaining:SE B, MEB or both	NACE 61	NACE 58.2	NACE 62	NAC E 63.1
	SEKO	76,868	5,551	SO	Both	Partly	No	No	No
SI	SDPZ-Telekom	15	15	S	SEB	Yes	Yes	Partly	Yes
	SDPZ	12,000	1,000	0	SEB	Yes	Yes	Yes	Yes
	SELEKS	1,140	950	SO	SEB	Yes	Yes	Partly	Yes
	SINEKS	900	900	S	SEB	Yes	Yes	Partly	Yes
SK	OZ T	400	400	S	SEB	Yes	Yes	Yes	Yes
	SOZ PT	800	430	SO	SEB	Yes	Yes	Yes	Yes
UK	USDAW	435,000	n.a.	SO	SEB	Partly	No	No	Partl Y
	Prospect	120,000	40,000	SO	SEB	Yes	Yes	Yes	Yes
	Unite the Union	1,282,671	n.a.	SO	SEB	Yes	Partly	Partly	Partl Y
	CWU	192,210	n.a.	SO	SEB	Partly	No	No	Partl Y
	PCS	185,000	n.a.	SO	SEB	No	Partly	Partly	Partl Y

Notes: C = congruent. O = overlap. S = sectional. SO = sectional overlap. SEB = single-employer bargaining. MEB = multi-employer bargaining. NACE 61 Telecommunications. NACE 58.2 Software publishing. NACE 62 Computer programming, consultancy-related activities. NACE 63.1 Data processing, hosting. n.a. = not available. The UK trade union GMB (General Municipal Boilermakers) was initially included in the analyses as it is affiliated to UNI Europa, but this trade union informed us that it does not have any members in the ICT-telecommunications sector; therefore, it cannot be considered a sector-related organisation.

Source: Network of Eurofound Correspondents, 2017–2018.

In this paragraph, the membership strength (organisational density) of trade unions in the ICTtelecommunications sector is assessed. Table 17 presents information on aggregated trade union strength per country, as far as this information has been provided by the Network of Eurofound Correspondents. Membership strength data are available for 74 out of 118 organisations. Also included in Table 17 is sectoral aggregated membership strength per country, given that membership data have been given for all sector-related trade unions of a country. However, this is the case only for some of the Member States. The incompleteness of the available data means that it is difficult to compare the relative membership strength of each individual trade union. The next section, therefore, considers the relevance of each trade union in the sector depending on its involvement in sector-related collective bargaining. Overall, despite the incompleteness of the data, Table 17 illustrates considerable variation in sectoral density rates; it can be observed that, with a few exceptions, unionisation tends to be low in the sector. Low densities are mainly attributable to the 'new' ICT sector, where many employees are still reluctant to join a union, whereas densities in the telecommunications sector, that is still dominated by the former monopoly providers and incumbents in many countries, tend to be higher. Moreover, it should be borne in mind that for several countries, the data for all or at least some of the largest unions in the sector are missing.

Table 17: Trade union density, share of sector workforce membership

Member	Total employees in	Trade union men	Share of trade union	
State	the sector (number)	Number of trade unions with data available	Number of trade union members in the sector	members in the ICT- telecoms workforce (%)
AT	70,004	1 of 2	3,500	>5
BE	79,047	0 of 7	n.a.	n.a.
BG	64,960	3 of 3	1,160	3.6
CY	6,887	5 of 5	2,854	41.4
CZ	88,800	1 of 2	380	>0.4
DE	760,784	0 of 4	n.a.	n.a.
DK	66,403	6 of 9	16,104	>24.3
EE	14,841	1 of 1	81	0.5
ES	402,600	2 of 7	17,500	>4.3
FI	111,000	5 of 5	34,100	(30.7)
FR	608,783	10 of 11	75,300	>12.4
GR	48,863	2 of 4	9,700	>19.9
HR	21,389	2 of 2	3,500	16.4
HU	68,801	2 of 2	9,862	14.3
IE	n.a.	2 of 2	3,650	n.a.
IT	379,849	3 of 9	59,529	>15.7
LT	23,374	1 of 1	630	2.6
LU	16,309	1 of 4	800	>4.9
LV	22,558	1 of 1	1,200	5.3
MT	5,628	1 of 1	n.a.	n.a.
NL	218,000	3 of 4	14,831	7
PL	187,348	6 of 6	6,310	3.4
PT	54,421	4 of 5	<11,400	>20.9
RO	139,650	3 of 4	9,400	>6.7
SE	159,347	5 of 6	63,501	+/-40
SI	16,486	4 of 4	2,865	17.4
SK	46,600	2 of 2	830	1.8
UK	n.a.	2 of 5	40,000	n.a.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

# Trade union involvement in collective bargaining

The previous section considered the domain coverage and membership strength of trade unions. In this section their involvement in collective bargaining is analysed. Single-employer bargaining (SEB) and multi-employer bargaining (MEB) are distinguished. SEB denotes the negotiations of a collective labour agreement between the trade unions on the one hand and the employer on the other hand, covering only the workforce at that employer. MEB covers all member companies of the employer

organisation which is party to the collective agreement and their respective workforces covered by such an agreement. MEB can be conducted at different levels: national level (cross-sectoral), intersectoral, sectoral or branch level, regional or local level or even at occupational level. Single-employer agreements can be concluded at the group level, company level or plant level.

In four of the top five countries in terms of sectoral workforce and in terms of revenues, MEB plays an important role: France, Germany, Italy and Spain. However, although MEB is nationwide – the most common pattern in Spain and its ICT-telecommunications sector, as in Germany – a significant part of bargaining is carried out at company level. This is because large (multinational) companies are prevalent in the sector and prefer company collective agreements. Because of the large size of these companies, their SEB might cover more employees in the sector than the MEB of the remaining other smaller companies. The UK, ranking highest in the top five, is the exception insofar as no sector-related employer organisation involved in collective bargaining exists. The UK records only business associations, like UKITA for SMEs.

Table 18 shows that most trade unions (99 of 118) are involved in SEB, either as the exclusive form of bargaining (63 trade unions) or in tandem with MEB (36). There are 49 trade unions involved in MEB (13 involved exclusively in MEB and 36 that combine MEB with SEB). The predominance of single-employer arrangements results from the particular business structure in the sector, with a few big players in either sector relying on company-level bargaining to achieve tailor-made settlements fitting the particular requirements of the company. Hence, it is a salient feature of the sector that bargaining practices in telecommunications and ICT do not necessarily follow general industrial relations practice in the Member States but are path-dependent according to the specific circumstances of the sector (e.g. existence of incumbents, predominance of former monopoly providers, sector-specific legal framework with regard to industrial relations, etc.).

Table 18: Involvement of trade unions in collective bargaining

	Trac	de unions		
No collective bargaining involvement	4	1 (3%)		
	in 2 Me	ember States		
SEB	63	112 (93%) in	99 trade unions in	
Both SEB and MEB	36	28 Member States	SEB	49 trade
MEB	13			unions in MEB
Number of organisations for which no collective bargaining information is available		2		L
Total number of trade union organisations		118		

Notes: MEB = multi-employer collective bargaining; SEB = single employer collective bargaining. Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

In two countries, a total of four trade unions do not conduct collective bargaining, for various reasons. For example, according to the tradition in Denmark, unions of professionals like IDA, DJØF and DM do not engage in collective bargaining because employment conditions for professionals are usually governed by individual employment contracts.

On the other hand, two of the top five countries by sectoral workforce, France and Italy, maintain a substantial collective bargaining structure based on MEB at national or sector level. The case of Italy shows that the structure in the ICT-telecommunications sector is based on three different areas of collective bargaining; namely, the metalworking, communication and advanced tertiary areas around telecommunications. The metalworking sector includes companies such as IBM, Oracle and Xerox, which produce hardware and software and deliver IT and cloud computing services. The National Collective Bargaining Agreements (NCBA) of the communication and advanced tertiary sector cover about 25,000 employees working for software producers and publishers and providers of IT consultancy services. In the telecommunications sector, three NCBAs are negotiated by the trade unions, each one for three different employer groups. Finally, company-level agreements are generally negotiated in larger companies in Italy.

Table 19 gives an overview of the collective bargaining involvement form and coverage for each of the 118 trade unions. For the four trade unions that are not involved in collective bargaining, this is marked in red in Table 19. For two trade unions, there is no information available regarding its involvement in collective bargaining (marked in blue).

Table 19: Collective bargaining involvement of the 118 sector-related trade unions

Member State	ICT-Telecoms trade union	Collective bargaining in the sector	Form: SEB, MEB or both	Collective bargaining coverage (%)	Number of workers covered by collective bargaining	Scope: ICT, telecoms or both
AT	GPA-djp	Yes	MEB	100	<60,000	ICT
	GPF	Yes	Both	-	<5,000	Both
BE	LBC-NVK	Yes	Both	100	62,971	Both
	CNE	Yes	Both	-	62,971	Both
	BBTK-SETCA	Yes	Both	-	62,971	Both
	ACLVB-CGSLB	Yes	Both	•	62,971	Both
	ACV Transcom	Yes	SEB	•	12,076	Both
	ACOD-CGSP	Yes	SEB	•	12,076	Both
	VSOA-SLFP	Yes	SEB	•	12,076	Both
BG	TUFC	Yes	SEB	n.a.	870	Both
	SFOEMI	Yes	SEB	•	1,000	ICT
	FC CL Podkrepa	Yes	SEB		870	Telecommui cations
CY	EPOET	Yes	SEB	31	2,219	Telecommu cations
	SIDIKEK	Yes	SEB		2,219	Telecommu cations
	PASE-ATHK	Yes	SEB		2,219	Telecommu cations
	ASET-CYTA	Yes	SEB		2,219	Telecommu cations
	SEP-CYTA	Yes	SEB		1,631	Telecommu cations
CZ	OS ZPTNS	Yes	SEB	14	12,000	Both
	OS PPP	Yes	Both	•	3,000	ICT
DE	ver.di	Yes	Both	n.a.	n.a.	Both
	IG Metall	Yes	Both	-	n.a.	Both
	DPVKOM	Yes	MEB	•	n.a.	Both
	CGPT	Yes	(n.a.)		n.a.	Telecommu cations
DK	Dansk Metal	Yes	MEB	n.a.	7,500	Telecommu cations
	HK/Samdata	Yes	MEB	-	n.a.	ICT
	PROSA	Yes	both	1	n.a.	ICT
	Finansforbundet	Yes	MEB	1	n.a.	ICT
	TL	Yes	MEB	1	n.a.	Both
	Dansk El-Forbund	Yes	MEB	1	300	Both
	IDA	No	No	1	0	Both
	DJØF	No	No		0	Telecommu cations
	DM	No	No	-	0	ICT

EE	ESTAL	Yes	SEB	12	1,886	Both
EL	OME OTE	Yes	SEB	n.a.	8,500	Telecommuni cations
	Unicosmo	Yes	SEB		2,000	Telecommuni cations
	OIYE	No	No	1	0	Both
	PaseVodafone	Yes	SEB		n.a.	Telecommuni cations
ES	CCOO Servicios	Yes	Both	n.a.	270,000	ICT
	FSC-CCOO	Yes	SEB		50,000	Telecommuni cations
	FeSMC UGT	Yes	SEB	1	n.a.	Both
	USO Services	Yes	SEB		n.a.	Both
	CGT	Yes	SEB	7	n.a.	Both
	STC	Yes	SEB	7	n.a.	Both
	ELA STV	n.a.	n.a.	1	n.a.	Both
FI	FEWU	Yes	MEB	Almost 100*	2,000	Telecommuni cations
	FIU	Yes	MEB		n.a.	Telecommuni cations
	Pro	Yes	MEB	1	14,000	Both
	YTN	Yes	MEB	-	46,000	Both
	AITSE	Yes	MEB		42,000	Both
FR	CFE-CGC-Fieci	Yes	MEB	100	17,934	ICT
	CFDT F3C	Yes	Both		>600,000	Both
	FSE-CGT	Yes	Both	7	500,000	ICT
	CFTC CSFV	Yes	Both	-	500,000	ICT
	FEC-FO	Yes	Both	7	500,000	ICT
	FO-COM	Yes	Both		160,000	Telecommuni cations
	FPT-CFTC	Yes	Both		160,000	Telecommuni cations
	FAPT-CGT	Yes	Both		160,000	Telecommuni cations
	FCCS-CFE-CGC	Yes	Both		160,000	Telecommuni cations
	SUD PTT	Yes	SEB		n.a.	Telecommuni cations
	UNSA Telecommunications	Yes	SEB		n.a.	Both
HR	HST	Yes	SEB	30	4,200	Both
	RSRH	Yes	SEB		n.a.	Telecommuni cations
HU	HMTSZSZ	Yes	SEB	>10	6,000	Both
	TAVSZAK	Yes	SEB		2,500	Telecommuni cations

IE	CWU	Yes	SEB	<10	3,500	Telecommuni cations
	Forsa	Yes	SEB		150	Both
IT	SLC-CGIL	Yes	Both	100	n.a.	Both
	FISTEL-CISL	Yes	Both		n.a.	Both
	Uilcom-UIL	Yes	Both		n.a.	Both
	FIOM-CGIL	Yes	Both		n.a.	ICT
	FIM-CISL	Yes	Both	=	105,000	ICT
	UILM-UIL	Yes	Both	=	n.a.	ICT
	Filcams-CGIL	Yes	Both	=	25,000	ICT
	Fisascat-CISL	Yes	Both		25,000	ICT
	Uiltucs-UIL	Yes	Both		25,000	ICT
LT	LRDPS	Yes	SEB	11	2,500	Both
LU	OGBL SeE	Yes	SEB	30	350	Both
	LCGB CeS	Yes	SEB		360	Both
	ALEBA	Yes	SEB		360	Both
	Syndicat des P&T	Yes	SEB		4,302	Telecommuni cations
LV	LSAB	Yes	SEB	25	5,000	Both
MT	GWU	Yes	SEB	12	700	Both
NL	CNV Connectief	Yes	Both	<19	15,400	Both
	CNV Vakmensen	Yes	Both		<37,000	Both
	FNV	Yes	Both		25,000– 40,000	Both
	VHP2	Yes	SEB		12,000	Both
PL	SL NSZZ Solidarność	Yes	SEB	8	15,500	Both
	FZZPT	Yes	SEB		15,500	Both
	ZZIT	Yes	SEB		15,131	Both
	KZZPT	Yes	SEB		15,131	Both
	ZZ Kontra	Yes	SEB		15,131	Both
	NSZZ Solidarność 80	Yes	SEB		15,131	Both
PT	Sinttav	Yes	SEB	12	9,515	Both
	STPT	Yes	SEB		9,515	Both
	Sindetelco	Yes	SEB		9,515	Both
	SNTCT	Yes	SEB		9,515	Both
	SITESE	Yes	SEB		9,515	Both
RO	ANTIC	Yes	SEB	n.a.	650	Both
	FSTc	Yes	SEB		5,000	Both
	SITT	Yes	SEB		1,900	ICT
	SL-TC	Yes	SEB	1	650	Both
SE	Unionen	Yes	Both	70	30,000	Both
	Sveriges Ingenjörer	Yes	Both		6,500	Both
	Civilekonomerna	Yes	Both		>900	Both

	Jusek	Yes	Both		n.a.	Both
	Ledarna	Yes	Both		500	Both
	SEKO	Yes	Both		4,500	Telecommuni cations
SI	SDPZ-Telekom	Yes	SEB	15	2,403	Both
	SDPZ	n.a.	(SEB)		2,403	Both
	SELEKS	Yes	SEB		2,403	Both
	SINEKS	Yes	SEB	-	2,403	Both
SK	OZ T	Yes	SEB	<7	2,800	Both
	SOZ PT	Yes	SEB	=	2,800	Both
UK	USDAW	Yes	SEB	n.a.	10,000	Both
	Prospect	Yes	SEB	-	20,000	Both
	Unite the Union	Yes	SEB	-	n.a.	Both
	CWU	Yes	SEB		n.a.	Both
	PCS	Yes	SEB		n.a.	ICT

Notes: MEB = multi-employer collective bargaining; SEB = single employer collective bargaining.

Source: Network of Eurofound Correspondents, 2017–2018.

Broadly, the coverage of collective bargaining is low, particularly in ICT. It is higher in the telecommunications sector mainly because of the collective agreements concluded in the large telecommunications companies which were previously state-owned. The telecommunications sector is smaller than the ICT sector. The large telecommunications companies have a large share of the overall employment of the sector and are usually covered by a company agreement. This is why the collective bargaining coverage in the telecommunications sector tends to be relatively high, compared to the ICT sector. However, this illustrates the high concentration of businesses in the telecommunications sector. Factors that may contribute to low collective bargaining coverage rates in ICT include the relatively young age of the ICT sector (there is no tradition of industrial relations in this segment of the economy in many countries) and the reluctance of, in particular, IT professionals to join trade unions. On the other hand, a lack of employer organisations is the main obstacle to establishing wide-ranging industrial relations systems in many countries. In several central and eastern European countries, such as Bulgaria and Hungary, the largest ICT and telecommunications companies (often foreign-owned multinationals) usually prefer company-level employment regulations to sector-level agreements.

# Domain coverage of employer organisations

This study has identified 62 employer organisations and business associations.<sup>10</sup> In each EU Member State except Croatia and Latvia, there is at least one employer organisation with members in either the telecommunications or the ICT sector. For the ICT sector, apart from Croatia and Latvia, there is at

<sup>&</sup>lt;sup>10</sup> Employer organisations are normally involved in social dialogue or collective bargaining, and have the mandate to represent their members for this purpose. Some of these organisations are not involved in social dialogue or collective bargaining, and they do not have any activities or mandate to represent their member companies in matters that relate to working conditions, in which case they are classified as business associations. In this report, both types of organisation will be distinguished by their involvement in collective bargaining. For now, in this section, business associations will be considered as employer organisations.

least one employer organisation in each Member State. For the telecommunications sector, seven Member States (Cyprus, Czechia, Hungary, Luxembourg, Poland, Romania and the UK<sup>11</sup>) do not have an employer organisation for the sector.

As Table 14 shows, the membership domains of 26 of the 62 employer organisations represent both telecommunications and ICT interests. One additional employer organisation, FTR in Austria, only covers telecommunications. Together with the 26 that cover both ICT and telecommunications, this results in 27 organisations in total involved in the telecommunications sector. Figure 5 shows that there are 27 employer organisations (44%) with member companies in the telecommunications sector. The three bars in the middle of the figure represent the number of employer organisations with members in each of the three ICT activities. Altogether, there are at least 55 employer organisations (89%) of the 62 ICT-telecommunications sector-related employer organisations that have member companies in the ICT sector (5 organisations provided no detailed information on their sector relatedness). Not all these 55 organisations cover all three ICT activities. We can see in Figure 5 that 52 organisations have member companies active in computer programming (NACE 62) and data processing and hosting (NACE 63.1) and 44 in software publishing (NACE 58.2). Of the 55 ICT sector-related employer organisations, there are 29 that only cover ICT activities, while 26 cover both ICT and telecommunications activities via their membership domain.

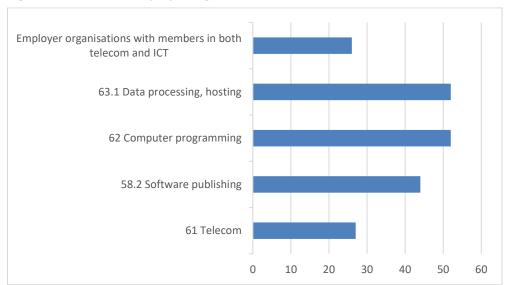


Figure 5: Number of employer organisations with members in the different sectoral activities

Most of the employer organisations and business associations cover the ICT subsectors classified by NACE 62 and 63.1, with the smallest number representing the telecommunications sector (NACE 61). Table 20 gives an overview of the NACE coverage of each employer organisation and business association for which relevant data are available.

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<sup>&</sup>lt;sup>11</sup> For one of the UK employer organisations, TECH UK, no information regarding their domain coverage was available but, based on their website, we assume that their membership domain only (or mainly) covers the ICT sector.

Table 20: Employer organisation and business association membership and domain coverage

Member State	Employer organisations and business associations	Member companies in sector (number)	Workforce member companies (number)	Domain coverage	NACE 61	NACE 58.2	NACE 62	NACE 63.1
AT	FTR	500	15,000	SO	Yes	No	No	No
	UBIT	26,000	60,000	SO	No	Yes	Yes	Yes
	100	n.a.	n.a.	n.a.	Yes	Yes	Yes	Yes
BE	Agoria	546	n.a.	0	Yes	Yes	Yes	Yes
	VBO-FEB	546	n.a.	0	Yes	Yes	Yes	Yes
BG	Basscom	n.a.	n.a.	SO	No	No	Yes	Partly
	ICT Cluster Plovdiv	20	1,000	SO	Partly	Partly	Yes	Partly
	BCT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	BAIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
СҮ	CITEA	57	n.a.	SO	No	Yes	Yes	Yes
CZ	SBP	n.a.	n.a.	SO	No	No	Partly	Partly
DE	Agv:c	28	76,500	С	Yes	Yes	Yes	Yes
	BITMi	n.a.	n.a.	S	No	Yes	Yes	Yes
DK	DI	220	9,725	0	Yes	Yes	Yes	Yes
	Dansk Erhverv	11	7,595	0	Yes	Yes	Yes	Yes
	DI Digital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	IT Forum Midtjylland	470	20,000	S	No	Yes	Yes	Yes
EE	ITL	85	9,000	С	Yes	Yes	Yes	Yes
EL	Corallia	150	10,000	С	Yes	Yes	Yes	Yes
	HAMAC	80	4,000	S	No	Partly	Partly	Partly
	SEPE	200	n.a.	С	Yes	Yes	Yes	Yes
<b>ES</b> <sup>12</sup>	Conetic	12,000	55,000	SO	No	Yes	Yes	Yes
	AEC	24	n.a.	SO	No	No	Partly	No
	ACEC	28	n.a.	SO	No	No	Partly	No
	Ametic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FI	PALTA	n.a.	17,000	SO	Yes	Partly	Partly	Partly
	TIF	200	28,000	SO	No	No	Partly	Partly
FR <sup>13</sup>	Syntec	1,538	221,798	SO	No	Yes	Yes	Yes
	Unetel-RST	48	63,000	S	Yes	No	No	Partly
	GPNI or DIGITAL SME France <sup>14</sup>	n.a.	n.a.	SO	No	Yes	Yes	Yes
	CINOV	2,055	43,178	SO	No	Yes	Yes	Yes
	AFNUM	60	n.a.	SO	No	n.a.	n.a.	n.a.
	TECH in France	400	n.a.	S	No	Yes	Yes	Yes

<sup>&</sup>lt;sup>12</sup> In Spain, a new employer organisation was established in 2018: DigitalES. Telefonica, Vodafone and Orange are now affiliated to this organisation. For more information, see <a href="http://www.digitales.es">http://www.digitales.es</a>.

<sup>&</sup>lt;sup>13</sup> Information as of 2017–2018. In December 2018, French SME associations joined forces to launch DIGITAL SME France (DIGITAL SME France, 2018).

<sup>&</sup>lt;sup>14</sup> Since the creation of DIGITAL SME France, GPNI, AFNUM and TECH in France no longer exist.

HR	No employer organisations							
HU	IVSZ	500	n.a.	S	No	Yes	Yes	Yes
IE	Technology Ireland	222	50,000	SO	Partly	Partly	Partly	Partly
IT	Asstel	n.a.	n.a.	SO	Yes	No	Partly	Partly
	CIM	n.a.	n.a.	SO	No	No	Partly	Partly
	Union Meccanica	n.a.	n.a.	SO	No	No	Partly	Partly
	Federmeccanica	n.a.	n.a.	SO	No	No	Partly	Partly
	Confcommercio	n.a.	n.a.	SO	No	Yes	Yes	Yes
	Confesercenti	n.a.	n.a.	SO	No	Yes	Yes	Yes
	CNA CTA	n.a.	n.a.	SO	No	Yes	Yes	Yes
	Confartigianato	1,200	3,000	SO	Partly	Yes	Yes	Yes
	Unigec	n.a.	n.a.	SO	No	Partly	No	No
	Unimatica	n.a.	n.a.	S	Partly	Yes	Yes	Yes
	Clusit	270	n.a.	0	Yes	Yes	Yes	Yes
	Anitec-Assinform	n.a.	n.a.	0	Yes	Yes	Yes	Yes
LT	InfoBalt	n.a.	n.a.	0	Yes	Yes	Yes	Yes
LU	APSI	77	n.a.	S	No	Yes	Yes	Partly
LV	No employer organisations							
MT	MEA	40	n.a.	0	Yes	Yes	Yes	Yes
NL	WENB	2	4,365	SO	Yes	No	Partly	Yes
	W ICT	n.a.	n.a.	SO	Partly	Yes	Yes	Yes
PL	Zipsee	3	n.a.	SO	No	Yes	Yes	Partly
PT	AGEFE	n.a.	n.a.	SO	Partly	Partly	Partly	Partly
RO	ANIS	135	18,500	S	No	Yes	No	Partly
	Cluj IT	34	10,000	SO	No	Yes	Yes	Yes
	Iconic	22	3,400	SO	No	Yes	Yes	Yes
SE	IT&T	1,200	100,000	С	Yes	Yes	Yes	Yes
SI	GZS-ZIT	280	about 17,000	С	Yes	Yes	Yes	Yes
SK	ITAS	90	30,000	0	Yes	Yes	Yes	Yes
UK	UKITA	n.a.	n.a.	S	No	Yes	Yes	Yes
	TECH UK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: C = congruent; O = overlap; S = sectional; SO = sectional overlap; NACE 61 Telecommunications; NACE 58.2 Software publishing; NACE 62 Computer programming, consultancy-related activities; NACE 63.1 Data processing, hosting; n.a. = not available.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

The findings of the study indicate a considerable degree of fragmentation among employer organisations in the ICT-telecommunications sector, largely due to the fact that many organisations (31) represent either the telecommunications sector or, more often, (part of) the ICT sector only. Whereas only one employer organisation covers the telecommunications subsector only (Austrian FTR), the remaining 30 organisations have a domain covering (part of) the ICT sector without covering any part of telecommunications. In the ICT sector, four employer organisations cover one subsector only: Unetel-RST of France (NACE 63.1), the Italian Unigec (NACE 58) and the Spanish AEC and ACEC

(both NACE 62). The majority of the organisations that cover the ICT sector (42 organisations) represent employers from all three subsectors (irrespective of whether they cover all the subsectors).

When assessing the employer organisation membership domains with regard to the ICT-telecommunications sector, it becomes apparent that more than half of them (55%) have a sectional overlap membership domain with regard to the sector. This means that only part of the sector, mostly in terms of business activities, is covered, while business activities outside the ICT-telecommunications sector are also covered. This indicates that the membership domains of most employer organisations are confined to either telecommunications activities or (part of) ICT activities while at the same time including service and even manufacturing activities beyond the ICT-telecommunications sector. Those employer organisations representing telecommunications companies often also represent postal companies. Of the business associations, 18% have sectional membership domains (i.e. their memberships comprise specific subgroups of employers and businesses in the sector), 16% have overlapping membership domains and 11% have membership domains largely congruent with the sector. For six organisations, no information on their membership domain patterns in relation to the sector was available.

Compared to the trade union side, the employer organisation membership domains tend to be only slightly narrower than those of the trade unions. However, in both sides of the industry, sectional overlap clearly prevails (see Figure 6).

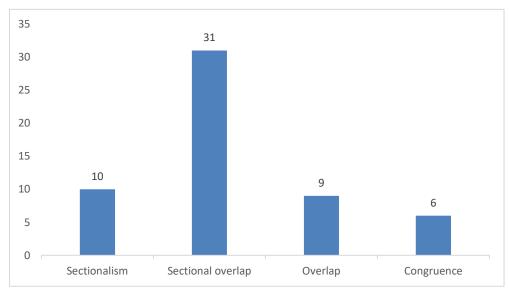


Figure 6: Domain coverage of employer organisations and business associations in the ICT-telecommunications sector (number)

Note: N = 56.

Source: Network of Eurofound Correspondents, 2017–2018.

Table 21 displays the membership domain patterns of employer organisations and business associations.

Table 21: Membership domain patterns of employer organisations and business associations

Member State	Congruent	Sectional	Overlap	Sectional overlap
AT				FTR, UBIT
BE			Agoria, VBO-FEB	
BG				Basscom, ICT Cluster Plovdiv
CY				CITEA
CZ				SBP
DE	Agv:c	BITMi		
DK		IT Forum Midtjylland	DI, Dansk Erhverv	
EE	ITL			
EL	Corallia, SEPE	HAMAC		
ES				Conetic, AEC, ACEC
FI				PALTA, TIF
FR		Unetel-RST, TECH in France		Syntec, GPNI, CINOV, AFNUM
HR				
HU		IVSZ		
IE				Technology Ireland
IT		Unimatica	Clusit, Anitec-Assinform	Asstel, CIM, Union Meccanica, Federmeccanica, ConfCommercio, Confesercenti, CNA CTA, Confartigianato, Unigec
LT			InfoBalt	
LU		APSI		
LV				
MT			MEA	
NL				WENB, W ICT
PL				Zipsee
PT				AGEFE
RO		ANIS		Cluj IT, Iconic
SE	ІТ&Т			
SI	GZS-ZIT			
SK			ITAS	
UK		UKITA		

Note: Number of employer organisations and business associations for which data are available = 56.

Source: Network of Eurofound Correspondents, 2017–2018.

There are two ways to assess the membership strength (organisational density) of employer organisations in the ICT-telecommunications sector: by looking at the share of *employers* in the sector represented by one or more sector-related employer organisations or the share of *employees* in the

sector working in companies organised by these employer organisations. The first of these means that each company is considered equally, while in reality some companies are far more important for the sector than others. Therefore, it is more meaningful to combine the company-based calculation with a workforce-based calculation of organisational strength. This is done by dividing the total workforce of all the affiliated companies by the total number of employees within the sector.

Table 22 shows aggregate sectoral membership strength per country, given that membership data has been provided for all sector-related employer organisations of a country or – as is the case for Austria, Denmark, France, Germany, Greece, the Netherlands and Spain – at least for the most important (largest) associations in the sector. In most countries for which data are available, density in terms of employees is significantly higher than that in terms of companies. This indicates a higher propensity of larger companies to associate, compared to their smaller counterparts.

In Austria, compulsory membership of part of the sector's businesses in tandem with a traditionally high willingness to associate means that density comes close to 100% in terms of both companies and employees. Also, Slovenia records a very high density of close to 100% in terms of employees, which may also be a legacy from the era when membership was compulsory in that country. Apart from these two countries, then, density rates in terms of employees tend to be moderate or low, with rates below 65% for all Member States with available data. Overall, these figures need to be assessed with caution due to a lack of data for many associations and the weak reliability of some figures. Moreover, the very low density rates in terms of companies in almost all countries may be attributed to the existence of a multitude of microbusinesses and self-employed in the ICT sector, which count as sectoral companies but which are rarely represented by employer organisations.

Table 22: Organisational density of employer organisations (by companies and employees) in ICT-telecommunications

Member State	Total sectoral employees (number)	Employees working in companies affiliated to employer organisations in the sector (number)	Density in terms of employees (%)	Total sectoral companies (number)	Companies affiliated to employer organisations in the sector (number)	Density in terms of companies (%)
AT	70,004	>70,000	100	14,763	n.a.	100
BE	79,047	n.a.	n.a.	32,851	546	<2
BG	64,960	n.a.	n.a.	7,213	n.a.	n.a.
CY	6,887	n.a.	n.a.	865	57	7
CZ	88,800	48,000	54	39,952	n.a.	n.a.
DE	760,784	>76,500	>10	96,080	n.a.	n.a.
DK	66,403	>37,320	>56	12,213	>701	>6
EE	14,841	9,000	61	3,388	85	3
EL	48,863	>14,000	>29	4,910	430	9
ES	402,600	>55,000	>14	42,941	>12,000	>28
FI	n.a.	45,000	n.a.	7,225	>200	>3
FR	608,783	>327,976	>54	109,487	>4,101	>4
HR	21,389	-	_	4,704	-	_
HU	68,801	500	<1	27,406	n.a.	n.a.
IE	n.a.	50,000	n.a.	n.a.	222	n.a.
IT	379,849	n.a.	n.a.	83,239	n.a.	n.a.
LT	23,374	n.a.	n.a.	4,466	n.a.	n.a.
LU	16,309	n.a.	n.a.	2,021	77	4
LV	22,558	-	-	5,034	-	-
MT	5,628	n.a.	n.a.	778	40	5
NL	218,000	>4,365	>2	63,400	n.a.	n.a.
PL	187,348	n.a.	n.a.	72,431	3	0
PT	54,421	n.a.	n.a.	11,808	n.a.	n.a.
RO	139,650	31,900	23	16,081	191	1
SE	159,347	100,000	63	42,451	1,200	3
SI	16,486	about 17,000	100	4,435	280	6
SK	46,600	30,000	64	15,451	90	<1
UK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

## Large corporate employers as relevant industrial relations actors

By applying the top-down approach, this study includes all employer and business organisations that are affiliated to ETNO, DigitalEurope and DIGITAL SME. However, ETNO represents only individual corporations rather than employer organisations. Therefore, apart from employer associations active in the ICT-telecommunications sector, this study also considers individual companies.

For each of the 28 EU Member States, information has been collected on the three largest (by number of employees) companies in the telecommunications and ICT sectors. As such, information on 166 different companies has been collected, including 84 telecommunications companies, of which 3 are also among the 85 largest ICT sector employers. For each of them, there is information about their collective bargaining involvement. As for their domain coverage, it can be assumed that most of the large telecommunications companies also cover at least part of the ICT sector, and this is the case for more than half of the ETNO members. Corporations affiliated to ETNO are highlighted in yellow in Table 23. Where one of the three largest telecommunications companies also appear as one of the three largest ICT sector companies, they are marked in purple. In Croatia, Estonia and the Netherlands, one of the largest telecommunications companies is also one of the largest ICT companies. In Romania, it is not one of the three largest ICT-telecommunications company; therefore, for Romania a fourth ICT company is included. This brings the total number of ICT companies to 85, besides the 84 telecommunications companies, with a total of 166 different companies.

Table 23: ETNO affiliate membership strength compared to the largest groups in the ICT-telecommunications sector

Member State	Telecoms employers	Employees	Collective bargaining	ICT employers	Employees	Collective bargaining
AT	Telekom Austria	9,000	Yes	Kapsch Group	2,009	Yes
	T-mobile Austria	1,306	Yes	Raiffeisen IT	n.a.	No
	UPC Austria <sup>15</sup>	1,100	Yes	ATOS	1,700	No
BE	Proximus	12,760	Yes	IBM Belgium	1,544	Yes
	Telenet	2,247	Yes	RealDolmen	1,117	Yes
	Orange	1,435	Yes	Atos Belgium	774	Yes
BG	Vivacom	6,145	Yes	IBM Bulgaria	n.a.	No
	Bulgarian Telecommunications Company EAD					
	Mobilitel EAD	4,500	No	Sixty K	3,250	No
	Telecommunications Bulgaria EAD	3,000	n.a.	Hewlett Packard Bulgaria	4,000	No
СҮ	CYTA Cyprus Telecommunications Authority	3,031	Yes	Wargaming Group Ltd	~350	No

<sup>&</sup>lt;sup>15</sup> Since October 2018, UPC Austria has merged with T-mobile Austria. All employees of T-Mobile Austria are covered by a collective bargaining agreement.

	MTN Cyprus Ltd	400	No	Logicom Group Public	~250	No
	Primetel Plc	300	No	NCR (ME) Ltd	~130	No
CZ	O2 CR AS	3,772	Yes	IBM CR Prague and IBM Global Service D.C. CR BRO	3,635	No
	T-Mobile CR AS	3,376		AVAST Software sro Prague	1,600	No
	Vodafone CR AS	1,678	No	Hewlett-Packard Prague	1,360	No
DE	Deutsche Telekom Deutschland	105,000	Yes	T-systems	>20,000	Yes
	Vodafone	14,862	Yes	SAP	~18,000	No
	Telefonica	8,300	Yes	IBM	~13,500	Yes
DK	TDC	8,000	Yes	KMD	3,000	Yes
	Telenor	2,000	Yes	IBM Denmark	2,550	Yes
	Telia	1,100	Yes	CSC Denmark	900	Yes
EE	Telia EEsti AS	1,793	Yes	Telia EESti AS	1,793	Yes
	Elisa EEsti AS	603	n.a.	Playtech Estonia OU	555	n.a.
	Tele 2	337	n.a.	Kuhne + Nagel	348	n.a.
EL	Hellenic Telecommunications (OTE) SA	8,507	Yes	First Data Hellas Processing Services and Holdings	1,100	No
	Cosmote Mobile Telecommunications	2,008	Yes	Intralot	714	No
	Vodafone-Panafon Hellenistic Telecommunications Company	1,431	Yes	Intrasoft International SA	600	No
ES	Telefonica	21,000	Yes	Tecnocom	5,125	Yes
	Orange Espagne SA	5,000	Yes	Tecnologica Ecosistemas SA	3,697	Yes
	Vodafone Ono SAU	>4,000	Yes	Accenture SL	2,965	Yes
FI	Elisa	4,724	No	Tieto	3,400	No
	Telia	3,000	No	CGI Finland	2,700	No
	DNA T	1,700	No	Fujitsu	1,900	No
FR	Orange	98,000	Yes	Capgemini	24,504	Yes
	SFR	14,300	Yes	Sopra-Steria	18,227	Yes
	Iliad	8,900	Yes	ATOS	13,000	Yes
			Yes	IBM	7,500	Yes
HR	Hrvatski Telekom dd	4,000	Yes	Ericsson Nikola Tesla	1,700	Yes
	VIPnet doo	1,224	No	APIS IT doo	411	Yes
	Ericsson Nikola Tesla Servisi doo	700	Yes	InfoBip doo	358	No
HU	Magyar Telekom Telecommunications	6,995	Yes	IT Services Hungary	4,212	Yes

	DIGI Telecommunications	1,621	Yes	T-systems Hungary	1,411	Yes
	and Provider  UPC Hungary Ltd	1,014	Yes	National	1,016	Yes
				Infocommunications Service Company		
IE	EIR	3,286	Yes	Apple	5,000	No
	Vodafone	2,000	Yes	Google	2,500	No
	Three Ireland	1,400	No	Facebook	1,500	No
IT	Telecommunications Italy	50,926	No	Accenture	6,224	Yes
	Wind-Tre	8,399	Yes	Engineering	6,179	Yes
	Vodafone Italia SpA	6,500	Yes	IBM Italia SpA	5,000	Yes
LT	Telia Lietuva	2,227	Yes	CSC Baltic	454	No
	Bite Lietuva	642	No	ATEA	304	No
	Teltonika	574	No	VISMA LIETUVA	296	No
LU	Post Luxembourg	4,660	Yes	Sogeti Luxembourg SA	650	No
	Post Telecommunications	360	Yes	Telindus SA		No
	Eltrona-Interdiffusion SA	150	No	Computer Task Group Lux PSF SA		No
LV	Lattelecommunications SIA	1,377	Yes	Evolution Latvia SIA	1,248	n.a.
	Latvijas Mobilais Telefons SIA	501	n.a.	Tieto Latvia SIA	704	n.a.
	Baltcom SIA	279	n.a.	Accenture Latvijas Filiale	700	n.a.
MT	Go plc Malta	1,000	Yes	Betsson Malta Ltd	1,000	No
	Melita plc	350	No	BESEDO	400	No
	Vodafone Malta	320	No	UNIBET Int. Ltd	315	No
NL	KPN NV	13,265	Yes	KPN NV	15,000	Yes
	Ziggo	4,300	No	Capgemini	4,000	No
	T-Mobile	1,400	No	ATOS	4,000	No
PL	Orange Polska group co and ICT	15,131	Yes	Capgemini Polska Ltd	5,560	No
	T-Mobile Polska+ ICT	4,000	No	Comarch Group Co	5,304	No
	Polkomtel Ltd	3,000	No	Atos Polska Co	5,000	No
PT	MEO-Serv de Communicaoese e multimedia	9,515	Yes	Companhia IBM	513	No
	(Portugal Telecommunications Group)					
	Nos Comunicacoes	1,272	No	PT Cloud and Data Centres	399	Yes
	Vodafone Portugal-com	1,434	No	SIBS Forward Payment Solutions	305	No

	Pessoais					
RO	RCS and RDS	6,267	No	Oracle Romania	3,043	n.a.
	Telekom Romania Communications and Telekom Mobile Communications	5,291 and 976	Yes	Ericsson Telecommunications Romania	2,172	n.a.
	Vodafone Romania	2,724	n.a.	IBM Romania	2,653	n.a.
				Information services AD	1,000	Yes
SE	Telia company AB	8,295	Yes	CGI Sverige AB	3,697	Yes
	Eltel	8,000	Yes	Sigma AB	3,046	Yes
	Tele2 AB	6,027	Yes	IFS AB	2,888	Yes
SK	Slovak Telecommunications AS Bratislava	3,268	Yes	IBM Int. Service Centre	4,505	No
	Orange Slovensko	1,088	No	T-systems Slovakia sro Kosice	3,850	No
	O2 Slovakia sro Bratislava	520	No	AT&T Network Services SK sro Bratislava	2,748	No
SI	Telekom Slovenije	3,268	Yes	COMTRADE	250-500	No
	A1 Slovenija telekomunikacijske storitv	1,088	No	IBM Slovenija	178	No
	Telemach širokopasovne komunikacije	520	No	SRC sistemske integracije	203	No
UK	British Telecommunications	80,869	Yes	Accenture UK	8,500	Yes
	Virgin Media	16,500	No	Apple	6,500	No
	EE UK	15,000	No	CISCO	5,500	No

Note: Of the 84 telecommunications corporate employers, 58% are involved in collective bargaining, while 36% of the ICT corporate employers are involved.

Source: Network of Eurofound Correspondents, 2017–2018.

# **Employer organisation and large corporation involvement in collective bargaining**

In the previous section, the sector relatedness and membership strength of employer organisations and large corporations was considered. This section deals with their involvement in collective bargaining and the number of employees covered by collective bargaining agreements signed by the employer organisations and large companies in the sector. Figure 7 provides an overview of the proportion of SEB and MEB conducted by employer organisations in the sector. About 44% of the employer organisations are involved in only MEB, a further 3% are involved in both MEB and SEB and the same proportion of associations is engaged in SEB only. However, a relatively large proportion (42%) of employer organisations in the ICT-telecommunications sector do not participate in any form

of collective bargaining.<sup>16</sup> This is because, in many countries, collective bargaining takes place – if at all – exclusively at the level of the individual employer, usually without the involvement of employer organisations. This situation applies to countries such as Bulgaria, Croatia, Cyprus, Estonia, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Slovenia and the UK. The large number of employer organisations in the ICT-telecommunications sector that do not engage in collective bargaining in particular results from the relatively young age of the ICT sector and the lack of traditional sector-level industrial relations in most countries (many newly established ICT firms prefer to belong to business rather than employer organisations, if at all) and, to a lesser extent, from the relatively highly fragmented environment for associations in some countries, such as Bulgaria, Denmark, France, Italy and Spain. In these countries, there are several different associations representing the interests of small business groups or SMEs within the sector. These organisations primarily act as business or trade associations and are classified as social partner organisations in this report only due to their affiliation to one of the sector-related European-level employer confederations, DigitalEurope or DIGITAL SME. All associations not involved in collective bargaining, according to Table 26, are considered as trade associations<sup>17</sup> in their country.

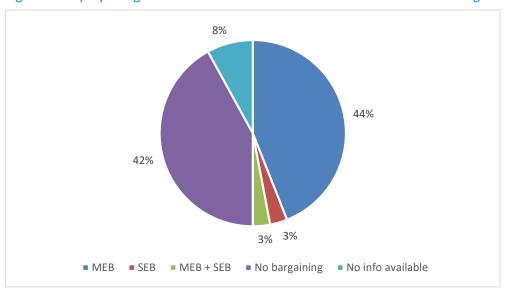


Figure 7: Employer organisation roles in ICT-telecommunications collective bargaining (%)

Notes: MEB = multi-employer bargaining. SEB = single-employer bargaining.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

Of the 84 large telecommunications corporate employers shown in Table 24, 47 (56%) are involved in company-level collective bargaining. In the ICT sector, collective bargaining agreements have been reached for 31 (36%) of the 85 ICT corporate employers. Hence, the importance of the large corporate employers for collective employment regulation is greater in telecommunications than in ICT.

<sup>&</sup>lt;sup>16</sup> No information on bargaining involvement was available from 8% of organisations.

<sup>&</sup>lt;sup>17</sup> In short, trade associations' main reference is the 'product' market (where business has interests relating to customers and suppliers) rather than the labour market.

Table 24: Collective bargaining involvement of employer organisations in ICT-telecommunications

Member State	Employer organisation	Number of member companies in sector	Number of employees in member companies in sector	Collective bargaining involvement	Number of employees covered by collective bargaining	Scope: ICT, telecomm unications or both
<b>AT</b> <sup>18</sup>	FTR	500	15,000	MEB	6,000	Telecomm unications
	UBIT	26,000	60,000	MEB	60,000	ICT
	100	n.a.	n.a.	No	0	Both
BE	Agoria	546	n.a.	MEB	62,971	Both
	VBO-FEB	546	n.a.	MEB	62,971	Both
BG	Basscom	n.a.	n.a.	No	0	ICT
	ICT Cluster Plovdiv	20	1,000	No	0	Both
	ВСТ	n.a.	n.a.	n.a.	n.a.	n.a.
	BAIT	n.a.	n.a.	n.a.	n.a.	n.a.
CY	CITEA	57	n.a.	No	0	ICT
CZ	SBP	n.a.	n.a.	Both	n.a.	ICT
DE	Agv:c	28	76,500	Both	73,500	Both
	BITMi	n.a.	n.a.	No	0	ICT
DK	DI	220	9,725	MEB	9,725	Both
	Dansk Erhverv	11	7,595	MEB	7,595	Both
	DI Digital	n.a.	n.a.	n.a.	n.a.	n.a.
	IT Forum Midtjylland	470	20,000	No	0	ICT
EE	ITL	85	9,000	No	0	Both
EL	Corallia	150	10,000	No	0	Both
	HAMAC	80	4,000	No	0	ICT
	SEPE	200	n.a.	No	0	Both
ES	Conetic	12,000	55,000	No	0	ICT
	AEC	24	n.a.	MEB	n.a.	ICT
	ACEC	28	n.a.	MEB	n.a.	ICT
	Ametic	n.a.	n.a.	n.a.	n.a.	n.a.
FI	PALTA	n.a.	17,000	MEB	17,000	Both
	TIF	200	28,000	MEB	43,000	ICT
FR <sup>19</sup>	Syntec	1,538	221,798	MEB	500,000	ICT
	Unetel-RST	48	63,000	MEB	160,000	Both
	GPNI	n.a.	n.a.	No	0	ICT
	CINOV	2,055	43,178	MEB	500,000	ICT
	AFNUM	60	n.a.	No	0	ICT
	TECH in France	400	n.a.	No	0	ICT
HR	No employer organisations					

 $<sup>^{18}</sup>$  In Austria, all 15,000 employees in the telecommunications sector are covered by one or more collective bargaining agreements.

<sup>&</sup>lt;sup>19</sup> The table presents the situation as it was in 2017–2018, prior to the creation of DIGITAL SME France.

HU	IVSZ	500	n.a.	SEB	n.a.	ICT
IE	Technology Ireland	222	50,000	No	0	Both
IT	Asstel	n.a.	n.a.	MEB	130,000	Both
	CIMEB	n.a.	n.a.	MEB	n.a.	ICT
	Union Meccanica	n.a.	n.a.	MEB	n.a.	ICT
	Federmeccanica	n.a.	n.a.	MEB	n.a.	ICT
	Confcommercio	n.a.	n.a.	MEB	n.a.	ICT
	Confesercenti	n.a.	n.a.	MEB	n.a.	ICT
	CNA CTA	n.a.	n.a.	MEB	n.a.	ICT
	Confartigianato	1,200	3,000	MEB	n.a.	Both
	Unigec	n.a.	n.a.	MEB	n.a.	ICT
	Unimatica	n.a.	n.a.	MEB	n.a.	Both
	Clusit	270	n.a.	No	0	Both
	Anitec-Assinform	n.a.	n.a.	No	0	Both
LT	InfoBalt	n.a.	n.a.	No	0	Both
LU	APSI	77	n.a.	No	0	ICT
LV	No employer organisations					
MT	MEA	40	n.a.	SEB	700	Both
NL	WENB	2	4,365	MEB	3,400	Both
	W ICT	n.a.	n.a.	MEB	<25,000	Both
PL	Zipsee	3	n.a.	No	0	ICT
PT	AGEFE	n.a.	n.a.	MEB	n.a.	Both
RO	ANIS	135	18,500	No	0	ICT
	Cluj IT	34	10,000	No	0	ICT
	Iconic	22	3,400	No	0	ICT
SE	IT&T	1,200	100,000	MEB	95,000	Both
SI	GZS-ZIT	280	about 17,000	No	0	both
SK	ITAS	90	30,000	No	0	Both
UK	UKITA	n.a.	n.a.	No	0	ICT
	TECH UK	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: MEB = multi-employer bargaining. SEB = single-employer bargaining.

Source: Network of Eurofound Correspondents, 2017–2018.

In those countries (AT, BE, CZ, DE, DK, ES, FI, FR, HU, IT, NL, SE) where employer organisations are involved in sector-related collective bargaining (almost exclusively MEB), agreement coverage in terms of employees tends to clearly exceed that of the SEB agreements concluded by the corporate ETNO members (if they engage in collective bargaining at all). However, in the remaining 16 countries, MEB in the ICT-telecommunications sector is completely absent. In some of these countries, where the ETNO members are engaged in company-level collective bargaining, the agreements concluded by the ETNO affiliates may be the most important in the sector in terms of coverage. This is the case in Bulgaria, Croatia, Cyprus, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and the UK.

In seven countries (Cyprus, Latvia, Malta, Poland, Portugal, Romania and Slovenia), collective bargaining is only conducted at the large telecommunications companies, all of which are ETNO affiliates. In the ICT-telecommunications sector of Luxembourg, only two company-level agreements exist, according to the main trade union OGBL. The telecommunications company Orange in France is engaged in group and company-level agreements and also in sector-level agreements through its membership of the sectoral employer organisation Unetel-RST, in which Orange is an important member according to the Eurofound correspondent.

In the next section, more details will be taken into consideration about the distinctive patterns of collective bargaining in the ICT-telecommunications sector.

## Collective bargaining patterns and social dialogue practices

As outlined previously, the representativeness of the national social partner organisations is of interest to this study in terms of the capacity of their European umbrella organisations to participate in European social dialogue. Similarly, it is important for the implementation of any agreements made by European-level organisations at the national, regional and local levels. The role played by social partners in collective bargaining, social dialogue and public policymaking is therefore an important component of representativeness. The relevance of the European sectoral social dialogue tends to increase with the growing ability of the national affiliates of the European organisations to regulate employment terms and influence national public policies affecting the sector (Perin and Léonard, 2011).

A cross-national comparative analysis shows a generally positive correlation between the bargaining role of the social partners and their involvement in public policy (Traxler, 2004). This is also borne out by the analysis of the ICT-telecommunications sector organisations in bipartite and tripartite bodies dealing with sector-specific public policies presented in this section. MEB tends to have greater significance in this regard, primarily because of the macroeconomic impact of such agreements, unless there are single-employer agreements in place involving very large employers which serve as an industry 'standard' or signalling effect. As well as looking at their formal role in bipartite and tripartite bodies, it is also important to ascertain the regularity of their involvement and whether they wield any significant influence in this arena.

As demonstrated above, 112 trade unions are involved in collective bargaining, which is 95% of the 118 trade unions identified in the sector. On the employer side, including business associations, exactly half (31 of the 62 organisations) are involved in collective bargaining. The information on coverage and nature of collective bargaining is summarised in Table 25.

Of the 99 telecommunications sector-related trade unions, 94 are involved in collective bargaining, of the 93 ICT sector-related trade unions, this is the case for 88. For the telecommunications sector there is a trade union involved in collective bargaining in all 28 EU Member States, while for the ICT sector this is the case in 27 Member States (excluding Greece). For the employers, 16 of the 27 (59%) telecommunications sector-related employer organisations are involved in collective bargaining in 11 EU Member States (AT, BE, DE, DK, FI, FR, IT, MT, NL, PT, SE), while 30 of the 55 (55%) ICT sector-related employer organisations are involved in collective bargaining in 14 EU Member States (AT, BE, CZ, DE, DK, ES, FI, FR, HU, IT, MT, NL, PT, SE). This slightly higher proportion of employer organisations involved in collective bargaining in the telecommunications sector is also found among the largest employers, where 56% of the companies among the top three employers in the telecommunications sector are involved in collective bargaining, in comparison to 36% in the ICT sector.

Table 25: Involvement of trade unions and employer organisations in collective bargaining

	Trade	e unions	Employer organisations and		Largest employers (companies) (see Table 33)		
				siness ciations	Telecommunications	ICT	
No collective bargaining involvement		4 Member cates	26 in 17 Member States		In none of the three largest employers in FI	In none of the three largest employers in BG, CY, CZ, EL, FI, IE, LT, LU, LV, MT, PL, SI, SK	
SEB					47 companies	31 companies	
	63	112	2	31	(56%)	(36%)	
		in 28 Member		in 14 Member	in 27 Member States	in 15 Member States	
Both SEB and MEB	36	States	2	States			
MEB	13		27				
Number of organisations for which no collective bargaining information is available		2	5		6	8	
Total number	:	118		62	84	85	

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

Tables 26 and 27 present collective bargaining information on a country-by-country basis, illustrating the different national collective bargaining patterns and levels of collective bargaining coverage in the ICT-telecommunications industry. Both tables provide an impression of the level of MEB and SEB, taking into account that SEB can also take place without the involvement of employer organisations (which is not taken into account in Table 25). This shows that although there are several countries in which employer organisations are not involved in collective bargaining, SEB often takes place, although its coverage is limited to a few (mainly larger) employers. This is true of at least Croatia, Cyprus, Estonia, Ireland, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Slovakia and Slovenia. However, mainly as a result of the lack of involvement of employer organisations in bargaining (and certainly due to the absence of MEB) in these countries, the rate of collective bargaining coverage remains relatively low (about 30% in maximum). Indeed, in no country where SEB is the exclusive form of bargaining does the coverage rate exceed 31% of the sector's workforce. The lowest rate of collective bargaining coverage in the context of prevailing MEB arrangements can be found in the Netherlands (less than 20%). This very low rate is mainly due to the lack of extension of collective agreements in the sector. The highest rates of collective bargaining coverage can be found in Austria, Belgium, Finland, France and Italy, with rates close to 100%. This is largely due to the practice of extending existing collective agreements across large parts of, or the entire, sector (Belgium, Finland, France) or functional equivalents to such extension mechanisms.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup>This is the case in Austria through compulsory membership of all businesses in employer organisations. In Italy, according to the country's constitution, minimum conditions of employment apply to all employees, which means that multi-employer agreements – according to labour court rulings – are generally regarded as binding.

Table 26: Form or level of bargaining per Member State

Form or level of bargaining	Member State
MEB	FI
MEB and SEB	AT, BE, CZ, DE, DK, ES, FR, HU, IT, NL, SE
SEB	CY, EE, EL, HR, IE, LT, LU, LV, MT, PL, PT, SI, SK, UK
No collective bargaining or no information	BG, RO

Source: Network of Eurofound Correspondents, 2017–2018.

Table 27 shows coverage and levels of collective bargaining.

Table 27: Collective bargaining coverage and collective bargaining level

		Collective bargaining coverage				
	More than 90%	51-90%	25-50%	Less than 25%	information available	
Only SEB or prevailing level			CY, HR, LU, LV	CZ, EE, HU, IE, LT, MT, PL, PT, SI, SK	DE, EL, UK	
Only MEB or prevailing level	AT, BE, FI, FR, IT	SE		NL	DK, ES	
No collective bargaining or no information	BG, RO					

Source: Network of Eurofound Correspondents, 2017–2018.

Actors other than employer organisations are involved in sector-related collective bargaining. Table 28 gives an overview of the coverage of collective bargaining (in terms of employees covered) conducted by employer organisations relative to the workforce covered by collective bargaining conducted by individual ETNO members. The latter is usually company collective bargaining, although in some countries the ETNO members are also involved in MEB (in cooperation with an employer organisation). It is important to note that the figures provided in Table 28 are not directly comparable because the coverage of collective bargaining conducted by employer organisations refers to the entire ICTtelecommunications sector, while the collective bargaining conducted by the ETNO affiliates mainly or exclusively refers to the telecommunications workforce (ETNO is the European representative of telecommunications businesses rather than ICT businesses). Nevertheless, we can see from Table 28 that the individual ETNO members in all Member States where they exist do engage in collective bargaining, at least on behalf of their own corporation if not for the entire telecommunications sector (in cooperation with an employer organisation). Since the ETNO affiliate in each Member State tends to be the most important telecommunications enterprise (incumbent) of the country (often the former state-owned monopoly provider), the ETNO members (where they exist) have to be regarded as important industrial relations actors in virtually all countries, in particular in those where they are the sector's only party on the employer side to engage in collective bargaining. This is the case in at least Croatia, Cyprus, Greece, Ireland, Latvia, Lithuania, Luxembourg, Poland, Romania, Slovakia, Slovenia and the UK.

Table 28: Collective bargaining and coverage by employer organisation and ETNO affiliates

Member State	Coverage of collective bargaining by employer organisations (number of employees)	ETNO affiliates and type of collective bagaining	ETNO member workforce coverage through collective bargaining (number of members)
AT	66,000	Telekom Austria	9,000
BE	62,971	Proximus	12,076
BG	n.a.	EAD	6,145
CY	0	СҮТА	3,031
CZ	n.a.	No affiliate	-
DE	73,500	Deutsche Telekom	73,500
DK	>17,320	TDC	7,963
EE	0	No affiliate	-
EL	0	OTE	15,500
ES	n.a.	Telefonica	28,107
FI	60,000	Elisa	3,251
FR	>500,000	Orange	97,607
HR	0	Hrvatski Telekom	3,500
HU	n.a.	Magyar Telekom	6,995
IE	0	EIR Telecommunications	3,286
IT	>130,000	Telecommunications Italia	50,926
LT	0	AB Telia	n.a.
LU	0	Post Luxembourg	946
LV	0	Lattelecommunications Group	1,377
MT	700	GO Plc	1,000
NL	about 25,000	KPN NV	13,000
PL	0	Orange Polska Group	14,000
PT	n.a.	Portugal Telecommunications	9,515
RO	0	TRC	6,267
SE	95,000	Telia	8,000
SI	0	Telekom Slovenije	2,403
SK	0	Slovak Telekom	3,268
UK	0	British Telecommunications	80,000

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

# Social partners and the sectoral dialogue – participation in public policy

In a significant number of Member States (particularly in northern and western Europe), the participation of social partners in public policymaking has long been established. In a number of other countries (particularly in central and eastern Europe) such involvement is more recent and usually less developed, but in some of them rather formalised – for instance, in tripartite bodies at the central level. While in general policymaking, representation tends to take place through peak organisations, consultation in sector-related matters usually involves sectoral social partner organisations. As

indicated above, such involvement in policymaking affecting the sector is another relevant indicator of representativeness of national social partner organisations in that sector.

Such policy dialogue can be formal or informal and, irrespective of its institutional set-up, the level of influence wielded by social partner organisations in this arena is an important point to consider. The members of the Network of Eurofound Correspondents were asked to provide information on the involvement of the various employer and trade union organisations in public policymaking with a particular focus on the ICT-telecommunications sector, including an assessment of the nature of their influence.

#### **Trade union consultation**

Figures 8 and 9 provide an overview of the nature and level of involvement of trade unions in relevant policymaking at Member State level. Figure 8 indicates that more than half of the sector-related trade unions (62) are consulted in relation to sectoral policymaking; around one-fourth (30) is not involved in consultation processes, whereas for the remaining organisations (more than 20%) this information is not available.

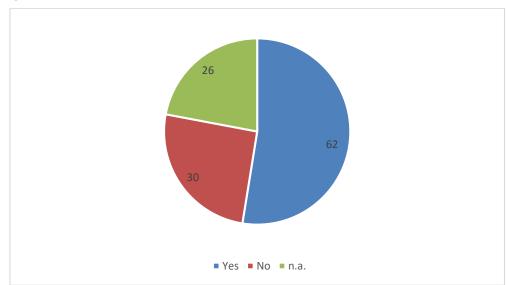


Figure 8: Consultation of trade unions in sector-related matters (number)

Note: N = 118.

Source: Network of Eurofound Correspondents, 2018.

In those 62 cases where consultation takes place, a clear majority of unions indicate that consultation is initiated on an ad hoc basis and that 17 unions are regularly consulted.

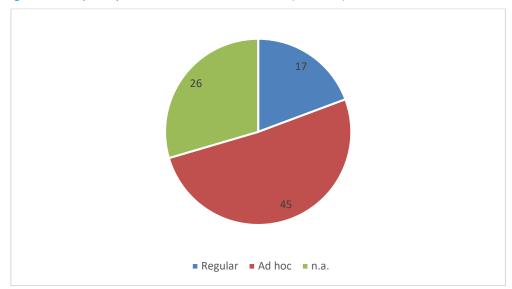


Figure 9: Frequency of trade union consultation (number)

Note: N = 88.

Source: Network of Eurofound Correspondents, 2018.

#### **Business consultation**

Figure 10 indicates that, among employer organisations, a little over 50% (32) are consulted in relation to sector policy, 11% (7) do not show any involvement in consultation and no information is available for more than 33% (23) of organisations. Compared to the trade union side, largely the same proportion of employer associations are consulted by the authorities in matters related to the sector. Due to unavailability of information for many organisations, it remains unclear whether and to what extent in some countries the consultation rights are unequally attributed by the administrations between the two sides of industry. This holds true in particular for Germany, Greece, Hungary, Ireland, Portugal, Romania and the UK. In Bulgaria, Estonia and Slovenia, however, it appears that the administrations are inclined to seek advice only from organised business, rather than organised labour in the sector.

23

7

Yes ■ No ■ n.a.

Figure 10: Consultation of employer organisations in sector-related matters (number)

Note: N = 62.

Source: Network of Eurofound Correspondents, 2018.

Among the 31 employer organisations consulted and for which detailed information has been provided, more than 60% (19) indicate that their consultation is usually requested on an ad hoc basis, only 38% (12) are regularly consulted and no information on consultation practices is available for more than 75% (24) (see Figure 11).

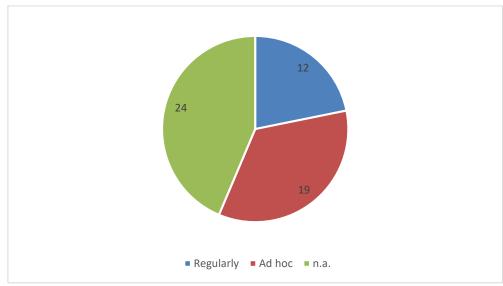


Figure 11: Frequency of employer organisation consultation (number)

*Note: N* = 55.

Source: Network of Eurofound Correspondents, 2018.

Table 29 shows that in 19 Member States at least one employer organisation is consulted, whereas in Estonia, Greece and Slovenia none of the sector-related trade unions is involved in consultation procedures. Trade unions in Bulgaria and Hungary, for which information is available, claim not to have been consulted, but information is lacking for at least one trade union in those countries. In the pluralist association systems of Belgium, Slovakia and Sweden, all the social partner organisations on both sides of the industry are consulted.

Table 29: Consultation of employers and trade unions by country

	At least one trade union consulted	No trade union consulted
At least one employer organisation consulted	AT, BE, CY, DK, FI, FR, IT, LT, LU, MT, NL, PL, SE, SK	(BG), EE, EL, (HU), SI
No employer organisation consulted	CZ, (DE), (ES), HR, (IE), LV, (RO), (UK)	(PT)

Notes: No employer organisations exist in Croatia and Latvia. In the countries marked in bold, all trade unions and employer organisations claim to be consulted. For the countries in brackets, no information is available for either trade unions or employer organisations.

### **Tripartite/bipartite participation**

Table 30 lists tripartite and bipartite bodies dealing with sector-specific public policies along with the participating trade unions and employer organisations. In total, 45 bodies have been identified in 11 countries.

Table 30: Bipartite and tripartite social dialogue in the telecommunications-ICT sector

Meml Stat	Name of the body and scope of activity	Bipartite or tripartite	Origin: agreement or statutory	Trade unions with representation	Employer organisations with representation
ВЕ	Social fund for occupational extra-social benefits in the sector	Bipartite	Both	Yes	Yes, Agoria among others
	Cevora (training fund)	Bipartite	Both	Yes	Yes
	Council on Information Technologies and Internet Management at Ministry of Transport, Information Technologies and Communications	Bipartite (between ministry and business association)	Statutory	None	Basscom
DK	Der Faglige Udvalg for Digital Media (Vocational Committee for Digital Media)	Bipartite	Statutory	Dansk Metal, HK	Confederation of Danish Industry, DI
	BFA-industri (branchefællesskab for arbejdmiljø i industrien)	Bipartite	Statutory	The Central Organisation of Industrial Employees, CO-industri	DI The Confederation of Organisation of Managerial and Executive Staff in Denmark, Lederne, LH

FI	Työturvallisuuskeskuksen palveluryhmä	Tripartite	Agreement	Service Union United (PAM), SAK	Confederation of Finnish Industries (EK)
	(Occupational safety branch of the Centre for Occupational Safety of the			Trade Union for the Public Sector and Welfare Sectors (IHL)	Finnish Commerce Federation (Kauppa)
	Services Sector) (promotes cooperation and occupational safety within the sector and develops quality of life in the workplace)			Welfare Sectors (JHL), SAK  Trade Union Pro, STTK  Finnish Union of Practical Nurses (SuPer), STTK  Union of Health and Social Care Professionals in Finland (Tehy), STTK  Finnish Pharmacologist Union (SFL), AKAVA  Confederation of Unions for Professional and Managerial Staff in Finland (AKAVA)	Federation of Finnish Financial Services (Finance Finland, FFI), Services sector Employers (PALTA)  Welfare Federation (HALI, Hyvinvointialan liitto)  Real Estate Employers (Kiinteistötyönantajat ) Pharmacy Employers (APTA)  Finnish Hospitality Association (MaRa)  Association of Finnish Independent Education Employers (AFIEE)  Private Employment Agencies Association
					(HPL)
	Teknologiateollisuuden ja palveluiden osaamisen ennakointiryhmä (competency prognostics group for business and administration) Replaces the sectoral National Education and Training Committee (official English name to be confirmed)	Tripartite	Statutory	IL, Akava Engineers of National Defence, Pardia, STTK Pro, STTK Teollisuusliitto, SAK Sähköliitto, SAK Trade Union of Education, OAJ	Technology Finland, EK PALTA, EK
	ICT-alan työelämätoimikunta (working life committee for ICT sector)	Bipartite	Statutory	SAK, STTK, OAJ, AKAVA	EK

### Telecommunications

FR	Commission paritaire permanente de négociation et d'interprétation (CPPNI) (Interpretation of collective bargaining)	Bipartite	Both	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST
	CPNE des télécom (vocational training)	Bipartite	Agreement	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST
	Observatoire paritaire des métiers des télécoms	Bipartite	Agreement	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST

	(employment and competencies observatory)				
	Association de Gestion du Paritarisme des télécoms	Bipartite	Agreement	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST
	(financing the bipartite social dialogue)			CG1, FO-COIVI	
	Commission de suivi Santé au travail et prévention des risques (CSPS) (health and safety issues)	Bipartite	Agreement	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST
	Section paritaire professionnelle au sein de l'Opca OPCALIA	Bipartite	Agreement	F3C-CFDT, FCCS-CFE- CGC, FPT-CFTC, FAPT- CGT, FO-COM	Unetel-RST
	(financing of vocational training)				
ICT					
	CPCCN	Bipartite	Agreement	CFDT-F3C, FSE-CGT,	Syntec
	(collective bargaining)			FEC-FO, FIECI-CFE-CGC, CSFV-CFTC	SINOV
	CPNEFP	Bipartite	Agreement	CFDT-F3C, FSE-CGT, FEC-FO, FIECI-CFE-CGC,	Syntec SINOV
	(vocational training)			CSFV-CFTC	3.110
	Opca FAFIEC	Bipartite	Agreement	CFDT-F3C, FSE-CGT,	Syntec
	(vocational training)			FEC-FO, FIECI-CFE-CGC, CSFV-CFTC	SINOV
	OPIIEC	Bipartite	Agreement	CFDT-F3C, FSE-CGT, FEC-FO, FIECI-CFE-CGC,	Syntec
	(employment and competencies observatory)			CSFV-CFTC	SINOV
	ADESATT	Bipartite	Agreement	CFDT-F3C, FSE-CGT, FEC-FO, FIECI-CFE-CGC,	Syntec
	(financing the bipartite social dialogue)			CSFV-CFTC	SINOV
	Commission paritaire permanente de négociation	Bipartite	Agreement	CFDT-F3C, FSE-CGT, FEC-FO, FIECI-CFE-CGC,	Syntec
	et d'interprétation (CPPNI) (interpretation of collective bargaining)			CSFV-CFTC	SINOV
	OPNC	Bipartite	Agreement	CFDT-F3C, FSE-CGT,	Syntec
	(Chambre d'enregistrement des accords existants)			FEC-FO, FIECI-CFE-CGC, CSFV-CFTC	SINOV
HU	Információtechnológia, Kommunikáció Ágazati Párbeszéd Bizottság (IKPB)	Bipartite	Agreement	VASAS szakszervezet Hungarian Metalworkers'	Informatikai, Távközlési és Elektronikai
	Information Technology, Communication Sectoral Dialogue Committee			Federation	Vállalkozások Szövetsége – IVSZ
				Hírközlési, Média és Távközlési Szakszervezeti Szövetség – HMTSZSZ –	Magyar Kábelkommunikációs Szövetség – MKSZ
				Communication, Media and Telecommunications Trade Union	

ΙΤ	COMETA (pension fund)	Bipartite	Agreement	FIM-CISL, FIOM-CGIL, UILM-UIL, FISMIC	Federmeccanica, Assistal e Intersind
	Mètasalute (health fund)	Bipartite	Agreement	FIM-CISL, UILM-UIL	Federmeccanica, Assistal
	Telemaco (pension fund)	Bipartite	Agreement	SLC-CGIL, FISTEL-CISL, Uilcom-UIL	Assotelecommunicati onsunicazioni Asstel
	TLC (health fund)	Bipartite	Agreement	SLC-CGIL, FISTEL-CISL, Uilcom-UIL	Asstel
	Fondapi (pension fund)	Bipartite	Agreement	FIOM-FIM-UILM, FILCEA-FLERICA- UILCEM, FILTEA-FILTA- UILTA, FLAI-FAT-UILA, SLC-FISTEL-UILSIC	Union Meccanica, Unionchimica, Uniontessile, Unionalimentari, Unigec (Confapi)
	Ebinter (observatory and training fund)	Bipartite	Agreement	Filcams-CGIL, Fisascat- CISL, Uiltucs-UIL	Confcommercio
	Fondo Est (health fund)	Bipartite	Agreement	Filcams-CGIL, Fisascat- CISL, Uiltucs-UIL, FIPE, FIAVET	Confcommercio
	QuAs (health fund for managers)	Bipartite	Agreement	Filcams-CGIL, Fisascat- CISL, Uiltucs-UIL	Confcommercio
	Fon.te (pension fund)	Bipartite	Agreement	Filcams-CGIL, Fisascat- CISL, Uiltucs-UIL	Confcommercio
	Ebn.Ter (training and welfare fund)	Bipartite	Both	Filcams-CGIL, Fisascat- CISL, Uiltucs-UIL	Confcommercio
	Enfea (training and welfare fund)	Bipartite	Both	CGIL, CISL, UIL	Confapi
	Sanapi (healthcare fund)	Bipartite	Agreement	CGIL, CISL, UIL	Confapi
LV	National tripartite Cooperation Council (NTSP)	Tripartite	Statutory	LBAS, LSAB	LDDK (LIKTA)
	Council of National Economy	Tripartite	Statutory	LBAS	LDDK
NL	CA ICT (education and training in the ICT sector)	Bipartite with third- party experts	Agreement	FNV, CNV Vakmensen, De Unie	Nederland ICT
	True Blue (pension fund in the ICT sector)	Bipartite	Agreement	FNV, CNV Vakmensen, De Unie	Werkgevers Vereniging ICT
	Pensioenfonds KPN (pension fund for KPN)	Bipartite	Agreement	FNV	KPN NV
	O&O Fonds KTb  (education and training fund in the cable and telecommunications sector)	Bipartite	Agreement	FNV, CNV	Ziggo, Kabel Noord
RO	Social Dialogue Commissions within the Ministry of Information Society (MCSI), Ministry of	Tripartite	Statutory	Indirect representation through BNS (National Trade Union Bloc,	No employer organisation or

	Labour and Social Justice and the Ministry of Social Dialogue and Public Consultations			largest trade union); ANTIC is an affiliate	business association involved
	Social and Economic Council (CES)	Tripartite	Statutory	Indirect representation through BNS representation; ANTIC is an affiliate	None
SK	Economic and Social Committee (HSR)  (Deals with all relevant changes concerning employment conditions, wages, social policy and education in the sector)	Tripartite	Statutory	SOZ PT and OZ T via their membership of KOZ SR	ITAS and ST via their membership of RUZ SR
	Sectoral tripartite Electronic Communication and Post Services	Tripartite	Agreement	SOZ PT and OZ T	ITAS and ST and Slovenska Posta (member of Union of Transport, Post and Telecommunications, UDPT)
UK	The Tech Partnership (formerly the e-Skills Sector Skills Council)	Bipartite	Statutory	Some union representation on the board (prospective)	Employer network

Source: Network of Eurofound Correspondents, 2017–2018.

The main topics discussed in these bodies are pensions, training and vocational education, health, welfare, occupational safety, employment and (future) competencies, and employment conditions in the sector. Bodies with a focus on the ICT or telecommunications sector are: the Vocational Committee for Digital Media (Denmark); the Information Technology and Communication Sectoral Dialogue Committee (Hungary); the O&O Fund for education and training in the telecommunications and cable sector and the CA ICT for education and training in the ICT sector (Netherlands); the sectoral tripartite Electronic Communication and Postal Services (Slovakia); the Tech Partnership dialogue (UK). In two countries, only one side of the social partners is represented in the bipartite body: in Bulgaria the trade unions are not represented, and in Romania the employer and business associations do not participate in the Social Dialogue Commissions at the three ministries.

# 3. European level of interest representation

In this chapter, the representativeness of the social partners at European level is assessed in three ways. First, the membership strength of both UNI Europa and ETNO is described, based on the collective coverage of their national affiliates in each of the 28 EU Member States. Here, both the membership domain and the actual membership is considered.

Second, the capacity of UNI Europa and ETNO to negotiate is analysed; that is, their ability to commit themselves on behalf of their members and to conclude binding agreements or actions that can be implemented or monitored across the EU through the support of their affiliates. This capacity to negotiate is affected by the involvement of their affiliates in collective bargaining at national level, which not only ensures that they can provide an effective mandate for discussion and negotiation at European level, but also that they are in a position to implement European-level agreements.

Third, every representativeness study also measures the limits of the representativeness of social partners involved in the ESSDC by counterweighting with the representativeness of other European associations in the sector and the national organisations not represented by UNI Europa and ETNO in the ESSD for the telecommunications sector.

As outlined in greater detail below, the study presents detailed information on two sector-related European associations: UNI Europa on the employee side and ETNO on the employer side. The European Commission lists both as social partner organisations to be consulted under Article 154 of the TFEU. Supplementary information will be provided for other organisations (potentially) involved in social dialogue in the sector, where this information has become available in the course of the study. In particular, DigitalEurope and DIGITAL SME will be assessed separately, since they represent a notable number of businesses and national employer and business organisations in the ICT sector of many Member States.

## Membership domain and membership composition of UNI Europa

UNI Europa is the regional part of UNI Global Union, which is a global organisation active on all continents. It deals with issues of concern to the affiliates and their members in Europe and to further the aims and objectives as set out in the UNI statutes, to support and implement decisions of the World Congress, the World Executive Board, the Regional Conference and the Regional Executive Committee.

UNI Europa is recognised as a European Industry Federation by its affiliation to the ETUC at cross-sector level. Through its national affiliates, UNI Europa covers the whole sector as defined for this study by the NACE codes 61 (telecommunications), 58.2, 62 and 63.1 (ICT). Beside its involvement in the Telecommunications European Social Dialogue Committee, UNI Europa is also engaged in the European sectoral social dialogue committees for the following sectors:

- Audiovisual
- Banking
- Personal services
- Industrial cleaning

- Insurance
- Live performance
- Post and logistics
- Private security service
- Sports
- Temporary and agency workers

The membership domain of UNI Europa is thus multi-sectoral and overlaps with the ICT-telecommunications sector under consideration in this report.

In the statutes of UNI Europa, membership is defined in Article 4, which states that membership of UNI Europa is 'open to all members of national trade union centres affiliated to the ETUC that fall within its jurisdiction'. The Regional Executive Committee makes recommendations to the UNI World Executive Board regarding affiliation of new organisations.

Of the 118 national trade unions in the EU ICT-telecommunications sector, as many as 76 (64%) are directly affiliated to UNI Europa. In addition, three unions (VSOA-SLFP of Belgium, YNT of Finland and PaseVodafone of Greece) are indirectly affiliated through higher- or lower-order units. All the 28 EU Member States with sector-related trade unions are covered through affiliations to UNI Europa.

In Estonia, Latvia, Lithuania and Malta, the only existing trade union in the sector is affiliated to UNI Europa. In the countries with more than one sector-related union – Austria, Belgium, Czechia, Denmark, Greece, Ireland, Luxembourg and Portugal – all unions representing workers in the sector are affiliated to UNI Europa. In the remaining countries with a pluralist system on the trade union side, at least one but not all sectoral unions are in membership. With the exception of Bulgaria, Hungary, Poland, Slovakia and Slovenia, in all Member States the trade unions recording most members in the sector (based on the data available) are affiliated to UNI Europa. However, for Germany, Italy and Spain, a lack of data for large trade unions prevents us from drawing any conclusions about whether the largest unions in terms of sectoral membership are UNI Europa affiliates (see Table 31).

Table 31: Sector-related trade unions affiliated to UNI Europa

Member State	Trade unions affiliated to UNI Europa	Trade Unions not affiliated to UNI Europa	Affiliation of trade union with most members in the sector
AT	GPA-djp, GPF		Yes
BE	LBC-NVK, CNE, SETCA-BBTK, CGSLB- ACLVB, ACV Transcom, ACOD-CGSP, (VSOA-SLFP)		Yes
BG	TUFC, FC CL Podkrepa	SFOEMI	No
CY	EPOET	SIDIKEK, PASE-ATHK, AASET-CYTA, SEP-CYTA	Yes
CZ	OS ZPTNS, OS PPP		Yes
DE	ver.di	IG Metall, DPVKOM, CGPT	n.a.
DK	Dansk Metal, HK Samdata, PROSA, Finansforbundet, TL, Dansk El-Forbund, IDA, DJØF, DM		Yes
EE	ESTAL		Yes

Member State	Trade unions affiliated to UNI Europa	Trade Unions not affiliated to UNI Europa	Affiliation of trade union with most members in the sector
EL	OME OTE, Unicosmo, OIYE, (PaseVodafone)		Yes
ES	CCOO Servicios, FSC-CCOO, FeSMC UGT, ELA STV	USO Services, CGT, STC	n.a.
FI	FIU, PRO, (YTN)	FEWU, AITSE	Yes
FR	CFDT F3C, FSE-CGT, FEC-FO, FO-COM, FAPT-CGT	CFR-CGC-Fieci, CFTC CSFV, FPT-CFTC, FCCS-CFE-CGC, SUD PTT, UNSA Telecommunications	Yes
HR	HST	RSRH	Yes
HU	TAVSZAK	HMTSZSZ	No
IE	CWU, Forsa		Yes
IT	SLC-CGIL, FISTEL-CISL, Uilcom-UIL, Filcams-CGIL, Fisascat-CISL, Uiltucs-UIL	FIOM-CGIL, FIM-CISL, UILM-UIL	n.a.
LT	LRDPS		Yes
LU	OGBL SeE, LCGB CeS, ALEBA, Syndicat des P&T		Yes
LV	LSAB		Yes
MT	GWU		Yes
NL	CNV Vakmensen, FNV	CNV Connectief, VHP2	Yes
PL	SL NSZZ Solidarność	FZZPT, ZZIT, KZZPT, ZZ Kontra, NSZZ Solidarność 80	No
PT	Sinttav, STPT, Sindetelco, SNTCT, SITESE		Yes
RO	ANTIC, FSTc, SL-TC, SITT		Yes
SE	Unionen, Sveriges Ingenjörer, Jusek, SEKO	Civilekonomerna, Ledarna	Yes
SI	Telekom Slovenije (TS)	SDPZ-telekom, SDPZ, SELEKS, SINEKS	No
SK	OZ T	SO PT	No
UK	USDAW, Prospect, Unite the Union, CWU, PCS		Yes

Note: Trade unions in brackets are indirect UNI Europa affiliates.

Source: Network of Eurofound Correspondents, 2018.

UNI Europa also has a member trade union in Serbia: Unitel. This is the Telenor Common Union, that united the trade unions of the companies Telenor, Telenor Common Operations and Telenor Bank and which has been transformed into Unitel.

As shown in Table 31, in 25 Member States UNI Europa has at least one affiliate covering at least part of the telecommunications sector according to NACE 61 and part of the ICT sector according to NACE 58.2, 62 and 63.1. In Cyprus, the sole UNI Europa member (EPOET) only covers the telecommunications sector according to NACE 61. In the pluralist systems of Denmark, France, Italy, Luxembourg, Portugal, Spain, Sweden and the UK, there are member unions covering the entire ICT-telecommunications sector and member unions covering only part of it.

According to Table 32, for the vast majority of UNI Europa members, the domain pattern is one of sectional overlap (56 organisations). Most of these unions have a broad membership domain in terms of business activities, but nevertheless do not cover all sub-activities within the ICT-telecommunications sector. Moreover, their domains often cover only certain regions or only white-or blue-collar workers or particular occupations; in several cases, they do not represent employees of publicly owned enterprises. Only 1 UNI Europa affiliate has a membership domain which is (largely) congruent with regard to the sector, while 7 have a sectional membership domain and 12 have an overlapping domain.

Overall, however, compared to all 118 sector-related trade unions, the 76 UNI Europa members tend to have a broader membership domain, in that they are slightly overrepresented among those unions covering at least part of both the telecommunications and ICT subsectors. In contrast, more specialised trade unions representing only employees in either telecommunications or ICT are less likely to be UNI Europa affiliates. This means that UNI Europa is particularly representative of trade unions acting for both telecommunications and ICT members.

As shown in Table 19, of the 117 trade unions in the ICT-telecommunications sector for which data are available, 113 are involved in collective bargaining. The four unions that are not involved (three from Denmark and one from Greece) are members of UNI Europa, but in these two countries there are other members of UNI Europa that do engage in sector-related collective bargaining. Of the 113 unions that are involved in collective bargaining, 72 (64%) are members of UNI Europa. As these tend to be the unions with the largest membership in most countries (notable exceptions can be found in Bulgaria, Poland and Slovakia), their collective bargaining coverage also tends to be highest. Almost half of the unions affiliated to UNI Europa (36 out of 76) are involved in MEB. In the multi-trade union systems of Austria, Belgium, Czechia, Denmark, Greece, Ireland, Luxembourg and Portugal, where more than one trade union is involved in collective bargaining, all trade unions involved in collective bargaining in the sector are affiliated to UNI Europa. In all EU Member States with a pluralist trade union system in the sector, at least one trade union involved in collective bargaining is a member of UNI Europa, but not all of the sector-related unions. In the single trade union systems of Estonia, Latvia, Lithuania and Malta, the only sector-related trade union is both involved in collective bargaining and affiliated to UNI Europa.

As can be seen from Table 19, one or more member unions of UNI Europa per country are among those achieving the highest coverage by collective bargaining in the sector in almost all EU countries for which sufficient data are available. Only in Bulgaria does the trade union not affiliated to UNI Europa have a higher coverage than the UNI Europa members. There is insufficient data available to make this assessment in Denmark, Germany, Greece, Italy and Spain. In all 28 EU Member States, UNI Europa records at least one member organisation involved in collective bargaining.

## Membership domain and membership composition of ETNO

ETNO was founded in 1992 and is the voice of Europe's telecommunications network operators. As such, it is the only recognised European social partner organisation acting on behalf of businesses in the telecommunications sector. ETNO members are pan-European operators that are individual companies or company groups rather than national business or employer organisations. For ETNO, direct company membership is preferable, since national business associations are often exclusively dedicated to commercial, technical or market-related issues in respect of the national regulatory authorities. ETNO brings together the main investors in e-communication platforms and services,

representing about 70% of total sector investment. ETNO members collectively employ about 600,000 employees throughout Europe. In addition to 'members', the ETNO statutes also provide for an 'observer' status. Observers are entities involved in the European telecommunications sector that are invited to attend as observers of (part of) ETNO's activities on an ad hoc basis and as the occasion may require.

ETNO has direct company membership in the 28 EU Member States with the exception of Czechia and Estonia. ETNO represents primarily the major telecommunications companies, many of which belong to the group of former monopoly providers.

With direct membership of corporations rather than associations, ETNO's structures are not tied to the national systems of employer and business associations. This raises the question of how these structures relate to the Commission's criterion of representativeness, which requires European social partner organisations to represent organisations which themselves are an integral and recognised part of Member States' social partner structures and with capacity to negotiate agreements (Eurofound, 2007). However, since collective bargaining, more so in the telecommunications sector than in the ICT sector, is conducted either mainly or exclusively at individual enterprise level in most of the EU countries, large companies themselves rather than employer organisations tend to be the agents of business in industrial relations. The largest telecommunications companies, often the former monopoly providers, are still the key actors and leaders of business in the sector's systems of SEB; moreover, they are usually affiliated to ETNO. In the few countries where MEB is prevalent or allencompassing, the ETNO members may be linked indirectly to the national bargaining process in that the ETNO affiliate may conduct bargaining within its own realm, such that its agreements complement the sector-level multi-employer agreements (which is, for instance, the case in Austria). Any form of pattern bargaining or other forms of influencing MEB (goal formation, bargaining strategies, etc.) by ETNO affiliates, when they are affiliated to national employer organisations at the same time, could however not be revealed.

In Table 32, the sector relatedness and involvement in collective bargaining is presented for all 26 corporate members of ETNO. They cover 26 Member States, which means that there is one ETNO member in all 28 States but for Czechia and Estonia. Of these 26 affiliates, 15 (58%) operate both in telecommunications and in ICT-related activities. All of them but Elisa of Finland are involved in collective bargaining.

Table 32: ETNO member companies' sector relatedness and collective bargaining

Member State	Company	Telecoms workforce (number and percentage)	Sector relatedness	Collective bargaining	NACE 61	NACE 58	NACE 62	NACE 63
AT	Telekom Austria	9,000 (61%)	S	SEB	Yes	Partly	Partly	Partly
BE	Proximus	12,076 (55%)	S	SEB	Yes	No	Partly	Partly
BG	EAD	6,145 (30%)	S	SEB	Yes	No	No	No
CY	СҮТА	3,031 (90%)	S	SEB	Yes	No	No	No
CZ	No affiliation		•					
DE	Deutsche Telekom	105,000 (n.a.)	С	MEB by Agv:c	Yes	Yes	Yes	Yes
DK	TDC	7,963 (61%)	С	SEB	Yes	No	No	No
EE	No affiliation							
EL	OTE	15,500 (59%)	S	SEB	Yes	Partly	Partly	Partly
ES	Telefonica	28,107 (25%)	S	SEB	Yes	No	No	No
FI	Elisa	3,251 (n.a.)	S	No	Yes	No	No	No
FR	Orange	97,607 (58%)	S	SEB	Yes	No	Partly	Partly
HR	HRVATSKI Telekom	4,000 (55%)	S	SEB	Yes	No	No	No
HU	Magyar Telekom	6,995 (44%)	S	SEB	Yes	Partly	Partly	No
IE	EIR Telekom	3,286 (n.a.)	S	SEB	Yes	No	No	No
IT	Telecommunications Italia	50,926 (63%)	SO	SEB	Yes	Yes	Yes	Yes
LT	AB Telia Lietuva	2,227 (39%)	S	SEB	Yes	No	Yes	Yes
LU	Post Luxembourg	4,302 (87%)	S	SEB	Yes	No		Yes
LV	Lattelecommunicatio ns Group	1,377 (27%)	S	SEB	Yes	n.a.	n.a.	n.a.
MT	GO Plc	1,000 (58%)	S	SEB	Yes	No	No	No
NL	KPN NV	13,021 (43%)	S	SEB	Yes	No	Partly	Yes
PL	Orange Polska Group	14,000 (30%)	S	SEB	Yes	No	Partly	Partly
PT	Portugal Telekom Group	9,515 (68%)	SO	SEB	Yes	Partly	Partly	Partly
RO	TelekomRomana Communications	6,267 (15%)	SO	SEB	Yes	No	No	No
SE	Telia Company AB	8,000 (33%)	S	MEB	Yes	No	No	No
SI	Telekom Slovenije	2,403 (52%)	S	SEB	Yes	Yes	Partly	Yes
SK	Slovak Telekom	3,268 (28%)	SO	SEB	Yes	Partly	Yes	Yes
UK	British Telecommunications	80,000 (35%)	С	SEB	Yes	Yes	Yes	Yes

Notes: C = congruent. O = overlap. S = sectional. SO = sectional overlap.

Source: Network of Eurofound Correspondents, 2017–2018.

Table 32 shows that 10 ETNO affiliates cover NACE 61 in telecommunications only. The majority of ETNO members, however, are also active in (part of) the ICT sector. Whereas only 3 ETNO affiliates operate in the whole ICT-telecommunications sector, 12 ETNO members cover the entire

telecommunications sector and part of the ICT sector (for the Lattelecommunications Group of Latvia no information in activities in ICT has been provided). The strategy of the large telecommunications groups to expand into and to integrate all segments of the market, as described in the second chapter, is reflected in this table. The expansion of telecommunications towards the ICT sector resulted in a blurring of the boundaries between the two subsectors where telecommunications absorbed ICT segments. Nevertheless, in 10 countries, ETNO affiliates have not expanded their operations to the ICT sector: Bulgaria, Croatia, Cyprus, Denmark, Finland, Ireland, Malta, Romania, Spain and Sweden. ETNO affiliates are present in 26 of the 28 countries (Czechia and Estonia do not have a telecommunications company affiliated to ETNO). However, the Telia company in Estonia is a daughter company of Telia AB in Sweden, establishing a kind of kinship relation with ETNO. In all other countries, ETNO has exactly one company member.

The ETNO members together employ about 600,000 people, which is more than half of the EU telecommunications workforce according to Table 9 in the second chapter. Comparing the size of the workforce of ETNO affiliates to the (local) workforce of the telecommunications sector shows a share of over 50% for 12 countries: Austria, Belgium, Croatia, Cyprus, Denmark, France, Greece, Italy, Luxembourg, Malta, Portugal and Slovenia. However, the outcome is much lower when comparing the ETNO members' workforce with the size of the workforce of the whole sector, including the ICT subsector. Overall, the workforce of ETNO members is estimated to make up 10–15% of the entire EU ICT-telecommunications workforce. Although it is hard to assess which part of the workforce of the ETNO affiliates is to be subsumed under pure telecommunications activities according to NACE 61, the ETNO members' presence in the telecommunications subsector (which ETNO represents) appears to be high.

## **Domain coverage of DIGITAL SME and DigitalEurope**

Both DIGITAL SME and DigitalEurope are dealt with separately as (potential) European employer organisations on behalf of the ICT sector in this study because they have expressed their interest in participating in European-level structures of interest representation on behalf of the ICT sector. DIGITAL SME is a network representing about 20,000 ICT SMEs across the EU. According to its statutes, among its objectives is interest representation on behalf of its members on specific problems vis-à-vis the institutions of the EU, which may qualify this organisation as, potentially, a European social partner organisation. DigitalEurope regards itself as the voice of digitally transforming industries and more as a European business than employer organisation; it organises both corporate and associational members. As of July 2019, membership includes about 40 trade associations from EU and non-EU European countries, thus representing about 35,000 businesses throughout Europe. In terms of business activities, both DIGITAL SME and DigitalEurope have a membership domain which largely corresponds to the ICT sector according to NACE codes 58.2, 62 and 63.1. In terms of firm size, however, DIGITAL SME only represents SMEs.

Table 33: Employer organisation and business association membership and domain coverage

	Employer organisation or business	Member companies in sector	Workforce member companies	Domain coverage	Affiliated to DIGITAL	Affiliated to Digital Europe		NAC	E	
	association	(number)	(number)		SME	Luiope	61	58.2	62	63.1
Α	FTR	500	15,000	SO	No	No	Yes	No	No	No
Т	UBIT	26,000	60,000	SO	Yes	No	No	Yes	Yes	Yes
	100	n.a.	n.a.	n.a.	No	Yes	Yes	Yes	Yes	Yes
В	Agoria	546	n.a.	0	No	Yes	Yes	Yes	Yes	Yes
E	VBO-FEB	546	n.a.	0	No	No	Yes	Yes	Yes	Yes
B G	Basscom	n.a.	n.a.	SO	Yes	No	No	No	Yes	Partl y
	ICT Cluster Plovdiv	20	1,000	SO	Yes	No	Partly	Partly	Yes	Partl y
	ВСТ	n.a.	n.a.	n.a.	Yes	No	n.a.	n.a.	n.a.	n.a.
	BAIT	n.a.	n.a.	n.a.	No	Yes	n.a.	n.a.	n.a.	n.a.
C Y	CITEA	57	n.a.	SO	No	Yes	No	Yes	Yes	Yes
С	SBP	n.a.	n.a.	SO	No	No	No	No	Partl	Partl
Z	A	20	76 500		Ne	Ne	Vee	Vee	У	У
D E	Agv:c	28	76,500	С	No	No	Yes	Yes	Yes	Yes
_	BITMi	n.a.	n.a.	S	Yes	No	No	Yes	Yes	Yes
D K	DI	220	9,725	0	No	No	Yes	Yes	Yes	Yes
	Dansk Erhverv	11	7,595	0	No	No	Yes	Yes	Yes	Yes
	DI Digital	n.a.	n.a.	n.a.	No	Yes	n.a.	n.a.	n.a.	n.a.
	IT Forum Midtjylland	470	20,000	S	Yes	No	No	Yes	Yes	Yes
E	ITL	85	9,000	С	No	No	Yes	Yes	Yes	Yes
E	Corallia	150	10,000	С	Yes	No	Yes	Yes	Yes	Yes
-	HAMAC	80	4,000	S	Yes	No	No	Partly	Partl y	Partl y
	SEPE	200	n.a.	С	No	Yes	Yes	Yes	Yes	Yes
E	Conetic	12,000	55,000	SO	Yes	No	No	Yes	Yes	Yes
S	AEC	24	n.a.	SO	No	No	No	No	Partl Y	No
	ACEC	28	n.a.	SO	No	No	No	No	Partl y	No
	Ametic	n.a.	n.a.	n.a.	No	Yes	n.a.	n.a.	n.a.	n.a.
F	PALTA	n.a.	17,000	SO	No	No	Yes	partly	Partl Y	Partl y
	TIF	200	28,000	SO	No	Yes	No	No	Partl Y	Partl y
	Syntec	1,538	221,798	SO	No	Yes	No	Yes	Yes	Yes

F R	Unetel-RST	48	63,000	S	No	No	Yes	No	No	Partl y
	GPNI, DIGITAL SME France	n.a.	n.a.	SO	Yes	No	No	Yes	Yes	Yes
	CINOV	2,055	43,178	SO	No	No	No	Yes	Yes	Yes
	AFNUM	60	n.a.	SO	No	Yes	No	n.a.	n.a.	n.a.
	TECH in France	400	n.a.	S	No	Yes	No	Yes	Yes	Yes
H R	No employer organisations									
H	IVSZ	500	n.a.	S	No	Yes	No	Yes	Yes	Yes
I E	Technology Ireland	222	50,000	SO	No	Yes	Partly	Partly	Partl Y	Partl y
T	Asstel	n.a.	n.a.	SO	No	No	Yes	No	Partl Y	Partl y
	CIM	n.a.	n.a.	SO	No	No	No	No	Partl y	Partl y
	Union Meccanica	n.a.	n.a.	SO	No	No	No	No	Partl Y	Partl y
	Federmeccani ca	n.a.	n.a.	SO	No	No	No	No	Partl Y	Partl y
	Confcommerc io	n.a.	n.a.	SO	No	No	No	Yes	Yes	Yes
	Confesercenti	n.a.	n.a.	SO	No	No	No	Yes	Yes	Yes
	CNA CTA	n.a.	n.a.	SO	Yes	No	No	Yes	Yes	Yes
	Confartigianat o	1,200	3,000	SO	No	No	Partly	Yes	Yes	Yes
	Unigec	n.a.	n.a.	SO	No	No	No	Partly	No	No
	Unimatica	n.a.	n.a.	S	No	No	Partly	Yes	Yes	Yes
	Clusit	270	n.a.	0	Yes	No	Yes	Yes	Yes	Yes
	Anitec- Assinform	n.a.	n.a.	0	No	Yes	Yes	Yes	Yes	Yes
L T	InfoBalt	n.a.	n.a.	0	No	Yes	Yes	Yes	Yes	Yes
L	APSI	77	n.a.	S	No	Yes	No	Yes	Yes	Partl y
L V	No employer organisations					No				
M T	MEA	40	n.a.	0	No	No	Yes	Yes	Yes	Yes
N L	WENB	2	4,365	SO	No	No	Yes	No	Partl y	Yes
	W ICT	n.a.	n.a.	SO	No	Yes	Partly	Yes	Yes	Yes
P L	Zipsee	3	n.a.	SO	No	Yes	No	Yes	Yes	Partl y
P T	AGEFE	n.a.	n.a.	SO	No	Yes	Partly	Partly	Partl Y	Partl y

R O	ANIS	135	18,500	S	No	Yes	No	Yes	No	Partl y
	Cluj IT	34	10,000	SO	Yes	No	No	Yes	Yes	Yes
	Iconic	22	3,400	SO	Yes	No	No	Yes	Yes	Yes
S E	ІТ&Т	1,200	100,000	С	No	Yes	Yes	Yes	Yes	Yes
S	GZS-ZIT	280	about 17,000	C	No	Yes	Yes	Yes	Yes	Yes
S K	ITAS	90	30,000	0	No	Yes	Yes	Yes	Yes	Yes
U	UKITA	n.a.	n.a.	S	Yes	No	No	Yes	Yes	Yes
K	TECH UK	n.a.	n.a.	n.a.	No	Yes	n.a.	n.a.	n.a.	n.a.

Notes: C = congruent. O = overlap. S = sectional. SO = sectional overlap. NACE 61 Telecommunications. NACE 58.2 Software publishing. NACE 62 Computer programming, consultancy-related activities. NACE 63.1 Data processing, hosting. n.a. = not available.

Source: Network of Eurofound Correspondents, 2017–2018, and authors' own calculations.

According to Table 33, of a total of 62 sector-related employer organisations, 15 (from 10 countries) and 24 (from 22 countries) are affiliated to DIGITAL SME and DigitalEurope, respectively. DigitalEurope thus covers, through affiliations from these countries, all Member States but for Czechia, Estonia, Germany and Malta as well as Croatia and Latvia, where no sector-related employer organisations exist at all. For 2018, no employer organisation was affiliated to both DIGITAL SME and DigitalEurope simultaneously, which means that 39 of the 62 sector-related associations are either affiliated to DIGITAL SME or DigitalEurope.

Since membership data in terms of companies and employees employed by member companies are not available for so many employer organisations, it cannot be assessed whether DIGITAL SME and DigitalEurope tend to represent the strongest (and most representative) associations in the Member States.

Since both DIGITAL SME and DigitalEurope claim to represent mainly the ICT subsector according to NACE codes 58.2, 62 and 63.1, it comes as no surprise that, to the extent that information in their sector relatedness has been provided, all national members of both European organisations represent at least part of this ICT subsector, while in the case of only 3 DIGITAL SME affiliates and as many as 11 DigitalEurope affiliates, (part of) the telecommunications sector is also represented. Hence, both European organisations are by far more representative of the ICT sector than the telecommunications sector.

Whereas for some organisations, information on their collective bargaining involvement is not available, the vast majority of the DIGITAL SME members (at least 12 out of 15) and a majority of DigitalEurope members (at least 14 out of 24) do not engage in sector-related collective bargaining. This means that, more so for DIGITAL SME than for DigitalEurope, industrial relations only rarely count as the key tasks of their affiliates.

<sup>&</sup>lt;sup>21</sup> Agoria (Belgium) has been an affiliate of DIGITAL SME since May 2019, and it is also a member of DigitalEurope, as indicated in Table 33.

#### Other European trade union associations

Overall, representativeness of UNI Europa in the sector is very high. First, it covers 26 Member States through 73 direct and three indirect affiliations from these countries, and 72 UNI Europa members are involved in collective bargaining. Second, with regard to its affiliates' membership domains in terms of business activities, the vast majority of them record domains covering most of the sector, in particular within the telecommunications subsector. This means that, especially in the telecommunications subsector, representativeness gaps of UNI Europa are scarce, at least in terms of both territorial coverage and business activities.

Nevertheless, in order to assess the weight of UNI Europa in the sector, it is necessary to look at other European labour organisations that may represent the sector. This is done by reviewing other European organisations to which sector-related trade unions are affiliated. The affiliations of the trade unions are listed in Table 34. European labour organisations other than UNI Europa represent 26 of the 118 sector-related trade unions in 13 countries. Of these 26 unions recording one or more affiliations to European organisations other than UNI Europa, 12 are simultaneously affiliated to the latter organisation. Those European organisations that cover at least three sector-related trade unions comprise the European Confederation of Independent Trade Unions (CESI), the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT), the European Federation of Public Service Unions (EPSU), the European Training Foundation (ETF) and IndustriAll Europe. However, although the affiliations listed in Table 34 are likely not to be exhaustive, this overview does not question the principal status of UNI Europa as the sector's labour representative at European level. This is not only due to the relatively low numbers of affiliations per organisation other than UNI Europa, but also because the presence of these organisations usually results from the multi-sector domains of the respective trade unions. Moreover, there is no indication that any of these 'alternative' European organisations have a specific interest in representing ICT-telecommunications workers. Hence, none of the other European organisations challenge UNI Europa's position as the main European representative of labour in the ICT-telecommunications industry. Furthermore, in terms of both number of affiliations and territorial coverage, all of the 'alternative' European organisations clearly fall short of UNI Europa.

Table 34: Sector-related trade unions affiliated to UNI Europa and other European labour associations

Member State	Trade unions directly affiliated to UNI Europa	Trade unions not directly affiliated to UNI Europa	Direct affiliation to European labour organisations other than UNI Europa
AT	GPA-djp		EPSU, EFFAT, EFJ
	GPF		
BE	LBC-NVK		
	CNE		
	BBTK-SETCA		
	ACLVB-CGSLB		
	ACV Transcom		
	ACOD-CGSP		
		VSOA-SLFP (indirect member)	
BG	TUFC		

Member State	Trade unions directly affiliated to UNI Europa	Trade unions not directly affiliated to UNI Europa	Direct affiliation to European labour organisations other than UNI Europa
		SFOEMI	
	FC CL Podkrepa		
CY	EPOET		
		SIDIKEK	
		PASE-ATHK	
		ASET-CYTA	
		SEP-CYTA	
CZ	OS ZPTNS		
	OS PPP		
DE	ver.di		
		IG Metall	IndustriAll
		DPVKOM	CESI (including Eurofedop)
		CGPT	CESI (including Eurofedop)
DK	Dansk Metal		
	HK, Samdata		
	PROSA		
	Finansforbundet		
	TL		
	Dansk El-Forbund		
	IDA		
	DJØF		
	DM		
EE	ESTAL		
EL	OME OTE		
	Unicosmo		
	OIYE		
		PaseVodafone (indirect member)	
ES	CCOO Servicios		
	FSC-CCOO		
	FeSMC UGT		
		USO Services	
		CGT	
		STC	
	ELA STV		
FI		FEWU	EFBWW, IndustriAll
	FIU		IndustriAll
	Pro		IndustriAll
		YTN (indirect member)	
		AITSE	

Member State	Trade unions directly affiliated to UNI Europa	Trade unions not directly affiliated to UNI Europa	Direct affiliation to European labour organisations other than UNI Europa
FR		CFE-CGC-Fieci	CEC Managers
	CFDT F3C		
	FSE-CGT		
		CFTC CSFV	
	FEC-FO		
	FO-COM		
		FPT-CFTC	
	FAPT-CGT		
		FCCS-CFE-CGC	
		SUD PTT	
		UNSA Telecommunications	
HR	HST		
		RSRH	
HU		HMTSZSZ	
	TAVSZAK		
IE	CWU		
	Forsa		EPSU
IT	SLC-CGIL		
	FISTEL-CISL		
	Uilcom-UIL		
		FIOM-CGIL	IndustriAll
		FIM-CISL	IndustriAll
		UILM-UIL	IndustriAll
	Filcams-CGIL		EFFAT
	Fisascat-CISL		EFFAT
	Uiltucs-UIL		EFFAT
LT	LRDPS		
LU	OGBL SeE		IndustriAll, Eurocadres
-	LCGB CeS		,
	ALEBA		
	Syndicat des P&T		CESI (incl. Eurofedop)
LV	LSAB		ezar (men. zararedap)
MT	-5.1		EPSU, EURO-WEA, FERPA,
	GWU		Eurocadres, ETF, EFBWW, EFFAT, IndustriAll
NL		CNV Connectief	CESI (incl. Eurofedop)
	CNV Vakmensen		
	FNV		
		VHP2	
PL	SL NSZZ Solidarność		
		FZZPT	

Member State	Trade unions directly affiliated to UNI Europa	Trade unions not directly affiliated to UNI Europa	Direct affiliation to European labour organisations other than UNI Europa
		ZZIT	Eurocadres
		KZZPT	
		ZZ Kontra	
	NSZZ Solidarność 80		
PT	Sinttav		
	STPT		
	Sindetelco		
	SNTCT		
	SITESE		
RO	ANTIC		
	FSTc		
	SITT		IndustriAll
	SL-TC		
SE	Unionen		
	Sveriges Ingenjörer		
		Civilekonomerna	
	Jusek		
		Ledarna	
	SEKO		
SI	Telekom Slovenije (TS)		
		SDPZ-Telekom	
		SDPZ	
		SELEKS	
		SINEKS	
SK	OZ T		
		SOZ PT	CESI (including Eurofedop)
UK	USDAW		IndustriAll, EFFAT, ETF
	Prospect		ETF
	Unite the Union		EPSU, EFFAT, EFBWW, ETF, IndustriAll
	CWU		
	PCS		EPSU, ETF, UFE

Source: Network of Eurofound Correspondents, 2017–2018.

**CESI**, including Eurofedop, represents trade unions in the sector in five Member States (Austria, Germany, Lithuania, the Netherlands and Slovakia), and in Luxembourg it includes as a member organisation the telecommunications trade union with most members in that country. In Germany, the CGPT is also affiliated to CESI as a member of the German CGB, which is a member organisation of CESI. In Slovakia, SOZ PT is a member of CESI (via Eurofedop).

In Luxembourg, the Syndicat des P&T is a member of the CGFP (Conféderation Générale de la Fonction Publique), which is a member organisation of CESI. With 1,500 members in the sector, the Syndicat des P&T is the biggest trade union in the sector. CESI reported that this trade union ceased its European affiliation with UNI Europa in 2018 and, at European level, has only been a member of CESI (through CGFP) since then. As this study was based on data collected in 2017, it reflects the situation when this trade union was still affiliated to UNI Europa.

In Austria, the GPF is in itself a member of UNI Europa. However, within the GPF, the Christian section (FCG-GPF) is a member of CESI (via Eurofedop). The affiliates of the FCG-GPF have therefore, technically speaking, a double affiliation to both CESI (via Eurofedop) and UNI Europa. The FCG-GPF has 14,000 active members in the sector.

Table 35 lists other EU labour associations with insurance sector national trade unions as members.

Table 35: Other EU labour associations with insurance sector national trade unions as members

Abbreviation	Full name	Member States with one or more affiliate
CEC Managers	CEC European Managers	FR
CESI	European Confederation of Independent Trade Unions	DE, NL
EFBWW	European Federation of Building and Woodworkers	FI, MT, UK
EFFAT	EFFAT European Federation of Food, Agriculture and Tourism Trade Unions	
EFJ	European Federation of Journalists	AT
EPSU	European Public Service Union	AT, IE, MT, UK
ETF	European Transport Workers' Federation	MT, UK
Eurocadres	Council of European Professional and Managerial Staff	LU, MT, PL
Eurofedop	European Federation of Public Service Employees	DE, SK
EURO-WEA	European Workers' Education Association	MT
FERPA	European Federation of Retired and Elderly People	MT
IndustriAll Europe	IndustriAll European Trade Union	DE, FI, IT, LU, MT, RO, UK
UFE	Union of Finance Personnel in Europe	UK

Source: Network of Eurofound Correspondents, 2018.

## Other European employer and business associations

A similar review of the membership of the national employer organisations can be derived from Table 36. Whereas most organisations do not record any affiliation to European associations other than DIGITAL SME and DigitalEurope, a few can be identified as having an affiliation to alternative European associations. However, for only one of these associations, namely the European Federation of Management Consultancies Associations (FEACO), three affiliations from two countries can be found, whereas EuroCommerce counts two affiliations from the sector-related employer and business organisations. Moreover, most of them do not regard themselves as social partner organisations with a particular interest in social policy and labour market affairs, but primarily act as business or trade and lobbying organisations. Therefore, none of these alternative European associations appear to challenge the principal status of DIGITAL SME and DigitalEurope as the ICT subsector's main representatives on the business side, although both organisations as yet do not act as industrial

relations agents rather than trade organisations. ETNO's position as the employers' voice on behalf of the telecommunications businesses in the European-level social dialogue is not challenged either.

Table 36: Sector-related employer organisations affiliated to DIGITAL SME and DigitalEurope and other European employer associations

Member State	Employer organisations directly affiliated to DIGITAL SME and DigitalEurope	Employer organisations not directly affiliated to DIGITAL SME and DigitalEurope	Direct affiliation to European employer organisations other than DIGITAL SME and DigitalEurope
AT		FTR	
	UBIT		FEACO
	100		
BE	Agoria		
		VBO-FEB	
BG	Basscom		
	ICT Cluster Plovdiv		
	BCT		
	BAIT		
CY	CITEA		
CZ		SBP	EBF, Insurance Europe
DE		Agv:c	
	BITMi		
DK		DI	
		Dansk Erhverv	EuroCommerce, Euro-Ciett, Clecat
	DI Digital		
	IT Forum Midtjylland		
EE	ITL		
EL	Corallia		
	HAMAC		
	SEPE		
ES	Conetic		
		AEC	FEACO
		ACEC	FEACO
	Ametic		
FI		PALTA	
	TIF		
FR <sup>22</sup>	Syntec		
		Unetel-RST	
	GPNI, DIGITAL SME France		
		CINOV	EFCA
	AFNUM		

<sup>&</sup>lt;sup>22</sup> Table 36 presents the situation as it was in 2017–2018, prior to the creation of DIGITAL SME France.

Member State	Employer organisations directly affiliated to DIGITAL SME and DigitalEurope	Employer organisations not directly affiliated to DIGITAL SME and DigitalEurope	Direct affiliation to European employer organisations other than DIGITAL SME and DigitalEurope
	TECH in France		
HR	No employer organisations		
HU	IVSZ		
IE	Technology Ireland		
IT		Asstel	
		CIM	
		Union Meccanica	CEAPME
		Federmeccanica	Ceemet
		Confcommercio	EuroCommerce
		Confesercenti	
	CNA CTA		
		Confartigianato	
		Unigec	
		Unimatica	
	Clusit		
	Anitec-Assinform		
LT	InfoBalt		
LU	APSI		
LV	No employer organisations		
MT		MEA	
NL		WENB	
	W ICT		
PL	Zipsee		
PT	AGEFE		CECED, EUEW
RO	ANIS		
	Cluj IT		
	Iconic		
SE	IT&T		
SI	GZS-ZIT		
SK	ITAS		
UK	UKITA		
	TECH UK		

Source: Network of Eurofound Correspondents, 2017–2018.

Table 37 lists other EU employer or business associations with ICT-telecommunications sector national employer organisations as members.

Table 37: Other EU employer or business associations with ICT-telecommunications sector national employer organisations as members

Abbreviation	breviation Full name	
CEAPME	European Entrepreneurs – Confédération Européenne des Associations de Petites et Moyennes Entreprises	IT
CECED	European Committee of Domestic Equipment Manufacturers	PT
Ceemet	European Tech and Industry Employers	IT
Clecat	European Association for Forwarding, Transport, Logistics and Customs Services	DK
EBF	European Banking Federation	CZ
EFCA	European Federation of Engineering Consultancy Associations	FR
EUEW	European Union of Electrical Wholesalers	PT
Euro-Ciett	World Employment Confederation – Europe	DK
EuroCommerce	The Retail, Wholesale and International Trade Representation to the EU	DK, IT
FEACO	European Federation of Management Consultancies Associations	AT, ES
Insurance Europe	European Insurance and Reinsurance Federation	CZ

Source: Network of Eurofound Correspondents, 2017–2018.

## Representativeness of UNI Europa and ETNO in the ICTtelecommunications sector (including information for DIGITAL SME and DigitalEurope)

Table 38 summarises the representativeness of both UNI Europa and ETNO in the ICT-telecommunications sector, and also of DIGITAL SME and DigitalEurope, with regard to their respective affiliated trade unions and employer organisations and – in the case of ETNO – corporate members.

Of the 118 sector-related trade unions identified in this study, 79 (representing 28 countries) are affiliated to UNI Europa. Of the 113 trade unions involved in sector-related collective bargaining, 74 are UNI Europa affiliates. UNI Europa represents affiliates that are involved in collective bargaining in 28 Member States.

Altogether, there are 62 employer organisations in the ICT-telecommunications sector in 26 Member States. Only Croatia and Latvia do not have any sector-related employer organisations. Of these 62 associations, 15 are affiliated to DIGITAL SME, which covers 10 Member States through affiliations from these countries. To the extent that information has been provided, only 2 of the 15 DIGITAL SME members are involved in sector-related collective bargaining. In the case of DigitalEurope, this organisation includes 24 of all 62 sector-related employer organisations under its umbrella, thus covering 22 of the 28 EU Member States. With seven member associations for which collective bargaining involvement affecting the sector is documented, only a minority of all DigitalEurope members (32%) and all sector-related employer organisations involved in bargaining (23%) act as industrial relations agents. DigitalEurope members engaging in collective bargaining can be found in seven countries. In this context, it is important to note that the membership domains of both European employer associations (which are not included in the Commission's list of recognised

European social partner organisations to be consulted on behalf of a sector) have a clear focus on the ICT rather than the telecommunications sector.

According to its statutes, ETNO membership exclusively comprises corporate affiliates rather than employer organisations. As shown in Table 38, ETNO has one individual company member in 26 Member States – that is all Member States but for Czechia and Estonia. For all member organisations, except those in Finland, involvement in collective bargaining can be discerned, usually in the form of SEB on behalf of the individual organisation; however, in Sweden, and possibly a few other countries, ETNO members engage in MEB as part of a negotiating team on the employer side.

Table 38: Membership structure of UNI Europa, ETNO, DIGITAL SME and DigitalEurope

	organisations Member States with organisations		Number of organisations involved in collective bargaining <sup>23</sup>	Number of Member States with organisation(s) involved in collective bargaining	
All sector-related trade unions	118 trade unions	28	113 trade unions	28	
Affiliates of UNI Europa	ropa 79 trade unions <sup>24</sup> 28  76 directly  3 indirectly		74 trade unions	28	
Percentage affiliated	67	100	65	100	
All sector-related employer organisations	62 employer organisations	26	31 employer organisations	14	
Employer organisations affiliated to DIGITAL SME (in 2018) <sup>25</sup>	15 employer organisations	10	2 employer organisations	2	
Percentage affiliated	24	38	6	14	
Employer organisations affiliated to Digital Europe	24 employer organisations	22	7 employer organisations	7	
Percentage affiliated	39	85	23	50	
Companies or groups affiliated to ETNO	26	26 (not in CZ, EE)	25	25 (not in CZ, EE, FI)	

Source: Authors' own calculations based on Network of Eurofound Correspondents data.

When taking affiliations of employer organisations to DIGITAL SME and DigitalEurope cumulatively, they cover 39 of all 62 sector-related employer associations in 25 Member States. <sup>26</sup> Interestingly, multiple memberships do not exist, which means that there is no employer organisation affiliated to both DIGITAL SME and DigitalEurope simultaneously. Nine of the DIGITAL SME and DigitalEurope

<sup>&</sup>lt;sup>23</sup> No information is available on the collective bargaining involvement of one trade union which is a UNI Europa member and of five employer organisations which are all affiliated to either DIGITAL SME or DigitalEurope.

<sup>&</sup>lt;sup>24</sup> Including three indirect affiliations through higher- or lower-order units.

<sup>&</sup>lt;sup>25</sup> Agoria's affiliation to DIGITAL SME since May 2019 brings the total number of DIGITAL SME member organisations to 16 from 11 Member States. As Agoria is involved in sector-related collective bargaining, its membership also increases the number of affiliates involved in collective bargaining to three in three separate Member States. Also, from 2019, DIGITAL SME France is a member of DIGITAL SME in France, instead of GPNI, which does not affect the numbers in the table.

<sup>&</sup>lt;sup>26</sup> Malta has no affiliations to DIGITAL SME or DigitalEurope, and in Croatia and Latvia no sector-related associations can be found.

affiliates (29% of all employer organisations involved in collective bargaining) engage in bargaining activities themselves, covering nine countries. Cumulatively, associate members of DIGITAL SME and DigitalEurope cover about 63% of the sector-related employer associations and almost 30% of those employer organisations involved in collective bargaining.

Table 39 seeks to provide more details on a country-by-country basis, demonstrating the importance of UNI Europa and ETNO in terms of their coverage of employees in the sector and involvement in collective bargaining. It is important to note that the table lists only the most important sector-related trade unions (in terms of sectoral membership and collective bargaining involvement) in the EU28.

The table highlights that UNI Europa is represented in the sector in all 28 Member States, and the national representativeness of the member unions of UNI Europa is generally high. In all countries but Poland, at least one of the largest or most important trade unions is affiliated to UNI Europa. Virtually all of them are involved in sector-related collective bargaining, and most of them represent employees active in one or both of telecommunications and ICT.

On the employer side, all ETNO corporate members cover all business activities within the telecommunications sector according to NACE 61 and most of them at least part of the ICT sector according to NACE codes 58.2, 62 and 63.1. All of them except for Elisa of Finland are involved in collective bargaining, which is usually SEB. Since ETNO's membership domain has a clear focus on the telecommunications sector, its members' strength with regard to the telecommunications subsector workforce in each Member State is of particular importance to assess its representativeness. Table 39 shows that 12 ETNO affiliates employ more than 50% of the total telecommunications workforce in their respective countries, and in a further 6 countries, between 30% and 50% of the workforce, while for some affiliates no information is available. This indicates that ETNO's representativeness in terms of the workforce employed by its national members is high.

Table 39: Importance of UNI Europa and ETNO at national level

	Most representative trade union(s)	Sector coverage	Collective bargaining	Member of UNI Europa	ETNO affiliate	Sector coverage	Collective bargaining	Workforce (number and % in telecoms)
AT	GPA-DJP	(T) + ICT	MEB	Yes	Telekom Austria	T + (ICT)	SEB	11,600 (78%)
BE	SETCA-BBTK	(T) + ICT	MEB	Yes	Proximus	T + (ICT)	SEB	12,076 (55%)
	LBC-NVK	(T) + ICT	MEB	Yes				
	ACOD-CGSLB	(T) + (ICT)	SEB	Yes				
BG	FC CL Prodkrepa	Т	SEB	Yes	Vivacom, EAD	Т	SEB	6,145 (30%)
CY	SIDIKEK-PEO	(T)	SEB	No	CYTA	Т	SEB	3,031 (90%)
	EPOET	Т	SEB	Yes				
CZ	OS ZPTNS	T + (ICT)	SEB	Yes	No affiliation			
DE	ver.di	T + ICT	MEB	Yes	Deutsche Telekom	T + ICT	SEB	105,000 (n.a.)
DK	HK/Samdata	ICT	MEB	Yes	TDC	Т	SEB	7,963 (61%)
EE	ESTAL	T + ICT	SEB	Yes	No affiliation			

EL	OIYE	(T) + (ICT)	No	Yes	OTE	T + (ICT)	SEB	15,500 (59%)
	OME OTE	Т	SEB	Yes				
ES	CCOO Servicios	ICT	MEB	Yes	Telefonica	Т	SEB	28,107 (25%)
FI	YTN	T + (ICT)	MEB	Yes	Elisa	T	No	3,251 (n.a.)
FR	Fo-Com	T	MEB	Yes	Orange	T + (ICT)	SEB	97,607 (58%)
	CFDT F3C	T + ICT	MEB	Yes				
HR	RSRH- telecommunicat ions	Т	SEB	No	HRVATSKI Telekom	Т	SEB	4,000 (55%)
	HST	T + ICT	SEB	Yes				
HU	HMTSZSZ	T + (ICT)	SEB	No	Magyar Telekom	T + (ICT)	SEB	6,995 (44%)
	Távszak	Т	SEB	No	reiekom			
IE	CWU	Т	SEB	Yes	EIR Telekom	Т	SEB	3,286 (n.a.)
IT	Filcams-Cgil	(ICT)	MEB	Yes	Telecomm unications	T + ICT	SEB	50,926 (63%)
	Fisacat-CISL	(ICT)	MEB	Yes	Italia			
	FIM-CISL	(ICT)	MEB	No				
LT	LRDPS	(T) + (ICT)	SEB	Yes	AB Telia Lietuva	T + (ICT)	SEB	2,227 (39%)
LU	OGBL SeE	T + ICT	SEB	Yes	Post Luxembou rg	T + (ICT)	SEB	4,302 (87%)
LV	LSAB	T + ICT	SEB	Yes	Latteleco mmunicati ons Group	T	SEB	1,377 (27%)
MT	GWU	T + ICT	SEB	Yes	GO PIC	Т	SEB	1,000 (58%)
NL	FNV	T + ICT	MEB	Yes	KNP NV	T + (ICT)	SEB	13,021 (43%)
PL	NSZZ Solidarność 80	T + ICT	SEB	No	Orange Polska Group	T + (ICT)	SEB	14,000 (30%)
PT	SNTCT	T + (ICT)	SEB	Yes	Portugal Telecomm unications Group	T + (ICT)	SEB	9,515 (68%)
RO	ANTIC	T + (ICT)	SEB	Yes	TelekomR omana Communi cations	Т	SEB	6,267 (15%)
SE	Unionen	T + ICT	MEB	Yes	Telia Company AB	Т	MEB	8,000 (33%)
SI	SDPZ	T + ICT	SEB	No	Telekom Slovenije	T + (ICT)	SEB	2,403 (52%)
SK	SOZ PT	T + ICT	SEB	No	Slovak	T + (ICT)	SEB	3,268 (28%)
	OZT	T + ICT	SEB	Yes	Telekom			
UK	Unite the Union	T + (ICT)	SEB	Yes	British Telecomm unications	T + ICT	SEB	80,000 (35%)

Notes: T = full coverage of telecommunications sector. (T) = partial coverage of telecommunications sector. ICT = full coverage of ICT sector. (ICT) = partial coverage of ICT sector. MEB = multi-employer bargaining. SEB = single-employer bargaining.

Source: Network of Eurofound Correspondents, 2017–2018.

Overall, despite some trade unions in the ICT-telecommunications sector at Member State level not being affiliated to UNI Europa, the organisations that are members of UNI Europa tend to be those with the most members and collective bargaining coverage in their country – at least as far as (multi-employer) collective bargaining exists in the sector. On the employer side, for DIGITAL SME and DigitalEurope such an assessment with regard to membership strength cannot be made, mostly due to a lack of membership data for many national employer organisations. However, what can be said is that employer organisations involved in collective bargaining are underrepresented among DIGITAL SME and DigitalEurope members.

Table 40 indicates that all the EU Member States with the largest ICT-telecommunications sector workforce are represented by UNI Europa, and all the countries with the largest sectoral workforce have at least one affiliation to either DIGITAL SME or DigitalEurope. Also, ETNO has exactly one corporate member in each of these countries. This means that, of the nine Member States with the largest workforce in the sector, all are represented by UNI Europa and also by DIGITAL SME or DigitalEurope (or both) through associational memberships, and all are represented by ETNO through corporate membership. As recognised European-level social partner organisations, both UNI Europa and ETNO have members that engage in collective bargaining in all these countries. In contrast, neither DIGITAL SME nor DigitalEurope members are involved in collective bargaining in four of the nine countries with the largest ICT-telecommunications workforce: Germany, Poland, Spain and the UK.

Table 40: Affiliations in EU Member States with employment in excess of 100,000 in the ICT-telecommunications sector

Member State	Total employment	At least one trade union affiliated to UNI Europa	At least one UNI Europa affiliate involved in collective bargaining	At least one employer organisation affiliated to DIGITAL SME or DigitalEurope	At least one DIGITAL SME or DigitalEurope affiliate involved in collective bargaining	Corporate member of ETNO	At least one corporate member of ETNO involved in collective bargaining
DE	760,784	Yes	Yes	Yes	No	Yes	Yes
UK	760,000	Yes	Yes	Yes	No	Yes	Yes
FR	608,783	Yes	Yes	Yes	Yes	Yes	Yes
ES	402,600	Yes	Yes	Yes	No	Yes	Yes
IT	379,849	Yes	Yes	Yes	Yes	Yes	Yes
NL	218,000	Yes	Yes	Yes	Yes	Yes	Yes
PL	187,348	Yes	Yes	Yes	No	Yes	Yes
SE	159,347	Yes	Yes	Yes	Yes	Yes	Yes
RO	139,650	Yes	Yes	Yes	No	Yes	Yes

Note: Ordered by total employment.

Source: Network of Eurofound Correspondents, 2017–2018.

## UNI Europa, ETNO and DIGITAL SME's capacity to negotiate

UNI Europa and ETNO have agreed numerous joint texts since the creation of the social dialogue committee for telecommunications in 1993 (see Table 41).

Table 41: Joint texts of the ESSDC for telecommunications

Date	Торіс	Form
11 January 2018	Reconciling innovation and privacy protection to the benefit of the European data economy	Joint statement of the European Sectoral Social Dialogue Committee partners
2 February 2017	Joint declaration on ICT-based mobile work	Joint declaration
9 June 2016	Telework	Joint declaration
28 November 2014	Future ICT skills needs	Joint declaration
22 September 2014	Gender equality	Joint declaration
2 March 2011	Good work, good health	Good practice guidelines on improving the mental well-being of workers in the telecommunications sector
1 December 2007	Social and economic aspects of CSR	Joint statement
23 October 2007	Regulatory framework for electronic communications networks and services	Joint statement on European Commission proposals
1 October 2007	Musculoskeletal disorders	Introduction and review of good practice in telecommunications
4 June 2007	Diversity at work	Review of good corporate practice in the telecommunications sector
1 March 2007	Work-related musculoskeletal disorders	Response of the social partners to the EU second-stage consultation
20 October 2005	Good practice guidelines for the prevention of musculoskeletal disorders within telecommunications	Health and safety guidelines
1 October 2005	Musculoskeletal disorders	Introduction and review of good practice in the telecommunications sector
13 September 2005	Prevention of musculoskeletal disorders within telecommunications	Background report from the European Social Dialogue Working Group
15 June 2004	Guidelines for customer contact centres	Joint declaration
19 May 2003	Implementing social dialogue into an enlarged Union to ensure growth and competiveness in the telecommunications industry	Joint statement on EU enlargement
7 February 2001	Guidelines for telework in Europe	Guidelines, working conditions
10 October 2000	Joint statement for the Lisbon Top	Joint statement
1 March 2000	Rules of procedure in the telecommunications sector	Social dialogue European social partners
23 November 1998	Opinion on telework	Joint opinion, working conditions
23 November 1998	Feasibility study on setting up an employment observatory	
23 March 1998	Convergence of the telecommunications, media and information technology sectors and the implications for regulation (COM(97)623)	Opinion on a European Commission Green Paper

23 November 1997	Study of effects on employment of the process of liberalisation in the telecommunications sector	Joint opinion on the study
20 November 1997	Social and labour market dimension in the information society	Draft proposal for a joint opinion
20 November 1997	Round tables	Joint opinion
20 November 1997	Partnership for a new organisation of work (COM(97)128)	Joint opinion
20 November 1997	Recommendatory framework agreement	Framework agreement
28 February 1997	Joint opinion on the Green Paper on numbering (COM(96)590)	Joint opinion
16 December 1996	European year 1997 against racism and xenophobia	Resolution
16 December 1996	Development of the social dialogue at community-wide level	Opinion on the Commission's statement
16 December 1996	Study concerning the effects on employment of the liberalisation of the telecommunications sector	Opinion on the executive summary of the study
11 March 1996	General authorisations and individual licences in the telecommunications sector	Joint opinion
4 December 1995	Universal service in a competitive environment	Joint opinion
3 March 1995	Proposal for a Directive on the application of open network provision to voice telephony	Joint opinion
3 March 1995	Green Paper on the liberalisation of telecommunications infrastructure and cable networks Part II	Opinion
5 December 1994	Green Paper on a common approach in the field of mobile and personal communications in the EU	Opinion
5 December 1994	Harmonised European statistics on occupational accidents in the telecommunications sector	Opinion
27 October 1993	Communication on developing universal service for telecommunications in a competitive environment	Opinion
15 June 1993	Commission communication to the Council and the proposal for a Council resolution on the review of the situation in the telecommunications sector	Opinion
2 April 1993	Commission on electromagnetic radiation	Opinion
2 April 1993	Directive on the mutual recognition of licences	Joint opinion
21 January 1993	Advice of the Joint Committee on the 1992 Review of the situation in the telecommunications sector adopted with the exception of British Telecommunications and PTT Telecommunications BV	Advice
17 December 1992	Joint opinion on the establishment of the harmonised European statistics on industrial accidents among network operators in the telecommunications industry	Joint opinion

3 November 1992	Commission communication on telecommunications tariffs in the Community	Joint opinion
3 November 1992	Proposal for a Council Directive on the application of open network provision to voice telephony	Position of the Joint Committee
3 November 1992	Communication of the Commission on the European telecommunications equipment industry	Position of the Joint Committee

Source: European Trade Union Institute for Research (ETUI), undated; European Commission social dialogue texts database.

UNI Global's statutes provide a mandate for its European branch, **UNI Europa**, to negotiate on behalf of its members in relation to the European Sectoral Social Dialogue Committee (although the committee is not specifically referred to). The statutes in Article 3 oblige UNI Europa to fulfil its obligations in relation to its objectives in:

- deciding policy and action with respect to the institutions of the EU to ensure that there is a social and democratic dimension to European integration
- representing affiliates in European institutions whose activities affect the social, economic and cultural conditions of affiliates and their members
- coordinating the activities of UNI Europa affiliates and offering assistance and support as appropriate
- crucially, undertaking collective bargaining and negotiating agreements in the region upon the mandate of the UNI Europa Executive Committee

It is therefore the UNI Europa Regional Executive Committee, which meets once a year, that has the power to provide a mandate. The composition of the Regional Executive Committee is clearly outlined in Article 9 of the statutes. This article also states that

where issues of concern to a particular sector are involved, a nominee or nominees of the group concerned may be invited to attend meetings of the Regional Executive Committee in an advisory capacity.

Article 10 of the statutes also provides the opportunity to establish a Regional Management Committee.

There are no clear provisions regarding responsibility for the approval of texts agreed within the remit of the European Sectoral Social Dialogue Committee.

**ETNO's** Articles of Association do not make direct reference to the European social dialogue process, but list the following among its activities:

• to conduct any research, collect and distribute scientific information concerning the legal, economic and social status of the firms in the relevant sectors

- to ensure a permanent link with the EU and with all other international bodies with a view to represent and defend the professional interests of its members as a whole
- to inform its members about all matters of mutual interest
- to adopt positions on behalf of commerce and coordinate the actions of its members, with a view to contributing to European integration
- and, more generally, to carry out all activities which, broadly speaking, may contribute to the achievement of the supranational objectives set forth in the previous paragraphs

While the final decision-making body is the General Assembly (on which all members are represented), on a day to day basis key decisions are taken by a (maximum) 13-member strong Executive Board, which is appointed by the General Assembly. The Executive Board approves the major positions and policies, as well as the strategic work areas and major priorities. The Executive Board meets twice a year and it is stipulated that its decisions are to be made based on consensus, whenever possible. If no consensus can be reached, decisions of the Executive Board shall be taken by a simple majority of the votes cast.

All joint opinions between ETNO and UNI Europa and the activities of the ESSDC are prepared in the ETNO working group on 'Employment, Health and Safety'. This is composed of nine permanent members who represent their company on a Europe-wide operational/subsidiary level. The current delegates are two delegates from Altice in Portugal, one from Telefonica in the UK, one from Deutsche Telecommunications in Germany, one from Orange in France, and two from BT in Belgium and in the UK, one from Telia in Sweden and an officer from the ETNO Brussels office. This Employment, Health and Safety working group has monthly teleconferences independent of the ESSDC, to coordinate the ETNO activities. The Chair of the working group reports on the activities to the ETNO director. Also, in the meeting of the General Assembly an activity report is presented on the activities of the ESSDC and of the ETNO Employment, Health and Safety working group. Draft joint opinions prepared by this working group are presented and finally approved in the ETNO Executive Board by unanimity.

With this working group and these decision-making procedures in place, it can be concluded that ETNO is focused on policy influence and future capacity building and under Executive Board mandate, there is an ad-hoc capacity to negotiate.

The European **DIGITAL SME** Alliance has in its structures internal expert working groups, one of which is responsible for matters related to the social dialogue (WG SKILLS). The meetings of this working group are normally held electronically (via online calls). As of July 2019, four position papers have been jointly developed and signed by DIGITAL SME and UNI Europa (UNI Europa and PIN-SME, 2011a, 2011b, 2011c, 2011d).

The process of drafting the joint positions starts with a meeting between the two delegations (European DIGITAL SME Alliance and UNI Europa), who work together to identify common potential interests across different topics. Next, the secretariats of both organisations prepare draft position papers which are then discussed with members of each organisation. Then, the second round of meetings between delegations of both organisations are convened to share the important points raised by their members, discuss them and agree on the final text. For the adoption of these joint opinions, a vote takes place within DIGITAL SME before the signing of the position paper, the final decision being made by majority. After positions are first discussed by the delegation of the European DIGITAL SME Alliance, General Assembly members are consulted and their input taken into

consideration in drafting the final text. The General Assembly is then asked to approve the final text of the position papers. On this basis, DIGITAL SME can rely on an ad-hoc capacity to negotiate

For the dissemination of the four position papers referred to above, the joint position papers were then sent out to all DIGITAL SME members. However, at the time these position papers were signed (2011), the European DIGITAL SME Alliance did not have enough resources to conduct any follow-up activities. However, the organisation has experienced significant growth since then such that, as of July 2019, the European DIGITAL SME Alliance organises campaigns (social media campaigns, press releases, meetings with relevant decision makers, national press campaigns by its members, etc.) to promote its policy positions. In addition, internal working groups contribute to the monitoring of implementation and further promotion of the positions.

## 4. Conclusions

About 4.5–5 million employees work in ICT-telecommunications overall. In the telecommunications sector, 80% of employment is in companies with 250 or more employees, whereas in the ICT sector around 66% of employment is in companies with fewer than 250 employees. The origins of telecommunications are rooted in state monopolies, while ICT was initially dominated by a few multinational incumbents. Whereas in the telecommunications sector, in particular in the field of network operations and related services, the former monopoly providers still retain a dominant position in most Member States, the ICT sector has grown strongly and diversified in that numerous small enterprises and start-ups coexist with large multinational companies. The distinction between the two sectors in terms of qualifications required and services provided has however been blurring; therefore, they are assessed together.

In the wake of liberalisation and privatisation processes in telecommunications, new industrial relations structures have developed, in that new trade unions and employer organisations have emerged, and new bargaining structures have been introduced, partially replacing or complementing the remaining public sector style of industrial relations. However, in many countries employer organisations with encompassing membership within the telecommunications sector are still lacking, while the former monopoly providers and other large companies often maintain their individual company-level industrial relations systems. This means that SEB is still the prevalent form of collective employment regulation in telecommunications in most Member States.

In the ICT sector, although multi-employer settlements are more widespread, the prevalent form of bargaining is at the company level in most countries. ICT companies have tended to favour trade associations rather than employer organisations. Where employer organisations exist, they tend to have a very particular membership domain which is tailor-made for certain business groups such that multi-employer collective agreements concluded by them cover only part of the whole ICT sector.

Overall, telecommunications have broader collective bargaining coverage in most countries, since company agreements signed by large telecommunications incumbents tend to cover a greater share of the sector's workforce than multi-employer agreements in a highly fragmented landscape for associations in ICT. This structure is also reflected in sectoral industrial relations at European level. ETNO, the organisation of employers of the telecommunications sector at European level, admits only companies as members, and no national employer organisations. The latter are, however, the unit of membership for DIGITAL SME and DigitalEurope, although their membership focuses on ICT rather than telecommunications and neither is included in the list of organisations recognised by the European Commission as a European social partner organisation.

ETNO has 26 direct company members in 26 Member States (all except for Czechia and Estonia). It represents the largest telecommunications companies in each of these countries. With the exception of the Finnish member, all of them are involved in collective bargaining. All 26 ETNO affiliates cover the entire telecommunications sector, and half of them also include business activities in the ICT sector. Overall, ETNO is the only employer organisation representative of the big telecommunications companies.

DIGITAL SME is a network of ICT SMEs in Europe, and DigitalEurope is a business organisation representing the ICT sector. Out of a total of 62 sector-related organisations, 15 (from 10 countries)

were affiliated to DIGITAL SME in 2018<sup>27</sup> and 24 (from 22 countries) were affiliated to DigitalEurope. In 2018, there was no organisation affiliated to both DIGITAL SME and DigitalEurope simultaneously,<sup>28</sup> which meant that 39 of the 62 sector-related associations were either affiliated to DIGITAL SME or DigitalEurope. Both organisations regard themselves primarily as business rather than employer organisations – accordingly, the majority of their respective members are not engaged in collective bargaining – and both organisations' focus of interest representation clearly lies in the ICT rather than the telecommunications sector.

In contrast to the employer side, UNI Europa on the employee side represents telecommunications and ICT workers at the European level. Of the 118 national trade unions identified, 76 are directly affiliated to UNI Europa and 3 are affiliated indirectly (via lower- or higher-order units). UNI Europa has affiliates in all Member States, and 74 of its members (65% of the 113 trade unions involved in collective bargaining) are involved in sector-related collective bargaining. UNI Europa has an affiliated trade union involved in sector-related collective bargaining in all 28 EU Member States. Thus, representativeness of UNI Europa, in terms of its national member unions in both the telecommunications and ICT sectors, is very high.

<sup>&</sup>lt;sup>27</sup> Developments in 2019 have strengthened the representativeness of Digital SME, while this study describes the situation as it was in 2018. Since May 2019, also AGORIA from Belgium is affiliated to Digital SME, bringing the number of their member organisations to 16 in 11 different EU Member States. As AGORIA is involved in sector-related collective bargaining, its membership in Digital SME brings the number of affiliates involved in collective bargaining up to three in three different EU Member States. Also, since 2019, Digital SME France is a member of Digital SME in France, instead of GPNI, which does not affect the numbers in Table 38.

<sup>&</sup>lt;sup>28</sup> Agoria (Belgium) is, since May 2019, affiliated to both DigitalEurope and Digital SME, as indicated in Table 36.

## **Bibliography**

Adam, G. (2017), 'Die Arbeitsbeziehungen in liberalisierten Wirtschaftsbereichen in Österreich', Wirtschaft und Gesellschaft, Vol. 43, No. 1, pp. 65–98.

Agoria (undated), Charter: Be the change, web page, accessed 17 July 2019.

Cazes, S., Garnero, A. and Martin, S. (2017), *The state of trade unions, employer organisations, and collective bargaining in OECD countries*, web page, accessed 17 July 2019.

Colclough, C. J. (2005), 'The sectoral social dialogue: Telecommunications', *Transfer: European Review of Labour and Research*, Vol. 11, No. 3, pp. 391–396.

CSR Europe (2018), How responsible is your organisation in its digital transformation?, web page, accessed 17 July 2019.

ETUI (European Trade Union Institute) (undated), *EU social dialogue: Telecommunications*, web page, available at <a href="http://www.worker-participation.eu/index.php/EU-Social-Dialogue/Sectoral-ESD/Telecommunications">http://www.worker-participation.eu/index.php/EU-Social-Dialogue/Sectoral-ESD/Telecommunications</a>, accessed 17 July 2019.

DIGITAL SME France (2018), Des syndicats professionnels français du numérique s'unissent pour créer DIGITAL SME France, press release, Paris, 18 December.

Eurofound (2007), Representativeness of the social partners: Telecommunications sector, Dublin.

European Commission (1998), 'Commission decision of 20 May 1998 on the establishment of Sectoral Dialogue Committees promoting the dialogue between the social partners at European level', Official Journal of the European Union, L 225, 12 August.

European Commission (2010), *European sectoral social dialogue: Recent developments*, 2010 edition, Publications Office of the European Union, Luxembourg.

European Commission (2015), *Impact of the structural changes on jobs and industrial relations in the telecommunications and ICT: Final report*, Brussels.

European Commission (2018a), *Employment and social developments in Europe: Annual Review 2018*, Publications Office of the European Union, Luxembourg.

European Commission (2018b), *The 2018 PREDICT key facts report*, Publications Office of the European Union, Luxembourg.

Holtgrewe, U. and Schörpf, P. (2017), *Understanding the impact of outsourcing in the ICT sector to strengthen the capacity of workers' organisations to address labour market changes and to improve social dialogue (IMPOS): Final report*, FORBA-ZSI, Vienna.

MT Magazine (2018), It's a MAD world: Modulair, agile en decentraal, 6 May.

OECD (2002), Measuring the information economy, OECD Publishing, Paris.

OECD (2018), OECD Employment Outlook 2018, OECD Publishing, Paris.

OECD (undated), Collective bargaining, web page, accessed on 17 July 2019.

Perin, E. and Léonard, E. (2011), 'European sectoral social dialogue and national social partners', Transfer: European Review of Labour and Research, Vol. 17, No. 2, pp. 159–168. Traxler, F. (2004), 'The metamorphoses of corporatism: From classical to lean patterns', *European Journal of Political Research*, Vol. 43, No. 4, pp. 571–598.

UNI Europa and PIN-SME (2011a), *PIN-SME and UNI Europa ICTS common position on e-skills*, Nyon, Switzerland.

UNI Europa and PIN-SME (2011b), PIN-SME and UNI Europa ICTS common position on gender balance in the ICT sector, Nyon, Switzerland.

UNI Europa and PIN-SME (2011c), PIN-SME and UNI Europa ICTS common position on intellectual property (ACTA and software patents), Nyon, Switzerland.

UNI Europa and PIN-SME (2011d), PIN-SME and UNI Europa ICTS common position on mobility of the IT workforce, Nyon, Switzerland.

#### Other sources

An overview of the European Commission's Joint Research Centre (JRC) publications can be found on the website of the European Commission's Information Society Unit:

http://is.jrc.ec.europa.eu/pages/Publications.html

The European Union has also developed the DSM strategy and corresponding Digital Agenda to open up digital opportunities for businesses and individuals in the digital economy: https://ec.europa.eu/digital-single-market/

An overview of European studies of the ICT sector, including one on the emerging need for telecommunications skills, can be found on the European Commission website: https://ec.europa.eu/jrc/en/predict/ict-sector-analysis-2018

In light of the changes occurring in the world of work, the OECD promotes a coordinated but decentralised style of bargaining. The notes from a live webinar about future collective bargaining are available on the OECD website:

https://www.oecd.org/els/emp/WEBINAR EMO CollectiveBargaining.pdf

With financial support from the European Union, the Fondazione Politecnico di Milano conducted a study that aimed to identify which social partners in each country would potentially be interested in joining a future European social dialogue platform relating to ICT:

https://www.uniglobalunion.org/sites/default/files/files/news/20140131 fpm final report en.pdf

Since 1992, ETNO has been the voice of, and principal policy group for, pan-European electronic communications network operators. Its 39 members and observers from Europe and beyond are the main drivers of broadband and investors in innovative and high-quality e-communications platforms and services, representing 70% of total sector investment: <a href="https://etno.eu/home/about/etno">https://etno.eu/home/about/etno</a>

ETIS is a non-profit organisation founded in 1991 that brings together the major European telecommunications providers to share knowledge in a trusted environment. With 23 members and 14 associate members, ETIS represents the telecommunications industry in 23 European countries. Its goal is to enable members to achieve their strategic goals and improve business performance by sharing knowledge: <a href="https://www.etis.org/page/About\_Us">https://www.etis.org/page/About\_Us</a>

The European Competitive Telecommunications Association (ECTA), founded in 1998, is a pan-European telecommunications association that promotes market liberalisation and competition in the European communications sector and seeks to foster an appropriate regulatory environment for the European communications sector. ECTA represents more than 100 communications service providers, including providers of consumer broadband and triple-play and those who provide European or global services to businesses: <a href="https://www.ectaportal.com/about-ecta">https://www.ectaportal.com/about-ecta</a>

DigitalEurope represents the digital technology industry and digitally transforming industries in Europe. Its members include more than 35,000 European companies represented by 63 corporate members and 40 national trade associations from across Europe. It calls for a stronger DigitalEurope, working on aspects including the DSM, inclusion, green growth, innovation, trust and an agile and mission-based policy and leadership: <a href="https://www.digitaleurope.org">www.digitaleurope.org</a>

The European DIGITAL SME Alliance is the largest network of digital SMEs in Europe: <a href="https://www.digitalsme.eu/">https://www.digitalsme.eu/</a>

Organisations representing the interests of employers and workers in the ICT sector regularly promote and communicate the opportunities and challenges that their work involves. The e-CF provides a common structure and point of reference to which they can refer to illustrate and quantify topical issues, recognise skills and role profiles and foster career development: <a href="http://www.ecompetences.eu">http://www.ecompetences.eu</a>

The European IT Observatory (EITO) analyses developments in the ICT markets and produces reports: <a href="https://www.eito.com">https://www.eito.com</a>

# **Annex 1: Supplementary information**

Table 42: Employment characteristics in the telecommunications sector in the EU28

Member State	Number of companies	Total employment (number)	Average employment per company	Number of employees in Table 5	
EU28	43,815	43,815 1,049,634		1,022,300	
AT	339	14,847	43.79	14,847	
BE	3,979	22,144	5.56	22,078	
BG	672	20,939	31.15	20,625	
CY	137	3,395	24.78	3,382	
CZ	1,279	26,700	20.87	24,900	
DE	3,135	71,000	22.64	59,472	
DK	367	13,193	35.94	13,120	
EE	191	4,337	22.70	4,276	
EL	843	27,337	32.42	26,392	
ES	4,438	125,700	28.32	114,500	
FI	433	433 11,252 25.98		+/-24,000	
FR	5,382	167,292*	31.08	167,292	
HR	316	9,298	29.42	7,323	
HU	1,101	15,778	14.33	15,725	
IE	n.a.	15,600	n.a.	16,300	
IT	4,293	84,854	19.76	80,929	
LT	273	5,732	20.99	5,684	
LU	89	4,941	55.51	4,940	
LV	592	5,215	8.80	5,038	
MT	30	1,727	57.56	1,712	
NL	1,215	31,000	25.51	30,000	
PL	9,701	83,100	8.56	46,576	
PT	750	16,705	22.27	14,016	
RO	2,319	n.a.	n.a.	41,496	
SE	1,331	24,343*	18.28	24,343	
SI	271	4,705	17.36	4,634	
SK	319	12,500	39.18	11,700	
UK	Including ICT**	226,000	n.a.	217,000	

Notes: The majority of data is for 2016, though in some countries, it is for 2015. \* Employment data was not available for France and Sweden, so values have been estimated using data for all employees. \*\* The UK makes no distinction between telecommunications and ICT, calling the sector Information and Communication. Telecommunications data are included in the data for the ICT companies.

Source: Network of Eurofound Correspondents and author's own calculations.

Table 43: Employment characteristics in the ICT sector in the EU28, 2016

Member State	Number of companies	Total employment (number)	Average employment per company	Number of employees	
EU28	1,033,521	3,894,852	4.43	3,664,596	
AT	14,540	68,927	4.74	55,157	
BE	28,872	22,078	0.76	56,969	
BG	6,541	48,209	7.30	44,335	
CY	728	3,540	4.86	3,505	
CZ	38,673	87,800	2.27	63,900	
DE	92,945	787,000	8.46	701,312	
DK	11,846	59,255	5.00	53,283	
EE	3,197	11,626	3.63	10,565	
EL	4,067	26,537	6.52	22,471	
ES	38,503	337,100	8.75	288,100	
FI	6,792	49,633	7.30	+/-90,000	
FR	104,105	441,491*	4.24	441,491	
HR	4,388	18,543	4.22	14,066	
HU	26,305	53,589	2.03	53,076	
IE	13,687	62,400	4.55	91,700	
IT	78,946	370,891	4.69	298,920	
LT	4,193	18,885	4.28	17,690	
LU	1,932	11,630	6.01	11,369	
LV	4,412	19,505	4.65	17,520	
MT	748	4,287	5.73	2,080	
NL	62,185	218,000	3.50	188,000	
PL	62,730	207,455	3.30	140,772	
PT	11,058	14,016	1.26	40,405	
RO	13,762	n.a.	n.a.	98,154	
SE	41,120	135,004*	3.28	135,004	
SI	4,164	14,151	3.39	11,852	
SK	15,132	43,300	2.86	34,900	
UK	337,850**	760,000	2.24	658,000	

Notes: n.a. = not available. \* Employment data was not available for France and Sweden, so values have been estimated using data for all employees. \*\* The total number of companies in the UK ICT sector includes the telecommunications sector. The UK does not make a distinction between telecommunications and ICT, calling the sector Information and Communication. Of the firms in the sector with no employees, 77.6% are sole traders, amounting to 262,172 persons in total.

Source: Network of Eurofound Correspondents.

Table 44: Share of the workforce in the three largest companies in the telecommunications and ICT sectors

	Total workforce in top three telecoms companies (number)	Total workforce in the telecoms sector (number)	Percentage of sectoral workforce in top three telecoms companies (%)	Total workforce in top three ICT companies (number)	Total ICT workforce (number)	Percentage of sectoral workforce in top three ICT companies (%)
AT	10,758	14,847	72%	3,709*	55,157	7%
BE	16,442	22,078	74%	3,435	56,969	6%
BG	13,645	20,625	66%	7,250*	44,335	16%
CY	2,919	3,382	86%	730	3,505	21%
CZ	8,826	24,900	35%	6,595	63,900	10%
DE	89,304**	59,472	-	51,500	701,312	7%
DK	11,100	13,120	85%	6,450	53,283	12%
EE	2,733	4,276	64%	5,429	10,565	51%
EL	11,946	26,392	45%	2,414	22,471	11%
ES	28,618	114,500	25%	11,784	288,100	4%
FI	7,951	n.a.	-	8,000	n.a.	-
FR	102,200	167,292	61%	55,731	441,491	13%
HR	4,924	7,323	67%	2,469	14,066	18%
HU	9,630	15,725	61%	6,639	53,076	13%
IE	19,500	n.a.	-	9,000	n.a.	-
ΙΤ	65,825	80,929	81%	17,403	298,920	6%
LT	3,443	5,684	61%	1,054	17,690	6%
LU	4,812	4,940	97%	650*	11,369	6%
LV	2,157	5,038	43%	2,652	17,520	15%
МТ	1,670	1,712	98%	1,715	2,080	82%
NL	20,700	30,000	69%	23,000	188,000	12%
PL	20,131	46,576	43%	15,864	140,772	11%
PT	10,355	14,016	74%	1,217	40,405	3%
RO	19,570	41,496	47%	7,868	98,154	8%
SE	12,770	24,343	52%	9,631	135,004	7%
SI	3,572	4,634	77%	756	11,852	6%
SK	4,876	11,700	42%	11,103	34,900	32%
UK	112,369	217,000	52%	20,500	658,000	3%
	<u>I</u>					

EU total	622,746	982,000	63%	294,548	3,462,896	12%
EU average	22,241	37,769	63%	10,520	133,188	15%

Notes: n.a. = not available. \* Data from one large company are not available for Austria and Bulgaria. For Luxembourg, data are not available from two large groups. \*\* For Germany, data from Deutsche Telekom probably include data from subsidiaries abroad, which is why the number

of employed persons in the three largest groups exceeds the workforce of the German telecommunications sector.

Source: Network of Eurofound Correspondents, 2017–2018.

Table 45: Overview of trade unions in the ICT-telecommunications sector

Member State	English name	National name	English abbreviation	National abbreviation
AT	Union of Salaried Private Sector Employees, Graphical Workers and Journalists	Gewerkschaft der Privatangestellten, Druck, Journalismus, Papier	GPA-djp	GPA-djp
	Union of Post and Telecommunications Employees	Gewerkschaft der Post- und Fernmeldebediensteten	GPF	GPF
BE		Landelijke Bediendecentrale- Nationaal Verbond voor Kaderpersoneel		LBC-NVK
		Centrale Nationale des Employés		CNE-CSC
		Bond van Bedienden, Technici en Kaderleden-Syndicat des Employés, Techniciens en Kader		BBTK-SETCA
		Algemene Centrale der Liberale Vakverbonden van België – Centrale Générale des Syndicats Libéraux de Belgique		ACLVB-CGSLB
		ACV Transcom		ACV Transcom
		Algemene Centrale der Openbare Diensten – Centrale Générale des Services Publics		ACOD-CGSP
		VSOA-SLFP		VSOA-SLFP
BG	Trade Union Federation of Communications	Синдикална федерация на съобщенията	TUFC	СФС
	Trade Union Federation of Organisations of Electronics, Mechanical and Informatics	Синдикална федерация на организациите в електрониката, машиностроенето и информатиката	SFOEMI	СФОЕМИ
	Federation Communications at CL Podkrepa	ФЕДЕРАЦИЯ 'СЪОБЩЕНИЯ' КЪМ КТ 'ПОДКРЕПА'	FC CL Podkrepa	ФС към КТ 'Подкрепа'
СҮ	Free Pancyprian Organisation of Employees in Telecommunications	EPOET (OHO-SEK)		EPOET-OHO-SEK

	Semi-Government, Municipal and Local Authority Workers and Employees Trade Union Cyprus	Συντεχνία Ημικρατικών, Δημοτικών και Κοινοτικών Εργατοϋπαλλήλων	SIDIKEK-PEO	ΣΗΔΗΚΕΚ-ΠΕΟ
	Cyprus Independent Employees' Trade Union of the Cyprus Telecommunications Authority	Παγκύπρια Ανεξάρτητη Συντεχνία Εργαζομένων Αρχής Τηλεπικοινωνιών Κύπρου	PASE CYTA- POAS	ΠΑΣΕ ΑΤΗΚ – ΠΟΑΣ
	Independent Trade Union of Employees in Telecommunications	Ανεξάρτητη Συντεχνία Εργαζομένων στις Τηλεπικοινωνίες Cyta	ASET-CYTA	ΑΣΕΤ-СΥΤΑ
	SEP-CYTA	SEP-CYTA	SEP-CYTA	SEP-CYTA
CZ	Trade Union of Workers in Postal, Telecommunications and Newspaper Services	OS zaměstnanců poštovních, telekomunikačních a novinových služeb		OS ZPTNS
	Trade Union of Banking and Insurance Workers	Odborový svaz pracovníků v bankovnictví a pojišťovnictví		OS PPP
DE	United Services Union	Vereinte Dienstleistungsgewerkschaft	ver.di	ver.di
	Metalworkers Union	Industriegewerkschaft Metall	IG Metall	IG Metall
	The Communication Union	Die Kommunikationsgewerkschaft	DPVKOM	DPVKOM
	Christian Union Postal Services and Telecommunications	Christliche Gewerkschaft Postservice und Telekommunikation	CGPT	CGPT
DK	Danish Metalworkers Union	Dansk Metal	Dansk Metal	Dansk Metal
	HK (HK was formerly the Union of Clerical and Commercial Workers in Denmark but is now just HK, in Danish as well as other languages)	HK SAMDATA	НК	НК
	PROSA	PROSA	PROSA	PROSA
	Danish Association of Masters and PhDs	Dansk Magisterforening	DM	DM
	Danish Society of Engineers	Ingeniørforeningen i Danmark	IDA	IDA
	Danish Association of Professional Technicians	Teknisk Landsforbund	TL	TL
	Danish Association of Lawyers and Economists	Dansk Jurist og Økonomforbund, DJØF	DJØF	DJØF
	Danish Union of Electricians	Dansk El-Forbund	DEF	DEF
	Financial Services Union	Finansforbundet	FF (but FSU in the UNI Europa list, which is not the Danish abbreviation)	FF

EE	Estonian Communication and Service Workers' Trade Union	Eesti Side ja Teenindustöötajate Ametiühingute Liit	ESTAL	ESTAL
EL	Federation of OTE Employees	Ομοσπονδία Εργαζομένων Οργανισμού Τηλεπικοινωνιών Ελλάδας	OME-OTE	OME-OTE
	Employees' Union of Cosmote	Σύλλογος Εργαζομένων Cosmote	Unicosmo	Unicosmo
	Federation of Private Sector Employees of Greece	Ομοσπονδία Ιδιωτικών Υπαλλήλων Ελλάδας	OIYE	OIYE
	National Union of Workers Vodafone- Panafon Greece	Πανελλήνιο Σωματείο Εργαζομένων Vodafone	Pase Vodafone	ΠΑΣΕ Vodafone
ES	Services Federation of the Trade Union Confederation of Workers Commissions	Federación de Servicios de Comisiones Obreras		CCOO Servicios
	Federation of Citizens Services of the Trade Union Confederation of Workers' Commissions			FSC-CCOO
	Federation of Services, Mobility and Consumption of the General Workers' Union	Federación Estatal De Servicios, Movilidad y Consumo de la Unión GeneraldDe Trabajadores		FeSMC UGT
	Workers' Trade Union	Unión Sindical Obrera		USO Services
	General Confederation of Labour	Confederación General del Trabajo		CGT
	Trade Union of Communication Workers	Sindicato de Trabajadores de Comunicación		STC
	Basque Workers' Solidarity Industry and Construction	Euskal Sindikatua Industria eta Eraikuntza		ELA STV ETA Eraikuntza
FI	Finnish Electrical Workers' Union	Sähköliitto		
	Industrial Union (previously the Finnish Metalworkers' Union)	Teollisuusliitto (previously Metalli)		
	Federation of Professional and Managerial Staff	Ylemmät Toimihenkilöt	YTN	YTN
	Trade Union Pro	Ammattiliitto Pro	Pro	Pro
	Association of IT Sector Employees	Tietoalan toimihenkilöt		
FR	National Federation of Managers of the Computer Services, Information, Consulting, Engineering and Training	Fédération nationale du personnel de l'encadrement des sociétés de service Informatique, des Études, du Conseil, de l'Ingénierie et de la Formation	CFE-CGC Fieci	CFE-CGC Fieci
	Communication, Consulting, Culture Federation – French	Fédération Communication Conseil Culture – Confédération Française démocratique du Travail	CFDT F3C	CFDT F3C

	Democratic Confederation of Labour			
	CGT Federation of the Personnel of the Companies of Research and Consulting and Prevention	Fédération CGT des personnels des sociétés d'études et de conseil et de prévention	FSE-CGT	FSE-CGT
	Federation CFTC Retail Service and Sales Forces	Fédération CFTC Commerce service et forces de vente	CFTC CSFV	CFTC CSFV
	Managers and Employees' Federation, Force Ouvrière	Fédération des Employés et Cadres, Force Ouvrière	FEC-FO	FEC-FO
	Force Ouvrière – Communication	Force Ouvrière – Communication	FO-COM	FO-COM
	Postal and Telecommunications Federation – French Christian Workers' Confederation	Fédération des Postes et des Télécommunications – Confédération des Travailleurs Chrétiens	FPT-CFTC	FPT-CFTC
	CGT Federation of Postal and Telecommunications Activities	Fédération CGT des Activités Postales et de télécommunication	FAPT-CGT	FAPT-CGT
	CFE-CGC Federation Culture, Communication, Live Performance	CFE-CGC Fédération Culture Communication Spectacle	FCCS-CFE-CGC	FCCS-CFE-CGC
	Post and Telecommunications Workers Federation	Fédération des activités postales et des télécommunications, SUD PTT	SUD PTT	SUD PTT
	National Federation of Independent Unions – Telecommunications Workers Federation	Union nationale des syndicats autonomes – Fédération syndicale des activités de télécommunication	UNSA Telecommunica tions	UNSA Télécom
HR	Republic Trade Union of Workers in Croatia	Republički sindikat radnika Hrvatske	RSRH	RSRH
	Croatian Trade Union in Telecommunications-HST	Hrvatski sindikat telekomunikacija – HST	HST	HST
HU	Telecommunications Trade Union	TÁVKÖZLÉSI SZAKSZERVEZET	TÁVSZAK	TÁVSZAK
	Communication, Media and Telecommunications Trade Union	Hírközlési, Média és Távközlési Szakszervezeti Szövetség	HMTSZSZ	HMTSZSZ
IE	Communications Workers' Union		CWU	CWU
	Forsa (previously PSEU Public Services Executive Union)	Forsa	Forsa	Forsa
IT	Communication Workers' Union	Sindacato Lavoratori Comunicazioni – CGIL	SLC-CGIL	SLC-CGIL
	Federation of Entertainment, Information and Telecommunications	Federazione dello Spettacolo, dell'Informazione e delle Telecommunicationsunicazioni	FISTEL-CISL	FISTEL-CISL
	Italian Union of Communication Workers	Unione Italiana Lavoratori Comunicazione	Uilcom-UIL	Uilcom-UIL

	Federation of White- and Blue-Collar Metalworkers	Federazione Impiegati Operai Metallurgici	FIOM-CGIL	FIOM-CGIL
	Italian Federation of Metalworkers	Federazione Italiana Metalmeccanici	FIM-CISL	FIM-CISL
	Italian Union of Metalworkers	Unione italiana lavoratori metalmeccanici	UILM-UIL	UILM-UIL
	Italian Federation of Workers in the Trade, Tourism and Service Sectors	Federazione Italiana dei lavoratori del Commercio, Alberghi, Mense e Servizi	Filcams-CGI	Filcams-CGIL
	Italian Federation of Trade Unions of Workers in the Tourism, Trade Service and Related Sectors	Federazione Italiana Sindacati Addetti Servizi Commerciali Affini Turismo	Fisascat-CISL	Fisascat-CISL
	Italian Union of Workers in Tourism, Trade and Service Sectors	Unione Italiana Lavoratori Turismo, Commercio Servizi	Uiltucs-UIL	Uiltucs-UIL
LT	Lithuanian Communication Workers Trade Union	Lietuvos ryšių darbuotojų profesinė sąjunga	LCWTU	LRDPS
LU	Trade Union Confederation of Luxembourg – Service and Energies	Onofhängege Gewerkschaftsbond Lëtzebuerg Service et Energies		OGBL Service et Energies
	Confederation of Christian Unions in Luxembourg – Services and Retail	Lëtzebuerger Chrëschtleche Gewerkschafts-Bond	LCGB Commerce et Services	
	ALEBA	ALEBA	ALEBA	ALEBA
	Syndicat des P&T, ALEBA	Syndicat des P&T, ALEBA		
LV	Latvian Post and Telecommunications Workers Trade Union	Latvijas Sakaru darbinieku arodbiedrība	LSAB	LSAB
MT	General Workers Union		GWU	GWU
NL	Christian National Union Federation Connective	Christelijk Nationaal Vakverbond Connectief	CNV Connective	CNV Connectief
	Christian National Union Federation Professionals	Christelijk Nationaal Vakverbond Vakmensen	CNV Vakmensen	CNV Vakmensen
	Federation of Dutch Trade Unions	Federatie Nederlandse Vakbeweging	FNV	FNV
	Association of Higher Personnel 2	Vereniging Hoger Personeel 2	VHP2	VHP2
PL	Communications Secretariat of the Independent Self- Governing Trade Union 'Solidarity'	Sekretariat Lacznosci Niezaleznego Samorzadnego Zwiazku Zawodowego 'Solidarność'	NSZZ	NSZZ
	Federation of Telecommunications Employees' Trade Unions	Federacja Zwiazkow Zawodowych Pracownikow Telekomunikacji	FZZPT	FZZPT
	Trade Union of Engineers	Zwiazek Zawodowy Inzynierow i	ZZiT	ZZiT

	Confederation of Telecommunications Employees' Trade Unions	Konfederacja Zwiazkow Zawodowych Pracownikow Telekomunikacji	KZZPT	KZZPT
	Trade Union Contra	Zwiazek Zawodowy Kontra	ZZ Kontra	ZZ Kontra
	Independent Self- Governing Trade Union 'Solidarity' 80	Niezalezny Samorzadny Zwiazek Zawodowy 'Solidarność' 80	NSZZ 'Solidarność' 80	NSZZ 'Solidarność' 80
PT	National Union of Workers in Telecommunications and Audiovisual Activities	Sindiacato Nacional dos Trabalhadores das Telecommunicationsunicações e Audiovisual		Sinttav
	Union of Workers of the Portugal Telecommunications Group	Sindicato dos Trabalhadores do Grupo Portugal Telecommunications		STPT
	Democratic Union of Communications and Media Workers	Sindicato Democrático dos Trabalhadores das Comunicações e dos Média		Sindetelco
	National Union of Postal and Telecommunications Workers	Sindicato Nacional dos Trabalhadores dos Correios e Telecommunicationsunicações		SNTCT
	Union of Workers and Technical Staff in Services, Commerce, Restaurants and Tourism	Sindicato dos Trabalhadores e Técnicos de Serviços, Comércio, Restauração e Turismo		SITESE
RO	The National Alliance of ICT Trade Unions	AlianţA Sindicatelor din Tehnologia Informaţiilor şi Comunicaţii		ANTIC
	Timisoara IT Trade Union	Sindicatul IT Timișoara		SITT
	Telecommunications Trade Union Federation	Federatia Sindicatelor din Telecommunicationsunicatii		FSTc
	Telecommunications Free Trade Union	Sindicatul Liber din Telecommunicationsunicatii		SL-TC
SE	n.a.	Unionen		None
	The Swedish Association of Graduate Engineers	Sveriges Ingenjörer		None
	n.a.	Jusek		None
	The Swedish Association of Graduates in Business Administration and Economics	Civilekonomerna		None
	Ledarna (for managers)	Ledarna		None
	The Swedish Union for Service and Communications Employees	SEKO		SEKO
SI	Trade Union of Workers in Transport and Communications (SDPZ)			SDPZ-company
	Union in the company Telekom			
	Trade Union of Workers in Transport and			SDPZ-sectoral

	Communications (SDPZ) – sectoral trade union			
	Trade Union of Electronic Communications of Slovenia			SELEKS
	Trade Union of Electronic Communications and Media			SINEKS
SK	Trade Union Association of Telecommunications	Odborový zvaz Telekom		OZ T
	Slovak Trade Union Association of Post and Telecommunications	SOZ post a telekomunikacii		SOZ PT
UK	The Union of Shop, Distributive and Allied Workers	The Union of Shop, Distributive and Allied Workers	USDAW	USDAW
	Prospect	Prospect	Prospect	Prospect
	Unite the Union	Unite the Union	Unite the Union	Unite the union
	Communication Workers' Union	Communication Workers' Union	CWU	CWU
	Public and Commercial Services Union	Public and Commercial Services Union	PCS	PCS

Table 46: Employer organisations and business associations – names and abbreviations

Member State	English name	National name	English abbreviation	National abbreviation
AT	Association of Telecommunications and Broadcasting Companies	Fachverband der Telekommunikations und Rundfunkunternehmungen		FTR
	Association of Business and Management Consultancy, Accounting and Information Technology	Fachverband Unternehmensberatung, Buchhaltung und Informationstechnologie		UBIT
	100	Internet Öffensive Österreich		100
BE	Agoria	Agoria		Agoria
		Verbond van Belgische Ondernemingen – Fédération des Entreprises de Belgique		VBO-FEB
BG	Bulgarian Association of Software Companies	Българска асоциация на софтуерните компании		Basscom
	The Information and Communication Technology Cluster Plovdiv	Клъстер "Информационни и комуникационни технологии' Пловдив	ICT Cluster PLOVDIV	ICT Cluster Plovdiv
	Bulgarian Cluster Telecommunications		ВСТ	
	Bulgarian Association for Information Technologies		BAIT	BAIT

CY	Cyprus Information Technology Enterprises Association	Παγκύπριος Σύνδεσμος Επιχειρήσεων Πληροφορικής		CITEA
CZ	The Union of Banks and Insurance Companies	Svaz bank a pojišťoven		SBP
DE	Agv Community	Arbeitgeberverband für Telekommunikation und IT		Agv:c
	BITMi	Bundesverband IT- Mittelstand e. V.	BITMi	BITMi
DK	DI, Confederation of Danish Industry	DI (in Danish, only DI is now used)	DI	DI
	Danish Chamber of Commerce	Dansk Erhverv		
	IT Forum Midtjylland	IT Forum Midtjylland		
	DI Digital, Danish ICT and Electronics Federation, under the Confederation of Danish Industries		DI Digital	DI Digital
EE	Estonian Association of Information Technology and Telecommunications	Eesti Infotehnoloogia ja Telekommunikatsiooni Liit	ITL	ITL
EL	Corallia Clusters Initiative	Πρωτοβουλία Συνεργατικών Σχηματισμών	Corallia	Corallia
	Hellenic Association of Mobile Application Companies	Σύνδεσμος Εταιρειών Κινητών Εφαρμογών Ελλάδος	HAMAC	НАМАС
	Association of Information Technology and Communications Enterprises	Σύνδεσμος Επιχειρήσεων Πληροφορικής και Επικοινωνιών Ελλάδας	SEPE	ΣΕΠΕ
ES	Spanish Confederation of Information, Technology, Communication and Electronic Enterprises	Confederación Española de Empresas de Tecnologías de la Información, Comunicación y Electrónica		Conetic
	Multisectorial Association of Companies of Electronics, Information and Communication Technologies, Telecommunications and Digital Content	Ametic	Ametic	Ametic
	Spanish Association of Consultancy Companies	Asociación Española de Empresas de Consultoría		AEC
	Catalan Association of Consultancy Companies	Asociación Catalana de Empresas de Consultoría		ACEC
FI	Services Sector Employers Palta	Palvelualojen työnantajat Palta		PALTA
	Technology Industries of Finland	Teknologiateollisuus		Teknologiat Ilisuus
FR	Syntec	Syntec	Syntec	Syntec
		Union nationale des entreprises de télécommunications, de réseaux et de services en télécommunications	Unetel-RST	Unetel-RS
	French Digital Industry Trade Association	Alliance Francaise des Industries du Numerique		AFNUM

	National Association of Computer Science	Groupement professionnel national de l'Informatique		GPNI
	Federation of Employers Organisations of the Intellectual Services of the Council, Engineering and Digital	Fédération des syndicats des métiers de la prestation intellectuelle du Conseil, de l'Ingénierie et du Numérique	CINOV	CINOV
	TECH in France	Association Française des Editeurs de Logiciels et Solutions Internet	TECH in France	TECH in France
HU	Hungarian Association of IT Companies or ICT Association of Hungary	Informatikai Távközlési és Elektronikai Vállalkozások Szövetsége	IVSZ	IVSZ
IE	Technology Ireland	Technology Ireland		
IT	Asstel	Assotelecommunicationsunic azioni Asstel	Asstel	Asstel
	Italian Confederation of Manufacturing Industry and of Private Enterprises – Metalworking Business	Confederazione Dell'Industria Manufatturiera Italiana e dell'Impresa Privata – Impresa Meccanica	Confimi Impresa Meccanica	Confimi Impresa Meccanica
	Union Meccanica – The National Union of Small and Medium-sized Metalworking Enterprises	Union Meccanica – Confederazione Italiana della Piccola e Media Industria Privata	Union Meccanica- Confapi	Union Meccanica- Confapi
	Association of Italian Metalworking Industry	Federazione Sindacale dell'Industria Metalmeccanica Italiana		Federmeccan ca
	Italian General Confederation of Companies, Professional Activities and Self-employment	Confederazione Generale Italiana delle Imprese, delle Attività Professionali e del Lavoro Autonomo	Confcommercio	Confcommero io
	Italian Confederation of Businesses in the Trade, Tourism and Service Sectors	Confederazione Italiana Esercenti Attività Commerciali, Turistiche e dei Servizi	Confesercenti	Confesercent
	National Confederation of Craftsmanship and SMEs – Communication and Advanced Tertiary Business	Confederazione nazionale dell'artigianato e delle PMI – Comunicazione e Terziario Avanzato	CNA Comunicazione e Terziario Avanzato	CNA Comunicazion e e Terziario Avanzato
	Confartigianato Comunicazione	Confartigianato Comunicazione		Confartigiana o
	National Organisation of Graphic, Printing and Paper Packaging SMEs	Unione nazionale piccola e media industria grafica editoriale cartaia cartotecnica e affine	Unigec	Unigec
	Italian Organisation of SMEs for Information Processing	Unione italiana piccole e medie imprese per il trattamento dell'informazione	Unimatica	Unimatica
	Clusit – Italian Information Security Association	Clusit – Associazione Italiana per la Sicurezza Informatica	Clusit	Clusit
	Anitec-Assinform	Anitec-Assinform		
LT	Association InfoBalt	InfoBalt asociacija		InfoBalt

LU	Professional Association of the Information Society	Association Professionnelle de la Société de l'Information	APSI	APSI
MT	Malta Employers Association		MEA	MEA
NL	Employer Association ICT	Werkgevers vereniging ICT	Werkgevers vereniging ICT	Werkgevers vereniging ICT
	Employer Association Energy, Waste and Environment and Cable and Telecommunications	Werkgeversorganisatie Energie, Afval and Milieu en Kabel and Telecommunications	WENB	WENB
PL	Association of Importers and Producers of Electrical and Electronic Equipment 'Digital Poland'	Zwiazek Importerow i Producentow Sprzetu Elektrycznego i Elektronicznego 'Cyfrowa Polska'	Zipsee Digital Poland	Zipsee 'Cyfrowa Polska'
РТ	AGEFE	Associação Empresarial dos Sectores Eléctrico, Electrodoméstico, Fotográfico, Electrónico	AGEFE	AGEFE
RO	Cluj IT Cluster	Cluj IT Cluster		Cluj IT Cluster
	Iconic Cluster	Iconic Cluster		Iconic Cluster
	Employer Association of the Software and Services Industry	Asociația Patronală a industriei de software și servicii		ANIS
SE	The Swedish IT and Telecommunications Industries	IT and Telekomföretagen		
SI	Chamber of Commerce and Industry of Slovenia-Association of Informatics and Telecommunications	GZS-Združenje za informatiko in telekomunikacije	GZS-ZIT	GZS-ZIT
SK	IT Association of Slovakia	IT asociácia Slovenska		ITAS
UK	UK IT Association	UK IT Association		UKITA
	TECH UK	TECH UK	TECH UK	TECH UK

Table 47: UNI Europa list of member trade unions

Member State	Trade unions
AT	GPA-DJP; GPF
BE	ACV-CSC Transcom; CGSLB-ACLVB; ACOD-CGSP; CNE-CSC; LBC-NVK; SETCA-BBTK; (VSOA-SLFP)
BG	FC CL-PODKREPA; TUFC
CY	EPOET
CZ	OS PPP; OS ZPTNS
DE	ver.di
DK	DANSK METAL; DEF; DJØF; DM; Finansforbundet; HK; IDA; PROSA; TL
EE	ESTAL
EL	OIYE; OME OTE; Unicosmo; (PaseVodafone)
ES	ELA STV; FeS MC-UGT; FSC-CCOO; Servicios-CCOO
FI	FIU; PRO; (YTN)

FR	FSE-CGT; CGT-FAPT; F3C CFDT; FEC-FO; FO-COM
HR	HST
HU	-
IE	CWU; FORSA
IT	Filcams-CGIL; FISTEL-CISL; SLC-CGIL; Uiltucs-UIL; Uilcom-UIL; Fisascat-CISL
LT	LRDPS
LU	OGB-L; Syndicat des P&T LCGB; ALEBA
LV	LSAB
MT	GWU
NL	CNV Vakmensen; FNV
PL	SL NSZZ Solidarność
PT	Sindetelco; Sinttav; SITESE; SNTCT; STPT
RO	ANTIC; FSTc; SL-TC
SE	SEKO; SI; UNIONEN; Jusek
SI	-
SK	ОZТ
UK	CWU; PROSPECT; Unite the Union; USDAW

Note: Affiliates in parentheses are indirect members.

Table 48: ETNO membership, 2018

Member State	Members
AT	Telekom Austria
BE	Proximus
BG	EAD (Vivacom)
CY	CYTA (Cyprus Telecommunications Authority)
CZ	-
DE	Deutsche Telekom AG
DK	TDC
EE	-
EL	OTE SA
ES	Telefonica SA
FI	Elisa Communications Corporation
FR	Orange
HR	Hrvatski Telekom
HU	Magyar Telekom
IE	EIR Telekom
IT	Telecommunications Italia
LT	AB Telia Lietuva
LU	Post Luxembourg
LV	Lattelecommunications Group
MT	GO Plc
NL	Koninklijke KPN
PL	Orange Polska Group
PT	Portugal Telecommunications Group
RO	Telekom Romania Communications
SE	Telia Company
SI	Telekom Slovenije
SK	Slovak Telekom
UK	British Telecommunications

Table 49: DIGITAL SME and Digital Europe membership, 2018

Member State	Name of Digital Europe member	Name of DIGITAL SME member	
AT	100	UBIT	
BE	Agoria		
BG	BAIT	Basscom; ICT Cluster Plovdiv; BCT	
CY	CITEA		
CZ			
DE		BITMi	
DK	DI Digital	IT Forum Midtjylland	
EE			
EL	SEPE	Corallia; HAMAC	
ES	Ametic	Conetic	
FI	Technology Industries Finland		
FR	Syntec; AFNUM; TECH in France	GPNI	
HR			
HU	IVSZ		
IE	Technology Ireland		
IT	Anitec-Assinform	CNA CTA; Clusit	
LT	InfoBalt		
LU	APSI		
LV			
MT			
NL	Werkgeversvereniging ICT		
PL	Zipsee Digital Poland		
PT	AGEFE		
RO	ANIS	Cluj IT; Iconic	
SE	IT and Telekomföretagen		
SI	GZS-ZIT		
SK	ITAS		
UK	TECH UK	UKITA	

Table 50: The system of collective bargaining in the ICT-telecommunications sector, 2018

Member State	Collective bargaining coverage (%)	MEB (%)	Extension procedures
AT	100%	93%	(2)
BE	100%	100% (a)	2
BG	n.a.	0%	0
CY	31%	0%	0
CZ	14%	SEB prevailing	0
DE	n.a.	SEB prevailing	0
DK	n.a.	MEB prevailing	0
EE	12%	0%	0
EL	n.a.	0%	0
ES	n.a.	MEB prevailing	2
FI	almost 100%	100%	2
FR	100%	MEB prevailing	2
HR	30%	0%	0
HU	>10%	SEB prevailing	0
IE	<10%	0%	0
IT	100%	100% (a)	(2)
LT	11%	0%	0
LU	30%	0%	0
LV	about 25%	0%	0
MT	12%	0%	0
NL	12–19%	MEB prevailing	0
PL	8%	0%	0
PT	12%	close to 0%	0
RO	n.a.	0%	0
SE	70%	95%	2
SI	15%	0%	0
SK	6–7%	0%	0
UK	n.a.	0%	0

Notes: n.a. = not available. Collective bargaining coverage is defined as employees covered by collective agreements as a percentage of the total number of employees in the sector.

MEB = multi-employer bargaining (relative to the total number of employees covered by any form of collective bargaining). (a) = complemented by SEB. Extension practices (including functional equivalents to extension provisions; that is, obligatory membership and labour court rulings):

0 = no practice, 1 = limited or exceptional, 2 = pervasive; cases of functional equivalents are enclosed in parentheses.

# **Annex 1: Network of Eurofound Correspondents**

Table 51: Members of the Network of Eurofound Correspondents who contributed to the study

Austria Belgium Bulgaria Croatia Cyprus	Bernadette Allinger Guy Van Gyes Gabriela Yordanova Predrag Bejaković and Irena Klemenčić Pavlos Kalossinatos Petr Pojer	FORBA  HIVA – KU Leuven  Bulgarian Academy of Sciences  Institute of Public Finance  Cyprus Labour Institute (INEK-PEO)	
Bulgaria Croatia	Gabriela Yordanova  Predrag Bejaković and Irena Klemenčić  Pavlos Kalossinatos  Petr Pojer	Bulgarian Academy of Sciences Institute of Public Finance Cyprus Labour Institute (INEK-PEO)	
Croatia	Predrag Bejaković and Irena Klemenčić Pavlos Kalossinatos Petr Pojer	Institute of Public Finance  Cyprus Labour Institute (INEK-PEO)	
	Pavlos Kalossinatos Petr Pojer	Cyprus Labour Institute (INEK-PEO)	
Cyprus	Petr Pojer		
	·		
Czechia		Research Institute for Labour and Social Affairs	
Denmark	Carsten Jorgensen	FAOS, University of Copenhagen	
Estonia	Ingel Kadarik	Praxis Centre for Policy Studies	
Finland	Anna Savolainen	Oxford Research	
France	Frédéric Turlan	IR Share	
Germany	Sandra Vogel	Cologne Institute for Economic Research	
Greece	Sofia Lampousaki	Labour Institute of GSEE	
Hungary	Pál Belyó	Policy Agenda Tanácsadó Kft.	
Ireland	Andy Prendergast	IRN Publishing	
Italy	Denisa Rexhep and Feliciano Iudicone	Fondazione Giacomo Brodoloni	
Latvia	Raita Karnite	EPC	
Lithuania	Inga Blaziene	Lithuanian Social Research Centre	
Luxembourg	Frédéric Turlan	IR Share	
Malta	Vincent Marmarà		
Netherlands	Noëlle Payton	University of Amsterdam	
Poland	Maciej Pánkow	Institute of Public Affairs	
Portugal	Reinhard Naumann	Friedrich Ebert Foundation (Lisbon)	
Romania	Volintiru Clara	Euractiv Network	
Slovakia	Ludovit Cziria	Institute for Labour and Family Research	
Slovenia	Barbara Lužar	University of Ljubljana	
Spain	Pablo Sanz de Miguel	Notus	
Sweden	Anna-Karin Gustafsson	Oxford Research AB	
UK	Claire Evans	Warwick Business School	

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This study provides information allowing for an assessment of the representativeness of the actors involved in the European sectoral social dialogue committee for the ICT and telecommunications sector. Their relative representativeness legitimises their right to be consulted, their role and effective participation in the European sectoral social dialogue and their capacity to negotiate agreements. The aim of Eurofound's representativeness studies is to identify the relevant national and European social partner organisations in the EU Member States. This study identified the European Telecommunications Network Operators' Association (ETNO) (representing employers) and UNI Europa (representing employees) as the most representative European-level social partner organisations in the telecommunications sector. In the ICT sector, there is a more fragmented landscape in terms of European associations: these include the European DIGITAL SME Alliance, DigitalEurope and other European associations. UNI Europa is also the most representative European trade union organisation in this area.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.

