



**WP1: Literature review and expert interviews**

*The Social Dialogue in the face of digitalisation in Spain  
An emerging and fragmented landscape*

**Final report**

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## 1. Introduction

Social dialogue in Spain has played a fundamental role as a socio-economic governance mechanism since the country's return to democracy in the second half of 1970s, both at tripartite and bipartite level.

The evolution of social dialogue during the last decades, however, has been far from being linear. Thus, the *tripartite* social dialogue has undergone through several phases influenced by changes in factors such as the economic cycle, the political “colour” of the governments or the public policies addressed. As a consequence, the compared analysis of the agreements reached shows a great discontinuity and diversity in terms of scope, contents, implementation and outcomes (Monereo, 2015).

The main expression of the *bipartite* social dialogue is collective bargaining, which in Spain takes place at national, sector and company level. There are two dominant employers' confederations: the Spanish Confederation of Employers and Industries (CEOE); and the Spanish Confederation of Small and Medium Enterprises (CEPYME). Also, there are two major labour confederations: Workers Commissions (CCOO); and the General Union of Workers (UGT).

The evolution of collective bargaining has been more progressive in terms of scope and coverage since the 80s, reaching a maximum peak in 2008 –just before the onset of the Great Recession- with near six thousand collective agreements and 12 million workers affected<sup>1</sup> This meant an adjusted coverage rate of 79,3%<sup>2</sup>. Also, since 2002 the most representative social partners at state level have signed various national agreements providing general guidelines on different topics for their development through collective bargaining.

Now, if we focus the analysis in the last decade it can be said that the “Great Recession” has challenged the traditional basis of the social dialogue.

It must be highlighted that the scale of the impact of this crisis was particularly strong in Spain compared with other European countries, especially in terms of job losses (3,48 million jobs lost between 2008 and 2013)<sup>3</sup>. The most important consequence of this shock was the sharp rise in the unemployment rate, which still remains at dramatic levels in spite of the economic recovery registered since 2014: 16,8 per cent at the beginning of 2018, the second highest in the European Union (EU), after Greece<sup>4</sup>.

In this sense, three periods regarding tripartite social dialogue can be distinguished since the beginning of the financial and economic crisis (Molina and Miguelez, 2013 and 2017):

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<sup>1</sup> Source: Statistics of Collective Agreements, Ministry of Employment and Social Security

<sup>2</sup> Source: J. Visser, ICTWSS Data base, version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2016. The adjusted coverage rate estimates employees covered by collective (wage) bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right to bargain.

<sup>3</sup> Source: Eurostat, second quarters.

<sup>4</sup> Source: Eurostat, first quarter of 2018 (population from 15 to 74 years).

- **2008-2009:** the period of “stimulus response”, characterized by a significant involvement of the social partners, though with few results in terms of outcomes.
- **2010-2014:** the implementation of the “austerity framework” adopted in the Euro zone Summit held in May 2010, and the change to a unilateral approach of policy governance with little or no room at all left for the social partnership.
- **2014-2018:** a period marked by the economic recovery registered since 2014, with fragmented and discontinuous attempts to reanimate the tripartite social dialogue. Nevertheless it is worth noting that in June 2018 there was a change of government, and the new ruling party (PSOE) has expressed its willingness to push forward the role of tripartite social dialogue (although its room for manoeuvre is limited due to the lack of a parliamentary majority).

Collective bargaining has been also under strain in Spain since the onset of the Great Recession. This can be explained on the one hand because of the significant worsening of the economic and social situation created a tough context for the normal development of industrial relations. On the other hand, due to the impacts of the legal reforms of the collective bargaining system launched under the umbrella of the New European Economic Governance.

The most important impact on collective bargaining developments has no doubt been strong wage devaluation, which has exacerbated the social situation in Spain with a general rise in inequality and poverty levels. Also, the last reforms of the labour law –in particular, that of 2012- have strongly deepened the power asymmetry between capital and labour, strengthen the capacity of employers to regulate working conditions at company level unilaterally. This has laid the foundations for a more authoritarian pattern of industrial relations, and also for the potential consolidation in the medium term of a model of “disorganized decentralization” of collective bargaining (Rocha, 2014 and 2018.a).

Against this background, the public debate on digitalisation in Spain has had to coexist with the still ongoing controversy about the lasting consequences of a deep economic recession and the implementation of austerity policies and structural reforms. In short, “in the midst of the accelerated changes of the fourth industrial revolution, Spain has had to weather a storm” (Grande, 2018, p, 385).

## **2. Methodology**

The general goal of this report is to analyze the role of social dialogue in the face of digitalisation in Spain, addressing the views and initiatives carried out by the main actors involved to face restructuring phenomena driven by digitalisation.

The analysis is structured around three research hypotheses:

- H1: The role of the tripartite social dialogue on digitalisation has been almost irrelevant in recent years, in a context marked by the virtual paralysis of the partnership between the government and the social partners.

- H2. Digitalisation is having so far a low and reactive management by industrial relations in Spain.
- H3. There are some emerging collective agreements addressing digitalisation, which are mainly taking place in multi-national firms operating in sectors with a higher competitive pressure on a global level.

The content of the report is structured as follows: Section 3 analyzes the role of social dialogue in the face of restructuring processes driven by digitalisation. It begins with a brief general overview, following with the exam of four sectors: manufacturing; financial services; tourism; and postal services, more specifically the segment of courier, express and parcel industry (CEP). Section 4 summarizes the main findings and lessons learnt. Section 5 list the bibliographical references used. Finally, section 6 includes some complementary information.

The study is based on the information provided by desk-research and in-depth interviews carried out with key informants (see table 1). Also, there has been carried out a specific search of those contents of collective agreements in force related to technological changes and digitalisation, through the online database of the collective agreements registered by the Ministry of Employment and Social Security<sup>5</sup>.

**Table 1. Key informants interviewed<sup>6</sup>**

1	Head of Union Policy Department (General Confederation of UGT)
2	Advisor to the Economic and Social Council
3	Professor of Labour Law at “Universidad Carlos III de Madrid”
4	Head of the International Labour Organization Office for Spain
5	Union officer of the tourism sector (CCOO)
6	General Secretary of the Spanish Federation of Hotel Industrt
7	Union officer of the banking sector (CCOO)
8	Union officer of the insurance sector (CCOO)
9	Union officer of the manufacturing industry (CCOO)
10	Manager of Human Resources and Industrial Relations in a manufacturing company
11	Union officer of the logistic services sector (CCOO)

### **3. Digitalisation, restructuring and social dialogue in Spain**

#### **3.1. General overview**

##### ***3.1.1. Digitalisation and restructuring***

According to the European Commission Digital Economy and Society Index (DESI), Spain ranks 10th out of the 28 Member States in 2018, integrating in the medium performance cluster of countries<sup>7</sup>. In short, Spain performs well in the dimensions of

<sup>5</sup> Register of collective agreements (REGCON): <https://expinterweb.empleo.gob.es/regcon/index.htm>

<sup>6</sup> It has not been possible to have interviews with representatives of the business associations of Delivery and financial services. The views of the employers of these sectors have been reflected in the report, however, through bibliography.

<sup>7</sup> The other countries of this cluster are Austria, Malta, Lithuania, Gemany, Slovenia, Portugal, Czech Republic, France and Latvia.

Digital Public Services, Integration of Digital Technology and Connectivity. However, the rank of the country is below under EU average in the dimensions of Human Capital and Internet Services (European Commission, 2018.a).

The comparative analysis of digitalisation in Spain shows therefore a mixed picture, with advances in some areas and less in others. In this regard, the literature review allows to highlight some barriers particularly challenging, which should be tackled in order to take advantage of the potential benefits of this phenomenon in the coming years (Comisiones Obreras-Industria, 2016 and 2017.b; Consejo Económico y Social, 2017 y 2018; Cuatrecasas, 2017.a; Observatorio ADEI, 2013; OECD, 2017; Myro, 2016; Rocha et al, 2016; Roland Berger, 2016):

- ***Socio-cultural factors***, in a twofold dimension: (a) the lower level of basic digital competences of the population, compared to other European countries, in spite of the improvements recorded in the last years; and (b) the existence of social digital gaps, based on various variables such as sex, age, educational attainment, incomes, households characteristics and territory.
- ***Imbalances of the productive model***, such as: (a) the decline and persistence of important weaknesses in the industrial sector, and uneven development of digitization among the different service sectors; (b) the atomization of the business structure and low level of innovation of the value chain; (c) the shortage of digital skills; and (d) a relevant skill mismatch, both on the supply and demand side.
- ***Deficits of the innovation management at company level***, highlighted in aspects such as: (a) predominance of basic digital uses in most companies, which contrasts with a higher degree of resistance or mistrust of the application of more advanced applications (only used by a reduced number of innovative companies; (b) low percentage of companies with a formalized digital strategy, adapted to its objectives and characteristics; (c) lack of a firm commitment to digital training for employees; and (d) low level of digital skills of a significant percentage of corporate managers.

Against this background, it can be said that digitalisation has played so far a relatively lower influence in the development of restructuring processes, compared with other traditional factors. This can be explained by two reasons:

- First, the digitalisation of the Spanish economy is still at an early stage, despite of the progress achieved during the last years. In this regard, the implementation of the most advanced innovations with more potential disruptive impacts is still minority, and focused in a reduced number of companies (Consejo Económico y Social, 2017)<sup>8</sup>.
- Second, the emergence of this phenomenon has had to coexist with a deep recession that led to a major crisis of employment, as noted above. So, traditional economic factors have had a significantly greater weight in the causes of business restructuring processes developed at a company level (Grande, 2018).

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<sup>8</sup> For some examples of new digital companies based in disruptive technologies emerging in Spain, see López et al, 2018.

Nevertheless it must be noted that this is a highly changing situation, so it is expected an increase of the restructuring processes driven by digitalisation in Spain in the coming years (Domenech et al, 2018; Hidalgo, 2018; Lladós, 2018).

Also, it must be taken into account that although digitalization is an integrated process in all sectors, the impacts are quite heterogeneous depending on the activity. In this regard, “in some it directly affects the productive processes, in terms of productivity or costs; in others, changes are identified in the very nature of the activity, creating new sources of added value generation as opposed to exhaustion of existing ones; and in others, it affects the markets in which they compete, with the emergence of new digital competitors, which forces existing companies to adopt new business strategies, from changes in the distribution and commercialization processes, to their relationships with the suppliers or in relations with the competitors themselves, but, above all, in their relations with customers” (Consejo Económico y Social, 2017, p.74).

### ***3.1.2. Views of the actors***

The literature review allows highlighting six major topics under discussion in Spain regarding to digitalization and its effects on the world of labour:

- The *evolution of employment*, in a twofold dimension: on the one hand, the controversy about the scale of job losses due to the increasing implementation of robotics and automatization, with the traditional polarization between “optimists” and “pessimists”. On the other hand, the debate about the potential job creation linked to the expected improvement of productivity and the development of new products and services (Consejo Económico y Social, 2017; Cuatrecasas, 2017 a y b, 2018; Domenech, 2018; Gortazar, 2018; Hidalgo, 2018; Lladós, 2018; Miguelez, 2018).
- The *changes in the tasks and contents of jobs, and the related skills requirements*. With regard to this issue, there is a widespread consensus about the shortage of digital skills of the workforce in Spain, and the relevant skill mismatch, both on the supply and demand side (Acosta, Consejo Económico y Social 2017; Cuatrecasas, 2017 a y b, 2018; Fundación España Digital, 2015; Gortazar, 2018; Gurrutxaga and Galarraga, 2017; Jalil, 2018; López et al, 2018; OECD, 2015; Rocha et al, 2016; The Cocktail Analysis, 2016).
- The *legal status of the workers who provide labour services through online platforms*. This is a “hot topic” nowadays in Spain, following the increasing activity of various digital platforms in the country. In this regard, at the moment of writing there is no consensus on the legal status of platform workers, nor among labour law scholars neither between labour courts<sup>9</sup> (Álvarez, 2017; Cruz, 2017; Gonzalez, 2017; Mercader, 2017; Rocha, 2018.b; Rodríguez-Piñero and Hernández, 2017; Todoli, 2016; Todoli and Hernández, 2018).

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<sup>9</sup> For example, at the moment of writing this report there have been two contradictory decisions by the labour courts. On the one hand, it was decided that workers of the platform of delivery services Deliveroo are employees. On the other hand, it was established that workers of the platform of delivery services Glovo are self-employed.

- The *impacts on wages and working conditions*. Some authors remark the positive effects of digitalization in terms of greater flexibility and autonomy of the workers, and also the benefits for the health and safety in some dangerous occupations and tasks. Nevertheless, there are also remarks about the various potential negatives impacts, regarding to issues such as monitoring, data protection and the developments of new forms of precariousness linked to the platform work (Consejo Económico y Social, 2017; Cuatrecasas, 2017 a y b, 2018; Comisiones Obreras de Industria, 2017.b and 2018.b; Rocha, 2017.b and 2018.b; Trillo, 2017).
- The *effects on social protection*. There are two main elements of debate regarding to this point: (a) Self-employed workers who develop their professional activity through digital platforms do not access to some social security rights and benefits, typically associated with the status of employees (for example, unemployment benefits). This has raised for example the debate around the universal basic income; and (b) the taxation of the economic activities developed by the digital platforms (Consejo Económico y Social, 2017; Cuatrecasas, 2017 a y b, 2018; Comisiones Obreras de Industria, 2017.b and 2018.b; Rocha, 2017.b and 2018.b; Rodríguez, 2017; Rodríguez-Piñero, 2017; Sánchez, 2017).
- The *role of industrial relations*. The debate around this topic is structured in two different dimensions. On the one side, how social partners may address the effects of the process of digitalisation on employment and working conditions at sectoral and company level. On the other side, the role of industrial relations in the emerging field of digital platforms. In both cases, there is a widespread consensus that industrial relations in Spain plays so far a minor and emerging in the face of digitalization (Álvarez, 2017; Consejo Económico y Social, 2017; Cruz, 2017; Cuatrecasas, 2017 a y b, 2018; Comisiones Obreras de Industria, 2017.b and 2018.b; Mercader, 2017; Molina y Sánchez, 2018; Rocha, 2017.b and 2018.b; Trillo, 2018).

Against this background, the main positions of the government and social partners, both in relation to the diagnosis of the possible impacts of this phenomenon and on the formulation of policies and their governance, can be summarized as follows.

The former national **government** launched between 2013 and 2017 a set of actions aimed to promote the digital society and economy, following the guidelines adopted by the European Commission in this field. More specifically, it is worth highlighting three main initiatives: (a) the *Digital Agenda for Spain* (2013); (b) the initiative *Connected Industry 4.0* (2015); and (c) the *Digital Strategy for a Smart Spain* (launched for public consultation in 2017, but still pending of adoption in July 2018 due to the change of government)<sup>10</sup>.

The objectives, lines of action and plans designed and implemented through the different initiatives were intended “to encourage the creation of employment opportunities and economic growth through the smart adoption of digital technologies, thus contributing to the collective effort of promoting the economic recovery of the country” (Gobierno de España, 2013, p. 4).

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<sup>10</sup> For further information about these initiatives, see annex 6.1.

The development of these initiatives has favoured advances in this field during this period, in dimensions such as connectivity and the digitalization of public services. However, there can be noted in parallel some relevant imbalances regarding to issues such as the weak institutional coordination among the different Ministerial Departments, the existing budgetary constraints, or the lack of real involvement of social partners in the policy making.

The change of government in June 2018 has led to a scenario of uncertainty, although the new ruling party has expressed that the promotion of a new productive model and the deepening of initiatives aimed to foster a "fair digitalisation" represent strategic goals of its policy action.

The main Spanish **employer's confederations** (CEOE-CEPYME) have an essentially positive view about the benefits linked to digitalisation. In this regard, employers state that "the digital transformation of our country should not be an option but a reality, since it is the greatest and best opportunity that Spain has to generate high-value employment, consolidate economic growth, evolve the Public Administration and improve the welfare of citizens" (Confederación Española de Organizaciones Empresariales, 2017, p.1).

Employers agree with trade unions in the need to develop a "Country-Strategy" to address digitalisation and in the necessary role of social dialogue (CEOE, 2018). In fact, the review of their proposals show some consensus between both social partners regarding to goals such as the development of infrastructures, connectivity and the improvement of the digital skills of workers. However, there are also some clear differences of approach among employers and trade unions, related to issues such as the scale and scope of legal regulation, the effects on working conditions and the preservation of labour rights.

The most representative **trade unions** at State level (CCOO and UGT) share the opinion that digitalisation is a social process under construction, whose possibilities and real impacts are far from being known with certainty. Among other reasons, because the development of this phenomenon depends as much on structural factors as on the strategies of the various actors involved (governments, employers, trade unions...).

Also, both organisations consider that the digital transformation of the Spanish economy could lead to opportunities in terms of new activities and jobs, as well as of improvement of the productivity. However, they express at the same time their fears about some potential social risks that could be reinforced by this phenomenon, such as: (a) jobs losses caused by automatization; (b) fragmentation of the labour market; (c) worsening of the quality of jobs; (d) reinforcement of the control capacity of management (digital surveillance, data protection...); (e) effects of health and safety; (f) deterioration of industrial relations; and (g) the deepening of societal challenges, like unemployment and rising inequalities; deregulation (labour law, wage-setting, collective bargaining...); tax erosion, social protection funding; and growing social polarisation (Confederación Sindical de Comisiones Obreras and Union General de Trabajadores, 2017).

In this sense, trade unions claim for a "Country- Strategy for a fair and inclusive digital transition", aimed to seize the opportunities and benefits of this phenomenon, and

mitigate its potential risks. The implementation of this strategy should be based in the reinforcement of social dialogue, as an essential tool for the governance of this process.

Finally, it is worth noting the growing implication in this public debate of some new actors such as the **digital platforms**. It is important to remark that this is a very fragmented and changing business environment, with low level of cooperation between the various operators.

Notwithstanding the above it can be noted the existence of one Business Association (“Association for the Digital Economy” - ADIGITAL), which aims to represent the sector of the digital economy in Spain. This association is developing an intensive action aimed to lobby in favour of the promotion of the platform economy. According to their view, there is the need to promote public measures to foster entrepreneurship in this field, including the liberalisation of those economic activities “excessively regulated” in order to allow the arrival of new operators. Also, they express their refusal to apply the existing labour regulation for employees to the workers in this field (ADIGITAL, 2017).

### ***3.1.3. Social dialogue***

The role of the *tripartite social dialogue* can be considered so far as a “blind spot” of the process of digital transformation of the Spanish economy and society, in spite of the public claims about its importance (Vogel, 2017). A striking absence, taking into account that it has been unanimously valued as an essential tool for the socio-economic governance of the country in the past four decades, as noted above.

It is worth noting that this picture is far from being an isolated case in the European context. On the contrary, according to the findings of a survey carried out by the European Trade Union Confederation, “the involvement of trade unions in broad and general initiatives as well as national government programmes such as digital agendas is weak overall: there are large quantitative and qualitative gaps in trade union involvement” (Voss and Riede, 2018, p. 17).

There are two main reasons that may explain this situation in Spain.

First, the application of a unilateral approach of policy governance since 2012, which left little or no room at all for the social partnership. The consequence has been the virtual paralysis of tripartite social dialogue in Spain practically, despite of some fragile attempts to recover it in the last two years.

Second, the preference of the former Spanish government by the “public consultations” in the governance of the main policy initiatives related to digitalisation, instead of social dialogue. This is method of “open governance” widely promoted by the European institutions, which for example was applied for example in 2017 with the launching of the proposal of a “*Digital Strategy for a Smart Spain*”.

Social partners participated in this public consultation expressing their views about this new strategy, along with a set of private associations, companies, institutions and

individuals (CCOO Industria, 2017.a; FSC-CCOO, 2017; CEOE, 2017; UGT, 2017)<sup>11</sup>. Nevertheless, trade unions have pointed out that the public consultation, no matter how useful they may be, cannot replace the role of social dialogue.

Once again, it should be noted that this critic is shared by other European trade unions. Thus, according to the findings of the survey mentioned above, “less than one quarter (24%) of all trade union respondents indicated that unions were involved in such initiatives as an important stakeholder. Sweden and Germany were the only countries in which more than half of the respondents regarded the role of trade unions in national initiatives and programmes as ‘important’. In Spain, Denmark, the Czech Republic and Belgium, trade unions felt that they were only involved as one stakeholder amongst many others, while in Poland, France and Italy a high share of respondents commented that unions were not involved at all in national digital agendas or similar programmes” (Voss and Riede, 2018, p. 17).

There is just one initiative of the former government that was partially based in the agreement with the social partners: the training program for employed workers, for the acquisition and improvement of skills in the field of transformation and the digital economy. This programme was launched in March 2018, and its goal is to fund training actions aimed to “promote continuous training and improvement of workers' employability both in the field of ICT and the digital economy, as in other sectors where a transformation process is taking place linked to the introduction of ICT in their management and business models, favoring their training in the knowledge, skills and competences demanded by companies, and encouraging their access to better jobs related to these matters”<sup>12</sup>.

Notwithstanding the above, it must be noted that the trade unions have been highly critical with this action, due of the lack of a real negotiation process of the content of this programme. In this regard, unions evaluated it as a first step in the right direction, but clearly insufficient.

The new government in force in Spain since June 2018 has expressed the will to change the policy making governance towards a more participatory approach based on the dialogue with employers and trade unions. If this approach will lead to a real involvement of social partners still need to be seen, however, at the time of writing this report.

Trade unions and employers have also highlighted the essential role of *collective bargaining* in order to facilitate the digital transformation of productive sectors and companies. As noted in a report by the Economic and Social Council, “collective bargaining by its nature and functions is the instrument that can facilitate, in particular, an adequate governance of digital transformation strategies of productive organizations by dynamizing labour relations in a proactive sense, that is, anticipating changes and

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<sup>11</sup> The outcomes of this public consultation can be found in: <http://www.mincotur.gob.es/telecomunicaciones/es-ES/Participacion/Paginas/Cerradas/consulta-estrategia-digital.aspx> (retrieved July 9).

<sup>12</sup> *Resolution of March 7, 2018, of the Red.es Business Public Entity, M.P., which establishes the regulatory bases of the program of training aimed at working people who are primarily employed, for the acquisition and improvement of skills in the field of transformation and the digital economy.* Official State Bulletin (March, 20, 2018).

their effects, and balanced in relation to those” (Consejo Económico y Social, 2017, p.118)<sup>13</sup>.

Nonetheless, when addressing the empirical analysis of industrial relations “we must start from a statistical reality and that is, our collective bargaining has only marginally addressed the topic of technological change and new technologies (...): less than 15% agreements, between 10-15% in the last three years, deal in a relevant way and identifying the relationship between the organization of work and new technologies” (Cuatrecasas, 2018, p. 287).

By the way, it is worth noting once more that this situation is far from being unique in the European context. On the contrary, the comparative analysis shows that “despite some progress, many remains to be done to address the social impact of digital technology in the collective bargaining process” (Jolly, 2018, p.212).

The scant integration of technological changes in collective bargaining in Spain can be historically explained by the following factors:

- The development of technological innovations is identified as a component of the design of work organization, which is recognized by labour law as an exclusive competence of the employer.
- The low level of innovation of the majority of firms in Spain, particularly among the SME and micro-companies.
- The traditional lack of knowledge by the bargaining actors –in both sides of the table- about the impacts of technological innovations on working conditions. A situation further aggravated with regard to digitalisation, taking into account the quick pace of the innovations and the uncertainty about the scope and intensity of their impacts on a number of cross-cutting issues (jobs, skills, working time, health and safety at work, data protection...).

Now, if we focus our attention in recent years there is another crucial factor worth highlighting: the deep consequences of the Great Recession and the implementation of austerity policies in Spain, particularly in terms of wage devaluation, erosion of working conditions and reinforcement of a more authoritarian model of industrial relations (Rocha, 2014 and 2018.a)

In this regard, the priority goal for trade unions nowadays is to promote the improvement of working conditions and the recovery of the lost labour rights, which leaves little room to address other topics like digitalisation<sup>14</sup>. In this sense, “*the present for workers is so precarious and hard, that we have no time to think in the future*” (interview with an union officer of UGT).

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<sup>13</sup> The reports of this institution are consensual by social partners.

<sup>14</sup> For example, in the text of the *IV Agreement for Employment and Collective Bargaining 2018,2019 and 2020* signed by CEOE-CEPYME, CCOO and UGT in July 5th 2018, which provide general guidelines for the tripartite social dialogue and collective bargaining, there is no single mention to digitalisation.

Notwithstanding the above, it is important to remark that trade unions are aware of the challenges posed by digitalisation to the world of labour. For example, the most representative trade union at state level (CCOO) included the following statement in the resolutions approved in its last Confederal Congress (2017): “We must avoid a new precariousness in the digital field. The transition to fair and quality digital work must be shaped, and in this sense the union should intervene in employment, salaries, qualification, improvement of competence, outsourcing of tasks, regulations on time of work, health and safety at work, access to Social Security, respect for privacy, conciliation of private life with the implementation of the right to digital disconnection outside the working day, protect the rights to intellectual property, in addition to guaranteeing the right to information, consultation and representation in monitoring committees and boards of directors. Also, to integrate the notion of gender to promote the full integration of women” (Confederación Sindical de Comisiones Obreras, 2017, p. 28).

There are also emerging initiatives of collective agreements addressing the effects of digitalisation on some specific topics, like training and working time, which are taking place in multinational companies with an already existing tradition of adaptation to technological changes (for example, in sectors such as chemical industry, automotive industry and banking).

Finally, it is worth noting that the implication of social dialogue in the emerging field of the platform economy is still embryonic in Spain, due to various reasons: (a) the percentage of the platform work is still very reduced; (b) the digital platforms refuse to consider themselves as employers, so they do not recognize workers as employees but as “independent contractors”; (c) the strong controversy within the main employers’ associations regarding to the new business models based on digital platforms, being particularly negative on the side of the traditional operators; and (d) the strategies of the traditional trade unions regarding to this emerging reality are still in a very early stage, and mainly focused in the court litigations regarding the situations of bogus self-employment (Rocha, 2018.b).

Once again, it must be said that this picture is quite similar to that registered in most EU countries, where the dynamics of social dialogue and industrial relations in the platform economy are in a very early stage (Florisson and Mandl, 2018; Johnston and Land-Kazlauskas, 2018; Kilhoffer et al, 2017).

## **3.2. Manufacturing**

### ***3.2.1. Digitalisation and restructuring***

The Great Recession has had a serious impact on the Spanish manufacturing industry, shown in a significant decline of both production and employment between 2008 and 2013, being particularly devastating among small and medium size companies. Since 2014, in a context of reactivation of the economy, there has been a certain improvement of the situation of the industrial sector, amounting nowadays around 14% of total gross value added and 13% of total employment<sup>15</sup>.

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<sup>15</sup> Sources: Economic National Accounts (provisional data of Gross Value Added for 2016); and Labour Force Survey (data of employment for 2018, second quarter). See more detailed statistical information in annex 6.2, tables 1 and 2.

Besides the shared diagnosis about the deep effects of the crisis, the literature review also shows general consensus around some key structural imbalances of the Spanish industry, which could affect to a large extent the competitiveness of the sector in a highly changing environment at a global level (Comisiones Obreras de Industria, 2016 and 2017.b; Myro, 2016; Molero, 2017):

- A small weight of the most innovative industries, mainly of ICT manufactures
- The slow advance of productive efficiency, measured through labour productivity and total factors productivity
- A high proportion of small and micro-companies<sup>16</sup>.
- A reduced number of innovative firms, compared to other European countries
- A reduced innovation effort compared to other European countries, which is also concentrated in some selected industries, such as chemical, automotive and aeronautics. As a result, according to the European Union Innovation Scoreboard, Spain belongs to the group of “moderate innovators”, far from the “leaders” and “strong innovators”, and only ahead of “modest innovators” (European Commission, 2018.b).
- Deficits of skills of the workforce and skill mismatches.
- A low level of expenditure of companies in external training of their directors, managers and workers in general. In this regard, it has been noted that “this not only speaks of a certain refusal to involve workers in the tasks and objectives of the company. It also reflects the extension of temporary hiring, an undoubted evil that must be stopped if we want to have more human capital” (Myro, 2016, p. 194).

Against this background, all the political and social actors agree that digitalisation poses a serious challenge for the future of manufacturing sector in Spain. Nevertheless, despite of this claim the literature review points out that the digitalisation in the Spanish industry is still at an early stage and its development is highly heterogeneous, with significant differences based on the branch of activity and, especially, the size of the firm<sup>17</sup>.

More specifically, the literature shows that while the basic digital uses are practically universal among the industrial companies, the most advanced digital uses seems to be concentrated in some branches –like automotive manufacturing and aeronautical industry– and in a reduced number of foreign capital multinational companies (AERT-ATP, 2017; Comisiones Obreras de Industria, 2016 and 2017.b; Cuatrecasas, 2017.b y 2018; López, 2018; Medina; 2018; Mur, 2018; Observatorio ADEI, 2015; Roland Berger, 2016; Urueña et al, 2018, pp. 41-55).

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<sup>16</sup> According to the Central Business Register (National Institute of Statistics), in 2017 around 47% of manufacturing companies in Spain had less than 10 workers, and 27% of the companies between 1 and 2 workers.

<sup>17</sup> This doesn't mean of course that technological innovation is a new phenomenon in the industrial sector. On the contrary, process of automatization for example has been carried out in the last decades in activities such as the car manufacturing.

To summarize, “in Spain, there are some large industrial companies that are considered leaders in terms of the digitization process of both their production and their business models, and it constitutes an important competitive feature in their activity. However, other branches of industry, generally the furthest from the retail distribution phase, are less receptive to the push from consumer demand to the growing intelligent exploitation of data” (Consejo Económico y Social, 2017, p. 79).

In this regard, it is possible to state that the influence of digitalisation in the development of restructuring processes in the last decade has been relatively low, compared to other factors related to the impacts of the crisis. Nevertheless, is expected to play an increasing role in the short run, especially in those activities with a higher pace of implementation of the most advanced digital uses.

### **3.2.2. Views of the actors**

The former **government** launched in 2015 the so called initiative “*Connected Industry 4.0*” (CI4.0), aimed at digitising and enhancing competitiveness of Spain’s industrial sector (Gobierno de España, 2015). This initiative was aligned and complementary to two other former national initiatives approved by the Spanish government: the Digital Agenda for Spain (2013); and the Agenda for Strengthening the Industrial Sector in Spain (2014).

The general goals of CI4.0 are: (1) ensuring widespread knowledge of Industry 4.0 technologies and suitable skill development of Industry 4.0 in Spain (2) encourage digitised collaborative environments and platforms, such as Digital Innovation Hub, Industrial Platforms or Clusters, (3) enhance the development of digital enablers; and (4) promote industry 4.0 solutions adapted to the industrial needs; including those of SMEs.

In order to meet this goals, it is defined a “Spanish model of industry 4.0” with three specific objectives (1) Increasing the industrial added value and quality employment; (2) Developing a unique and competitive model for the industry of the future and promote a strong local offering of digital solutions for the manufacturing sector; and (3). Promoting and enhancing differential competitive levers that favour industry and boost exports.

The initiative also identifies the main obstacles for the digital transformation of the industrial sector: (a) lack of knowledge about the concept of “Industry 4.0”; (b) need to define the technologies to use and how to use them; (c) lack of availability of digital enablers; and (d) lack of qualified, experienced resources to undertake the transformation, especially in smaller companies.

It is worth noting that, although the development of this initiative has been driven by the former General Secretary of Industry and SME, it was the result of a wide and open consultation process involving a large set of public and private actors.

It must be said that the real implementation of this initiative began in 2017, with the development of different working groups driven by public and private partners (Lazaro,

2017). However, nowadays there is some uncertainty about its continuity, due to the change of government that took place in June 2018.

**Employers associations** of the industrial sector have a highly positive view about the effects and consequences of this phenomenon.

Broadly speaking, employers and managers of companies consider that digitalisation will provide benefits for the Spanish industry in terms of improvement of the productivity, the development of new products and services, and also the rise of new jobs (CEOE, 2018; Cuatrecasas, 2018; Roland Berger, 2016, p. 29).

Nevertheless, it is also recognized that this process will lead to a negative impact on employment; for example, in the short run is expected the automatization of the most routine transversal tasks related to the administrative and financial fields.

Employers also remark that the digitalisation of the industrial sector in Spain could be limited by some barriers, such as: the costs of the processes, particularly for the SME; the lack of the required skills among the workforce and managers; and the resistance to change.

More specifically, the outcomes of a survey to professional of human resources about the perception of industrial robotics in Spain point out to some elements worth highlighting (Cuatrecasas y the Addeco Group, 2018):

- 88% of the surveyed believe that robotics will have a high or very high incidence in the labour market in the coming years. In addition, this possible impact will occur in the medium and long term.
- 93% ensure that the workforce either is not prepared for the integration of robots or only partially. Therefore, most companies believe that the coexistence of both will be problematic, at least in the short term.
- Companies believe that the effects of the introduction of robots in companies will be positive, among other things, because they will provide more agility to the processes, encourage innovation and the development of new products and services and will help reduce the number of errors.
- However, experts are concerned about the potential resistance of employees and trade unions to the adoption of robotics in companies.
- 3 out of 4 professionals believe that robotization will not destroy jobs.
- The factors that companies will need to generate or accelerate a greater integration of employees and robots in order of priority are: greater training; greater attention to the cultural change involved in working with robots; and visualizing the benefits of intensive use of robots.
- 91% of professionals are aware of the fundamental role that HR departments will have when managing a staff of robots and humans. However, 54% believe that these teams are focused on the digitization of HR and not on the entire confluence of technologies.

- 83% of the respondents consider that robotization will make the emotional management of the teams increase in importance by incorporating the robot into day to day work collaboratively with workers.

Nevertheless, it should be noted again that the situation of the industrial sector is highly heterogeneous among the various branches of activity. So the perceptions of the impacts of digitalisation also show some level of diversity.

Finally, there is also a widespread among employers and management consensus about the need to reform the labour law, promoting a greater flexibility of the employment regulation in order to facilitate the adaptation of companies to the challenges of digitalisation (Cuatrecasas, 2017 a/b and 2018; Ros, 2018).

**Trade unions** consider that digitalisation poses both opportunities and risks for the manufacturing industry. The reason is that “digital technologies provide the manufacturing industry with the possibility of respond to the new demands of its customers at the level of "Products, Processes and Business Models", producing a decisive impact in the value chain and providing both benefits and threats for those who remain outside, at the same time that it incorporates an increase in the quality of products and a reduction in production costs” (Comisiones Obreras de Industria, 2016, p. 2).

Focusing in the effects on the world of work, trade unions agree with the predictions of a higher impact of the process of digitalisation on the most routinized jobs, both manual and non manual. Also, they point out to the consequences on working conditions with regard to topics such as intensification of working time, the emergence of new health and safety risks, the increased capacity of the management for the control and surveillance of workers and the erosion of data protection. Likewise, trade unions are very concerned about the potential development of digital platforms, as they represent a new form of outsourcing based on precarious work, in spite that this is still and emerging phenomenon located in some services activities (such as delivery). Finally, they warn about the potential deepening the segmentation and inequalities among workers if the accelerated process of digitalisation of industry and services is not accompanied with public policies of support.

Regarding to the situation in Spain, the view of trade unions is that the combined effects of the Great Recession and the structural imbalances of the manufacturing industry have left the sector in a weak position to address the challenges of digitalisation and industry 4.0. Additionally, they are very critical with the low level of implementation of industrial policies in Spain in general, including the specific initiatives on digitalisation and connected industry 4.0 launched in the last years.

It is worth noting that trade unions also recognize that digitalisation has not been so far a key goal for them. This is explained by various reasons: (a) the main priority of union action during the last decade has been the mitigation of the impact of the crisis and structural reforms on employment, working conditions and labour rights; (b) the lack of information and knowledge about digitalisation and its real consequences on the world of labour; (c) the low level of development of digitalisation in the Spanish industry, at least in its most advanced uses, being concentrated besides in some few multinational companies; (d) the refusal of employers to negotiate with trade unions the

implementation of technological changes at a company level; and (e) the lack of a “proactive” culture of addressing the topic of innovation on the union’s side.

Against this background, trade unions have posed the need of a higher implication of their organisations in the development of the process of digitalisation of manufacturing industry, through a reinforcement of the role of tripartite social dialogue and collective bargaining.

By way of illustration, the guidelines for collective bargaining approved in 2018 by the industrial federation of CCOO include the following statement: “The irruption of new processes of change determined by the development of Industry 4.0, with direct effects on employment, working conditions and their organization, which the companies intend to implement without the participation of trade union representation, as they are doing in the sector of services, requires that you find your space in these criteria to be able to anticipate and act before them” (Comisiones Obreras de Industria, 2018.a, p.4).

### 3.2.3. *Social dialogue*

The evaluation of the role of *tripartite social dialogue* in the face of digital transformation of the Spanish industry show some relevant differences among the actors involved.

Taking as a reference the main policy initiative launched in Spain so far (“*Connected Industry 4.0*”), according to the former government it was the result of a wide process of public consultation involving public and private organisations, scientific, academic, political parties, civil society and trade unions.

Employers share this view, and in fact some representatives from major technological companies and associations have chaired (or facilitated) the main working groups created in the framework of this initiative (Lázaro, 2017).

The view of trade unions however is much more critical. The reason is threefold: first, they think that open consultation can complement but never replace the role of tripartite social dialogue; in this regard, trade unions denounce that their implication in this initiative has been reduced to receive information in some formal meetings with the Ministry of Industry. Second, they emphasize the low level of implementation of the different lines of action included in the initiative. And third, they also criticize the lack of coordination between the different government departments and agencies created to foster digitalisation in Spain.

Social partners have agreed by their part two initiatives worth highlighting in the context of the *bipartite sectoral social dialogue*.

a) The *Declaration of social partners urging the development of a State Pact for industry*, signed in 2016 by the industrial federations of the unions CCOO and UGT, and the business organizations integrated in the Alliance for the Competitiveness of the Spanish Industry (representatives of strategic sectors such as Automobile, Paper, Petroleum Products, Chemistry, Food and Beverages, Cement and Steel). Also, the Metal, Equipment and Components sectors for the Automotive, Textile and Fashion sectors joined to this declaration

The Declaration poses nine demands for policies to foster industrial competitiveness, including the following one: “it is necessary to establish a R & D & I Technology and Digital Development Policy that facilitates and bets for the innovative activity of the companies and, on the other hand, allows to attract and develop in Spain public, private and mixed advanced and specialized centres in those areas transversal and essential to provide the industry with a technological base. It is also essential to increase public and private investment in research, development and innovation that increases the generation of productions with greater added value”.

b) The “*Manifesto for the Leadership of Digital Transformation in the Spanish Economy through Talent Development*”, promoted in 2017 by the trade unions UGT and CCOO and the association AMETIC<sup>18</sup>, which includes a number of proposals on education and training to help Spain face digital transformation successfully.

**Collective bargaining** in manufacturing sector is structured around some few collective agreements at State level, various collective agreements at provincial level and a higher number of collective agreements at a company level<sup>19</sup>.

The analysis shows that collective bargaining has played a minor role so far in tackling the challenges of the digital transformation of the industrial sector, due to similar reasons to those noted above (see section 3.1.3). Nonetheless, it is possible to highlight some good examples of collective agreements addressing the effects of technological innovations, including provisions on training, working time, anticipation of change, management of restructuring processes and involvement of workers’ representatives<sup>20</sup>.

### 3.3. Financial services

#### 3.3.1. Digitalisation and restructuring

The Spanish banking sector has gone through a deep restructuring in the last decade whose last steps are still taking place in 2018. In order to prevent a systemic crisis of the whole financial system in the wake of the Great Recession, the Spanish and EU authorities fostered an intense adjustment process aimed at improving the health and efficiency of the financial entities. The results of this process include: (a) a series of mergers and acquisitions within the sector; (b) divestment or reduction in assets and/or activities deemed non-profitable (in particular, a reduction in installed capacity most acute in the area of retail branches; and (c) a large-scale provisioning effort; and recapitalisations in some instances through reliance on private investors, while in others through reliance on public funds (Banco de España, 2017; Ocaña and Faibeshenko, 2016).

The scale of the restructuring of the financial system is reflected in the sharp drop in the number of institutions and their distribution networks, as well as in the decline of

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<sup>18</sup> AMETIC is a business association that represents the digital technology industry in Spain. Its members are companies of all sizes which include large global companies of IT, telecoms, consumer electronics, services and digital contents, as well as other leading companies in digital transformation and other associations of the sector.

<sup>19</sup> See detailed statistical information in annex 6.2, table 3.

<sup>20</sup> See annex 6.3.1.

employment: according to the Labour Force Survey, in 2008 the financial services (NACE 64) accounted 328,4 thousand employees in Spain, while ten years later the volume of employment is of 238,5 thousand people, meaning a loss of 89,9 jobs<sup>21</sup>.

According to the updated figures, the financial services sector accounts nowadays 4% of the total gross value added and around 9% of the total employment in Spain<sup>22</sup>.

Additionally to the lasting consequences of this process, the Spanish banking industry faces in the last years other challenges that are playing as a drivers of restructuring, such as: (a) a macro-environment characterized by very low interest rates, negatively affecting banks' profitability; (b) more stringent regulatory and supervisory requirements; (c) changes in the traditional relationship with customers; and (d) reputational problems aggravated in times of crisis.

Against this background, digitalisation poses a new major challenge for the financial services, both for the banking and insurance sector. It is important to remark that information and communication technologies have been used massively in the Spanish banking system since the 1970s. Nevertheless, there is a widespread consensus about the qualitative leap that means the digital transformation of the financial entities ("digital bank") and the irruption of new technological players in the financial industry such as the FinTech, the "bigtech" and the Insurtech (in the insurance sector).

It is worth noting that financial services are one of the sectors where the process of digital transformation in Spain has taken place earlier and more profoundly, with significant investment of resources in the process, anticipating trends later observed in other sectors. Also, as one of the services most related to the daily activity of society, it can be considered a digitalization tractor in other areas. It should be said, however, that the pace of digitalisation is uneven taking into account the size of the firm, being higher among the bigger ones (Bordonaba, 2017; Castejón et al, 2015; CEOE, 2018; Consejo Económico y Social, 2017; KPMG, 2017; Roland Berger, 2016).

Likewise, in the last years there has been the emergence of start-ups that use technological advances to provide financial services in certain product or services niches. According to some sources, in June 2018 there were 305 FinTech and 101 InsurTech firms in Spain (Finnovating, 2018). So this phenomenon is still at an early stage of development, although it is expected a quick growth in the coming years.

Finally, it can be said that the weight of digitalisation in the restructuring processes of the financial sector has been not so relevant during the last years as other factors (in particular, the sharp adjustment of the banking sector forced by the public authorities in the wake of the crisis). Nevertheless, it is worth highlighting the influence of digitalisation in a twofold way: (a) by deepening of the capacity reduction process of Spanish entities, which is been translated in office closings and downsizing; and (b) by promoting a reorganization of the business model and organizational structure and culture, in order to take the lead of the process of digital transformation.

### ***3.3.2. Views of the actors***

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<sup>21</sup> Source: Labour Force Survey, National Institute of Statistics (second quarters of 2008 and 2018),

<sup>22</sup> See more detailed statistical information in annex 6.2, tables 1 and 2.

The banking industry is a highly regulated sector, and in this sense it is worth highlighting the view of the **Bank of Spain**<sup>23</sup> about the challenges of digitalisation.

According to the Deputy Governor of this institution, “we unquestionably face a situation in which digital innovation is transforming traditional banking (...) The implications of this technological revolution are complex and varied both for the banking sector and for regulators and supervisors, and must be analysed with caution taking into account the particularities of the banking sector and avoiding oversimplification” (Alonso, 2017, p. 6).

Given the potential impacts of the dynamics in the financial sector the stability of the whole economy, it is noted that the implementation of technological innovations in banking operations required a closer monitoring of the new risks introduced in the system. In this regard, it is remarked that “matters such as the privacy of personal information, security, the risk of cyber attacks or even the risk of exclusion, must be monitored and, where appropriate, duly regulated. Regulation has to achieve a balance, protecting financial stability and confidence in the system, without unjustifiably hindering the exploitation of these technological innovations by industry and society in general” (ibidem, pp. 6-7).

Also, with regard to the new technological operators like the fintech firms it is also pointed out to the need of regulation. More specifically, it is stated that “the greater the likeness between their financial activity and traditional banking activity, the more they will be subject to requirements and controls similar to those of banks, tailored to the risk of the activity in question. That is to say, it is necessary to set fair rules of play ensuring neutrality on the basis of the risk involved and the activity carried out” (ibidem, p.7).

**Employers** have a very positive view about the benefits of digitalisation for the financial services industry. For example, according to the speaker of the Spanish Banking Association, “digitalisation brings a huge opportunity for Banks” (Martinez, 2017). This view is shared by the traditional firms of the insurance sector and, of course, by the associations of the technological start-ups.

This is explained because digitalisation offers ways to be more efficient in customer service, given the growing demand from this service for higher added value. It also anticipates lower future costs, from the automation of tasks, an improvement in flow management and greater efficiency in the internal management of risks.

Nevertheless, representatives of the business associations and CEOs also remark that digitalisation poses various challenges for the traditional operators of financial services (Castejón et al, 2015; CEOE, 2018; KPMG, 2017; Martínez, 2017; Mullor, 2018; Roland Berger, 2016):

- Adaption to the growing and stricter regulation, which is considered the mayor barrier to the development of digital innovation in the industry; particularly taking into account that the technological start-ups (fintech and insurtech) and the “bigtech” – like Google, Amazon, Apple...- are not affected by the strict regulation

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<sup>23</sup> The Bank of Spain is the national central bank and, within the framework of the Single Supervisory Mechanism, the supervisor of the Spanish banking system along with the European Central Bank.

of the financial sector. In this regard, there is a widespread about consensus about the creation of a “regulatory sandbox” for the Spanish financial industry<sup>24</sup>.

- Establishment of a new relationship model with the client. The new environment marks the need to reinvent the model of relationship with the client towards a model “Customer Centric” that guarantees a personalized and immediate experience. For this, it is necessary to know in depth the clients for what is required to build powerful capacities to integrate all the available information. In addition, financial institutions must pursue omnichannel by establishing a structure of complementary channels. On the other hand, banks must transform their distribution models to respond to the new needs and habits of digital customers
- Transformation of the structures, strategy and culture of the organization, in order to achieve the necessary flexibility to evolve constantly and dynamically towards a more digital entity.
- Collaboration with the technological start-ups (Fintech) in order to access to new market niches.

Finally it it’s worth noting that, according to some human resources managers, digitalisation is going to favour the deepening of some labour trends that have been already taking place in the sector in recent years: (a) the continuous decline of employment in the front-offices, due to the increasing replacement of the face-to-face” banking by the online or multi-channel banking; (b) the growing demand of new professional profiles linked to digital technologies; (c) the re-skilling of the employees; and (d) the transformation of the organizative models of the entities (Chozas, 2017; Monge, 2017).

In this sense, there is an undisguised bet for a more individualized and flexible model of industrial relations at a company level, in order to ensure the required capacity of adaptation to change of the firms and their employees. In short, according to this view “it is important a change of mindset about the acquired rights petrified in the labour contracts, law and collective agreements. For this, industrial relations should also be changing” (Monge, 2017, p.97).

The current priorities of **trade unions** are very conditioned by the consequences of the still not yet finished process of restructuring faced by the financial services since the onset of Great Recession. Additionally, there are highlighted the strong pressures on workers linked to the growing and stricter regulatory requirements related to the relationship with customers.

In particular, unions point to the Directive 2014/65/EU on the markets of financial instruments, commonly called MiFID II, together with Regulation 600/2014 (known as MiFIR). This Directive, in force since January 2018, is aimed to “achieve a safer, more responsible and transparent financial system”. The adoption of this new regulation impacts all the actors of the financial industry, requiring legislative developments,

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<sup>24</sup> A regulatory sandbox is a ‘safe space’ in which businesses can test innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences of engaging in the activity in question.

whose implementation entails the performance of training actions aimed at complying with the requirements contained in it.

Against this background, the position of trade unions regarding digitisation is more ambiguous than that of employers. First, because in spite of that ICT have been introduced in the financial services for decades, there is a lack of knowledge about the real implications of the new disruptive digital innovations (such as Big Data or Artificial Intelligence).

Second, notwithstanding the above trade unions consider that digitalisation is going to impose an unprecedented change in financial services, which is already visible in dimensions such as the digital relationship with customers, transformation of the business model, new skills requirements, and the irruption of emerging players in the sector (fichtech and insurtech).

Third, according to the union officers interviewed digitalisation is expected to have significant impacts on work organisation, which could lead to some risks such as: (a) intensification of workload; (b) higher demands on availability and flexibility of working time; (c) increasing stress for workers; (d) skill gaps; and (e) exclusion of those workers with lower capacity of adaptation to technological change.

Finally, although the higher impact is expected on work organization and working conditions, trade unions are also concerned about the negative impacts in terms of job losses.

### **3.3.3. Social dialogue**

The enacted measures to foster the restructuring of the financial services in the wake of the Great Recession has been adopted unilaterally by the Spanish Authorities, following the guidelines coming from the European Institution, without the involvement of the social partners.

Against this background, social dialogue in financial services in recent years has taken place mainly at bipartite level, through *collective bargaining*.

In the banking industry, collective bargaining is structured around three State-level sectoral collective agreements, complemented with a reduced number of statutory collective agreements at a sectoral and company level, and other agreements on specific issues at a company level<sup>25</sup>. In this regard, digitalisation has not been addressed so far by collective bargaining, and in fact the references to technological innovations in the three sectoral agreements currently in force are irrelevant.

This situation can be explained by a number of reasons.

- Social dialogue has been focused during the last decade in the management of the deep restructuring process of the sector, which has been conducted through a process of negotiation –and conflicts- between employers and trade unions.

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<sup>25</sup> XXIII collective agreement of bank sector (2015-2018); Collective agreement of saving banks (2018); Framework collective agreement for the financial credit institutions (2017-2018). See more detailed statistical information in annex 6.2, table 3.

- Additionally, social partners are focusing social dialogue in some challenging issues related to the regulatory framework, such as the training certification required by the new regulations (MiFIDII).
- The larger financial entities has adopted in recent years strategies and actions plan for their digital transformation, whose design and implementation is being conducted without the participation of trade unions and workers representatives.
- There is a lack of information and knowledge on the union side regarding to the full implications and impacts of digitalisation on employment and working conditions. In this regard, trade unions poses that their will is to address this topic in the next renovation of the sectoral agreements that structure collective bargaining in the sector. Also, it is worth noting that some emerging topics like the right to disconnect have been addressed by social dialogue at a company level<sup>26</sup>.

Collective bargaining in the insurance sector is structured around one State-level sectoral collective agreement and others collective agreements at a provincial and company level<sup>27</sup>. In this regard, it can be said that digitalisation has had a low incidence so far, although there are some agreements at a company level including provisions related to issues like working time, training and teleworking<sup>28</sup>.

### **3.4. Tourism**

#### ***3.4.1. Digitalisation and restructuring***

The analysis of the impact of digitalisation on the Spanish tourism sector is very relevant given the importance of this economic activity, both in terms of GDP and employment, as well as its favourable impact on the external balance. In this regard, the tourism industry has been a key driver for the economic recovery in Spain since 2014, and it contributes nowadays with the 6% of the whole GDP and of 9% of total employment (2,56 million jobs)<sup>29</sup>.

It is important to note that the tourism sector comprises branches of activities very heterogeneous, such as the hospitality industry, passengers transport and travel agency, tour operator and other reservation service and related activities. In this regard, there is a strong weight of the hospitality industry (accommodation and food service activities), which amounts around 64% of the employment of the tourism sector in Spain.

Other relevant features of the sector worth remarking are: (a) the atomisation of the business structure, with a high percentage of small and micro-companies; (b) the seasonality of the demand, which conditions the strategies of the firms (particularly, with regard to the management of the workforce); (c) the low degree of technological innovation, especially among the smaller companies; and (d) the high level of

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<sup>26</sup> See annex 6.3.2.

<sup>27</sup> Collective agreement of insurance, reinsurance and collaborating mutual with Social Security (2016-2019). For more detailed information, see annex 6.2, table 3.

<sup>28</sup> See annex 6.3.2.

<sup>29</sup> Data for the branches of activities related to accommodation services. See annex 6.2, tables 1 and 2 for more detailed information,

precarious work, both in terms of type of contracts and of working conditions (Gabinete Económico de CCOO-Servicios, 2018).

Against this background, the literature review shows that digitalisation is having a significant impact in the tourism industry, and therefore represents a major challenge for its sustainability in Spain. Particularly, given that this sector is strongly exposed to the competence of other tourist destinations in a highly changing environment at a global level (Consejo Económico y Social, 2017; De Pablo, 2016; Fundación Orange, 2016.a; Observatorio ADEI, 2015; Roland Berger, 2016; Romero, 2018; SEGITTUR e Instituto Tecnológico Hotelero, 2014; Valls and Roche, 2017).

More specifically, the analysis of available statistics points to an almost universal implementation of ICT and the basic digital uses related among the firms of the sector. Nevertheless, the development of the most advanced uses –for example, Big Data– are minority, and concentrated above all in the larger firms of the hotel sector (Urueña et al, 2016; Urueña et al, 2018, pp. 123-136)

Regarding to the restructuring processes driven by digitalisation, it is worth highlighting two main trends. First, the “digitalisation of the customers” has led to the disintermediation of services, affecting to the existing operators among which travel agencies had a dominant position. The informative transparency provided by the internet, the digitalization of activities and the familiarization of the users with these technologies have caused that the companies have reframed their competitive strategies.

Second, the strong competition, the technological advances and the evolution of the user has pushed towards a new re-intermediation in which online players with a strong B2C reputation (online search engines, online agencies) are now the leaders of the industry.

In addition, there has been an emerging process of digital transformation of the existing firms, although is mainly concentrated so far in the business segment of the larger hotels. On the other hand, the main changes in the tourism sector are taking place in the production and commercialization phase of the service, while its final consumption is strongly linked to activities with intensive use of labour where the impact of digitization is low. However, “it is true that technological developments suggest that this phase of tourism activity will also experience a digital transformation. The application of the internet of things or artificial intelligence could be extended to the improvement of the tourist experience, being able to impact the jobs of the sector, both in number and in qualification” (Consejo Económico y Social, 2017, p. 87).

Finally, it must be noted the emergence of new players in the branch of hospitality such as the digital platforms that allows the access to private shared or rented housing. This phenomenon is still at an early stage in Spain compared with other countries, although it has been increasing in recent years in the biggest cities like Madrid and Barcelona. In this regard, there is an ongoing public controversy about the necessary regulatory norms that should be applied to these platforms, regarding to issues such as taxation, registration, responsibility and insurance.

#### ***3.4.2. Views of the actors***

The **Government of Spain** has opted in the last years for the transformation of the Spanish tourism model to guarantee its present and future. A comprehensive strategy has been implemented that affects the tourist, the destination and the digital transformation of the sector.

The main initiative launched in this field has been the multi-annual *National and Integrated Tourism Plan 2012-2015* (“Plan Nacional Integral de Turismo”- PNIT). The Secretary of State for Tourism is responsible for its implementation, although there are multiple stakeholders involved in its execution.

The general objective of the PNIT is “to boost the competitiveness of companies and our destinations, renew the global leadership of our country for the coming decades and contribute to the generation of wealth, employment and welfare of citizens” (Gobierno de España, 2012, p.13).

To this end, the Plan goes on to define a series of specific objectives: (1) increase tourism activity and productivity; (2) create quality employment; (3) stimulate a single market; (4) improve international positioning; (5) improve the coherence and recognition of the ‘Spain’ brand; (6) encourage public-private co-responsibility; and (7) reduce the seasonality of tourism.

The Plan includes six axes of action and a set of measures, including among them some related to ICT and innovation:

- *Smart Destinations Project*. The aim of this Project is to improve the positioning of Spain as a world tourism destination, seeking new mechanisms to boost innovation in the destinations through the deployment and development of ICTs in order to create differential and highly competitive services. A further aim is to set up a standardised framework that establishes the minimum requirements to classify tourism destinations as “Smart Destinations” aligned with the trend towards Smart Cities.
- *Emprendetur*. It is a program to support entrepreneurs that include actions such as creating a network of cooperation to promote tourist development, enhancement of training and improving the skills of entrepreneurs, support in finding investors, among others. It also includes a funding line, called Emprendetur R+D+i. This program has 2 areas, Emprendetur R+D; and development of innovative products.
- *“INNpulsa Turismo” Platform*. It is an on line platform created and managed by SEGITTUR for innovative businesses and entrepreneurs in the tourism sector that offers information and advice on 4 axes: (a) lines of financing projects and new business models; (b) existing calls of proposals at national and international level; (c) supporting innovative tourism entrepreneurs; and (d) supporting the internationalization of innovative tourism products

These measures are aligned with other initiatives enacted under the Digital Agenda for Spain, such as the National Plans of “Smart Cities” and “Technologies of Natural Language”.

Also, for Public authorities there is the challenge of the regulatory problems posed by digitalisation, especially with emergence of new players such as the digital platforms that allows the access to private shared or rented housing. This is an ongoing debate in Spain, being the main initiative so far in the report of the National Commission on Markets and Competition, which has been very controversial (Comisión Nacional de los Mercados y la Competencia, 2016)<sup>30</sup>.

Finally, it is worth noting that, according to the Spanish authorities, the digital transformation of the sector has to face some barriers, similar to those that can be found in other economic sectors: (a) lack of awareness and resistance to change in many firms, especially the smaller ones; (b) the need to improve the digital infrastructures, in spite of the advances registered in recent years; and (c) the lack of digital skills (De Pablo, 2017).

The main economic activity in the tourism sector is the hospitality industry, as noted above, which comprises accommodation and restaurant services. In this regard, **business associations** are fully aware of the challenges posed by digitalisation, as shown with the launching in 2017 by the Spanish Federation of the Hotel Sector (FEHR, acronym in Spanish) of the “Observatory for the Digital Transformation of the Hospitality Industry”.

According to the FEHR this is a necessary instrument to foster the digital transformation of the sector, taking into account not only the ongoing trends that are already affecting the business models but also the current digital gap in the sector: among the hotels and the restoration activities on the one side; and between the biggest firms and the small ones on the other side (Hosteleríadigital.es, 2017).

Focusing the analysis in the innovation strategies implemented in the Spanish tourism sector in recent years, the outcomes of a survey among CEOs and managers allows highlighting some relevant issues (Valls and Roche, 2017):

- 17,8% of the Spanish touristic firms do not invest on innovation. Among the companies that do invest: around 28, 3% devote between 2 and 4% of the annual turnover to innovation; 24% between 1 and 2%; and 7,4% of the companies less than 1%.
- Three major focuses illuminate innovation among Spanish tourism companies: (a) the relationship with the client. Indeed, the main area of innovation in 2017 is that of co-creation, understood as involving the client in the design of the tourism product and services; (b) the networks, to establish permanent relationships with the tourist, before, during and after the trip; and (c) the structure, understood as the alignment between talent and all kinds of assets to translate into the company's interior the great challenges of turning the client into the source of all management.
- The main concern of tourism entrepreneurs is centred on innovation of products and services, rather than in technologies.

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<sup>30</sup> Among other reasons, because some traditional operators estimated that the preliminary conclusions of this report were too nuanced in favor of the new digital players.

It is also possible to point out some key barriers highlighted by managers and business associations for the digital transformation of the tourism sector in Spain (Fundación Orange, 2016.a): (a) resistance to change by the less innovative companies; (b) organizational structures that are too rigid and hierarchical; (c) lack of strategic vision on the part of many managers, who understand technology as an expense instead of as an investment and believe that the existence of a direct and tangible return is necessary to dedicate resources to technological innovation; (d) lack of talent and knowledge in digital skills within organizations; (e) atomisation of the business structure, with a high number of micro-companies (especially in restoration activities); (f) difficulty accessing financing for digital innovation; (h) regulatory uncertainty in the face of new business models; and (i) lack of knowledge and very limited use of what are considered today as more advanced technologies. This is the case of cloud computing, big data or business intelligence.

With regard to the labour impact, employers focus in the demand of new professional's profiles and the necessary re-skilling of the workforce.

Finally, employers associations are highly concerned with the emergence of the new digital platforms in the sector, which according to them is often developing in an uncontrolled and unregulated way. In this regard, there is a call upon the public authorities for a fair competitive level playing field.

The perspective of **trade unions** focuses in the first instance in the denounce of the structural labour precariousness of the Spanish tourism sector, shown in dimensions like: (a) the high prevalence of atypical contracts; (b) bad quality working conditions, especially, in terms of low wages and long working days; (c) the increasing outsourcing of some activities and occupations (such as hotel housekeepers) to Multi-services companies, where working conditions are rather poorer; and (d) an estimated high percentage of irregular economy and undeclared work.

Regarding to the digital transformation of the sector trade unions agree with the diagnosis about that the basic ICT uses are fully extended, but that the most advanced digital innovations are being implemented so far only in the large firms of the hotel sector.

This digital gap can be explained in their view by different reasons: (a) the low degree of investment in innovation and training, especially in the restoration sector and in the smaller firms; (b) the strong atomisation of the business structure, with a high level of small and micro-companies; (c) the lack of digital skills among workers, particularly the older ones, coupled with a low level of training at a company level in ICT; and (d) the structural labour precariousness of the sector, which leads to a high level of employee turnover favouring the consolidation of a "low-road" model of business competitiveness.

Notwithstanding the above, trade unions point out that digitalisation is having some labour impacts in the traditional firms of the sector:

- The progressive disappearance of some low-qualified occupations, such as telephone operators at hotels, or the employees in charge of the billing at the restaurants.

- The emergence of new professional profiles with high qualifications requirements, particularly in the larger and most internationalized companies. For example: strategic sales manager; innovation managers; and managers of networks, information and content.
- Changes in the work organisation, especially in the commercial departments of the hotels.
- Requirement for Basic digital skills r for all the employees, meaning a higher pressure for the older workforce.

Trade unions also remark that the uncontrolled emergence of the new digital platforms is favouring unfair competition and social dumping, both in the hotel and restaurant sector. Likewise, they denounce the negative social impacts in terms of the rising the housing rental prices and problems in the mobility of citizens, further aggravated in the most strategic tourist destinations.

In this regard, the Spanish trade unions claim that public authorities should ensure that legislation is fully respected by and enforced upon all providers of hospitality and tourism services, so that customers are protected and employees are treated fairly and entitled to their rights.

### ***3.4.3. Social dialogue***

The role of *tripartite social dialogue* in the face of digitalisation of the tourism sector in Spain has been, so far, irrelevant.

In November 2017, the former government created the “*Tripartite Table for the quality of employment in the Hostelry*”, composed by the Ministry of Employment and Social Security and of Energy, Tourism and Digital Agenda, and the most representative social partners of the sector.

The aim was to analyze all the issues related to the improvement of the working conditions in the sector, paying special attention to dimensions like job stability, training, regulation and working time, and health and safety at work. In order to meet this goal, there was planned the creation of different working groups, including one related to new technologies and digitalisation.

In practice this initiative was never developed and it was in fact paralyzed with the change of government. Nevertheless, the new Minister of Industry, Commerce and Tourism has announced the will to reactivate this Table, although at the time of writing of this report (December2018) there is no news regarding this issue,

It is worth noting that the trade union CCOO has proposed the need of a “Pact for the Tourism” between the Government and the social partners, with the goal to foster a more sustainable and “high-quality” path road for the sector. Among other issues, this trade union poses the implementation of a “Digital agenda in the tourism industry”. In this sense, according to this trade union, “the impact of the disruption of changes in the tourism industry must be compatible with a just transition and the development of fully

legal, socially and environmentally sustainable and responsible economic activities” (Gabinete Económico de CCOO, 2018, p. 33).

Also, the employers’ associations Confederation (CEOE) has posed a set of measures, with particular emphasis in the support to the digitalisation of the small and medium companies of the sector, and the transformation of Spain into a “smart destination” (CEOE, 2018).

**Collective bargaining** in the hospitality industry is organized around a State framework agreement and various collective agreements at regional, provincial and company level<sup>31</sup>.

It can be said that digitalisation has not still entered in the bargaining agenda of the social partners. This can be explained by different reasons: (a) the low level of innovation and dissemination of the most advanced ICT innovations, which are very concentrated in a few big firms, as noted above; (b) the generalized view that the adoption of technological change is a part of the exclusive competence of the employers; (c) the lack of knowledge about the labour implications of digital innovations; and (d) digitalisation is not included in the current priorities of trade unions, which are much more concerned with the improvement of the poor working conditions and the control and regulation of extended business practices such as the generalised outsourcing of key activities and occupations (such as hotel housekeepers). In this regard, according to the Register of the Ministry of Employment and Social Security, there is just one collective agreement of the sector in force that address the issue of technological change<sup>32</sup>.

Nevertheless, the both representatives of social partners interviewed share the need to address the topic of digitalisation in the next renewal of the State level agreement for the sector.

### **3.5. Postal services (CEP)**

#### **3.5.1. Digitalisation and restructuring**

The postal services market in Spain has undergone significant changes in the last decade following the abolishment in 2010 of the public monopoly, which fostered the liberalisation of the sector and an intensified competition between the State owned company –Correos group- and the new competitors<sup>33</sup>. In addition, there are other factors that have affected to the evolution of the sector, such as the impact of the economic crisis and the changes of the demand, which has led to the progressive replacement of traditional products and services by new ones linked to the growing relevance of the electronic commerce.

According to the data from the National Commission of Markets and Competence, the postal market in Spain accounts around 0, 19% of the national GDP and the 0, 45% of

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<sup>31</sup> V Labour agreement at state level for the hostelry sector 2015-2019. See annex 6.2, table 3.

<sup>32</sup> See annex 6.3.3

<sup>33</sup> in 2010 the national government passed the *Act 43/2010 of 30 December 2010 on the Universal Postal Service Act, rights of users and the postal market*. This law implemented the EU Directive 2009/6/CE, which established December 2010 as the latest deadline for the liberalisation of the postal sector.

total employment. Also, a more in-depth analysis allows distinguishing two large sectors with very different characteristics (Comisión Nacional de los Mercados y la Competencia, 2015 and 2017):

- *Traditional postal sector*, which mainly includes the correspondence segment. The companies in this segment are characterized by carrying out some or all of the activities of the postal chain and making available to its customers a network for the admission, classification, collection, transport, distribution and delivery of national, provincial or local coverage. The postal items characteristic of this segment are letters, postcards and direct mail, which are delivered through home lockers. Also included in this segment are certified letters and administrative notifications.
- *Courier, Express and Parcel delivery sector (CEP)*. This sector could be considered, in some way, the result of the progressive and, to a certain extent, convergent evolution of two sectors of traditional activities: the postal sector and the road transport sector. This evolution was partly caused by the need for postal and transport operators to adapt to a growing demand for personalized and value-added services. The supply of this sector is mainly made up of urgent shipments, with commitment to delivery within a specified period, and parcel shipments.

In this regard the analysis of this section is focused specifically in the CEP sector, excluding from its scope the traditional postal sector<sup>34</sup>. The reason behind this choice is the interest of address how the irruption of new digital players –like the big tech retailers- is challenging the playing field of the traditional social partners in a sector whose economic relevance has been growing in recent years.

To begin with, one key feature worth highlighting of the CEP sector in Spain is the high degree of heterogeneity of the companies. Thus, on the one hand it comprises firms related to different branches of activity: in 2016 the distribution of companies according to the NACE was as follows (Comisión Nacional de los Mercados y la Competencia, 2017): postal and courier activities (42,9%); freight transport by road (23,8%); support activities for transportation (21,4%); others (7,1%); and other business support activities (4,8%).

On the other hand, there can be distinguished different types of firms attending to different characteristics. First, according to the ownership there is a clear split between the public operator and the private ones. The public operator is the State owned Correos group, which comprises a specific brand focused in the CEP market (*Correo express*).

Second, the private operators can be classified in four groups according to features such as the organizational structure and the territorial scope of their activity:

- *Integrators*. An operator is considered to be an integrator when it has full operational control of the logistics of shipments, from origin to destination, including air transport and sufficient geographic coverage worldwide. In 2016, four integrators operated in Spain: DHL, FedEx, TNT<sup>35</sup> and UPS.

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<sup>34</sup> There are no available primary statistical information for the branch of activity

<sup>35</sup> It must be noted that in May 2016 FedEx announced the purchase of TNT express.

- *Urgent transport networks nationwide.* This group includes broad capillarity operators composed of a dominant or central company that manages and coordinates the network, and a group of companies under a franchise or collaboration system that allow services to be provided throughout the national territory.
- *Operators of the traditional postal sector.* Within this group of operators are companies whose main activity is framed in the traditional postal segment, but that also operate within the CEP segment.
- *Independent operators.* These are companies that do not work within any network of franchises, being autonomous.

Against this background, the literature review shows that digitalisation is significantly affecting to the traditional basis of the post and parcel industry at a global level. Thus, it has been noted that “technology-driven innovations redefine products, realign customer expectations and reshape the competitive landscape. As retail shifts toward digital, post and parcel organizations are reengineering their core businesses to meet the new reality of rapidly growing B2C parcel delivery” (Accenture, 2016, p.5).

By way of illustration, one of the global firms (“integrators”) currently operating in Spain, point to the following digital innovations that are expected to transform the logistic and delivery activities in the next future (FedEx, 2018): (a) autonomous deliveries without drivers; (b) an artificial intelligence to start a shipment; (c) a single driver that controls a convoy of trucks; (d) trucks that drive themselves; (e) robotic staff at the warehousing and storage; (f) online virtual assistant for customers; (g) drones for commercials deliveries; and (h) messengers robots.

Back to the present, however, the picture is still far from being so disruptive. Thus, on the one hand the Spanish sector of transportation, warehousing and support activities for transportation has in general terms a lower implantation level of ICT compared with other sectors, with regard to different dimensions like: recruitment of ICT specialists; acquisition of solutions based in cloud computing; and training actions for workers in ICT (Urueña et al, 2018, pp.139-153).

On the other hand, the investment in the most advanced –and expensive- digital innovations are highly concentrated in the largest firms of the CEP sector, namely: the global integrators, and some of the largest companies that coordinate national networks.

Regarding to the impact of digitalisation on restructuring processes, the first point to remark is the growing influence of the electronic commerce as a driver for the economic dynamism registered by the CEP sector in the aftermath of the crisis. In this sense, the e-commerce transactions in Spain have doubled since 2013 (Comisión Nacional de los Mercados y la Competencia, 2017).

Second, changing retailer and consumer behaviours affecting the e-commerce logistics chain are contributing to the increasing polarization of the delivery services, with growing concentration of the largest operator at one end, and a atomised hyper-local delivery business structure at the other.

Third, the digital transformation of the companies is mainly taking place in the commercial and logistic areas, while the activities related to the delivery activities in the “last mile” are not so easy to digitalise<sup>36</sup>.

Finally, it should be noted the role of the digital retailers like Amazon, whose recent irruption in the landscape of the Spanish CEP sector is being highly controversial among the traditional operators (see next section).

### *3.5.2. Views of the actors*

The first priority for the **government** is to ensure the enforcement of the legal regulation of the activities of the sector, including the administrative authorisation to the economic operators and the control of the compliance with the commercial and labour law. This is a highly relevant issue in the digitalisation debate in the CEP sector, taking into account the recent irruption of new players like the digital retailers.

Also, the Ministry of Public Works have promoted different actions aimed to promote the development and competitiveness of the logistics sector. The main initiative so far has been the “Logistics Strategy for Spain” (2013), which includes some measures to foster the “implementation of the use of new technologies in the logistics sector”.

The CEP sector is composed of firms related to the postal sector and the road transport sector, as noted above. In this regard, there are different **employers’ associations**, like the Spanish Confederation of Transport of Goods (CETM, acronym in Spanish), the Spanish Confederation of Transport Operators (CEOT), and the Business organization of Logistics and Transport (UNO).

The different employers’ associations agree that the e-commerce burst registered in Spain in recent years is driving to the digital transformation of the sector, leading to the larger operators to adapt their business models to the new social habits of consumers, which increasingly demand deliveries quicker, flexible and interactive.

Nevertheless, they are also cautious regarding to the pace of implementation of the most advanced and potentially disruptive innovations. For example, according to the General Secretary of UNO, “all logistics companies are technological; they have their own department of R & D and they are essential to making your activity profitable. Each one will use the technology that you consider most appropriate to make your deal. In the case of autonomous vehicles technology already exists, but what is being worked on is the legislation to put that technology to work in a short time. In the case of drones, I believe that it is not profitable for our activity beyond that it is a very interesting marketing tool and for certain very specific cases. In very isolated places or for health emergencies at a very appropriate time<sup>999</sup> is viable, but you can not generalize because their costs are high and that in addition to each drone there must be a driver” (Ecommerce news, 2017, p. 56).

Employers also recognizes that, despite that there can be found various initiatives in this field, they are mainly concentrated in a reduced core of companies. In this regard, there have been remarked a set of barriers to the digital transformation of the firms in this sector (Fundación Orange, 2016.b):

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<sup>36</sup> For example, despite all the literature on the potential use of drones, their wide use for delivery in the big cities seems so far non-viable.

- Polarization of the business structure, characterized by the coexistence of big multinational operators more willing to innovate at one end, and small size companies with a higher resistance to change at the other. As a result, the pace of innovation in the sector is very heterogeneous, as noted above.
- Lack of knowledge on the part of many managers on how to take advantage of the possibilities of digital innovation and its adaptation to the new demands of consumers, as well as a lack of sense of urgency about the next challenges.
- Lack of digital skills and training of the workforce in ICT.
- Regulatory uncertainty in the face of the new business models.

With regard to the last point, one hot topic nowadays among the traditional operators of the CEP sector concerns to the irruption of the digital retailer Amazon. In a first stage, this company used to outsource the delivery to the big operators of the sector. However, due to the abusive conditions imposed by Amazon –high volume of shipments at a low price- the retailer was forced to outsource to other smaller operators.

In 2017 Amazon took a further step with the creation of “Amazon flex”, which allows to an indeterminate number of self-employees to apply for the delivery of the shipments of the company. In other words, the irruption of the “platform economy” in the CEP sector.

As it happens in other countries Amazon don’t inform about the number of workers registered in the platform so far. Nevertheless, some news from the media talks about the growing spread of this system in different Spanish cities (Plaza, 2018).

In this regard, the traditional operators of the sector have requested the intervention of the public authorities, arguing that the behaviour of Amazon is a clear case of unfair competition, due to a twofold reason: on the one hand, because most of the self-employees working for this company are operating with their private vehicles and without the compulsory administrative authorisation (according to the legal regulation on freight transport by road).

On the other hand, because most of these workers are bogus-self employed, meaning therefore that Amazon is not complying with the labour law that affects to the traditional operators of the sector. In this regard, according to UNO, “we are in favour of the digital economy. In fact, our companies make intensive use of new technologies as drivers of competitiveness and efficiency, but that cannot become an excuse to deregulate the sector, make it precarious and turn it into a jungle” (UNO, 2018).

**Trade unions** focus in the first place in the precarious working conditions of the sector and the related challenges for trade union action. As happens in other European countries, in Spain “postal services as well as parcel and express services essentially thrive on a wide range of activities and business ties among multinational logistics groups, temporary employment agencies, franchise companies, subcontractors and ‘self-employed’ couriers – an environment providing very diverse labour and contracting

relations for workers, and hence complicating their appropriate representation over all workplaces” (Haidinger, 2015, p. 200).

Against this background, in the view of trade unions digitalization is an emerging process in the Spanish CEP sector, whose implementation is highly concentrated in a reduced number of big companies. Also, they agree with the perception that the most advanced innovations are taking place in the commercial and logistics area, while the delivery activities in the “last mile” are not being really affected.

Union officers also recognize a lack of knowledge about the full scope and impacts of the technological innovations. Nevertheless, they express their concern about different issues: (a) the “redeployment” of the workers that can be displaced by automation and robotics (for example, in warehousing and storage); (b) the lack of digital skills of most workers, and the low level of training provided by the firms; and (c) the increasing pressures on workers in terms of higher intensity, flexibility and availability of working time, in order to meet the increasing demand from the e-commerce.

Finally, another controversial point concerns to the irruption of Amazon. According to trade unions, the behaviour of this company show the “ double face of digitalisation”: on the one side, it is a disruptive business model based in huge investments of technological innovations, such as automation, geolocalisation and “smart logistics”. On the other side, it is a company that has been continuously denounced by the precarious working conditions, as shown by the labour strikes that have been taking place in Spain as well as in other European countries. Additionally, trade unions state that the development of Amazon Flex is going to enhance the social dumping in the sector, due to the reasons noted above.

### 3.5.3. Social dialogue

There is no empirical evidence so far about the role of *tripartite social dialogue* in the face of digitalization of the CEP sector in Spain.

Regarding to *bipartite social dialogue*, one key point worth highlighting is the dispute of the different employers’ associations for the representativeness of the sector. As noted above, the CEP sector is the result of the progressive convergent evolution of two sectors of traditional activities: the postal sector and the road transport sector.

In this regard, the structure of **collective bargaining** is organized as follows<sup>37</sup>: first, at State level there is the II General agreement for companies of freight transport by road, signed in 2014 by the employers’ associations CETM and CEOT and the trade unions CCOO and UGT.

Second, there is a significant number of collective agreements at sectoral and company level, signed by these social partners. And last, there are collective agreements signed by the other big employer association (UNO) with the trade unions, covering specifically the activities of logistics and parcel delivery, and excluding couriers.

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<sup>37</sup> Information from interviews. Given that the parcel delivery sector covers activities from different branches, there is no available statistical information at the related level (4 digits of NACE).

Against this background, it can be said that digitalisation has not been addressed so far by collective bargaining in this sector<sup>38</sup>. This can be explained by different reasons, very similar those already mentioned with regard to the other sectors analysed in this report:

- Digitalisation is still at an early stage for most of the companies of the sector.
- Employers consider that the implementation of technological innovations is their exclusive competence, not submitted to negotiation with the workers representatives.
- The bargaining priorities of trade unions are focused in the lasting consequences of the crisis and the devaluation policies.
- Difficulties to include digitalisation in the bargaining agenda, due to the lack of knowledge of the parties. Quoting to one of the informants interviewed, “*we hear “crying wolf”, but we don’t know how is coming*” (Union officer of CCOO).

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<sup>38</sup> In fact, the search carried out through the database of the register of collective agreements managed by the Ministry of Employment, did not show any record for the sector on this topic.

## **4. Conclusions**

### **4.1. Main findings**

1. The level of digitalisation of the economy and society in Spain shows a mixed picture in 2018 compared with the EU average, with advances in some dimensions –like Digital Public Services, Integration of Digital Technology and Connectivity– and less in others (Human Capital and Internet Services).

A more in-depth analysis point to the persistence of some barriers that could harm the potential development and benefits of this phenomenon in the coming years, related to issues such as sociocultural factors, structural imbalances of the productive model and deficits of the innovation management at a company level.

2. The digital transformation of the Spanish economy is not being homogeneous. On the contrary, there can be noted an uneven development of this process, attending to factors like the branch of the activity and, especially, the size of the firm.

Focusing the attention in the sectors addressed in the Diresoc project the analysis highlights that, although the basic uses of ICT are almost universal, the most advanced digital innovations are mainly taking place in some branches of activity –automotive and aeronautic industries, and financial services– and also are highly concentrated in the largest firms (both multinational and domestic companies).

3. Digitalisation has played a relatively lower influence in the development of restructuring processes during the last decade, compared with other traditional factors. This can be explained by two reasons: on the one hand, the digitalisation of the economy is still at an early stage in Spain. Also, as noted above, the implementation of the most advanced innovations with more potential disruptive impacts is still minority and focused in a reduced number of companies.

On the other hand, the development of this phenomenon has had to coexist with the lasting consequences of a deep recession that led to a major crisis of employment. So, economic factors have had a significantly greater weight in the causes of company restructuring processes.

4. Notwithstanding the above, the sectoral analysis allows to remark some restructuring trends linked to digitalisation, which are expected to be deepened in the coming years: (a) the automatization of the most routine transversal tasks, for example: those related to the administrative and financial fields; (b) a growing demand of new professional profiles; (c) the adaptation and re-skilling of the workforce; and (d) negative impacts of working conditions, with regard to issues such as the intensification of the workload, higher demands on availability and flexibility of working time the emergence of new health and safety risks, the increased capacity of the management for the control and surveillance of workers and the erosion of data protection.

5. The analysis has shown the potential disruptive impact of the new digital players in Spain, particularly in three sectors: financial services, with the fintech and insurtech; tourism sector, with the digital platforms that allows accessing to rental housing; and postal services, with the big digital retailers.

The controversy about this topic is focused on two main issues. On the one side, the traditional economic operators denounce that the behaviour of this digital players is a clear case of unfair competence, as they don't comply with the legal regulations of issues such as regarding to issues such as taxation, registration, responsibility and insurance.

On the other side, trade unions additionally emphasize that the digital platforms represent a new way of outsourcing based on bogus self-employment and precarious work.

**6.** The public debate on digitalisation in Spain is still at an early stage, with similarities and differences in the views of the main actors involved.

a) The former government launched between 2013 and 2017 a set of actions aimed to promote the digital society and economy, following the guidelines adopted by the European Commission in this field. The development of these initiatives has favoured some advances in this field during this period, in dimensions such as connectivity and the digitalization of public services. However, there can be noted in parallel some relevant imbalances regarding to issues such as the weak institutional coordination among the different Ministerial Departments, the existing budgetary constraints, or the lack of real involvement of social partners in the policy making.

The change of government in June 2018 has led to a scenario of uncertainty, although the new ruling party has expressed that the promotion of a new productive model and the deepening of initiatives aimed to foster a "fair digitalisation" represent strategic goals of its policy action.

b) Both employers and trade unions agree with the claim for a "Country-Strategy" to address digitalisation and in the necessary role of social dialogue. In fact, the review of their proposals show some consensus between both social partners regarding to goals such as the development of infrastructures, connectivity and the improvement of the digital skills of workers.

However, there are also some clear differences of approach among employers and trade unions, related to hot topics such as the legal regulation of the digital economy, the effects on working conditions and the preservation of workers' rights.

c) There has been also a growing implication in the public debate of new actors like the digital platforms. Basically, these platforms are developing an intensive lobbying with the government, aimed to foster the liberalisation of the regulatory frameworks of those activities –housing, transport, financial services, postal markets- where these players are emerging. In addition, they are promoting a strong campaign against the regulation of the digital economy, arguing that it would hamper the possibilities of innovation and entrepreneurship.

**7.** The analysis of the role of social dialogue in the face of restructuring driven by digitalisation in Spain, has confirmed the research hypothesis<sup>39</sup>.

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<sup>39</sup> See section 2.

**7.1.** The role of the *tripartite social dialogue* can be considered so far as a “blind spot” of the process of digital transformation of the Spanish economy and society, despite of the public claims about its importance.

There are two factors behind this situation: first, the application by the former Spanish government of a unilateral approach of policy governance since 2012, which left little or no room at all left for the social partnership. The consequence has been the virtual paralysis of tripartite social dialogue in Spain, despite of some fragile attempts to recover it in the last two years.

Second, the option of the former Spanish government by the “public consultations” in the governance of the main policy initiatives related to digitalisation, instead of social dialogue. This is method of “open governance” widely promoted by the European institutions, which has been highly criticized by the social partners (especially, by trade unions).

Nevertheless, it must be said that the new government in force since June 2018 has declared its will to relaunch the tripartite social dialogue with regard to various topics, including digitalisation.

**7.2.** The analysis has also shown that digitalisation is having so far a low and reactive management by industrial relations in Spain. This can be explained by a number of reasons:

- Collective bargaining in Spain has historically played a minor role in addressing technological change, due to different factors: (a) the development of technological innovations is identified as a component of the design of work organization, which is recognized by labour law as an exclusive competence of the employer; (b) the low level of innovation of the majority of firms in Spain, particularly among the SME and micro-companies; and (c) the lack of knowledge by the bargaining actors –in both sides of the table- about the impacts of technological innovations on working conditions.
- The labour law reforms of the crisis –in particular, that of 2012- strongly deepened the power asymmetry between capital and labour, strengthening the capacity of employers to unilaterally regulate working conditions. This has laid the foundations for a more authoritarian pattern of industrial relations in Spain, with much less room for the participation of the workers representatives in the decision making process at a company level.
- The key priorities of the Spanish trade unions are still focused nowadays in trying to recover those working conditions and labour rights seriously damaged during the Great Recession. In this regard, emerging topics like digitalisation are mostly out of the priorities of the current bargaining agenda of the workers representatives.
- Approaches for anticipating restructuring processes have not been developed in recent years in Spain, despite the impact of the crisis. In this regard, “as a general rule, restructuring continues to be carried out in an operative and time-specific manner, with limited room to apply anticipatory measures” (Rodriguez, 2014, p. 23).

- Last but not least, the quick pace of digitalisation, and the uncertainties about the scope and intensity of their social impacts does not match easily with the current institutional framework of industrial relations, which are often more organised on a regulated fixed timeline and usually cover a limited range of specific –and traditional- topics.

7.3. Notwithstanding the above, there are some emerging provisions included in collective agreements addressing the effects of technological innovations and digitalisations in topics such as training, working time, anticipation of change, management of restructuring processes and involvement of workers' representatives<sup>40</sup>.

These initiatives, are mainly taking place in multi-national firms operating in sectors with a higher competitive pressure on a global level.

7.4. The implication of social dialogue in the emerging field of the platform economy is still embryonic in Spain, due to various reasons: (a) the percentage of the platform work is still very reduced; (b) the digital platforms refuse to consider themselves as employers, so they do not recognize workers as employees but as “independent contractors”; (c) the strong controversy within the mayor business associations regarding to the positions on platform economy, being particularly negative on the side of the traditional operators; and (d) the strategies of the traditional trade unions regarding to this emerging reality are still in a very early stage, and mainly focused in the court litigations regarding the situations of bogus self-employment.

## 4.2. Lessons learnt

1. Technological change is certainly not a novel phenomenon, but there is a widespread consensus that the current transformations driven by digital innovations are proceeding at a much faster speed than in the past, and the scope of their impacts on the economy and society are also far larger.

Against this background, the anticipation and govern of the trends that have begun to draw in recent years is an essential requirement to favour a technological transformation that is also inclusive in the field of employment and labour relations. Given this complex and long-term objective, it is appropriate to propose integrated measures in wide-ranging strategies based on a shared diagnosis and with the effective participation of the social partners.

In this sense, the tripartite social dialogue between the government and the trade union and business organizations should play a leading role in this process that may be complemented, but under no circumstances replaced, by the open consultation to other actors or social groups.

Naturally, the scope and topics to be covered by the tripartite social dialogue must be agreed by the actors involved. Nevertheless, it is worth suggesting that it should address at least topics such as: legal regulation gaps of the digital economy; support to the creation of employment and job quality; labour rights; skills; active employment

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<sup>40</sup> See annex 6.3.

policies social; protection; gender issues; and improvement of the institutional capacities of public administrations (Rocha, 2017.b).

2. The reinforcement of the role of collective bargaining and the enrichment of its contents in relation to technological changes and their repercussions on employment and labour relations is a key condition to favour the digital transformation of sector and companies, and a fair transition for workers.

Once again, the design and implementation of those specific proposals on this issue correspond logically to the actors involved. Nevertheless, it is possible to suggest some points for the debate:

a) The reestablishment of a more fair and balanced legal framework for industrial relations, seriously damaged in Spain due to the last labour reforms passed in Spain during the Great Recession.

By the way, this a demand widely shared in other countries, as a necessary prerequisite condition for good governance of digitalisation at a sectoral and company level. For example, in a country like Germany, where trade unions' participation rights are far extensive than in Spain, it has been noted that "rather than simply seeking to slow the erosion of collective bargaining coverage and staff representation in the workplace which we have seen in recent decades, we should be endeavouring to reverse this trend" (Federal Ministry of Labour and Social Affairs, 2017, p. 13).

b) The empirical analysis carried in this project shows a generalised lack of knowledge among social partners regarding the scope and effects of digitalisation, and about how to deal in practice with the digital adaptation of firms and workers (particularly, in the smaller firms).

As a result, "these changes are difficult to manage when jobs are at risk and when changing skill requirements are unclear. For employers' representatives and unions, fear and uncertainty for the future do not augur well for the establishment of a constructive dialogue; in many cases neither managers nor employees are fully aware of the impending consequences" (Jolly, 2018, p.2010).

In this regard, it should be promoted the creation of bodies composed of representatives of employers and workers both at sectoral and company level, aimed to promote shared diagnosis and guidelines regarding to digitalisation. For example: sectoral observatories; working groups; or joint committees.

c) The improvement of the levels of information and training received by the bargaining actors, in particular with regard to the potential effects of the most disruptive innovations (Big Data, Internet of Things, and Artificial Intelligence).

d) The enrichment of the contents of collective agreements in relation to technological changes and their repercussions on employment and labour relations, as noted above. In this regard, the selected provisions included in the annex of this report give some good examples of this approach.

**3.** The emergence of the platform economy represents a serious challenge for the social dialogue in the next future, which has not been properly addressed by the traditional social partners in Spain, although there can be noted some very emerging initiatives in this field (Rocha, 2018.b).

**4.** Finally, the process of digital transformation is taking place nowadays in a context marked by increasing inequality, labour precariousness and segmentation, especially in those European countries hardest hit by the recent crisis like Spain (Rocha, 2017.a). In this regard, it is essential to promote, through social dialogue, a comprehensive strategy for the just transition to the digital economy, which favours the creation of decent work and contributes in parallel to preventing and mitigating the risks of segmentation and social exclusion among the population.

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## **6. Annexes**

### **6.1. Summary of the main national initiatives on Digitalisation**

#### ***6.1.1. Digital Agenda for Spain (2013)***

The Spanish Government launched in 2013 a “Digital Agenda for Spain” as a framework of reference to define a roadmap as regards information and communications technologies (ICTs) and e-Administration; to build Spain’s strategy to achieve the goals of the Digital Agenda for Europe; to maximize the impact of public policies on ICT to enhance productivity and competitiveness; and to transform and modernize the Spanish economy and society through efficient and intensive use of ICTs by citizens, businesses and public Administration bodies.

The Digital Agenda for Spain is structured around six major goals:

1. Foster the deployment of networks and services to guarantee digital connectivity.
2. Develop digital economy for the growth, competitiveness and internationalisation of Spanish companies.
3. Improve e-Administration and adopt digital solutions for efficient provision of public services.
4. Reinforce confidence in the digital environment.
5. Boost R+D+i system in Information and Communications Technologies.
6. Promote digital inclusion and literacy and the training of new ICT professionals.

The Agenda also included nine specific plans for its implementation and execution:

1. Telecommunications and Ultra-fast Networks Plan
2. ICT in SMEs and e-Commerce Plan
3. Digital Content Industry Comprehensive Plan
4. General State Administration’s e-Government Action Plan
5. Digital Ecosystem Confidence Plan
6. ICT Sector Development and Innovation Plan
7. Digital Inclusion Plan
8. Smart Cities National Plan
9. Advancement of Language Technology Plan

#### ***6.1.2. Connected Industry 4.0***

Launched in 2015 by the General Secretary of Industry and SME, within the Ministry of Economy, Industry and Competitiveness, the “Connected Industry 4.0 (CI 4.0)” aims at digitising and enhancing competitiveness of Spain’s industrial sector.

The key goals of the CI4.0 strategy are

1. Ensuring widespread knowledge of Industry 4.0 technologies and suitable skill development of Industry 4.0 in Spain
2. Encourage digitised collaborative environments and platforms, such as Digital Innovation Hub, Industrial Platforms or Clusters.

3. Enhance the development of digital enablers.
4. Promote industry 4.0 solutions adapted to the industrial needs; including those of SMEs.

The initiative comprises four main action lines and eight strategic areas of action focused on strengthening both the demand range of digital enablers for Spain's Industry 4.0.

### Connected Industry 4.0. Action lines, Strategic Areas and Objectives

Action Line	Strategic Areas	Objectives
<b>1. Awareness and education</b>	1. Awareness creation and communication	• Guarantee knowledge of I 4.0, its enablers, and its benefits
	2. Academic and job training	• Ensure the availability of I 4.0 skills
<b>2. Encourage multidisciplinary collaboration</b>	3. Collaborative environments and platforms	• Foster collaboration by promoting environments and platforms that are adapted to industry and focused on 4.0 technology
<b>3. Enhance digital enablers</b>	4. Promote digital enablers	• Boost R&D&I in I 4.0 technologies
	5. Support technological businesses	• Boost the business development of technology providers
<b>4. Support the digital transformation of the Industry and SME strategic areas</b>	6. Support to industry's adoption of I 4.0	• Support and enhance the adoption of Industry 4.0 by the companies
	7. Regulatory framework and standardization	• Regulatory framework and standardization
	8. I 4.0 projects	• Financing Industry 4.0

Source: Lazaro, O. (2017). *Analysis of National Initiatives for Digitising Industry. Spain: Industria Conectada 4.0*, Brussels: European Commission.

#### 6.1.3. Digital Strategy for a Smart Spain

The national Government announced in 2017 the elaboration of a new “*Digital Strategy for a Smart Spain*”, aimed to reinforce the development of the digital economy and society in Spain.

This new strategy included a number of goals and lines of action, structured around five big pillars:

1. Economy of Data
2. Ecosystems 4.0
3. Smart Regulation
4. Technological Infrastructures
5. Citizenship and Digital Employment

The government launched a public consultation on this strategy among various stakeholders, which finished in 2017.

## 6.2. Sectoral statistical information

**Table 1. Gross Value Added at basic prices (current prices) in Spain by branch of activity. Manufacturing, financial services and accommodation services (2015)**

Sector	EUR million	% over total GVA
<b>Manufacturing</b>	<b>139.300</b>	<b>14,2</b>
Manufacture of food products, beverages and tobacco products	28.017	2,9
Manufacture of textiles, wearing apparel and leather products	5.684	0,6
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1.926	0,2
Manufacture of paper and paper products	2.949	0,3
Printing and reproduction of recorded media	3.157	0,3
Manufacture of coke and refined petroleum products	2.880	0,3
Manufacture of chemicals and chemical products	11.108	1,1
Manufacture of basic pharmaceutical products and pharmaceutical preparations	6.666	0,7
Manufacture of rubber and plastic products	5.844	0,6
Manufacture of other non-metallic mineral products	5.214	0,5
Manufacture of basic metals	7.662	0,8
Manufacture of fabricated metal products, except machinery and equipment	10.004	1,0
Manufacture of computer, electronic and optical products	3.033	0,3
Manufacture of electrical equipment	4.866	0,5
Manufacture of machinery and equipment n.e.c.	10.454	1,1
Manufacture of motor vehicles, trailers and semi-trailers	12.135	1,2
Manufacture of other transport equipment	6.590	0,7
Manufacture of furniture; other manufacturing	5.125	0,5
Repair and installation of machinery and equipment	5.986	0,6
<b>Financial and insurance activities</b>	<b>38.925</b>	<b>4,0</b>
Financial service activities, except insurance and pension funding	28.251	2,9
Insurance, reinsurance and pension funding, except compulsory social security	6.192	0,6
Activities auxiliary to financial services and insurance activities	4.482	0,5
<b>Accommodation; food and beverage service activities</b>	<b>64.900</b>	<b>6,6</b>
<b>Total Gross Added Value on Basic Prices</b>	<b>979.874</b>	<b>100,0</b>

Source: National Accounts, National Institute of Statistics

**Table 2. Employment in Spain by branch of activity. Manufacturing, financial services and accommodation services (2018)**

Activity	Thousands	% over total employment
<b>C Manufacturing</b>	<b>2.464,1</b>	<b>12,7</b>
10 Manufacture of food products	446,8	2,3
11 Manufacture of beverages	56,0	0,3
12 Manufacture of tobacco products	3,7	0,0
13 Manufacture of textiles	53,9	0,3
14 Manufacture of wearing apparel	51,6	0,3
15 Manufacture of leather and related products	58,3	0,3
16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	65,6	0,3
17 Manufacture of paper and paper products	42,9	0,2
18 Printing and reproduction of recorded media	82,4	0,4
19 Manufacture of coke and refined petroleum products	21,8	0,1
20 Manufacture of chemicals and chemical products	135,7	0,7
21 Manufacture of basic pharmaceutical products and pharmaceutical preparations	70,5	0,4
22 Manufacture of rubber and plastic products	112,8	0,6
23 Manufacture of other non-metallic mineral products	94,1	0,5
24 Manufacture of basic metals	93,0	0,5
25 Manufacture of fabricated metal products, except machinery and equipment	237,9	1,2
26 Manufacture of computer, electronic and optical products	42,8	0,2
27 Manufacture of electrical equipment	75,3	0,4
28 Manufacture of machinery and equipment n.e.c.	152,7	0,8
29 Manufacture of motor vehicles, trailers and semi-trailers	236,9	1,2
30 Manufacture of other transport equipment	75,7	0,4
31 Manufacture of furniture	98,6	0,5
32 Other manufacturing	49,5	0,3
33 Repair and installation of machinery and equipment	105,8	0,5
<b>I Accommodation and food service activities</b>	<b>1.757,0</b>	<b>9,1</b>
55 Accommodation	429,0	2,2
56 Food and beverage service activities	1.328,0	6,9
<b>K Financial and insurance activities</b>	<b>421,3</b>	<b>2,2</b>
64 Financial service activities, except insurance and pension funding	238,5	1,2
65 Insurance, reinsurance and pension funding, except compulsory social security	126,3	0,7
66 Activities auxiliary to financial services and insurance activities	56,5	0,3
<b>Total employment</b>	<b>19.344,1</b>	<b>100,0</b>

Source: Labour Force Survey, National Institute of Statistics (2018, second quarter).

**Table 3. Collective agreements by year of economic effects, and workers covered in Spain by branch of activity and level of bargaining. Manufacturing, financial services and accommodation services (2016)**

Sector (NACE)	Total		Company level		Above company level	
	Nº agreements	Nº workers	Nº agreements	Nº workers	Nº agreements	Nº workers
<b>Manufacturing</b>						
10 Manufacture of food products	323	364.182	217	36.613	106	327.569
11 Manufacture of beverages	94	46.961	68	11.058	26	35.903
12 Manufacture of tobacco products	6	2.051	6	2.051	-	-
13 Manufacture of textiles	19	80.763	14	1.246	5	79.517
14 Manufacture of wearing apparel	2	248	1	18	1	230
15 Manufacture of leather and related products	10	56.076	1	150	9	55.926
16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	44	45.155	18	1.784	26	43.371
17 Manufacture of paper and paper products	33	21.879	31	4.509	2	17.370
18 Printing and reproduction of recorded media	19	100.371	18	1.666	1	98.705
19 Manufacture of coke and refined petroleum products	6	7.639	6	7.639	-	-
20 Manufacture of chemicals and chemical products	66	277.640	58	8.977	8	268.663
21 Manufacture of basic pharmaceutical products and pharmaceutical preparations	2	480	2	480	-	-
22 Manufacture of rubber and plastic products	59	33.406	52	14.172	7	19.234
23 Manufacture of other non-metallic mineral products	116	216.158	80	10.756	36	205.402
24 Manufacture of basic metals	101	407.984	75	21.313	26	386.671
25 Manufacture of fabricated metal products, except machinery and equipment	143	483.187	121	15.442	22	467.745
26 Manufacture of computer, electronic and optical products	10	2.055	9	2.034	1	21
27 Manufacture of electrical equipment	44	48.497	41	10.262	3	38.235
28 Manufacture of machinery and equipment n.e.c.	72	17.416	69	6.981	3	10.435
29 Manufacture of motor vehicles, trailers and semi-trailers	131	98.537	130	98.420	1	117
30 Manufacture of other transport equipment	28	21.172	25	9.401	3	11.771
31 Manufacture of furniture	22	5.697	19	1.816	3	3.881
32 Other manufacturing	32	13.737	27	1.552	5	12.185
33 Repair and installation of machinery and equipment	28	12.125	26	3.125	2	9.000
<b>Accommodation and food service activities</b>						
55 Accommodation	62	446.070	38	3.044	24	443.026
56 Food and beverage service activities	172	579.418	142	13.354	30	566.064
<b>Financial and insurance activities</b>	16	197.923	9	4.296	7	193.627
64 Financial service activities, except insurance and pension funding	17	92.950	8	5.650	9	87.300
65 Insurance, reinsurance and pension funding, except compulsory social security	8	33.185	6	1.355	2	31.830
66 Activities auxiliary to financial services and insurance activities	8	33.185	6	1.355	2	31.830
<b>TOTAL</b>	<b>5.640</b>	<b>10.738.608</b>	<b>4.471</b>	<b>804.266</b>	<b>1.169</b>	<b>9.934.342</b>

Source: Statistics of collective agreements, Ministry of Employment and Social Security (2016, definitive data. Collective agreements registered up to June 2018).

## **Annex 6.3. Good practices (provisions of collective agreements)**

### **6.3.1. Manufacturing**

#### ***XIX Collective Agreement of Seat SA (2016-2020)***

##### *Training for Industry 4.0*

In order to respond to the needs required by industry 4.0, the company will develop a general training model aimed at staff who voluntarily wants to receive it, which will be taught outside of working hours, either at the beginning or end of the day labour.

The costs of organization and delivery of the training will be borne by the company, as well as those incurred by the worker for the concepts of subsidy of the company canteen and displacement.

The objective of this training is to obtain a highly qualified and specialized staff in future technologies, to move towards a digitalized and interconnected industry, which favours the efficiency of industrial processes, in the fields of R & D, management, production, marketing, and competitiveness of the company, among others.

#### ***IX Framework Agreement of Repsol Group (2017-2019)***

##### *Principles of the right to disconnection outside of working time*

Within the framework of an adequate management of the principle of conciliation of private life and professional life, the Equality Table of the Framework Agreement will analyze this matter within the company and will identify, where appropriate, possible good practices and recommendations about the use of digital communication tools.

#### ***Inter-province Collective Agreement of Renault Spain (2017-2020)***

##### *New technologies*

To maintain the indispensable competitive capacity, we must use, as do the other companies in the automotive sector, the new technologies of design simplification, automation of facilities, robotization of them and rationalization and optimization of the production process (with a common denominator of maximum product quality).

The Commission of New Technologies integrated, as far as the representation of the workers, by seven members chosen by her, will have like functions those of informing, suggesting and proposing to the Management of the company.

Likewise, the management of the company, through the Promotion Commission, will be able to attend certain requests for the representation of the workers for the assistance of some members of the same to courses on new technologies.

The management of the company undertakes to provide within the Joint Committee with prior information on new technologies, sufficiently broad, to the representation of workers, as well as its impact on employment and working conditions.

***XIX Collective Agreement of the chemical Industry (2018-2020)***

*New technologies*

When a company introduces new technologies that may involve substantial changes in working conditions for workers, or a technical training or adaptation period of not less than one month, these modifications must be communicated in advance to the representatives of the workers in the sufficient term to be able to analyze and to foresee its consequences in relation to: employment, labour health, training and organization of the work, aspects these on which they will have to be consulted. Likewise, the affected workers will be provided with adequate and precise training for the development of their new function.

The introduction of new technologies will involve, if applicable, the update assessment of occupational risks

***VII Collective Agreement of Robert Bosh España Fábrica Aranjuez S.A.U. (2015-2017)***

*Reconversion*

1. Convinced that, due to their characteristics and projection in international markets, the future of the Company and of those who, at any time, work in it, depend on the expansion and competitiveness of it, it is recognized as convenient and necessary the continuous technical and organizational change that imposes, in parallel, a restructuring of the personnel and their capabilities.

To this end, and in accordance with current regulations, the Company is committed and the staff accepts, an appropriate action of reconversion of the workers, adapting them, applying the appropriate sociological and training techniques, to the new productive needs, in such a way that nobody is outdated by technical progress, furthering away the risk of possible technological unemployment.

2. In view of the need to restructure services and jobs, the readjustment of the personnel affected will be specifically defined in:

- Transferring workers from indirect positions to direct positions.
- Transferring professionals from atypical jobs to positions of typical crafts in the Company.
- Training these workers in the techniques of their new positions.
- Training, in general, all personnel affected by technical advances and organization, for a satisfactory performance of its mission.

3. Those who are affected by the conversion, will not lose the category reached in the Company and will keep their base salary and fixed salary supplements that they had, being for the rest of the remuneration concepts to what is established with respect to the position that they occupy. .

4. The reconversion process will be carried out by the Training and Psychology Services of the Company, in collaboration with the representatives of the Workers of the Company.

## **VII collective agreement of Iberdrola group (2017-2020)**

### *General principles of work organization*

The organization of work, respecting the current legislation, is the faculty and responsibility of the Directorate.

Without detracting from this principle, the signatories note that, in their social environment, profound changes are taking place that affect the economic, technological, cultural and social fields, and the very structure of the sector in which the companies included in the functional scope of this collective agreement. This permanent situation of change makes it necessary to adapt the organization of the company in order to face the improvement of competitiveness and the constant incorporation of new technologies, making it compatible with the maintenance of employment, the professional development of the staff and opening the possibility of access to the employment of new workers.

## **Collective agreement of the company Nano Automotive S.L-Tudela (2017-2020)**

### *New technologies*

Both parties, Management and Representatives of the workers, recognize that the progress of Technology is essential for the development of the company. Therefore, the introduction of new technologies should be the occasion to improve working conditions as well as productivity.

The Representation of the Management commits to inform in advance, with sufficient time to study the possible proposals that the Representatives of the Workers and their Unions could make, on the technological changes and to establish and evaluate previously with the Representation of the Workers any repercussion that can be known at that moment in employment, training of affected workers and working conditions, etc.

## **Collective agreement of Electrotecnica Artech Grid S.L. 2017-2020**

### *Technological and technical changes*

The practical organization of work is the exclusive faculty of the Company Management. Notwithstanding and in the face of substantial changes of a technological or organizational nature, and that imply adaptation of the workers to new jobs, these changes must be shared with the legal representatives of the workers of the Company, to allow their participation, advice and guidance, and this, well in advance, before its implementation.

The implantation or modification of the systems of work indicated would suppose that the Direction of the Company presents a plan that, among others, contemplates the following matters:

1. Objectives of the change.
2. Impact on productivity and employment.
3. Study of the new function to be developed by the workers in view of said changes.
4. Plan of training and necessary training for the adaptation of the workers to the jobs.
5. Training plan regarding the Health and Safety elements related to said positions

### 6.3.2. Financial services

#### **Labour agreement in the framework of the merger process between the entities Bank Santander, S.A., Bank Popular S.A. and Bank Pastor, S.A. reached between the directorate of the entities and the social representation (26/6/2018)**

##### *Criteria for a rational organisation of working time*

Promote an efficient and rational use of mail, through dissemination by the Direction of Guides and / or Recommendations that avoid their excessive use or unnecessary, or the sending of mails outside working hours, except situations justified or urgent that do not admit delay.

In this sense, and consequently, it is recognized the right of professionals not to respond to emails or professional messages outside their working hours, or during rest periods, permits, licenses or vacations, except in cases of force majeure or exceptional circumstances.

#### **Collective agreement of AXA group (2017-2020)**

##### *Right to digital disconnection*

The technological changes produced in the last decades have caused structural modifications in the field of labour relations. It is undeniable that nowadays the phenomenon of «digital interconnectivity» is affecting the forms of work execution, changing the scenarios of the development of labour occupations towards external environments to the classic productive units: companies, centres and jobs.

In this context, the place of job provision and working time, as typical elements that shape the framework in which the work activity is carried out, are being diluted in favour of a more complex reality in which permanent connectivity prevails, affecting, without doubt, to the personal and family environment of the workers.

That is why the signing parties of this Agreement agree on the need to promote the right to digital disconnection once the working day has ended. Consequently, except in cases of force majeure or exceptional circumstances, AXA recognizes the right of workers not to respond to emails or professional messages outside of their working hours.

#### **Collective agreement of the Insurance Reale Group (2017-2020)**

##### *Training and professional development*

Training is a decisive factor to increase the competitiveness of the company, contributing to the adaptation of new forms of work organization and technological changes and to the development and innovation in the insurance activity and, in short, to enable the attainment of objectives of the company's strategy

## **VI collective agreement of Generali Group (2017-2020)**

### *Teleworking*

Both parties acknowledge that teleworking is one of the innovative forms of organization and execution of work performance derived from the advancement of new technologies, which allows the realization of work activity outside the company's facilities.

Consequently, prior information and consultation of the Group Trade Unions, the group companies may implement a telework system or regime, respecting the provisions of article 13 of the Workers' Statute on distance work and in article 20 of the Convention general on teleworking, as well as the following criteria: (i) The voluntary and reversible nature of telework, both for staff and for group companies. (ii) Equal rights, legal and conventional, of teleworkers with respect to comparable personnel working in the company's facilities. (iii) The convenience of regulating aspects such as privacy, confidentiality, risk prevention, facilities, training, etc.

In order to consider and develop these criteria, the parties agree to refer to these effects the contents of the "Declaration on teleworking" subscribed by the European social partners in the insurance sector on February 10, 2015 and the declaration subscribed by Generali with the European Works Council dated May 16, 2017 on the promotion of teleworking.

### **6.3.3. Tourism**

#### **Collective agreement for hostelry sector of the province of Segovia (2018-2021)**

##### *New technologies*

The implementation of new technologies that favour the innovation of the productive system of companies will be previously reported to the representatives of the workers, for the purposes of better planning.

Likewise, workers' representatives will have to be consulted in decisions that lead to the use of equipment, materials or raw materials that may have an impact on the physical or mental health of workers.

The implantation of new technologies should not imply the reduction of the workforce. To this end, the training of personnel will be sought through workshops aimed at this purpose. In the assumption that, in spite of the adaptation courses, any worker will not adapt to the new technologies, the company will try to adapt it to another job, after consulting the personnel representatives.