



European Federation
of Building
and Woodworkers



“Better Understanding of “Arduous Occupations” within the European Pension Debate”

Final report

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Better Understanding of “Arduous Occupations” within the European Pension Debate

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By European Commission (after finalization of the project)

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On behalf of involved ETUF

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I. INTRODUCTION

Although “arduous occupations” are often commonly well-known and acknowledged by those with a grass root working experience, there is overall political tendency either to downsize or even completely neglect the reality of arduous occupations. This new political tendency was steered by the European Council decision of 21 October 2010 (maintained for 2013 by Council Decision 2013/208/EU of 22 April 2013 on guidelines for the employment policies), which was adopted to increase the overall pensionable age for all workers. Although the decision was simply another austerity measure, it was justified by the necessity to safeguard macro-economic balances and the sustainability of our pensions.

When the European Commission published its white paper “An Agenda for Adequate, Safe and Sustainable Pensions” (COM(2012) 55 final) it explicitly acknowledged the existence of arduous or hazardous jobs. Unfortunately the only recommendation it could present was the need to prevent arduous or hazardous jobs or to offer the workers alternative job (job mobility), in order to avoid early retirement. By doing this the European Commission meticulously followed the instructions of the Council, but unfortunately disregarded the reality on the workplace.

The presented study aimed to assess the reality of arduous and hazardous and tried to link this reality with a realistic and workers-friendly end-of-career policy. For this a multi-disciplinary study was conducted in 9 EU-countries, examining closely the arduous nature of 5 completely different occupations, namely a processing line workers in the meat sector, a bus drivers working in the public transport sector, a distribution Centre worker (like a typical Amazon worker which combines Commerce sector and Logistics sector), a (metal) foundry-worker and a carpenter - Floor Coverer.

The main conclusion of the study – although not a shocking news – is that arduous occupations is a reality and have a long term destructive impact on the physical and psychological wellbeing of the workers involved. The causes are complex and often linked to multitude of factors, which are often difficult to influence. The leads us to the second key conclusion, namely that prevention and workers employability are often not possible. Either because nobody is aware of the arduous nature of the occupation, disregards the long-term consequences or because the arduous nature simply can't be prevented and is part of the job.

The outcome of this study strongly contradicts the current EU-policy which has turned the principle of “increasing the effective retirement age and aligning the retirement age to changes in life expectancy” into a dogma and is pursuing its policy in all its binding national Council recommendations.

In its conclusions (see the recommendations), the study clearly emphasises the necessity to (1) strengthen and enforce preventive measures, (2) increase awareness and (3) implement workers re-employability, so that no worker is employed in an arduous or hazardous job. Unfortunately these principle are often not realistically achievable in all countries or professions. Therefore we cannot

disregard or forbid compensatory measures for the workers, so that they can continue to enjoy their final years with a decent level of quality. Therefore “early retirement schemes” must be acknowledged as an optional end-of-career scheme. Unfortunately this option is excluded by the current EU-pension policies.

II. DESKTOP STUDY

EU Legislation and policies

There is no specific legislation or policy at European level on the issue of arduous work; however this issue is intimately connected to occupational health and safety and prevention matters and the improvements in health and safety provisions were an early area for EU social policy harmonization: **Directive 89/391/EEC, the Community strategy 2007-2012 on health and safety at work...**; on the other hand the Charter of Fundamental Rights (Article 31) on fair and just working conditions states that *“every worker has the right to working conditions which respects his or her health, safety and dignity”*.

The issue of pensions can also be related to the debate on arduous work and, whilst on this matter the EU has no legislative powers, there is a continuous policy on the issue of pensions closely linked to changing demographic and financial perspectives. The main lines of a strategy to address the challenges raised by an ageing population were defined at the Stockholm European Council in 2001 and a more recent milestone in this policy field is the **European Commission’s White Paper on adequate, safe and sustainable pensions** (February 2012), aiming at guiding reforms of pension systems in the EU.

Furthermore, and in the context of the European “Active ageing” policies, keeping at work individuals who suffer from weak health or **strenuous working conditions** has become an important issue. Whilst policies aiming to retain older workers at work have mainly focused on financial incentives and the restriction of early retirement schemes, in some countries, on the contrary, the promotion of better health in the workplace (by an improvement of working conditions of older workers) has been a key feature of Active ageing policies.

What is “arduous work”?

Despite the absence of regulation on arduous work at European level, there is a wide evidence of its existence. However, there is no common definition of what is “arduous work” and in fact this question hardly admits a straightforward answer. In the review of examples of jobs or occupations commonly referred to as arduous in a selection of OECD countries, the list obtained is quite varied and does not lend itself to an easy definition. In a similar way, there is

no unique definition of “arduous” work in the nine European countries included in the scope of the present project¹.

Nevertheless, and according to the evidence gathered all through the research, arduous work could be horizontally defined as *“Occupations involving the exposure of the worker over a period of time to one or several factors leading to professional situations susceptible to leave long-lasting and irreversible effects on his/her health; these factors are related to physical constraints, psychosocial risks, an aggressive physical environment, working organisation and working rhythms, including shift work”*

In fact today it is widely admitted that the hardships experienced in an arduous work environment can be either physical (including exposure to chemical or biological agents) or mental, or some combination of both. These hardships can result in:

- a deterioration of health of workers in question, which may not become apparent at the time of exposure, leading to chronic diseases,
- A difficulty for workers to continue to carry out the same job or remain in the same occupation,
- A work-related disability,
- A diminished life expectancy,
- A premature mortality.

The horizontal definition of arduous work could be vertically completed by the following considerations:

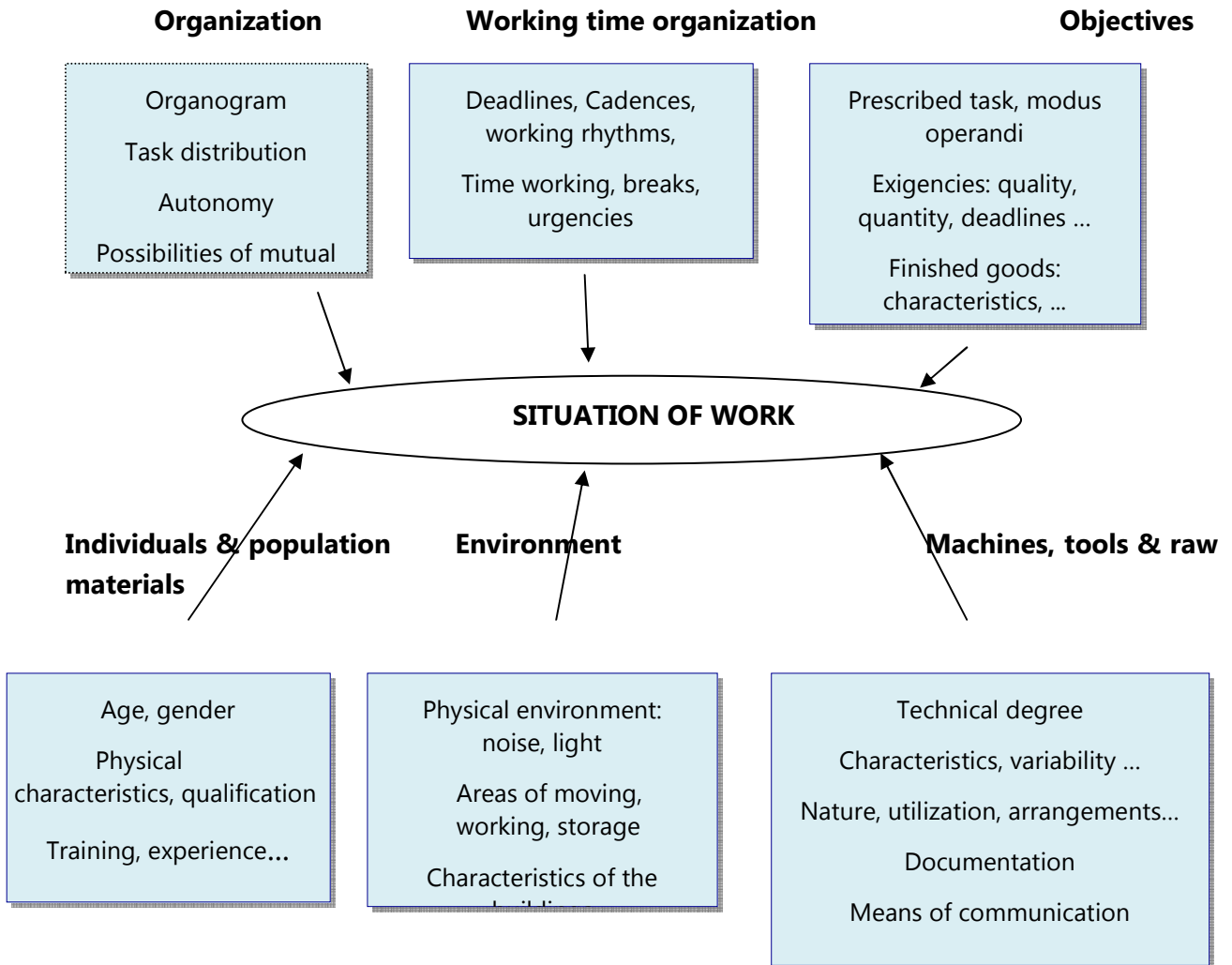
- the exposure to both physical and psychosocial risk factors can negatively impact on the health and well-being of workers,
- some factors are systematically considered as being the source of arduousness at work: repetitive movements, noise, carrying heavy loads, exposure to chemicals...
- sectoral social partners can agree on other factors as being sources of arduous working conditions: psychosocial risks...
- the consequences of arduous work increase with age
- there are external factors clearly linked to arduous work:
 - precariousness at work
 - the externalization of work: outsourcing and sub-contracting trends

¹ See national reports for further details

Discovering and revealing arduous work

As long as the exposure to occupational risks is difficult to measure, the researches and studies on arduous work use partial indicators: objective indicators (occupational accidents, professional diseases) and subjective indicators (declared constraints).

There is no proven mechanism or procedure to discover or reveal arduous work but some institutions or trade unions have developed their own analysis (see below the model used by a French trade union)



Arduous work to be dealt with at different levels

Most countries' Health & Safety regulatory systems already deal with the prevention and control of health risks at work but, in most instances, this is done without specific reference to the concept of arduous work. The Framework directive (directive 89/391/EEC) sets up a series of obligations concerning preventative measures for health at work:

- evaluating all the risks to the safety and health of workers,
- implementing measures which assure an improvement in the level of protection afforded to workers and are integrated into all the activities of the undertaking and/or establishment at all hierarchical levels,

- taking into consideration the worker's capabilities as regards health and safety when he/she entrusts tasks to workers

Moreover different measures tend to eliminate/reduce the arduousness of certain activities: individual protective equipment, collective protection, medical follow-up, changes in work organisation, vocational training, technological advances (which may have sometimes adverse effects as they can lead to higher demands regarding paces or productivity...)

Nonetheless, and despite compulsory health and safety regulations, working conditions in some specific jobs will remain arduous and that is how a comprehensive policy on arduous work must take into account in a simultaneous way:

- Effective prevention
- Proper detection and control from the Administration
- Continuous training and education
- Compensation/reparation

On the other hand, today we are facing a challenging world in terms of: the ageing population, the role and the employability of older workers. There is nowadays a wide range of factors and mechanisms that allow individuals, having faced arduous working conditions throughout their professional lives, to have a smoother end of career, including:

- Long-life learning (to improve or acquire competences and qualifications so that a new job can be envisaged),
- Improvement of working conditions,
- Reduction of working time,
- Changes in the work organisation,
- Better reconciliation of professional and private life,
- Adapting work places to the needs of older workers,
- Developing opportunities for flexible working arrangements

Given all those factors and the reality of arduous work **today, one major challenge is to move forward from reparation/compensation to prevention whenever possible.**

Leaving aside the impact and consequences of arduous work on individuals there are also global consequences not to be neglected: the impact of arduous work on the labour market.

The impact of arduous work on the labour market is visible from several points of view:

- A decrease in the employability of individuals working under arduous conditions,

- Early retirement of individuals having a great deal of know-how, competences and qualifications,
- Lesser attractiveness of some professions, leading young workers not to enter these professions and so to a shortage of workers,
- Poor health conditions of individuals leading to a lesser ability and willingness to continue working

The relation of arduous work to pension policies

Pension reforms have been a major worldwide concern of policymakers for some years now due to demographic changes, the major transformation of the labour market and lately, the global financial and economic crisis.

The pressure put on pensions' systems has lead in some countries to pension reform processes undertaken in haste and therefore raising the question of the sustainability of the reforms, as some issues at stake are not properly taken into consideration:

- the employment of youth and older workers,
- the problem of providing fair and adequate benefits to workers who may have been exposed over long durations to arduous and/or hazardous work environments.

In fact, special pensions or earlier retirement for workers in arduous jobs have long been present in many developed countries according to a compensation/reparation perspective in order to provide a compensation mechanism in two types of situations:

- where working conditions in specific jobs impact on the health of workers and:
 - reduce their working careers due to disability or sickness,
 - lead to premature mortality by diminishing life expectancy
- where some jobs cannot be performed by workers when they get older.

Today in the context of pension reforms, the special pension provisions for workers in arduous jobs, namely early retirement, are the subject of an on-going public policy debate as one of the main measures adopted by governments is the tightening of the rules of access to early retirement (and /or the elimination of this possibility).

With regards to the geographical scope of the project the issue of arduous work has been specifically raised during the debate on pension reform and, whilst in some countries the

opposition of trade unions has not been taken into account (Romania or Poland), in other countries arduous work has been recognized as a factor leading to early retirement².

III. NATIONAL REPORTS

1. BELGIUM

IV. Desk research

In Belgium, there is no official definition, so to speak, of arduous work. However, in the context of collective bargaining, reference is sometimes made to *arduousness* and *arduous tasks*, and the concept of arduousness is at the root of a number of legal instruments on end-of-career management.

Conversely, Belgium does have the concept of **demanding work**, which could be considered the national approach to arduous work. Demanding work is identified on the basis of three criteria:

- work in *successive shifts*, which means that the worker does not always work the same shift ;
- work in *split shifts*, with at least 11 hours between the start and the end of working day, a period of at least 3 hours separates the periods of work, and at least 7 hours are worked;
- working time arrangements involving *night work* (between 8.00 p.m. and 6.00 a.m.).

Where this definition is used, the scope covered by the concept of *demanding work* is restrictive, since the concept’s potential goes far beyond these three criteria. In fact, a broader definition of the concept of *demanding work* should take account of all the work-related factors that could reduce healthy life expectancy and quality of life. For instance, psychosocial

² See French national report

factors or physical factors, such as a very fast working pace or an awkward posture, could be included in a broader definition of arduous work.

The issue of arduousness is often examined from the viewpoint of employability, such that some measures that could be considered to attenuate arduousness actually aim to extend older workers’ professional lives by emphasising the need to make their careers *sustainable*. Three instruments illustrate this point:

- **plans for workers aged over 45**, which aim to boost the employability of these workers;
- **the Professional Experience Fund**, which offers funding and support for helping older workers to change jobs, relieving physical strain with adapted tools and equipment, and enhancing skills with training;
- **the end-of-career time credit**, which aims to help workers improve the balance between their working and personal lives and consists of a reduction in working time and a benefit to partially compensate the loss of salary. This flexible measure is based on individual factors and, as such, is applied in various ways based on a range of criteria. Generally speaking, workers must be aged at least 55 to be eligible for the time credit (although it is open to workers aged 50 and over if their company is in trouble or is restructuring, or, on a part-time basis, if they do demanding work for which there is a shortage of workers).

The legislation on demanding work provides as follows: there is **entitlement to end-of-career time credit halving working time** for employed people aged at least 50, who have done demanding work (for at least 5 years in the last 10 or at least 7 years in the last 15) for which there is a shortage of workers (such as nurses or carers in hospitals, nursing homes and retirement homes) and **an entitlement to end-of-career time credit reducing working time by one-fifth from the age of 55**. Workers are entitled to this reduction **from the age of 50** if the relevant sectoral collective agreement so provides, and if they have done demanding work and have been in paid employment for at least 28 years.

Finally, with regard to early retirement schemes, it is important to note that these were originally associated with macroeconomic employment policies and case-by-case management of company restructuring.

Early retirement is organised through the ***pre-60 unemployment with company-funded supplement scheme*** (*régime de chômage avec complément d’entreprise avant 60 ans*) and **the schemes deriving from it**. Under this system, if workers of a certain age are laid off, they are entitled to unemployment benefits along with a supplement known as the company

supplement (paid by their former employer) once they reach the age of 60. Under certain conditions, workers may qualify for the scheme if they are aged under 60, given the specific characteristics of some sectors, some jobs and even some workers. In short, workers aged 58 and over may qualify if they have been laid off and have severe physical conditions caused by their work that would make it extremely difficult for them to continue exercising their profession.

Nowadays, early retirement solutions appear to be moving away from an ‘early pension’ model towards time credit systems and schemes for unemployment with a company-funded supplement, a move which reflects the shift from sectoral level to company level in terms of decision-making and joint funding. The corporate culture, the balance of power and the economic position of the company in question are increasingly influential considerations.

V. Field research

Public bus drivers reported that they experienced arduousness due to the **psychosocial strain** of contact with the public, traffic and competition between transport providers, but also due to their **working conditions**, which result from their “*unnatural working patterns*” (bus drivers’ hours tend to vary a lot and cover a large part of the day, meaning their work matches the definition of *demanding work*), the state of the bus fleet and issues linked to hygiene and privacy.

The preventative measures designed to address the arduous factors experienced by workers have met with a rather mixed reception; while drivers say that health and safety rules are generally respected, they also feel that there is room for improvement with regard to collective protection measures and individual protection measures.

The compensation system for bus drivers is made up of a number of instruments: **additional pay for work at certain times, additional compensation in the event of incapacity for work, measures for job switches**, and, finally, different **early retirement schemes** - time credit or unemployment with a company funded-supplement.

In any case, the workers interviewed for the study believed that early retirement was “*necessary in view of the arduousness of the work we do*”. In fact, public bus drivers in Belgium almost always take early retirement (98% according to the interviewees).

The interviewees employed in **distribution centres** felt their work to be arduous due to their **exposure to extreme temperatures** in the warehouses, **noise** and the **heavy loads**, but also due to the **fast pace** (which is linked to the remuneration system, as workers must process 350

packages a day to receive their productivity bonus and holiday bonus without doing overtime): *“Some workers set the accelerator of their machines at a certain speed, rush off to fetch the products and then come running back to their posts with the package under their arms”*. Some found that **night shifts** and certain **new technologies** (such as voice picking) made their work more arduous. They also mentioned the issue of **stress**.

The compensation mechanisms in place differ from one company to another and range from additional days of leave for older workers to a 20% pay supplement for night work. Similarly, there are a number of different early retirement schemes (not always linked to arduousness), which also vary from company to company: half-time work from the age of 55, time credit with reductions in working time from the age of 53 (generally on the condition that the worker has worked for at least 28 years), and *unemployment with company-funded supplement*.

The special conditions for workers in demanding jobs apply here too: they must be aged at least 60, have worked for at least 35 years (for men; 28 years for women) and have done demanding work for at least 5 of the last 10 years or at least 7 of the last 15 years.

Foundry workers identified the main factors contributing to arduousness in their line of work as noise, extreme heat, significant differences in light levels, flying particles and steam clouds, though there are differences from one job to another. As regards psychosocial strain, the workers mentioned that there was no productivity bonus as such, but rather a monthly profitability evaluation that involves checking the percentage of good and bad pieces produced by each worker. Moreover, one of the workers pointed out that *“you do not feel safe when you are in a foundry, and you experience work-related stress as a result”*.

The workers were critical vis-à-vis the protective measures in their workplace, as these are mostly individual and *“the ear protectors are uncomfortable and the masks do not provide enough protection”*.

In the same vein, employability-boosting measures cannot be applied here because job switches are complicated and unusual; workers generally stay in the same jobs, without changing. Only if workers are incapacitated may they be reassigned to cleaning the canteen and the toilets, working in the warehouse or milling.

In practice, there is no compensation or reparation for arduousness at company level; there are no allowances or bonuses linked to arduousness.

However, arduousness is beginning to be addressed at sectoral level, When a sectoral agreement was signed for 2013-2014, the social partners agreed to examine certain issues in ad hoc working groups, and one of those issues was arduousness.

The workers and the trade union representative interviewed for this study emphasised that early retirement is common because it is permitted by the sectoral agreement:

- Unemployment with company-funded supplement (RCC) from the age of 58;
- RCC for workers aged at least 56 who have worked for at least 33 years, of which 20 at night;
- RCC for workers aged at least 56 who have worked for at least 40 years.

Workers in the elder care sector said that **contact with their patients’ families** was the main source of arduousness in their profession, followed by **work organisation** (their working hours change frequently, compensatory time off is often forgotten or cannot be taken because workloads are so high), **disregard of their opinions** as regards the choice of treatment, and **problems linked to work equipment and tools**. Many of these workers experience back, neck and shoulder pain; some take painkillers and anti-inflammatories to be able to continue working.

The issue of employability is partly addressed by a 2005 agreement which stipulates that companies offering older workers the opportunity to spend some of their working time ‘passing on their experience’ can, within certain limits, claim an ‘experience transfer allowance’ that will be used to subsidise the recruitment of additional workers to ensure that other workers’ workload does not increase.

Other incentives have been adopted to encourage target group workers to continue working full-time. These tend to take the form of additional pay, or working-time reductions without pay loss for care workers and nurses in hospitals and nursing homes. There are other mechanisms geared towards preserving workers’ employability, such as the **four-day week** and other **schemes for career breaks or reduction of working time**:

- contracted staff can reduce their working time by half, one-third, one-quarter or one-fifth once they are over 55 (or over 50 in exceptional circumstances, namely if they have demanding jobs or jobs for which there is a shortage of workers);
- permanent staff may take a career break, but only if they are at least 50 years old and:
 - have done demanding work for at least 5 of the past 10 years or at least 7 of the past 15 years;
 - are starting work in a demanding job for which there is a shortage of staff (which is the case for the healthcare sector).

The **meat processing sector** is characterised by very strong competition from third-party operators, which leads to significant pressure on workers. This pressure comes on top of the ‘traditional’ factors contributing to arduousness in the sector: **repetitive work, work at low temperatures, physical work and problems linked to work organisation.**

As competition in the sector is becoming increasingly intense, companies have adopted strategies that, in some cases, have a considerable impact on workers and their working conditions. For example: production chains are running more quickly, which has consequences for health and safety; more and more is being mechanised so that more can be produced by fewer workers; there is mounting pressure for flexible working arrangements with rolling shifts; and the workforce is changing due to increased use of precarious workers, under sub-contracted migrants.

There are a number of compensation mechanisms in the sector, such as guaranteeing workers aged 55 and over are additional compensation if they reduce their working time by half. In terms of end-of-career arrangements, access to time credit has been extended to workers aged 50 and over providing they have worked for at least 28 years. Finally, until the end of 2014, some workers are eligible for unemployment with a company-funded supplement (there are conditions based on age and the length of the worker’s career in the sector or in a specific job).

The sector is currently negotiating an agreement on ageing with a view to alleviating workers’ burden without generating additional costs for companies (awarding additional leave to workers aged over 60, assigning less demanding tasks to older workers, or bringing in mentoring throughout the sector). However, representatives from the sector feel that *“arduousness has to be addressed from the age of 20”* and that *“the problem is that people need to be able to work beyond the age of 50. What we need is solutions based on solidarity”*.

Responses from the **tilers/carpenters** interviewed revealed that these sectors view their professions in terms of **sustainability** rather than arduousness. The interviewees reported that the factors contributing to arduousness in their work included **exposure to physical phenomena** (noise, temperatures, dust) and **chemical agents** (solvents, petroleum-based substances), issues with **work organisation** (including atypical hours and night work) and **stress** related to deadlines. **Subcontracting** was also mentioned as a factor that increases arduousness as it creates a sense of dissatisfaction, a negative view of the future of employment in the construction sector, and a feeling that there is impunity because courts often lack the resources to follow up on the cases highlighted by the labour inspectorate.

While some workers mentioned that age makes it more difficult to move around the site, others felt that the physical risks associated with working in the construction sector were not a factor in arduousness as they are intrinsic to the job. These workers were more concerned about psychosocial pressure linked to deadlines, management and the atmosphere within the team.

A draft 2013-2014 sectoral agreement for the construction sector, signed on 31 March 2014, includes a section dedicated to the idea of **sustainable careers**, which shows that the sector is beginning to think – albeit indirectly – about arduousness and its long-term consequences for the employability of the sector’s workers. At present, measures such as job switching, rotation and adjustment are thin on the ground and, if a worker has a work-related disability, the chosen solution is generally redundancy, which puts the worker on the *unemployment with company-funded supplement* scheme.

With this in mind, the social partners have pledged to conclude a collective agreement on opt-in end-of-career time credit to make it accessible to workers aged 53 and over who have worked in the sector for at least 20 years.

Of the three types of early retirement available in Belgium, one is specific to certain sectors, including construction:

- the early retirement mechanism available to construction workers aged 58 and over is currently being renegotiated for 2014-2016, and may become less favourable as a result;
- early retirement to support restructuring, which is implemented on a case by case basis, and requires authorisation from the Ministry of Employment;
- early retirement due to physical incapacity, which was brought in by the 2009 sectoral agreement and applies to construction workers aged 56 and over who meet certain conditions in terms of age and work performed. This measure is currently governed by a collective agreement that must be renegotiated – if one of the social partners so requests – for the years following 2014.

2. ITALY

VI. Desk research

The notion of “arduous work” (“lavori usuranti”) was introduced in the early 1990s, defining as “extremely arduous” those works requiring “**a psycho-physical effort particularly intense and continuous, due to factors that cannot be prevented by suitable measures**” and leaving to social partners the definition of implementation criteria. Several professions were

considered as involving arduous working conditions. Later on, in 1999, criteria for defining as “arduous” an occupation were set: life expectation at the retirement age; the prevalence of the arduous tasks; the lack of possibility of prevention; psycho-physical compatibility as a function of the age; the high frequency of work accidents, with particular reference to those age brackets higher than fifty years; average invalidity pension age; ergonomic design and exposure to chemical, physical, biological, identified in accordance with the legislation in force for prevention. On the other hand, this decree considerably reduced the eligible professions by excluding a good deal of them and by regulating night work.

These general criteria were further specified in 2007, implementing a tripartite agreement and specifying ergonomic design in terms of assembly lines, by including several occupations and sectors (see below).

The last step in the reform took place in April 2011. Today the eligibility criteria for workers employed in the professions listed differ according to their expected time of retirement:

- Workers retiring before December 2017 must have worked on assembly lines positions for at least 7 of the last 10 years
- Workers with retirement expected from January 2018 are required to have worked in one of the following professions and occupations for at least half of their working career, by demonstrating exposure to certain risks:
 - extremely arduous workers ;
 - night shifts between midnight and 5 am for at least 3 months or at least 66 days per year, for at least 6 hours per night, or for at least 3 hours the entire year
 - workers on the following assembly lines: sweet confectionary; additives for beverages and other foods; plastic processing industry; sewing and linking machines in the clothing industry; construction vehicles and trailers; thermal apparatus and appliances for steam, heating, refrigeration and air conditioning ; tailoring of clothing, shoes and accessories
 - public transport drivers of buses carrying at least 9 passengers.

A functional equivalent of early retirement is so-called “mobility indemnity” in the case of company redundancy or restructuring (this latter case with a specific government decree on the basis of a company-level agreement), which lasts for one year for those workers aged less than 40, two years when aged less than 50 and 3 years when aged more than 50. This practice made recourse to the “arduous work” notion a residual one whenever redundancies could not be otherwise managed. Thus, both employers and trade unions were used to managing older workers, skills obsolescence and physical incapacity according to a compensatory approach financed by the public sector.

On the other hand, such a shared approach made systematic recourse to continuous vocational training in order to develop a life-cycle approach to workforce management unnecessary. Inter-sectoral training funds were established only from 2003 and only since 2011-2012 have these funds set up simplified procedures to access resources.

Nevertheless, the issue of both arduous work and management of older workers is gaining relevance after the December 2011 pension law, according to which all workers can retire only on the basis of paid payrolls (contributory system): the minimum age will progressively increase to 66 years for all workers, while currently there are differences among men (65 years), women employees (62 years) and women self-employed (63 years and 6 months).

Arduous work is regulated exclusively in terms of retirement policies. Trade unions officers indicate that most professions in the manufacturing sector listed in 2011 already benefit from functionally equivalent mechanisms, such as the combination of the wage integration fund and mobility, ensuring at least a three years' early retirement.

After the 2011 reform, these workers can retire with at least 35 years of paid payrolls provided they are aged 61 (62 when self employed). The applicant has to include, among others, documented evidence about work schedules, tasks assignments, health conditions, and risk assessment. In the case of applications exceeding available resources, priority criteria are set by administrative acts whose monitoring criteria are quite unclear.

VII. Field research

One of the main characteristics of the **meat (swine/bovine) sector** is outsourcing activities and units with the heaviest working conditions to pseudo-cooperatives and employing several thousands of workers, mostly migrants, where no automation can be introduced. Pay rates are at best half of those established by national labour contract hourly rates for the food industry, with frequent fraudulent behaviour; the trade union considers these workers as “*the slaves of coops*” and there are some thousands...

Notwithstanding rotation and mechanization, sectioning tasks are perceived as arduous because the pace of work is very high and people work in the most arduous positions (hanging, quartering, anatomic parts) for more than half of their working time.

Psychosocial outcomes are also highlighted: alienation and psychological and physical degeneration; depression, due to the degrading work environment and impossibility of finding a way out (through early incapacity retirement, internal mobility) although unable to work

properly and suffering pain while working; tensions among ethnic groups, sometimes degenerating into open conflict; widespread reports of drug use in order to face the high pace of long hours of work and to achieve incentives, especially under undeclared or semi-undeclared employment conditions.

There are limited opportunities for mobility towards less physically demanding positions; a possible way out is into the logistics area, where manual handling is mostly outsourced. The workers' representative envisages the opportunity of employing older workers as on-the-job trainers of new workers hired, especially temporary ones.

Workers do not benefit from any compensation but the performance-related pay foreseen by company-level collective agreement, 45% based on productivity performance.

According to the trade union officer, employees are discouraged from claiming incapacity as diseases reported are not occupational (where a causality nexus is assumed), but rather work-related (where the claimant has to prove the causality nexus). In this latter case, both the probability of success and incapacity benefits are low, and the employee can be fired when absence from work exceeds 180 days over the previous 3 years.

Notwithstanding this extensive evidence of arduous working conditions, **no professional profile is included within the “arduous workers” definition.** Notwithstanding time cycle constraints and high repetitiveness, workers are not working on “assembly lines” or in packaging as this is limited to sweets; finally, temperatures are low in slaughter houses, but not below 5C, and only renderers could fit with this, but they fall short in terms of both time continuity during their working time and often of night work.

Elderly care worker, mainly women with a high seniority, consider their work as arduous: “*Do you want to see my X-rays?*” was the welcome address received from one woman interviewed when asked about arduousness. They say that handling elderly people requires strong effort while lifting and moving. These activities cannot be replaced by supporting devices while dressing and undressing them, and they often lack the time to put in place and activate them, even when available, because of time pressure and workload.

Lack of cooperation between both nurses and cleaning personnel aggravates their workload by unloading onto them those tasks the nurses refuse, such as changing a catheter or cleaning the kitchen. This generates a feeling of isolation among operators, thus worsening the psychological aspects of work. Finally, guests' relatives are a further source of pressure and anxiety (including possible legal action for negligent behavior they can pursue). Moreover, social service public expenditure cuts lead to personnel reduction in these services.

As summarized by an occupational health doctor: it is a profession with a *“pre-ordered pathology, rising for sure after several years”* and aggravated by a negative socio-organizational environment. This profession should therefore be included into “arduous work” should there be a “rational” revision based on epidemiological evidence, as there is an irreducible component in both any organizational intervention and the automation of the tasks involved in tackling the main physical factors.

According to workers when asked about their work perspective, they answered: *“go to the other side of the home”* as a patient. In fact, and as they are poorly trained, elderly carer workers are offered very few alternative tasks within nursing homes, such as laundries, where these are not outsourced, or kitchen cleaning. Trade union officers tried to negotiate some part-time reduction as an alternative solution; employers usually offer a 50% reduction in order to minimize the load but low earning makes this proposal unviable for workers, who rather prefer to be 80% part-time. Economic compensation is almost non-existent.

This profession does not fit in with the eligibility criteria set for arduous work as night shifts are below the required threshold.

As a doctor from the occupational health services says, **workers’ professions in distribution centres** are certainly arduous ones, as carrying heavy loads is aggravated by low temperatures and particular pressures of any kind (time for delivery, employment uncertainty, organizational pressures) giving rise to “explosive feedbacks”. Moreover, there is extensive recourse to shifts, including nights in some centres, long hours and inadequate protective measures (protective devices above all) and lack of OHS worker representatives. Pressures from employers, rewarding employees’ loyalty and thus creating divisions and conflicts among employees, are probably the most aggravating factor as this exacerbates both the arduousness of tasks and the heavy physical environment.

Moreover the sector is characterized by a main trend: handling is usually outsourced to handling and portage cooperatives, often used as a screen for low paid jobs. According to the national collective agreement on commerce, hourly costs are almost 20€ while, according to the handling cooperatives, labour costs are 15€, with uncertain legal status of both employers, who often change their legal denomination in order to avoid any prosecution for unpaid payrolls, fines etc., and workers who are unaware of not being employees but ‘cooperative partners’ and thus subject to pay reductions to face lower incomes; net pay can reach 5€ per hour. Thus, workers – mainly migrants – combine both low pay and uncertain employment status, making trade union intervention more difficult.

Handlers report the most severe consequences on their health: hernias, low back pain and contractures, resulting in the widespread use of collars. The impact on health is amplified by the container floor, permanent humidity, and low temperatures: *“they usually stay at home for one month, they fill up with cortisone and come back to work”*. Somebody asks for a lighter position, but, in those rare cases where their demands are met, they are moved for a few months to the headquarters and then sent back to the warehouse, while nobody applies for an incapacity claim as they fear to be fired.

Only renderers are compensated with a low temperature indemnity, as foreseen by the national collective agreement. **Notwithstanding extensive recourse to night work in some sectors, only renderers dealing with frozen food fall within those professions acknowledged as “arduous” as they work at low temperature.** No information is available about workers actually benefitting from early retirement.

The Italian **construction sector** is characterized by an extremely small average company size, an impressive fragmentation of the whole production cycle, a high share of migrants, including self-employed, high health risks because of very demanding tasks and extensive irregularities with widespread undeclared work.

Further, the construction sector accounts for an increasing share of claims for incapacity due to work-related diseases; according to the occupational health officer interviewed, Inail (the national insurance institute for accidents at work) is recording a higher rate of occupational diseases in the construction sector than for the overall economy not only due to worse working conditions but also in order to reduce redundancies in the sector, which is the most affected by the crisis.

Posture is clearly the most critical aspect for tilers: they work kneeling on the floor a large part of their working time in preparing the underlying floor, positioning the tiles with distances, cutting tiles when necessary, and then laying the glue.

In considering occupational diseases, the construction sector displays a strong self-selection pattern, whereby workers who feel unable to tackle extreme working conditions in the sector (exposure to extreme temperatures, carrying heavy loads, exerting force, awkward postures, etc.) tend to change profession by moving into other comparatively less demanding sectors. According to occupational health officers, tile setters display high exposure to multiple musculoskeletal disorders because of their postures (knees, upper limbs), carrying heavy loads (especially low back pain), exposure to dust and powder, due to cutting tiles with grinders, and

to chemical risks because of chemicals in glues. Exposure to low temperatures and draughts are further aggravating factors.

The “younger” tile setter interviewed reported only some muscle hardening and especially osteoarthritis in the cervical area, and had recourse almost yearly to physiotherapy but was quite confident of retiring at 65 by accurately managing efforts and workload, especially avoiding working under pressure. His colleague displayed far worse health: he had surgery first for carpal tunnel syndrome, then to the right knee and, as he returned to work earlier than doctors told him, also to the left one, and thus is clearly less confident of achieving the same retirement age.

The **public transport** sector is crossing a considerable regulatory change with increasing privatization and competition among operators with a first liberalization phase started in late 90s. The new regulatory framework has led to employees being put under pressure through wage increase restraint, widespread understaffing and replacing personnel only in part, especially for bus drivers by means of outsourcing low-traffic lines and increasing the distances covered by each driver.

ISpesl, the Italian National Institute for Occupational Safety and Prevention, carried out a risk assessment of bus drivers’ working conditions in the early 2000s focused on ergonomic factors, mainly due to posture and vibration transmitted to the whole body, air pollution and stress at work (a recent study carried out in the province of Bologna among a large panel of public and private companies showed that bus drivers are those reporting the highest levels of stress)

Bus drivers consider their driving positions have been greatly improved: new buses display excellent ergonomic characteristics and there are very few that have not been updated. In contrast, stress is instead reported as the main adverse factor, due to traffic jams, user complaints of delays, and also free riding. This latter aspect raises a number of conflicts; unlike the ticket inspector, the bus driver is not a public officer having the right to raise fines and identify those passengers not paying the fare or behaving in an abusive way (thefts, harassment) - generating a feeling of impotence, stigmatized by “regular” passengers. Increased traffic, with increased delay and with fares covered, is conducive to the emergence of burn-out: *“a colleague, well known for his openness, after 15 years driving covers glass exposing his driving position with newspapers: he doesn’t want to deal with anybody while driving!”*

Musculoskeletal Disorders (MSDs) are the most reported health problems, especially in the back and upper limbs as a consequence of the earlier driving positions; their average age is

quite high (about 45 years) with an average 20 year seniority. The large recruitment gap (about 10 years) between the small group of young drivers and the earlier recruits prevents identification of whether ergonomic change has removed this problem; back pain due to persistent bad posture is still alleged to be quite widespread, and these symptoms may be associated with psychosocial risks.

Both trade unions and workers representatives proposed to employers to allow workers access to less demanding working positions, such as alternating urban and extra-urban lines or reintroducing internal mobility opportunities as garage operators or even ticket inspectors, but without any success. Conversely, these transition opportunities have declined as parking management, previously included within the public transport service (ATV) and other “classical” light positions for those drivers with poorer health, were transferred to a separate organisation as a spin-off.

Bus driver is the only profession having access to early retirement as performing arduous work.

According to the ISpesl-Regione Piemonte epidemiological study, **foundry workers** display higher risk of repeated work accidents (+28% with respect to average) and of reporting at least two chronic diseases (+9%).

The interviewees all agree in considering their work as arduous because of the work environment: dust, smoke and gases emitted by fusion of any kind. The most dangerous phases are molding, where people often report dizziness and vomiting because of vapours from chemical agents used in molding, especially in the core shop, while in machining and finishing dust from debarring and drilling is pervasive.

Some phases, such as mold assembly and stirrup downloading, display high repetitiveness, especially when parts are very small, with frequency and the use of stereotypes. Further, maintenance and tooling tasks, especially in molding, force workers into awkward positions.

Psycho-social factors play an important role because of the production cycle for vertical integration: if a problem occurs at any point, the whole production cycle has poor buffer opportunities to divert to; employees are therefore pressured to re-establish the machines fast in order to retrieve regular production.

The main indicator employees have concerning the arduousness of their work is life expectancy: *“almost all our colleagues have already died, few trespassed beyond 70”*. However, it is worth stressing that employees are in general more focused on pay conditions in posing demands to trade unions.

Notwithstanding exposure to high temperature and generally unfavorable working conditions, especially in the fusion and casting phases, **very few workers benefitted from the arduous work legislation for early retirement**, all before the 2011 legislative decree.

3. GERMANY

VIII. Desk research

In Germany no legal or formal definition of arduous work and occupations characterised by arduous working conditions exists and thus health and safety issues or arduous work criteria play no role with regard to retirement age and practice. However, and with a view to physically heavy work, a recent factsheet published by the *Federal Institute for Occupational Safety and Health* (BAuA) has defined the following conditions that characterise heavy physical work: working while standing; working with the hands, i.e. using hands with high precision, fast motions or with greater strength; carrying/lifting heavy loads, i.e. at least 20 kg for men and 10 kg for women; working in forced posture (in a bent, kneeling or lying position) or working overhead and working exposed to heavy reverberations and vibrations.

According to BAuA, one should speak of strenuous or stressful working conditions in cases where first, the criteria listed above are a *frequent* feature of the respective work/occupation and secondly, whether or not they are felt by the workers as stressful/arduous. Strenuous work and potential health complaints caused by physical work can be countered by health-promoting, work design and by codes of behaviour. Preventive measures should be based on risk assessments, which are a key element of OSH at the workplace and the basis for any successful management of OSH at company level.

Recent representative surveys have highlighted significant gaps and challenges in particular with regard to risk assessment: a survey amongst 20,000 employees in 2006 revealed that 57% of all workers report that no risk assessment was carried out at their workplace and a further 15% are not aware that such an assessment has been carried out or do not know.

Against these quite alarming results, the improvement of company-related OSH practice is a major concern of policy makers and key actors. An important strategic OSH resource is the Joint German Strategy on Occupational Security (*GDA*) that was established in 2008. Jointly supported by the German government, the federal states and accident insurance institutions, the *GDA* forms the basis for concerted action in order to attain jointly established occupational safety and health objectives.

There is a very obvious and immediate correlation between arduous and stressful working conditions and retirement or the need to leave the labour market (at least in the respective occupation) for health reasons. The DGB ‘*Good Work Index*’ survey includes results that are quite valuable for the relevance/exposure to arduous work in the context of retirement. As concerns the sectors analysed in our study, the Index shows that in 2007:

- *Construction*: 36% of new pensions were retirement pensions due to reduction in earning capacity and 68% of all employees do not expect to work until retirement age
- *Food sector*: 33% of new pensions were retirement pensions due to a reduction in earning capacity and 56% do not expect to work until retirement age
- *Health sector*: 29% of new pensions were retirement pensions due to a reduction in earning capacity and 43% do not expect to work until retirement age
- *Transport sector*: 26% of new pensions were retirement pensions due to a reduction in earning capacity and 38% do not expect to work until retirement age
- *Metal industry*: 22% of new pensions in 2007 were retirement pensions due to a reduction in earning capacity and 36% do not expect to work until retirement age.

The overall political and legislative framework of pension policy and retirement in Germany has recently changed. In May 2014, the German Parliament implemented a new pension reform package that aims to adjust at least some of the shortcomings and hardships for older employees that characterize the German pension system and in particular result from the increase in the retirement age. Apart from a measure that will benefit mothers who took time-off for children born before 1992, the pension reform includes the possibility of retirement at the age of 63 for those employees that have contributed to the pension system for at least 45 years. Furthermore, the reform includes an increase in the level of disability pensions (*retirement pension due to a reduction in earning capacity*).

The recent reform has to be put into a context of significant changes that occurred during the last decades: the retirement age was increased and the possibility and flexibility of retiring earlier without significant financial losses was successively reduced and finally abolished. Furthermore, the possibility to receive a pension because of reduced employability for health reasons was reduced in 2001 and so were the pension payments.

As a consequence, the average age of retirement between 1995 and 2013 increased by nearly two years (from 62.4 to 64.1 years) and the share of workers that retire early has decreased significantly. Around 21% (180,000) of all pensions are for reduced employability due to health reasons (“*retirement pension due to a reduction in earning capacity*”) with the largest share resulting from psychological disruption, followed by musculoskeletal diseases. The average age of

employees entering a reduced employability pension was 50.7 years. Also, it is estimated that only a half of all applications for the reduced employability pension is approved on average by the public pension authorities.

Against this background of increasing the pension age, abolishing flexible forms of transition into retirement and making the access to reduced employability pensions more difficult, the main challenges from the workers’ point of view - and in particular those exposed to arduous working conditions - are how to deal with the *increasing gap* (in terms of time as well as money) between leaving the labour market and entering the pension system. This gap results in a growing share of older workers leaving the labour market and becoming dependant on unemployment and social benefits and/or facing reduced pension payments.

Several trade unions have concluded collective agreements with the employers at sectoral or company level on transition schemes for older workers or are currently demanding such schemes in collective bargaining negotiations (see the results of the field research).

IX. Field research

Processing line workers in the meat sector are exposed to several risk factors and arduous work, including working with hands, carrying and lifting heavy loads, noise, cold and wet, etc. Furthermore, the risk of cutting damages due to the use of knives and other instruments is a particular risk for this occupation.

The work in this sector is characterised by a bundle of characteristics not only related to health and safety but also to other aspects of working conditions (pay, wage levels, precarious working conditions and an overall weak coverage by collective agreements). In recent years the rapidly increasing share of posted workers (mainly coming from Central and Eastern European countries), who are not employed directly by the employers but by contractors, and their scandalous working conditions have been the focus of public attention not only in Germany but also in neighbouring countries as well as of trade union campaigns.

Against this, and in particular against the difficulty to establish decent working conditions in the sector and the rather conflict-ridden relations between employers and trade unions, problems related to OSH and arduous work as well as to the employability of older workers have not been a “big issue” in recent years. However, with the latest collective agreements, this may change in the future; at the beginning of 2014 the social partners in the meat industry agreed a minimum wage for the sector in a collective agreement.

According to the trade union NGG a key problem as regards arduous work for the sector is the fact that those workers that are exposed most intensively to risky working conditions are not covered by the German regulatory framework of OSH and thus are not targeted by the OSH inspection and prevention bodies (BGN): *“These low-cost worker are in a very precarious situation. They don’t have a health insurance and horrible accidents occur with knives and machines because they don’t have any experience with handling them.”*

Contract workers are simply substituted by younger or healthier workers should they have an accident or are no longer able to do the job because of health problems or age-related restrictions. But also for direct employees, recent surveys carried out by the trade union have shown that arduous work and stressful working conditions are rampant: shift work is widely used in the meat industry as well as piece-rate work and frequent overtime work *“These are factors that result in health disorders and often involuntary early retirement. Thus, workplaces have to be designed in a way that provides more ‘demographic security’.”*

Bus drivers are particularly exposed to strenuous working conditions:

- Contradictory performance tasks (customer orientation versus narrow time schedule)
- Continuous concentration and no influence on work organisation/ schedule
- Gap between high responsibility and wage levels and working conditions (shift work, work on weekends, overtime)
- Increasingly stressful urban traffic situations
- Risks resulting from increasing violence and aggression by customers
- Physically unfavourable working posture and lack of musculoskeletal movement
- Climate related strains (heat, cold, wet) and noise, dust and pollution

In 2013 the trade union ver.di and local public employers in five federal states concluded a collective agreement that includes a number of measures aimed at managing and responding to demographic change within local public transport. This agreement foresees the support and development of different measures that particularly target older employees and their needs, including part-time work and age-appropriate work organisation and design and specific measures in response to the reduced employability of older employees.

In order to define priorities at enterprise level and to support the implementation of measures, the social partners agreed to establish a fund (*Demografie-Budget*), financed by employer contributions amounting to 1% of annual payroll, whose allocation is agreed jointly between the company-level social partners.

According to ver.di the kind of preventive measures taken in the companies depends mainly on the number of employees; larger companies offer in general a broader range of measures

and training and they also possess more capacity to provide jobs in other fields for employees who have had to stop driving because of health problems.

Ver.di trade unionists mentioned that the reference point at which bus drivers become incapable of working is approximately 21 years. While in larger companies older bus drivers can be employed in other functions, this is harder in smaller companies due to structural reasons. In this case bus drivers cannot be employed further. However they recognised that *“There is a need for relief both for older and young employees.”*

In some companies the possibility of long-term working time accounts (*Langzeitkonten*) is provided. Bus drivers can save hours in order to use them in order to retire earlier. However ver.di warns that long time accounts are not becoming an instrument for employers to save money; in recent years overtime has increased because of a dense staff situation and bus drivers have collected overtime hours without having the possibility to reduce them as, in practical terms, there are no drivers to take over their shift.

In the public sector there is a long tradition of the collective agreement regulating the transition of older workers into retirement before entering the formal pension age. In 2010 (with a duration until 2016), the ver.di trade union and federal as well as local public authorities concluded an agreement on flexible working time for older employees (*TV Flex AZ*) that, for employees aged 60 years or more, involves the possibility of reduced working time (both as part-time or as a block) for a maximum of five years. 2.5% of a company’s workforce can make use of flexible working time for older employees at any one time.

Part of the collective agreement is the part-time pension model “flexible old-age working time” (*FALTER*). This allows for an extension to work beyond the official retirement age on a part-time basis, i.e. a combination of part-time work with a pension status.

Foundry-workers are exposed to an extremely hot environment and a high level of noise. Furthermore, the profession includes heavily charged operations and working conditions shaped by dust, smoke and various chemicals, shift work and night work; a trade union representative stated that: *“Work in foundries is a show case of arduous working conditions in our sector.”*

The core of prevention is risk assessment at company level and based on that, preventive measures can be elaborated and conducted. According to IG Metall, about half of the enterprises concerned carry out a risk assessment, but the coverage is especially high in larger enterprises and there is also a large difference in the quality of risk assessments.

Allowances for unfavorable working conditions are agreed in the collective agreement as compensation. However, IG Metall regards these as controversial because they give incentives to workers to trade their health for a higher income, for example working more night shifts.

According to the trade union representative, employment of older workers is not yet taken sufficiently into account. However, according to IG Metall, the scope for adjustment in foundries is rather small: *“In foundries little can be changed. The optimization of OHS measures targeting arduous work is fully utilized.”*

Foundry workers rarely reach the official retirement age; an IG Metall trade unionist said *“Older colleagues aged between mid-40 and 50 years are already confronted with health constraints.”* Therefore the solution demanded by IG Metall is focused on the earlier retirement option for foundry-workers: *“Lighter workplaces should be regarded rather as an emergency solution than a meaningful measure.”*

In 2008 the social partners in the iron and steel industry decided on a collective agreement for the flexible transition into pensions (*FlexÜ*). Employees can make use of the early retirement regulation from the age of 55 years. A block model and a part-time model are possible. The time period can be set over six years and during this time employees receive 82% of their former wage. Only 5% of employees in a company at any one time can make use of this instrument. However, the quota can be over fulfilled.

Floor layers and carpenters are exposed to several aspects of strenuous work: carrying/lifting heavy loads and other heavy physical works, working in forced postures and heavy working with hands. Furthermore, they are exposed to environmental and ambient factors such as heat, cold, moisture or noise as well as dust.

In addition working conditions in the sector are characterised by a strong increase in psychical stress factors, especially due to a liberalisation in the access to this occupation that has resulted in a rapid increase in competition based on low prices.

OSH experts as well as the trade union IG BAU have stressed that, in contrast to physical risks, psychical risk factors and strains have increased significantly during recent years: *“Performance requirements in the firms are steadily increasing. Psychological factors in this occupation are also playing an increasing role. In the last years, incidents of sickness due to psychic disorders have increased by up to 50%. ”*

For construction workers older than around 50 years, a significant and growing gap exists between that age and entering the official pension age of 65. Most of the time spent after leaving employment in construction is likely to consist of forced non-employment, i.e. health-related inactivity and unemployment; the trade union OSH expert declared *“At the age of 50 a floor layer is normally no longer able to perform the job.”*

Moreover though the intensity of strenuous work has not decreased significantly and psychical risk factors and stress have certainly increased, the share of workers that enter into a reduced employability pension has decreased significantly. This means that for more and more workers the possibility to retire earlier due to health damage no longer exist and thus they either have to move to other occupations/sectors or become unemployed.

Also, as concerns the early retirement arrangements agreed between the social partners at sectoral level, the conditions in the construction sector are rather unfavourable: such agreements today are based on financial contributions both by employers and employees and, due to the large share of very small companies and the comparatively low wage levels in construction, both employers as well as employees are simply not able to provide their own financial sources for early retirement schemes at sectoral level.

Against this situation, the trade union IG BAU proposed in 2013 the *‘Altersflexi’* concept that aims to provide support for older workers with health constraints for the period after leaving the construction sector until entering the retirement age. Based on the financial instrument of short-time allowances that has been quite successful in stabilising employment in times of seasonal or structural crisis (implemented by collective agreements at sector as well as company level but financed by the public labour fund), the trade union has suggested applying such a scheme in a different way in order to provide a bridge into retirement for workers with health constraints.

In the *‘Altersflexi’* concept:

- the access of workers to the scheme is based on an individual medical expert examination being carried out similar to that applied in the context of re-integration measures after longer absence due to illness
- workers are supported and receive advice by ‘transfer agents’ at company level

According to the DGB-Good Work Index, 50% of all respondents in **elderly care work** think that, due to their health situation and the working conditions, it will not be possible to keep on working until retirement age. This is because of arduous physical work but also of psychical factors (stressful work) and working conditions (narrow time schedules, shift-work, overtime work and other forms of flexible work).

Strenuous work has also increased as a result of significant restructuring and privatisation within the sector. Moreover, elderly care-work is carried out mainly by women, often part-time and on low pay, so that the pension expected is also accordingly low.

Workers in the care sector are particularly exposed to risks related to musculoskeletal disorders (MSD) and this sector also illustrates quite well the degenerative character of MSD, i.e. occupational health strains and illness increases in correlation with age.

Against this situation, the framework conditions of retirement, in terms of transitions and more flexible forms of moving into retirement as well as with regard to pension payment levels, have worsened significantly during the last decade. This is highlighted by the ver.di secretary responsible for social policy and pension issues: *“The increase in the official retirement age up to 67 will affect in particular those workers who are not able to either profit from early retirement provisions at sector or company level or to build-up a private pension (that allows for an earlier exit without too large losses in pension payments)”*

As regards both elements, workers in the care sector are particularly disadvantaged. Firstly, there are no collective agreements on early retirement and flexible transitions into retirement apart from very few cases. At the same time, the public financial support for early retirement schemes that existed from the 1990s was stopped in 2009 and this again hits hard those sectors where social partners have not agreed on own schemes and programmes (co-funded by the employers).

Furthermore, and due to the low pay conditions in the sector, building-up private pension capital for most workers is not possible. Against this, older care workers who are not able to work until the retirement age, have to make an application for a disability pension. And here too the conditions have been significantly worsened: while the eligibility criteria have been markedly increased, the disability pension payments have been reduced to a level that is on average (currently around 640 €) below the poverty threshold and thus has to be topped-up by social benefits.

Against this threat of old-age poverty, a ver.di representative for the health sector said: *“Transition instruments such as part-time work for older workers or life-time working time accounts hardly exist anymore. Also, specific workplaces for older workers have been destroyed in order to reduce personnel costs in many care institutions. Therefore, older care workers who are no longer able to handle the job are moving to other sectors in order to work longer and obtain*

at least a half-decent retirement pension, They quit and move to cleaning jobs or work as a cashier in the supermarket because they cannot stand the strain of care work any longer.”

4. AUSTRIA

X. Desk research

In Austria a definition of strenuous work is given in the “heavy work regulation” taking into account six criteria:

- Shift work and changing working hours with an extent of six hours on six working days in a month,
- Working under extreme heat or cold,
- Working under chemical or physical influences which result in a reduced working capability of 10%,
- Men spend at least 2,000 and women 1,400 work calories during an eight-hour shift,
- Care of disabled or diseased persons with intensive care needs,
- Irrespective of the actual occupation, employees with a reduced working capability of 80 % can make use of the pension for strenuous work.

According to these criteria, arduous work in Austria is mainly defined in terms of hard physical work; nevertheless psychological arduous working conditions are also theoretically included.

On the basis of this regulation, employees working in arduous occupations gained the possibility of early retirement. Motives for the implementation were to reward arduous work, to prevent a precarious entry into the pension scheme and to compensate for the statistically shorter life span.

Since 2007 the national insurance scheme compiles lists with occupations that are classified as arduous and the workers in these occupations obtain the right to retire earlier. The entitlement to pension for arduous work is proved individually.

This legislation can be analysed with regards to the perception that the workers have of their own working conditions: five out of ten employees in Austria are involved in hard physical work and every third employee suffers from psychologically arduous work conditions (time pressure, harassment at work and threat of violence). Altogether 60% of employees face strenuous work conditions, either physically or psychological; at 67%, men are more affected than women at 51% (Statistik Austria 2009).

It must be highlighted that there are visible differences between the sectors: almost 75% of employees in the construction industry are confronted with at least one strain in their work. This is followed by the agricultural and forestry sector, with 72%, transport and messaging with 66%, the health, veterinary and social sector with 65%, and the hotel and catering sector with 64%. With 39%, employees in the credit industry and insurance were less affected (Eichmann et al. 2010, 121).

To tackle the issue of arduousness at work, the first solution is prevention, which is globally regulated through the Health and Safety at Work Act. Above all, the employer is responsible for preventive measures, but is supported by the social partners and social insurance institutions, with the Labour Inspectorate responsible for overseeing these.

One focus of preventive measures in Austria aims to preserve the employability of employees until retirement age. A project in which all social partners were involved, called “Fit for the future – preservation of employability” (*Fit für die Zukunft – Arbeitsfähigkeit erhalten*), lasted from 2009 to 2012 and was the first common project on pensions and accident insurance in this field.

Leaving aside prevention and employability issues, the debate on arduous work and its impact on workers and social policies within industrial relations is mainly focused on financial matters. In fact through collective agreements employees confronted with arduous working conditions receive a supplement in their hourly wages. However trade unions propose compensation in the form of leisure time instead of financial benefits for arduous work.

In Austria the issue of arduous work has been taken into account when setting up the retirement policies:

- The official pension age for men is 65 and for women 60 years (the pension age for women will be increased gradually to 65 years until 2024)...
- But additionally, employers can make use of:
 - the pension scheme for “*heavy workers*”
 - a corridor-pension.

The pension scheme for “**heavy workers**” was introduced in 2007 in response to an acknowledgement of arduous working conditions. To enter the pension scheme for “*heavy workers*” a male employee must have been insured for at least 45 years (540 months) and a female employee for 40 years (480 months). Therefore, in the last 20 years, 120 months of arduous work have to be included. At 60 years of age, the employee can apply for early retirement, while women can make use of this regulation at 55 years.

The minimum age to take advantage of the corridor-pension is 62 years. Furthermore, employees must have been insured for 450 months (37.5 years). Until 2017, this is increased up to 480 months (40 years) in 2017. Instead of a 0.35% deduction from the pension for each month before the official pension age is reached, the rate is reduced to 0.175% for each month. Women can make use of this regulation from 2028 on.

In 2014 the pension scheme was reformed. From now on, before an invalidity pension is approved, rehabilitative measures have to be taken. Only when no improvement in the health of the employee can be expected, is entrance to the pension scheme permitted. This is decided on the base of a medical estimate. This has been a major change in the invalidity pension. The conditions to receive the invalidity pension are furthermore 300 months (25 years) of insurance or 180 months of contribution to the social insurance. For employers older than 50 years, 60 months of insurance have to be proved in the last 120 months. Additionally, the invalidity has to have lasted for at least six months.

The night heavy worker regulation gives workers on shift work in arduous occupations the possibility to retire earlier. Night work involves a six hours shift between 10pm and 6 am; night heavy work includes, for example, working in cold and heat over 30 degrees Celsius. Also workers exposed to excessive noise are eligible. A month of heavy night work is given after six working days of heavy night work. According to the night heavy labour regulation, workers with 240 months (20 years) of night heavy labour or with 180 months (15 years) during the last 30 years can retire earlier and receive a special pension. Men can take advantage of this regulation at the age of 57 and women at the age of 52 years. The amount of this pension corresponds with the invalidity pension.

Only about 1 % of pensioners (1,147 persons) received the pension for arduous work.

In Austria the possibility of early retirement also exists on the basis of collective agreements. Employees receive 50% of the difference between their last salary in the last 12 months and their reduced income. Additionally, the employers continue to pay the same share to the social insurance. The working time is reduced in the range from 40 to 60 per cent.

XI. Field research

Employees in the meat sector are working in a cold and wet environment. Often the tasks include carrying heavy objects and working in monotonous motions. Additionally workers are exposed to high noise pollution and working in artificial light is psychologically strenuous. Working conditions are especially strenuous in the meat cutting process with a high level of stress and time pressure for the workers. Production machines determine working speed.

Additionally, motion sequences are monotonous and only small elbowroom is given. Working in this posture is uncomfortable for the employees.

Arduous work in this sector is classified according to the processing method and company size:

- Only certain professions are included in the heavy worker regulation; indeed, and according to ‘calorie consumption at work’ criteria, the profession of a butcher is considered as strenuous work while line workers in the meat processing industry are not included in the regulation.
- The “regulation of arduous work” includes only employees in companies processing at least 5,000 kg meat/ week (this point having been agreed between trade unions and employers associations in order to disburden smaller enterprises).

On the other hand, the sector faces a problem regarding the outsourcing of the arduousness:

- East European workers are employed in the meat sector, primarily in the meat cutting process which is considered as the most strenuous occupation; moreover, instead of being paid wages according to the collective agreement, some employers introduce a pay system based on performance.
- East European employees are often not directly employed by the company, but instead a complex triangular working arrangement is established with the company engaging a subcontractor having its headquarters in the same area. This subcontractor in turn closes a deal with a temporary workers agency.

This “outsourcing model” allows the company to source out their own risks by concluding temporary work arrangements and to have flexible workers at its disposal.

People working in arduous workplaces have additional paid breaks as these have been agreed in the collective agreement and people working in the cold have to be provided with warm drinks.

Employees falling under the heavy worker regulation can enter the pension scheme at the age of 60 years. Furthermore, employees can take advantage of early retirement schemes. While a part time or a block model can be chosen, the vast majority of employees decide for the block model.

Bus drivers are particularly physically stressed by unregular working hours in the form of shift and night work. Additionally, shifts are rather long. Long sitting and vibration throughout driving are also considered as strenuous working condition in this profession.

In psychological terms, employees in the public transport sectors are affected by stress in two ways: traffic in urban areas is becoming more denser and incidents with violent passengers occur. Moreover the trade union and the labour inspectorate underlined the negative impact of the strong pressure to save costs (the number of buses is diminishing and the driving schedules are becoming denser). Related to this is the fact that about half of bus lines are operated by the municipalities while the other half is contracted out in public procurements that are mainly given to competitors who offered the lowest price.

The Working Climate Index shows that professional drivers are less satisfied with their work than the average employee. Drivers are especially discontent with the recognition of their profession in society and their career options; every fifth driver complained about health conditions, every third driver sees himself/herself at risk of being involved in an accident or getting injured, and 41% of professional drivers perceive high time pressure at work.

The sector is shaped by a high percentage of older drivers. Keeping them fit is emphasized as a priority in the preventive measures. As working conditions are considered as unattractive, such measures are also viewed as important to increase the attractiveness of the occupation for younger workers.

The trade union *vida* focuses its efforts on establishing better working conditions. Age-appropriate working conditions are considered a most important topic. Stress and strains should be adjusted to the age of the employee.

A possibility to disburden older drivers would be to give them “better routes” with a less dense traffic situation. However, according to *vida* the possibility to distribute routes to drivers on a seniority principle is undermined by public procurement. Moreover, and according to the labour inspector, this possibility is hardly feasible as the profession has “*a disproportionate number of older employees*”. Besides, such a distribution would put a high burden on the health of younger drivers.

Bus drivers in Austria can make use of the normal retirement scheme. They are not included in the pension scheme for heavy workers. Furthermore, public transport drivers can make use of two different models in the scheme of early retirement: firstly, they can reduce their working hours to part-time; the second possibility is a block model. Overall the tendency is to restrict the possibilities for early retirement.

The employability of workers until they reach pension age is regarded as the most important issue. This is especially important regarding the shortage of drivers. In some companies a

bundle of different retirement regulations exist. To illustrate this, *vida* gave the example of ÖBB-Bus, the largest bus company in Austria. Employees in this company are in fact subject to three different rules: former civil servants from the post, on one hand, and from the public railway, on the other, underlie specific pension regulation and profit widely from arrangements expiring. All other employees fall under the normal pension regulations.

Foundry-workers are exposed to an extremely hot environment and furthermore, working conditions are affected by dust, smoke, various chemicals and noise. Hearing troubles, lung cancer and respiratory problems are some of the serious health problems faced by employees if they work regularly under excessive heat, noise and hazardous substances.

In the collective agreement for the metal and iron producing and processing industry, allowances have been agreed for arduous work but, in practice, most companies in the sector pay higher allowances than those set in the collective agreement (for example unskilled workers are paid in average 40 to 60 % more); additionally, workers can receive a dirty work and a danger bonus, but, according to trade union representatives, this is only logical as *“Otherwise, companies will not be able to find any worker.”*

The regulation of heavy labour does not include occupations in foundries but individual demands can be analysed in Court: i.e. until May 2014 crane operators transporting heat material were excluded. PRO-GE supported a crane operator in court to get access to the pension scheme for heavy workers. The Austrian Workers Compensation Board rejected the request, arguing that the necessary criterion of calorie consumption is not fulfilled. At court an examination of the workplace was undertaken and the conclusion was that the crane operator had to be included in the scheme for heavy labour pensions, taking into account the exposure to steam. *“This has been a substantial decision for crane operators in general”*, according to a PRO-GE trade union representative.

As regards retirement, a distinction is made between skilled and unskilled workers: if skilled workers older than 50 years become unfit for work, they can enter the pension scheme and receive invalidity pension and, according to vocational protection, they must accept no other job apart from those for which they are qualified. In contrast, unskilled workers are not subject to such protection and, if they have to stop their current occupation due to health problems, they must accept another occupation.

Floor layers and carpenters are exposed to strenuous working conditions in several ways: working in forced positions and carrying/ lifting heavy loads, standing for a long time, climbing, bending, and kneeling are often necessary. Additionally the work environment may

be wet, muddy or dusty and employees work under all weather conditions including extreme heat and cold.

The collective agreement for carpenters sets up certain benefits for arduous work:

- Work underground :+ 15%
- Demolition and dirty work: +25%
- Working in rooms with a temperature higher than 50°C :+ 10%
- Work with acids: + 10%

The Construction Workers’ Annual Leave and Severance Pay Fund (BUAK) covers floor layers and carpenters together with other occupations in the construction sector. In 2013 the heavy worker regulation was revised and from September 2013 all employees in occupations covered by the BUAK are eligible to the heavy workers’ regulation.

In 2008 most construction workers could not access the pension scheme for heavy workers because they were not have the eligible age; in fact, about 80% of construction workers have to apply for the invalidity pension on average at the age of 57 years. In 2010 the average pension for a worker in the construction sector was 2,100 €. In comparison, the average invalidity pension was about 905 €, while the amount of the pension scheme for heavy workers was about 1,630 € (EFBWW 2010).

To facilitate the transition from employment to the pension scheme, a transitional allowance scheme was agreed upon at sectoral level in 2013: from January 2015 on, construction workers can receive this allowance when they reach 59 years; the amount of the allowance corresponds to the wage agreed in the collective agreement whilst social security contributions are further paid. When employees reach the age of 60, they can enter the pension scheme for heavy workers. This transitional allowance scheme allows workers a better entry in the pension scheme and gives an incentive to work longer. In case an employee works until the regular pension age of 60 years, s/he receives from 2017 on an award of 700 € for each month s/he does not make use of the model and the employer receives 400 € as a contribution to the incidental wage costs.

The model is pre-financed since 2014 by employer contributions to the BUAK to the extent of 100 M€. The employer pays per week an amount corresponding to 1,5 work hours per employee to the BUAK. In return, workers disclaim part of their holiday payment, Christmas bonus and allowances for overtime hours.

Elderly care workers are exposed to a mixture of arduous working conditions: lifting/ carrying and working in forced positions, permanent night shifts, as well as alternating shifts and

psychological stress related to time pressure, work intensity, the flexible and permanent need for improvisation and even violence.

One in ten care workers (11%) felt under strong psychological pressure in 2012/2013 compared to only 3% in other occupations. Furthermore, 28% of care workers feel psychologically pressured while this applies to only 8% of employees in other occupations; in the same way, the risk of burn out is higher than in other occupations.

The issue of early retirement is a major concern for workers: in fact, only 44% of care workers believe that they will be able to work until the retirement age. However, according to the legal framework, care workers for the elderly can only make use of the pension scheme for arduous workers on an exceptional basis “*Care work is acknowledged as heavy work only in individual cases.*” Furthermore most employees enter the pension scheme from part-time work.

5. FRANCE

XII. Desk research

French legislation addresses arduousness in four key respects: through definition, prevention, tracing the factors involved, and compensation. According to the French Labour Code, arduousness at work is characterised by the combination of two conditions: workers’ exposure to one or more professional risk factors that are likely to have clear, irreversible effects on their health in the long term, and factors linked to physical constraints, an aggressive physical environment and certain working patterns. **The law does not recognise psychosocial risks as a factor contributing to arduousness**, which has attracted a great deal of criticism from the trade unions.

Where work is considered arduous, the following must be put in place: two individual instruments (an arduousness traceability sheet and early retirement mechanisms) and a collective instrument (an agreement or action plan to prevent arduousness).

All private-sector employers, regardless of their legal status, are required to draw up an agreement/action plan to prevent arduousness, as are public companies, public industrial and commercial bodies and public administrative bodies, for their staff employed under private-law contracts. The companies must have at least 50 employees or belong to a group with at least 50 employees, and at least 50% of the employees must be exposed to one of the factors in arduousness as defined by law.

The agreement or plan must concern:

- at least one of these two subjects: reduction of multiple exposure to the professional risk factors contributing to arduousness, or the adjustment and organisation of the job;
- **AND** at least two of the following issues: improving working conditions (particularly in terms of organisation), enhancing skills and qualifications and opening access to training, organising the ends of workers’ careers and keeping people in work, and preventing workers from being excluded from their professions.

Between 2012 and 2013, the social partners signed agreements on preventing arduousness for almost all the sectors and occupations covered by this study. The agreements laid down a definition of arduousness in the sector, set thresholds for various factors in arduousness, proposed measures for preventing arduousness (with quantitative objectives and monitoring indicators), and suggested end-of-career management measures for employees who had done arduous work. There is one exception, though this is not connected to the signature of these agreements, nor – directly, anyway – to the issue of work arduousness: the system for workers who have had long careers in construction, which allows workers who began contributing early to retire up to two years before the statutory retirement age, providing they have paid contributions for 41.5 years.

Arduous work has been a core issue in discussions between the social partners since 2003. This finally resulted in a pension reform in 2010, which addressed arduousness from the angle of compensation. The reform provided for the retirement age to be lowered to 60 for employees who could demonstrate:

- recognised permanent partial disability (PPD) of at least 20%, due to an occupational disease (OD);
- recognised permanent partial disability (PPD) of at least 20%, due to an occupational accident (OA) that caused injuries for which compensation would be paid if they were due to an OD;
- recognised PPD of less than 20% but at least 10%, due to an OD or an OA. In this last case, the worker must prove at least 17 years’ exposure to one or more arduous work factors and demonstrate that their permanent disability is directly connected to their exposure to these professional risk factors.

A further step was taken for the recognition of arduousness in pension systems in October 2013, when the National Assembly voted through the creation of a **personal account for preventing arduousness** (*compte personnel de prevention de la pénibilité*). These accounts will be available to all private-sector workers exposed to working conditions that reduce their life expectancy, and will enable workers to accumulate points based on their exposure to one or more arduous work factors (as defined by the applicable

legislation). Workers will receive one point for each quarter of exposure (two points if they are exposed to more than one factor), to a maximum of 100 points. Workers can then use the points accumulated in the account to fund training courses for reorientation to a less arduous job, maintain their salary level if they switch to part-time work at the end of their careers, or **contribute to three months’ pension**.

XIII. Field research

The main arduous work factors identified by **public bus drivers** were: problems with equipment (*“The choice of equipment is important, but we are not consulted on the ergonomics of our cabs”*); external factors like wear and tear on roads (*“There are so many trees that we can barely see”*); working time and breaks (*“at peak times, we have to leave practically right away”, “sometimes I have to drive for up to four hours without a break”*). They also highlighted the role of psychosocial factors in arduousness: *“drivers’ work is not really appreciated, we get no recognition”*; stress derived from the need to pay constant attention to external factors (traffic, fare-dodging, long working days); the risk of exposure to physical or verbal aggression; a system of work organisation based on productivity (*“the level of productivity demanded of us is at odds with our public service-oriented role”*).

Management of arduousness seems to be a key priority in this case: a job observatory has been set up that uses indicators to identify the factors contributing to arduousness within companies; a reference list of exposure thresholds has been created; arduousness and traceability are being evaluated; and local and transversal measures and action plans have been adopted. However, the approach to risk prevention has been criticised by workers and by the trade unions: *“Management’s actions are geared towards repairing damage, rather than preventing it”; “The current approach to risk management focuses on compensation rather than prevention, because the company is more interested in economic efficiency than social efficiency”*.

The issue of employability has also provoked discussions: there are systems for assigning routes based on drivers’ seniority (*“the ‘easier’ lines and times are assigned to the most senior drivers”*), and in other cases, *“drivers are sometimes given a break from driving for a week or two, during which time they do minor maintenance and repairs, but the system is not well publicised”*, said a trade union representative.

Arduousness within the profession and within specific companies has always been addressed in terms of compensation: there are early retirement schemes for some professions (these differ depending on how arduous the job is), and these are supplemented by the company.

This ties in with a special social security scheme for company employees, which dates back to 1948. At present, in view of the pension system reform, statuses are being changed, which entails major consequences for early retirement schemes and the associated supplements. These changes reflect developments in employment arrangements within companies: since 2009, the general policy has been to hire bus drivers under private-law contracts (30% of drivers under private-law contracts joined the company in 2009 or later), and these drivers are not eligible for the early retirement schemes provided for by the Statute. This arrangement has drawn criticism from the trade unions, who underscore the existence of *“unequal mechanisms for workers doing the same job”* and the gradual abandonment of efforts to recognise arduousness.

The main arduous work factors identified by **distribution centre workers** are: heavy loads (*“we have to move very heavy parcels, sometimes in very confined spaces”*), the long distances they cover (*“I can cover between 20 and 25 km every working day”*), a form of work organisation that generates stress (*“we feel like we are being watched all the time”*; *“walking to the time clocks – which are at the other side of the warehouse – eats into our breaks”*) and a system of productivity bonuses that encourages people to work very quickly.

The workers feel that the prevention measures applied in their sector do not reflect their real working conditions: *“the improvement measures that were brought in have led to increased productivity requirements, and thus more stress”*. The expert interviewed for the study commented that *“work is being done to address the physical environment, the use of rolling machinery and the design of individual pieces of equipment ... but little is being done about work organisation, staff evaluation and payment systems, or the creation of health indicators that take account of order pickers’ activities”*.

No economic compensation whatsoever is awarded in connection with arduous work factors; the only bonus is the productivity bonus, which the trade unionists interviewed deemed *“harmful”* to workers because they do everything they can to get it, without thinking about the potential negative effects on their health. As regards employability, the workers said it was *“practically impossible”* to change jobs and take up a *“less arduous”* position, and they all said that they were *“not planning on finishing their careers at the company”*. In a similar vein, the company does not have an early retirement scheme.

The arduous work factors mentioned by **foundry workers** were: exposure to physical phenomena (dust, noise, changes in temperature), hazardous substances (such as graphite, molybdenum and nickel), 3x8 shift patterns, repetitive movements and work organisation (workers who retire are not replaced, which creates additional work for those who remain). They also highlighted the impact of night work on their health (*“we know that a production*

worker who works nights will live 10 years less than a manager in the office”). And yet the workers have a rather fatalistic approach to arduousness, as they feel it is an integral part of their work: “that is just how it is, we do not have a choice”.

In reference to the relationship between the arduous work factors that are “*inherent*” to their jobs and their working conditions, which have improved as a result of the prevention measures that have been adopted, the workers said “*if we have to work in a foundry, we are lucky to be working in this one*”. However, they did stress that their improved working conditions and the associated productivity boost have driven up the pace of work and led to higher production requirements.

As regards compensation for arduous work (different allowances), the workers felt that “*not enough compensation*” was paid for the arduous work factors to which they were exposed, and that in any event, “*bonuses do not make up for loss of health*”.

Employability is one of the main areas addressed by the trade unions in the sector: “*early retirement is not the solution, except in very specific cases*”. The trade unions aim to improve working conditions and help workers to develop additional skills so that they can stay in work. The trade unionists who were interviewed for the study said that, in view of the enhanced working conditions in their company, “*we can keep people in work until the age of 60-62, without their health suffering too much because of their work*”. However, the workers did not share this view. They felt that it would be fairer if they could retire earlier as “*we could not do the same work when we are 60*”, adding that “*we would be doing pretty well to make it to 60*”.

Workers in the elderly care sector identified the main **risk factors** in their work as **psychological** factors linked to patients’ situations, work organisation (“*our schedules change all the time, so we cannot balance our personal lives and our working lives*”; “*there are always emergencies to handle and colleagues’ shifts to cover*”; “*our supervisors constantly pressure us to keep to our schedules, so we have to rush to make sure we are not late*”) and isolation (“*if there is a problem with the service or with a patient, we have to deal with it ourselves*”), though they also mentioned physical risk factors and risk factors linked to exposure to biological agents.

The nature of work in the sector (in patients’ homes) makes it difficult to set up appropriate prevention measures; as an ergonomics expert said, “*it is hard to prevent risks in the sector, because the work setting varies too much*”. Prevention is a marginal concern for companies and, although PPE is usually provided (e.g. gloves, work uniforms), very little is done to prevent psychosocial risks. Work organisation is a key factor in occupational health and safety: a trade unionist commented that: “*for a year and a half now, the sector has been increasingly concerned with finances... This has resulted in a sharp increase in the number of visits, and time is being*

divided across more and more patients – sometimes, visits are just fifteen minutes long... There has been an upsurge in psychosocial risks, stress and tiredness, leading to a worrying rise in road accidents and, worse still, incapacity-related redundancies”.

In this context, which is especially difficult given the nature of the work and the feasibility of applying prevention measures, the issue of compensation for arduous work factors is rarely raised in collective bargaining and there are no mechanisms for compensation through pay (except supplements for night work). Similarly, there are no early retirement schemes.

The main factors contributing to arduousness for **workers in the meat processing sector** are: repetitive movements (*“we have 1:15 minutes for each animal, but the movements are not always the same for every animal”*), awkward postures, exposure to artificial lighting all day (*“when I go outside after a day’s work, it takes a few minutes before I can see anything”*) and working hours (*“we are supposed to be working 35 hours a week, but we do a lot of overtime when shops have special deals on. And when there is a public holiday, we only have four days to do the work we normally do in five days”*). Workers also emphasised the importance of psychosocial factors: the fast pace, the stress caused by seeing blood all day, work organisation, and working in impaired circumstances.

The workers also reported a rather *“fatalistic”* attitude, which makes it difficult to tackle arduousness (*“arduousness is just a part of working in a slaughterhouse”*) and also makes it hard to implement vocational education, re-training and training.

The company had set up a system of task rotation to prevent/limit arduousness, but the workers felt it was not fit for purpose: while the workers do rotate between activities made up of tasks that seem different, the movements that need to be made are still the same, and the hidden complexities of some jobs have not been taken into account.

Similarly, the workers are very critical of the measures that have been introduced to improve their jobs: *“when measures are adopted to improve prevention and our jobs, the pace of work increases and we are required to be even more productive, which sometimes makes our tasks more arduous than before”*.

Measures for employability are also considered to be insufficient, as *“job switches are made in response to injury, not to prevent it, and they are not always successful; all the doctor does is say that workers cannot do certain jobs... There are no forecasts on the development of pathologies. An inventory should be made to see which jobs could be organised better, but this has not been done”*.

Compensation for arduous work has not been addressed because supplements are not paid for arduousness; in any case, the workers feel that *“financial compensation is not the answer”*. The workers and trade union representatives interviewed for the study pointed out that unemployment and post-50 incapacity were two different ways for older workers in poor health to leave the sector: *“instead of early retirement schemes, we have disability pensions (so the costs are transferred to society)”*.

One last point worth mentioning for this sector is the *outsourcing* of arduousness. Companies are bringing subcontractors, temporary workers and posted workers into their slaughterhouses and, according to the trade unionists interviewed for the study, this will lead to arduous work being outsourced, which will become *“a problem for the trade unions as these workers are often foreign and may not even speak French, they do not complain about the poor working conditions and they do not have contact with the trade unions”*.

The tilers interviewed for the study identified the following factors as contributing to arduousness in their work: awkward postures (*“being a tiler means spending entire days on your knees”*), repetitive movements, heavy loads (*“over the course of a day, we handle packets of tiles and bags of cement, sand and glue”*), exposure to heat and cold (*“it is too hot in summer and too cold in winter, not to mention the draughts...”*) and stress (*“we are under constant pressure because there are penalties if the work is not finished in time, we do not keep track of the overtime we have to do”*).

Tilers’ exposure to arduousness is made all the worse by a prevention approach that leaves much to be desired: both experts and labour inspectors have highlighted problems with risk prevention on work sites – risk assessments and prevention plans are not written; PPE and collective protection is not provided; subcontracting is rife, which dilutes responsibilities; undeclared work is common, and so on. Labour inspectors also mentioned that there are a lot of foreign workers on sites (*“some of them do not even speak French and, more strikingly, they do not complain and do not demand good working conditions”*) and highlighted the problem of bogus self-employment (*“construction companies force workers to register as self-employed so that they do not have to make contributions for them or provide protective equipment”*).

The workers also pointed out the shortcomings of the health and safety system: *“the company gives you the bare minimum (gloves and a back support belt), but that is all...”* However, they also acknowledge that their work is arduous by nature: *“there is nothing we can do, that is just the way it is”*.

Very little is done about risk prevention, and the situation is no better when it comes to compensation and employability. The workers interviewed for the study said that they did not receive any allowances to compensate them for arduous work, and that there are no structured mechanisms to guarantee their future employability: *“this is all we know how to do, and all we are capable of”*; *“when I cannot do my job any more, I will claim a disability pension”*, said one worker.

The position of the trade unions representing the profession (and the sector) is to demand early retirement, at the age of 55, for anyone who has done an arduous job. They argue that a worker’s exposure time to arduous work factors should be considered equal to the total time a worker has spent in an arduous job.

6. DENMARK

XIV. The framework for arduous work

In Denmark the issue of arduous work is dealt with through two concepts: ‘wear and tear’ and working capacity. ‘Wear and tear’ means a gradual decrease in functional ability to a level lower than the “normal” functioning for that age, while **working capacity** means the ability to perform work (both for the company as well as the person) in a satisfactory manner. Working capacity and thereby ‘wear and tear’ must be seen in relation to the requirements to carry out the work. If the requirements of the work are constant throughout the working life, the ‘wear and tear’ eventually reaches the critical point where the person is no longer able to do the work satisfactorily. This will be reflected in increased sick leave and eventual retirement from the labour market. The ‘wear and tear’ can be either physical or mental; these two categories are described separately but in fact they interact between them and they can occur solely or in combination.

Physical strains on the job consume muscle energy reserves and put a strain on tendons and joints. If the body does not get sufficient rest to replenish energy reserves and repair minor injuries, repeated physical strain will lead to injury, i.e. **physical** ‘wear and tear’. Older people require more rest to completely recover from physical heavy influences; thus ‘wear and tear’ is more frequent with age.

Potentially adverse psychosocial impacts in the work (e.g. time constraints, low predictability and low impact, great emotional stress, bullying, violence, etc.) bring the body into a tense condition. Basically, **mental** ‘wear and tear’ comes down to a question of the prolonged imbalance between the requirements of the individual and the opportunities we see in order to

cope with them now and in the future. Psychosocial impacts can create muscle tension and pain and thereby intensify the signs of physical ‘wear and tear’. Moreover, psychological mechanisms have great importance for how each person perceives pain and the ability to continue to work.

The industries particularly threatened by ‘wear and tear’ are identified by the Ministry of Employment as those with the highest risk of early pension, early retirement or long-term absence due to sickness. Today the list consists of a total of 18 industries and includes 1,010,466 employees (38% of all employees). The 18 industries are: civil Engineering; **construction**, demolition, and completion; electronics; **metal** and machinery; plastic, glass and concrete; textile and paper; logistics; wood and furniture; agriculture, forestry and fisheries; **slaughterhouses**; nutrition and stimulants (beverages, tobacco, etc.); police, emergencies and prisons; haircuts and other personal care; cleaning; **passenger transport**; **day care centres and residential care and home care**.

A number of regulations have been amended in the recent years (Welfare reforms), implying that citizens must be on the labour market for a longer period of time before retirement. In this context, the need for the establishment of special retirement regulations for citizens affected by carrying out arduous (wearing) work and work within abrasive industries is discussed. In the meantime, there are no such rules establishing general early retirement due to abrasive work today.

Later retirement is determined not only by changing rights and regulations, but also through providing special contributions to make a longer life become a better life and through giving better conditions throughout the individual’s working life so as to make it longer and of great quality. Therefore, The Welfare Reform has taken initiatives aimed at preventing ‘wear and tear’ and improving the working environment, among others in industries where many are threatened with ‘wear and tear’. One of these initiatives was to establish a Prevention Fund to prevent physical and mental ‘wear and tear’. Since 2012, this fund also provides support for:

- Initiatives that prevent physical and psychological ‘wear and tear’ and accidents at work and occupational diseases,
- Initiatives that help to retain older people as well as employees with reduced working capacity or contribute to early return to work after illness, and
- Initiatives that contribute to inclusion in the labour market.

XV. The results of the field research

Foundry workers consider their work as damaging due to a lot of heavy and awkward lifting, awkward postures (work that requires kneeling and twisting the body), air pollution and noise. Experts also unilaterally describe repetitive work and vibrations as damaging factors. Psychosocial factors are also present: mental stress is a reality mainly due to weak planning and work organization, resulting in significant time constraints. Workers and trade unionists declare that, when the company experiences a relatively high level of sickness leave, the management is fully aware that arduous work leads to strain; they recognise that the management is working continuously on improving technical aids and deflecting to technological and organizational change. Strong cooperation between management and employees is highlighted. There is no special remuneration system associated with the various ‘wear and tear’ tasks, though workers would like to see wage differentiation connected to strain/wear.

With regard to the impact on future work, the widespread perception is that it is not possible to dispute current duties up until the pension without a transition to less arduous work. Therefore, the interviewees believed that, at some point, they would be forced to switch to other less wearing work in another company, since they do not believe that such jobs will be there in their current company.

The general trade union policy in relation to arduous work is to prioritize strong preventive working environment legislation in order to ensure workplace retention as long as possible. This is combined with the high priority to upgrade qualifications continuously through training. Furthermore, there is a focus on strengthening professional qualifications, limiting working hours, breaks and improved pensions schemes in the collective agreement system.

As far as the possibilities for early retirement due to ‘wear and tear’ are concerned, there is no legislation that ensures this option. Through the collective agreement system, a special older persons’ plan is established. This plan allows a person to save holidays for the purpose of reducing working hours. The plan has been set up through local agreement in the individual company. Additionally, there are the possibilities of an agreed occupational pension and regulated retirement schemes, such as early retirement, flexible and occasional jobs as well as a work testing course and a disability pension.

Floor coverers consider their work as very arduous for the neck, shoulders, back, lower back and knees. As regards the mental consequences of the work, emphasis was primarily focused on strains caused by long sickness leave, pain, taking painkillers and loss of work ability. Work

has according to them serious health-related consequences so that none of those interviewed expected to continue floor-laying work until they retired (this fact having serious economic consequences for their future). Workers consider that: *“the employers are conscious that the work is of a wearing nature, but they are not specifically accommodating when it comes to reducing the strains because of fierce competition”*. Despite this opinion, workers’ representatives spoke of common (trade unions and employers’ federations) preventive activity being characterized by consensus, including: the design of guides for companies on mitigating and reducing specific health and safety problems in companies; and a consultancy service established and funded by the organizations which visits companies and advises them on the prevention and resolution of health and safety problems. Finally, they have been heavily involved in the introduction of new organizational and technical preventative initiatives.

There is no form of compensation for arduous work and the declared objective of the trade union is that members should be able to maintain their work (however, this is often very difficult in the context of ‘wear and tear’). The *“normal”* course for a person with arduous work is often that the pain for a shorter or longer period of time is handled with painkillers. Later the person goes on sick leave. Hereafter, the employee is relocated to a less arduous job or possibly retrained to other professions and finally possibly gaining early retirement.

None of the elderly-**care workers** interviewed experienced their work as being wearing at the beginning of their career. However, as the different types of trouble began to appear, they began to recognize the fact that parts of the work resulted in various forms of physical ‘wear and tear’ to the body as their personal responsibilities often meant a lot of heavy lifting and awkward postures. On their part, the workers’ representatives believe that the psychological area should be given higher priority because it is a predominant issue (violence, stress...). They all agreed that the work would have an impact on the quality of their future life as their various forms of ‘wear and tear’ resulted in increasing troubles.

The way in which ‘wear and tear’ has been dealt with in the care sector is considered as “best practice” by trade unionists: elderly care has been regarded as wearing work for many years and there has been a wide range of initiatives by the authorities and social partners. The definition of the criteria for wearing work has come from the authorities, though established through extended social dialogue and building on research conducted by multiple researchers over an extended period of years.

According to all the interviewees, there is a good dialogue between the management and the employees to prevent the wearing work: relevant support equipment is acquired and various treatment services (physiotherapy and gymnastics) are offered. However, the most difficult

discussions on prevention are about work organization as this often increases the economic cost and the economy is a crucial factor in relation to enhanced prevention.

There is no special compensation linked to wearing work (sometimes the work is done in reduced hours but without any financial compensation); nor there are special arrangements for ‘wear and tear’ in relation to scaling down and pensions. There are a number of arrangements of a more individual character, such as a more senior contract and gentler jobs, just as there can be private occupational pension arrangements, which allow downscaling. In addition, there are ordinary arrangements for retraining, flexible jobs and early retirement. Nevertheless workers’ representatives highlighted increased preventative activity by the pension industry with the development of incentives and ideas for prevention and retention rather than compensation and outlays being preferred.

The processing **line workers in the meat sector** do not consider their work as damaging in the first years of employment... but after a number of years they begin to experience different kinds of pain in the body and they start to realize the ‘wear and tear’. They mentioned a lot of heavy lifting, one-sided repetitive work and the high pace of work. The experts also pointed to significant problems with noise, as well as bullying in certain areas.

According to trade unionists there are criteria for assessing both heavy work and one-sided repetitive work, designed in dialogue between the authorities and the social partners. Employees complained that many actions that may reduce damaging work are, however, introduced simultaneously with a continued increase in pace in order to ensure performance and wages. According to the OSH expert, a cornerstone in prevention is the development and implementation of technical aids in relation to slaughter, boning, processing and packing work. Another cornerstone is rotation between different work functions with the aim of achieving variation. Moreover, those interviewed considered that piecework was a significant factor in relation to reducing ‘wear and tear’ in the slaughtering area, since this system contributes to an increased tempo and limited opportunities for rotation and therefore variation in the work.

Compensation for ‘wear and tear’ is not widely implemented: there is no special compensation associated with exhausting work besides that harmonious arrangements resulting in a relatively high salary. In a similar way, there are no formalized arrangements for retirement due to the wearing work, apart from senior conversations being introduced from the age of 55 year aimed at adapting the work to the capacity of individual employees so that they can be maintained in the company. However, the possibilities for accommodation are limited and the most common means is reduced working hours with consequent loss of earnings. This fact is confirmed by trade union representatives; there are only very limited examples of early

withdrawal in connection with wearing work and common to these is for employees themselves bearing the costs.

Bus drivers working in the public sector regard their work as wearing work, physical ‘wear and tear’ being linked to sedentary work, rigid posture as well as coldness while mental ‘wear and tear’ is associated with time pressures in relation to adhering to the route, cases of violence and harassment, as well as many “near misses”. Trade union representatives and OHS experts agree on these points and they add the impact of vibration. Moreover, competition within the bus transport sector has been increasing for a number of years and shifts have become more strained, seen in particular in the light of the increasing intensity of traffic. This has resulted in increased pressure on bus drivers and hence increasing ‘wear and tear’. Trade unionists pointed out that the social partners have been involved in efforts to determine the criteria for arduous work and are very active in its prevention. Emphasis is placed on prevention taking place through agreement between employers and employees, which is vital for an effective workplace. Prevention primarily takes place through the preparation of written guidelines and various forms of training.

Nevertheless both trade unionists and workers highlight the fact that, while being aware of ‘wear and tear’, employers manage it very differently. As regards the inside of the buses and thus part of the physical ‘wear and tear’, there is often goodwill to find or develop preventive measures. On the other hand, it seems to become increasingly difficult to find sufficient preventive measures against mental stress caused by tighter schedules and less opportunities for breaks; this latter point must be related to the increased competition which has led to difficulties in obtaining constructive dialogue on the prevention of, in particular, mental ‘wear and tear’. Accordingly trade unionists recognise that *“examples are also set to develop further preventive measures. But the majority of these initiatives do not survive the fierce economic competition with the industry”*

There is no associated compensation in relation to the wearing work (obviously it is possible to work on a part-time basis but with a corresponding reduction in salary). The issue of retirement is one of concern for workers who wonder whether it would be possible to proceed to retirement in the light of the changed retirement schemes; nevertheless, there are no special retirement schemes in connection with wearing work; in the collective agreement system, there is an option available for reducing working hours from the age of 60 but this happens solely through different forms of user charge (paying oneself).

In the **distribution centres sector** the work is considered arduous as it involves both the physical as well as mental stress connected work that involving picking. Physical ‘wear and tear’

is mainly daily big lifting (heavy and often unmanageable burdens) and rigid posture but also many poor postures and much walking and standing work. On the other hand, the mental ‘wear and tear’ occurs with the ever-increasing pace. Finally, there is a lot of evening and night work.

According to trade unionists, some of the characteristics of the sector have a direct impact on considering the work to be arduous: there are many young employees who are in the industry only for a limited period of time; there is a tendency for arduous work to be organized so that it is carried out on a part-time basis with looser compliance with the industry. Similarly, new companies are established in connection to the increasing on-line trade. Finally there are often problems with different kinds of workloads in these companies including, among others, spatial conditions, lack of technical resources, work organization, etc. On a global basis, trade unionists stated that many technical resources have been developed to reduce the physical stress, but they are not used adequately. However, the supervisor interviewed considered that technical aids in the form of vacuum suction, moving pieces, etc. have resulted in large reductions in ‘wear and tear’ to the body.

The final recommendations were given by the OHS expert: working for the prevention of ‘wear and tear’, it is still necessary to focus on changing the work of lifting, impulsion and transport. Similarly, it is important to continue the development of technical means, from the fully automated warehouse to manually operated devices, and it is vital that the aids are used as intended. Thus, it is also important to focus on the development of company skills as well as continuously assessing ergonomic and mental stress with managers and employees so that the necessary preventive measures can be developed and implemented. Finally, an important supplement for the prevention of ‘wear and tear’ can be health-promoting measures in the form of exercise etc.

7. SPAIN

XVI. Arduous work: definition, criteria, procedures

There is no definition of arduous work as such and no separate regulation of the arduous work factor in the Spanish legal system. Nonetheless Spanish legislation does refer to this aspect in its regulation of working hours as well as regarding early retirement (the amount of pension and the reduction coefficients are established). In a similar way there are no nationally unified criteria to determine what constitutes arduous work and the only existing procedures on this issue concern early retirement; with regards to the latter and there are theoretically common

and objective procedures applying to workers and self-employed workers performing any type of **activity that is especially arduous**, entitling them to retirement age reduction coefficients.

The procedure may generally apply on the basis of the following two assumptions:

- Occupational activities in the scales, categories or specialties whose performance entails being subjected to an exceptional level of arduous, dangerous, unhealthy or toxic work.
- Occupational activities in the scales, categories or specialties whose fulfilment, depending on the physical or psychological requirements demanded for its performance, increase significantly from a certain age onwards.

The procedure includes:

- ground work by the National Institute for Health and Safety in the Workplace (INSHT) to produce technical papers that measure how arduous, toxic, unhealthy or dangerous an activity is on the basis of an analysis of specific indicators;
- if the previous report concludes that working conditions cannot be changed and thus necessitates the application of reduction coefficients or lowering the retirement age, a cost calculation study is conducted in order to determine which these reduction coefficients are;
- afterwards the minimum retirement age can be set for each activity and the relevant reduction coefficients applied on the basis of these cost analysis findings;
- once a coefficient has been approved for a specific occupation, the ordinary statutory age of retirement for each worker will be reduced by an equivalent period as a result of the application of the appropriate reduction coefficient for the scale, category or specialty of each sector or working activity to the effective period worked in that specific activity (in any case the minimum retirement age may be less than 52 years of age);
- finally, the worker must prove that (s)he has carried out the activity entitling him/her to reduction coefficients for *“an effective working period equivalent to the minimum contribution period required for entitlement to a retirement pension yet on no account can the enforceable period exceed fifteen years for this purpose.”*

In practice this procedure has still not been used in so far as the INSHT reports are too general and aggregate to meet trade union criteria. As a result, the social partners and government have failed to reach agreement – which points to the difficulties or lack of political will to apply the new early retirement mechanisms effectively. Furthermore, and as it stands, there is no preliminary list of potentially arduous occupations to be examined (despite a tripartite commitment agreed on 2011).

Against this lack of effectiveness of existing mechanisms, several factors have been acknowledged by workers, experts and trade unionists in research throughout the field as leading to the characterisation of jobs as arduous:

- **Bus drivers** referred to: changing shifts and work schedules, extreme temperatures, night work and eating habits during the working day *“among professional drivers myocardial infarction is a major cause of death”*
- **Foundry workers** referred to: exposure to dust, noise, chemical products, the high temperatures or sudden temperature changes, the constant physical effort as well as repetitive movements and tasks; work organisation is also mentioned - *“at departure time, they cannot leave until the substitute has already arrived and they cannot leave the post in the middle of the production process”*
- Trade unionists and workers in **distribution centres** referred to *“repetitive movements and the weights you have to carry”, “the cold, [and] the artificial light”*; pickers who work at three heights expressed the difficulties they encounter in this area *“due to the equipment they use being poorly adapted for such heights”*
- **Elderly-care workers** highlight the risks of a physical character (manual handling of loads and the repetitive tasks) as well as the biological problems caused by the environmental conditions in the patient’s home and the contagious diseases carried by patients; according to them, and as the workplace is the user’s home: *“that exacerbates the above risk factors and working conditions at all levels”. “The beds are low, the furniture of the house in the way, working conditions are often very cramped, not to mention the stairs ...”, “Moving the patient to the bathroom can become a nightmare.”*
- **Meat industry workers** put forward: major cadences of work, significant presence of blood contact with bio-hazardous elements and working with noise all the working day as well as the repetitive movements and the handling of loads.
- **Carpenters/floors coverers** mentioned the forced, painful and tiring postures and maintaining the same posture for prolonged periods of time (*“I’ve spent 50 years of my life working on my knees”*, said one interviewee), repetitive hand and arm movements, the exposure to noise *“Some sounds cannot be removed even with the PPEs”*.

A common trend is the increasing importance of **psychosocial risks** as a factor of arduousness at work:

- **Bus drivers** stated *“There are 200 bus lines that change every time and there are street cuts, detours or demonstrations, so the route is unpredictable”* and added that their chiefs even phone them if they are not running on time;

- **Workers in distribution centres** highlighted the direct relationship between the system of compensation and situations of stress: *“it is the productivity bonus that makes some employees work at a pace which is well above what is considered to be healthy”*; workers therefore feel there is a need for *“an overall maximum salary to be established in order to avoid large increases in productivity and thus prevent workers from working at a very high pace in order to make a lot of money”*.
- **Foundry workers** highlight the stress due to production targets: *“We work on the basis of time trials, dependent on the continuous caster”, “sometimes we do not even have time to eat a sandwich”*. In a similar way, **workers in the meat sector** proffered the stress caused by the speed of the chain and the work organisation.
- **Carpenters/floor coverers** put forward the stress generated by the work *“you finish your workday so tired that you don’t even want to talk to your wife”*, a worker said

The consequences of exposure to arduous working conditions obviously differ according to the profession, ranging from musculoskeletal disorders or cardiovascular diseases to stress and depression; however, there is one common feature: **consequences increase with age** and that is why workers, experts and trade unionists advocate early retirement policies: a retired older care worker said that she retired one year before the stipulated date because she reached an agreement with the company as she *“couldn’t take it any more”*; trade unionists declared that *“Most workers become burned out and exhausted at an advanced age”*; the retired floor coverer recognized that *“my professional capacity was diminishing a lot, I could not have been repositioned, nowhere!”*.

It must be highlighted that the issue of arduousness at work is not always adequately dealt with or understood even at expert or trade-union level: **experts from IRSST** (Regional Institute for Health and Safety at Work) consider the issue of strenuous work as *“quite tricky”* because it is difficult to determine the criteria by which it is determined as such. They think it is interesting to pay attention to the following fact: *“arduous work may appear as work in which, despite having no danger and having the appropriate risk prevention measures, there are certain aspects inherent to it that cannot be mitigated by technical or organizational means but “should” be in the future”*; **trade unionists in the construction sector** understand there are many construction jobs which are *“really strenuous”*, but not the one of floor coverer; **trade union experts in the meat sector** state that *“arduousness is not an issue taken into account in collective bargaining and it is not a priority right now”*; **union experts in the distribution centre sector** confirm that *“arduousness is integrated in the sector and in this profession specifically - **there is a normalization of arduousness”***.

XVII. How to deal with the consequences of arduous work?

The consequences of arduous working conditions can be addressed / avoided in a double way: prevention and compensation/reparation.

XVII.1. Prevention

Obligations in terms of the prevention of occupational risks are clearly stated in Spanish legislation and cover the six professions included in the scope of the current research. Despite this legal obligation, the evidence provided by the field research shows that there is a lot to be done regarding prevention:

- **Bus drivers** talk about great difficulty in prevention: *“company directors are not aware of the real hardness of our work, they just want buses to go faster and to save time”, “they could take many measures instead of following the minimums of law”*. In a similar way, **workers in the meat sector** consider that *“the company does not want to hear about increased preventive measures”*
- The union experts in the **distribution centre** sector believe that overall *“the law is not fully enforced”, that “risk assessments have shortcomings”, that “there is no real culture of prevention in businesses”, and that “psychosocial risks are not properly detected in medical examinations, nor are the stipulated rest periods respected in cases where working with cold is required.”* Furthermore, they state that PPEs are not used properly because of *“the slowing effect on the tasks to be performed until the worker gets used to the new material and because the workers are not used to them”*.
- **Foundry workers** highly value the company’s health and safety plan because it is well above the legal provisions, while admitting that its implementation is not always adequate as it is not always respected. However the trade union expert considers that there is *“a lot of paperwork but few technicians who actually check what happens to security.”*
- **Elderly-care workers** feel that *“there has been an improvement on the past in terms of technical means and their availability, but the current period of crisis has caused a regression compared to previous years”; “In very extreme cases, they provide a hoist or two persons to help move the patients, but this possibility is not considered in most cases, only when the weight is significantly high.”*
- On the **construction** sector, the pensioner recognizes that prevention measures have improved compared to the past *“but there is a problem with no solution, to cover a floor it is compulsory to bend down, there is no other way to do it, this fact is not possible to be avoided”*.

The issue of employability, which can be related to prevention, is addressed piecemeal both at state and collective bargaining levels; nevertheless and in practice, the issue is highly controversial:

- **Unionists on the bus drivers** sector are skeptical about it, *"There may be relocations but a very small percentage; if we insist on this measure, it will create a lot of idle labor". "if you renew the staff, you bring young workers with better conditions to increase productivity"*.
- The crisis suffered by the **foundry sector** in recent years makes the management of workers' employability difficult.
- The issue of employability is addressed in a somewhat fatalistic way in **the meat sector**: *"anyway, you cannot promote inside your company and, because of the crisis, neither is changing jobs (either inside or outside the sector)"*. This idea is supported by the trade unionist, who judged functional mobility in low-skilled occupations as very difficult.
- In the **construction sector** *"Only some collective agreements foresee relocation but in very specific circumstances"* says a unionist. Furthermore, the majority of SME companies are unable to absorb relocations.

XVII.2. Compensation/reparation

The issue of **compensation/reparation** can be addressed in a double way: compensations (bonus, working time arrangements...) and the mechanism of early retirement. The analysis of the case studies shows that arduous working conditions are not always compensated but also that this issue is quite controversial: no bonus or compensation exist for **bus drivers** (but the interviewees said that they rejected a bonus for dangerousness and instead of that in the a process of collective bargaining they demanded more training and better PPE (personal protective equipment); in the **distribution centre** case study various bonuses (nocturnal, cold) are provided to partially offset factors of arduousness and the workers questioned were seen to be particularly attached to them; in the **foundry case** study there was an arduousness bonus but it became part of the base salary; in the elderly-**care sector** and according to a trade-unionist *"In the absence of proper prevention, it is not possible to discuss compensation policies either"*; **workers in the meat sector** earn a number of bonuses in order to compensate for their exposure to occupational hazards (arduous bonus, noise bonus and productivity bonus), but the workers express their desire not to receive bonuses to compensate for the risk factors: *"If I earn (bonus), it's ok, but I don't want to become deaf"*; finally in **the construction sector** a trade unionist said *"To advance in prevention issues, we should say goodbye to compensation policies" "the struggle for bonuses is not the best way to prevent... we do not want money for health"*.

The second aspect of compensation/reparation policies is the **early retirement policy**. **In Spain there is a theoretically close link between arduous work and retirement policies** as the carrying out of arduous work entitles a worker to early retirement according to the law; however, as long procedures aiming to regulate access to early retirement have not been implemented, **nothing is happening in practice**; according to trade unionists, the main barriers to progress on issues of strenuous work are first political and secondly economic. *“The logs and reports we need are costly in time and money, meanwhile the government does not step in, so strenuous work is a feasibility problem rather than a problem of legality”*, explained a retirement expert.

The issue of early retirement related to arduous working conditions presents the same features in almost all the professions covered by the present research:

- Workers in distribution centres, elderly care workers, process line workers in the meat sector, carpenters/floors coverers and bus drivers do not benefit from early retirement mechanisms.
- In the foundry case study, collective bargaining has improved retirement conditions:
 - The Group’s Framework Agreement states that *“The Company, (...) will offer partial retirement, with simultaneous replacement contract subscription, to workers born before 1958 inclusive.”* *“ A committee will be created at central level to carry out an analysis could be established...”*
 - The company collective agreement extends the possibility of partial retirement with a replacement contract to workers born in 1949.

The feelings of workers towards the issue of early retirement are the same for all professions: they all consider that they should have the possibility of retiring earlier due to their arduous working conditions.

The issue of early retirement is largely debated at trade union level: **The union pension expert from the distribution centre sector** considers that *“currently, what is at stake in Spain is the very continuity of the system as known until now. This is going to impose a model more in tune with the European pension model, whereby the state provides a minimum and the rest is funded privately, primarily by companies. Companies are against this system and are trying to ensure that it is the workers themselves who bear the cost of private contributions through private pension plans. To this is added the fact that wages in the sector are low, and therefore so is the contribution base, which is why existing pensions are rather small, and why, with the new model sought to be imposed, they will be even lower”*; **the Metal federation expert** understood that *“there has been little progress in legislation regarding the reduction coefficients, there have been many requests from the trade unions, but none has been heard”*; finally **a unionist in the construction sector** is very critical about the early retirement legislation:

- Early retirement is financed by extra contributions from employers and workers, and the latter ones shouldn't be allowed because early retirement is a compensation for injuries caused by work. *"It is even unconstitutional" he says, "the contributions of workers should be replaced by mutual contributions, for example"*
- The initiative to ask for these coefficients to be applied is inoperative because it comes through the administration that *"will not react according to current cuts policies"* or through agreement between employers and unions, but companies don't want to negotiate because it means more costs for them

8. POLAND

XVIII. Arduous work: definition, criteria and procedures

The concept of arduous working conditions is not defined in the Polish Labour Code, nor in its implementing provisions. However, the 2008 law on bridging allowances establishes a link between early retirement and some professions with conditions that could be considered arduous.

Professions of a special nature are professions that entail a certain degree of responsibility and require certain psychological and physical abilities; the probability that these professions are exercised correctly, without jeopardising public safety (including people's health and lives), decreases before the statutory retirement age because ageing causes psychological and physical capacities to deteriorate.

Professions with special conditions are professions linked to risk factors that are more likely to permanently damage health as a worker gets older. These professions are exercised under special conditions, in a working environment characterised by:

- forces of nature and/or environmental factors;
- technological processes:
 - associated with temperatures below 0 °C or above 28°C ;
 - associated with high atmospheric pressure;
 - associated with excessive physical efforts and the high static load that comes from keeping the joints in certain positions for long periods, and requiring energy use exceeding 6,300 kJ for men and 4,200 kJ for women;
 - requiring postures that entail keeping the joints in awkward positions due to the need to exercise a force exceeding 10 kg for men and 5 kg for women for 50% of the total working time.

Despite the implementation of technical, organisational and medical prevention measures, these professions have requirements that go beyond workers’ capacities as these end up being limited by the ageing process before the statutory retirement age to such an extent that workers can no longer work as well as before in their usual jobs.

Employers must register lists of jobs that could be considered arduous and provide a list of the employees performing those jobs. The social security office then uses the data to create a centralised register of the workplaces where arduous jobs are done, plus a centralised register of the employees doing those jobs. Employers must pay contributions to the bridging allowance fund for each of the arduous jobs within their company.

In addition to the registers mentioned above, employers must keep an up-to-date register of factors that may be harmful to health for each of their professions. The register is made up of sheets that describe each profession in terms of the technological processes it uses, the production type, the operations performed, the equipment, and the associated harmful factors (broken down into *chemical factors*, *physical factors* and *factors linked to industrial particles*).

The factors contributing to arduousness vary from job to job, but it is worth highlighting the increasing importance of psychosocial factors:

Tilers reported the following: awkward postures (kneeling or crouching while working), exposure to dust, chemical substances and physical phenomena (cold, vibrations, noise), heavy loads and repetitive movements. Some of these factors (heavy loads, repetitive movements and awkward postures) were also mentioned by **slaughterhouse** workers, who also reported issues with pace (which stem from the award of very high bonuses for productivity), work organisation and psychosocial factors deriving from the attitude of their superiors, *“who tend to be rude, and even humiliate workers”*. **Healthcare workers** described their work as *“arduous and exhausting – both physically and mentally”* and mentioned that *“in four years, 80% of the staff have been replaced”*. In **foundries**, workers had noticed the appearance of a new phenomenon in the past 10 years: psychological pressure and stress due to increasing emphasis on profitability and productivity. Both workers and trade union representatives said that *“depression is on the rise, and more and more workers require psychological support”*. **Distribution centre workers** found work organisation and the pace of work to be the biggest factors in arduousness: *“for some jobs, the company only recruits young people because performance standards make the work too difficult”*. **Bus drivers** experienced the same kind of psychological pressure: *“it is very difficult to keep exactly to the timetable, and yet you stand to lose your monthly bonus if you are just 30 seconds late.”*

The impact of arduous work on workers’ health varies depending on the exposure factors and the length of exposure. Effects may include MSDs, a feeling of exhaustion, trouble sleeping or psychological problems. However, workers, experts and trade unionists all agree on one thing: **the effects of arduous work become more severe as workers age.**

For example, **bus drivers** say that *“the probability that tasks will be carried out correctly, without jeopardising public safety (including people’s health and lives), decreases before the statutory retirement age because ageing causes psychological and physical capacities to deteriorate”*, adding that *“drivers are dying younger and younger – at the moment, the average age at time of death is 64”*. A fork-lift truck operator working in a **distribution centre** said that he could *“continue working in this kind of job for another seven years or so,”* but that after that, he would have to *“find a far less arduous job for health reasons”*. In the **foundry** examined for the study, one of the workers (aged 58) reported that his *“health clearly deteriorated”* when he was 55, while his colleagues pointed out that workers were dying at ever younger ages: *“it is becoming increasingly common for people to die one or two years after retiring”*. Finally, all the interviewees from the **elderly-care sector** said that the physical effects of their job were too severe for anyone aged over 60 to do the work without taking risks and exposing the patients to risks.

XIX. How should the consequences of arduous work be addressed?

XIX.1. Prevention

According to the law on work arduousness, employers must: organise work in such a way as to reduce its arduousness, particularly for monotonous, repetitive tasks that are carried out at the same pace; reduce the length of working time spent in conditions that are particularly arduous or harmful in the long term, by introducing breaks (to be included as working time); organise medical examinations for workers transferred to arduous jobs; and provide meals and drinks for workers working in particularly arduous conditions.

- However, the cases studies showed that the situation on the ground does not reflect these requirements:
- According to **bus drivers**, prevention is simply ignored: *“when the transport company buys a new bus, it puts financial criteria ahead of the safety and comfort of its drivers and passengers”*;
- **Distribution centre workers** felt that not enough was being done in terms of prevention: *“the situation would only get better if management complied with the Labour Code and respected employees and their work”*;

- Some **foundry workers** had a fatalistic view of arduousness in their line of work; they said that *“some factors contributing to arduousness (e.g. noise, temperature) cannot be significantly reduced or eliminated”*;
- In the **elderly-care sector**, staff wished there was *“a real prevention system and treatments tailored to their needs, as well as compensation for occupational diseases”*;
- The trade unionists in the **construction** sector reported that *“health and safety rules are violated almost systematically”* and stressed that *“the level of prevention provided by the current legal framework is inadequate”*.

The interviewees sharply criticised two key elements in the prevention of arduousness, namely labour inspectors and occupational health physicians. **Foundry workers** said that *“people only ever consult the occupational health physician to get a paper certifying that they are in good health”*, adding that *“occupational health physicians have limited knowledge of our jobs and of the occupational diseases that tend to arise”*. They concluded that *“at present, occupational health physicians do not fulfil their role of preventing and diagnosing illness”*. In the same vein, the workers and trade unionists in the **meat processing sector** said that *“the doctors never talk about occupational diseases”* and that *“the labour inspectorate does not always take ergonomics into consideration”*. Finally, one of the **tilers** interviewed for the study said that *“the labour inspectorate does not penalise the company enough when it sees non-compliance on a site”*.

The issue of employability – as a corollary of arduous work – is starting to be addressed by Polish legislation:

- In February 2014, the social insurance body (ZUS) announced a programme for funding measures that would enable the employees of micro-companies and SMEs to continue working until the statutory retirement age, i.e. to guarantee their employability in terms of health;
- the employment minister must, before 31 December 2014, suggest measures to open up access to vocational retraining courses for people who have worked for at least 15 years in a profession of a special nature or a profession with special conditions, and who are not entitled to early retirement or a bridging allowance. A national training fund will be set up to finance this.

Only time will tell if these measures prove effective. However, they could help to make up for the current lack of employability tools, an issue that was highlighted by the case studies:

- There are no special training or retraining measures for **bus drivers**, which is all the more problematic given that the sector does not have an efficient system for

recognising occupational diseases. According to the workers, *“if a worker is declared unfit for work after a medical exam, he is laid off without compensation”*.

- In **distribution centres**, *“there are no training systems to help us switch, in the medium term, to less arduous jobs. All in all, training is handled poorly”*.
- Everyone interviewed in **slaughterhouses** said that there were no programmes for retraining or job switching, even though *“several hundred employees leave the company each year, and many of them leave because of mental and physical exhaustion”*.
- Almost nothing is done to address the employability of **tilers**, and there are no systems for retraining or job switching.

XIX.2. Compensation/reparation

Compensation and reparation can be addressed in two ways: compensation (e.g. bonuses, adjustment of working time) and early retirement schemes. Analysis of the survey results shows that compensation is not a very common solution:

- There is no compensation at all for **bus drivers, tilers and elderly-care workers**, or there is no system of bonuses for arduous work;
- In the **meat processing sector**, the compensation system that existed before the pension reform (allowances and compensation linked to working conditions) was phased out when the reform was adopted, as it enabled employers to terminate most of the collective agreements that provided for these systems; the situation is similar in **foundries**, which used to have compensation schemes for arduous work. These included additional leave and allowances for the workers most exposed to arduous conditions;
- Finally, **distribution centre workers** do not receive any compensation for arduous work, other than energy-rich meals and drinks for people working in the cold.

The second component of compensation/reparation policies is **early retirement schemes**. The issue of recognising arduousness in early retirement schemes was one of the key points of contention between the government and the trade unions the last time the system was reformed. Among other things, the trade unions called for the inclusion, in the bill, of a list of jobs of a special nature and tasks performed under special conditions for certain professions. Their suggestions were rooted in medical arguments derived from analyses and studies commissioned by the trade unions and performed by recognised bodies. Nevertheless, the law

came into force on 1 January 2009 without taking account of the trade unions’ arguments. This has resulted in:

- a reduction of (around) half in the number of jobs giving entitlement to early retirement (there are now around 50);
- gradual erosion of the right to early retirement for jobs recognised as being arduousness (except for the special schemes in place for the police, security and armed forces and miners).

The gradual erosion of the right to early retirement is creating a situation where there are two categories of workers performing work recognised as being arduous: one group who are entitled to early retirement at the age of 55 or 60 (after 20 years’ work for women, or 25 years’ work for men) and one group who are not entitled to early retirement because they cannot meet the conditions set down by the law – namely the requirement to have worked under special conditions or done a job of a special nature before 1 January 1999.

The trade unionists interviewed for the study held that these criteria had been set with the aim of gradually dismantling the early retirement system, which they felt to be “*an unacceptable measure*”. However, there is a compensation measure for people who have done a job of a special nature or worked under special conditions for at least 15 years, and who are not entitled to early retirement. This compensation is paid at the worker’s request and takes the form of a supplement on top of the initial retirement payment.

The early retirement situation differed in each of the sectors included in the study:

- Following the reform, **bus drivers are no longer entitled to retire at 60**, except for the oldest workers, who meet the requirements outlined by the law on bridging allowances.
- The situation is the same in **foundries**, where, prior to the reform, 52 professions in the sector were considered arduous and almost 50% of foundry workers were entitled to compensation for the negative effects of their work on their health. Now, only eight professions in the sector meet the criteria for inclusion as a profession exercised under difficult conditions.
- The same goes for the **meat processing sector**: only two types of job remained classified as arduous (due to the temperature at which the work must be performed), subject to criteria linked to age and length of contribution period, whereas 30 professions in the sector were considered arduous in the early 1990s;
- The working conditions for some professions in **distribution centres** (refrigerated warehouses and warehouses for frozen products) and the conditions experienced by

people working outside in the cold fit in with the definition of arduous work, and so entitle workers to early retirement. However, in the case examined for this study, the workers cannot take advantage of early retirement schemes because the law sets down an additional condition: to qualify, a worker must have worked under arduous conditions before 1 January 1999, and the workers interviewed for the study had not. These conditions introduce an element of discrimination and reduce the protection offered to young workers.

- Work in the **elderly-care sector** is not included on the list of arduous professions, so workers in the sector are not eligible for early retirement schemes. In this regard, the workers commented that: *“political decision-makers just pretend to care about arduous conditions at work”*.
- **Tilers’** work is not included in the list of arduous jobs giving entitlement to early retirement, despite the trade unions’ efforts to ensure its inclusion when the reform was being drafted.

9. ROMANIA

I. Arduous work: definition, criteria, procedures

There is no definition of arduous work in the Romanian legislation but a classification of labour conditions: normal, difficult (outstanding) and special, depending on the difficulty and risks associated to a certain job; the pension contributions differ depending on the classification of the job:

- **Jobs in special working conditions:** jobs where the degree of exposure to professional risk factors or to specific conditions pertaining to some categories of public services, during at least 50% of the normal working time, can lead in time to occupational diseases, to dangerous behavior in the activity, with severe consequences on occupational health and safety.

The Law provides a list of occupations that qualify for special working conditions, including, with regards to the scope of the present project, a range of professions from the iron and steel sector and other metalworking sectors.

- **Jobs in difficult (outstanding) working conditions:** jobs where the degree of exposure to professional risk factors or to specific conditions pertaining to some categories of public services, during the entire duration of the normal working time,

can lead in time to occupational diseases, to dangerous behavior in the activity, with consequences on occupational health and safety.

The inclusion of a workplace in difficult (outstanding) conditions involves:

- nomination of the workplaces by the employer together with the representative trade unions or workers' Health and Safety representatives who also together assess the workplaces in order to identify the presence or not of occupational risks,
- obtaining the approval from the Territorial Labor Inspectorate which is accompanied by a list of technical, sanitary and organizational measures to be implemented to remedy the factors that have led to such a qualification,
- declaration to the territorial pension offices on a monthly basis of the list of all the persons that have worked in difficult (outstanding) working conditions (as they are granted specific medical checks-up and their social security contributions are taken into account for early retirement)

According to the Ministry of Labour as of August 1, 2013:

- 145 units have approval for inclusion in difficult working conditions
- 1213 jobs were included in difficult working conditions
- 32,993 workers were employed in difficult working conditions, i.e. 0,76% of the total workforce

Difficult (outstanding) working conditions are established for a workplace and are assessed depending on the presence in the working environment of certain risks: physical, chemical or biological factors. Through the field research these factors were acknowledged by workers, experts and trade-unionist as leading to the characterisation of jobs as arduous:

- **foundry workers** referred to: the dust “*which is everywhere*”, the physical effort, “*on a daily basis we have to lift weights of around 7 kg*”, the presence of gases and pollutants in the air or the very low temperatures in the winter “*in winter hands are sticking to the control panel*”
- trade unionists and workers in **distribution centres** referred to physical factors (low and high temperatures, air flows) as well as the manual handling of loads and repetitive physical operations (bending, lifting)
- **elderly-care workers** highlight the efforts needed to move and lift the patients “*it is very hard lifting a person that has no strength*” as well as the working environment and the long shifts (up to 12 hours)

- **experts in the meat industry** recognize as major factors of “arduousness” the postures (normal standing or sitting down) as well as the overuse resulting from the manual handling of loads, the repetitive movements and the forced pace of production system
- **carpenters/floors coverers** put forward: repetitive gestures, postures (arms raised, leaning forward), presence of pollutants, dust, sawdust, unpaid extra hours, stress related to deadlines and technical and mechanical malfunctions

It must be highlighted that **psychosocial risks are not taken into account** when defining a job as being done in difficult working conditions. However, and as shown by the case studies, it appears that psychosocial risks are put forward by workers when describing their work as arduous:

- **Bus drivers** consider *“very stressing to drive fully focused for 9 hours for 2 days in a row and 6 hours on a third day” “Some of our colleagues died as they were driving due to heart attacks caused by stress”* and they add *“Compared to a truck driver, the stress is sensitively higher: a truck driver carries only goods that in addition are insured and they have a more regulated working programme, while as a bus driver you have to transport human beings and the responsibility and pressure are much higher”*.
- **Workers in distribution centres** referred to the stress associated with the verification of products: the employee must report any discrepancy between the product and its characteristics according to the invoice and if errors are made, they are to blame.
- **Elderly care workers** highlighted that *“in some cases the patient can turn aggressive towards the staff”* and that leads to stress.

The consequences of exposure to arduous working conditions obviously differ according to the profession, ranging from musculoskeletal disorders or cardiovascular diseases to stress and depression. Nevertheless, there is one common feature - **consequences increase with age** and that is why workers, experts and trade unionists advocate early retirement policies: bus drivers agreed that *“after 55 years old the risk of a work related accident or occupational disease is consistently higher and that an early retirement policy is absolutely necessary”*; the metalworking trade unionist considers that *“employees in the foundry, especially in the most difficult areas such as cleaning, cannot work for more than 20 years without harm to their health...these persons should be able to retire around the age of 50”*; the caretaker interviewed agreed that *“being 55 years old (or even 50 years), you cannot carry out your duty due to your physical condition”*.

II. How to deal with the consequences of arduous work?

The Consequences of arduous working conditions can be addressed / avoided in a double way: prevention and compensation/repairation.

II.1. Prevention

In Romania there is a close link between compliance with the legal framework on occupational health and safety and the issue of special or difficult working conditions as the recognition of the latest depends on the **preventive measures** taken in the company. Despite this legal obligation, the evidence provided by the field research shows that a lot is to be done regarding prevention:

- **Bus drivers** explain that prevention measures exist, but they are not enough to mitigate the risks or they are not fully implemented: the buses have ergonomic seats that reduce the negative impact of vibration, but *“as they break, the company doesn't replace them with new ones”*,
- **Trade unionists in the foundry** said that the company does not do more than requested by the law; the same conclusion is drawn by workers who highlight that additional protective measures are needed especially during the cold season, adding that *“protection boots are often used until completely worn-out”*
- On the contrary, **elderly-care workers** assert that *“Prevention measures are carefully taken by the management: gloves, masks, waterproof overalls and boots”*. However they *“don't have special equipment that can help reducing the physical effort, such as cranes for lifting the patients”*
- In the **construction** sector the lack of collective bargaining is damaging prevention activities; according to trade unionists: *“working conditions in the workshops are not according to decent work conditions and the only thing implemented is better ventilation systems”*.

Two important pillars of the prevention system are Labour inspectors and Occupational doctors. However, their activity is widely criticized by workers and trade unionists: bus drivers consider that *“the role of the Labour inspectors regarding prevention is quite limited”* and, in a similar way, tilers explained that: *“In all our years of work, we have seen no labour inspector ever to come to the workshop and talk to the employees. The Labour inspector talks directly to the employer, checks the documents superficially and moves on”*; another worker added *“I went to the Labour Inspectorate to complain about the employer and I found no support at all”*

A last element must be taken into account regarding prevention: the adoption in 2011 of the new Social Dialogue Law meant a profound change in the regulation of industrial relations leading to a weakening of collective bargaining and allowing employers, whilst being obliged only to respect legal provisions, to decide by themselves the rules and measures to be implemented.

In fact trade unionists state that: *“the issue of working conditions is seldom discussed during collective bargaining and if it happens it’s dealt with at company level”*; the metalworking trade unionist added: *“compensatory measures are given priority in comparison to prevention measures”*.

The issue of employability, which can be related to prevention, is not directly addressed in Romanian legislation or by trade unions. Instead, it is considered that:

- When the rules of occupational health and safety are respected, employees maintain their employability;
- When the presence of pollutants or other factors leads to “arduous” work, it is acknowledged that the employability of workers is reduced in time and that is why compensation has been implemented (i.e. the reduction of their retirement age for some professions).

In practice, the lack of provisions on this issue is highly criticized by the persons interviewed:

- the trade unionist from the metalworking sector said: *“Employability is a sensitive issue, for several reasons. Firstly, there are no other companies with a similar professional profile in the region; secondly, workers exposed to health risk factors during a long period of time have lesser chances of being accepted by other employers; and, finally, as employees approach retirement age, their employability decreases naturally”*;
- the workers acting in the elderly-care sector highlight that: *“they can only apply for a similar job (i.e. nurse) but it is difficult to achieve as a degree is needed to be a nurse and they have rather few possibilities to attend the college given the work schedule”*
- the floor coverers emphasized that *“many of their colleagues that had suffered a work-related accident were laid off after coming back to work for not being physically competent for the job”*.

II.2. Compensation/reparation

The issue of **compensation/reparation** can be addressed in a double way: compensation (bonus, working time arrangements...) and the mechanisms of early retirement. Analysis of the case studies shows that arduous working conditions are not always compensated: no bonus or compensation exists in the meat industry, the elderly-care sector or in the carpenter/floor

coverer profession. However with regard to this point, a tiler said that *“economic repair is not a long term solution... my demand is the reduction of years of work and early retirement”*. In terms of the other three professions concerned: in **the distribution centre case study** some special bonuses are given to persons working in refrigeration areas, below zero or above 30°; the collective agreement on **public transport** establishes a compensation system related to the route where bus drivers are working on (several criteria are used to calculate the percentage of increment granted to each route) but bus drivers state that *“the actual system of compensations is not enough to cover the negative impact of their working conditions on their health”*, and they add *“an early retirement policy is absolutely necessary as arduousness increases with age”*; in the **foundry** case study, there is no specific compensation for arduous work except for the salary grid, which takes working conditions into consideration to a certain extent.

The second aspect of the compensation/reparation policies is **early retirement policy**. In Romania there is a close link between arduous work and retirement policies:

- For workers who have made contributions in periods **of difficult (outstanding) working conditions**, the reduction in the standard retirement age is between 1 and 8 years (a 3 month reduction per year worked in difficult working conditions). A minimum of 6 years’ contributions is required.
- For workers in **special working conditions**, the reduction in the retirement age ranges from 1 to 13 years, according to the contribution period achieved in these working conditions (for each year in special working conditions the retirement age is reduced by 6 months up to a maximum of 13 years).

On a global basis the reductions in the standard retirement age can be cumulated, but cannot exceed 13 years and the retirement age cannot go below 50 years for women and 52 years for men (some exceptions apply to military and Defense staff).

The issue of early retirement related to arduous working conditions presents the same features in almost all the professions covered by the present research:

- Workers in distribution centres, elderly-care workers, processing line workers in the meat sector, carpenters/floors coverers and bus drivers are not covered by the legislation granting access to early retirement for special or difficult working conditions
 - Before the last reform, bus drivers were considered as carrying out a job in difficult working conditions and so were allowed to leave for early retirement but today this measure has been cancelled.
- Activity in the foundries is considered as arduous work in terms of the national Pension Law and results into a reduction in the retirement age in those sections where workers are exposed to:

- The presence of above the limit crystalline CO₂ dust in the smelter area
- above the limit noise in the cleaning area.

This legislation means in practice that 63% of the total workforce in the foundry analyzed is recognized as being under special working conditions and benefits for a reduction in the retirement age of between 3 and 13 years, depending on the length of the exposure. In the view of the trade union leader: *“all employees of the company should have been included in the special working conditions scheme”* and the fact has been considered as discriminatory, leading some employees to go to court to have their working conditions recognized as special working condition, but with no success.

The feelings of workers towards the issue of early retirement are quite different in each profession:

- workers in distribution centres are quite young and they say that *“they do not experience particularly difficult working conditions”*. In fact the issue of retirement policies is not really of interest to them and the low level of remuneration and social packages seem to be a more stringent problem than working conditions for the workers interviewed.
- caretakers declared that *“the right to early retirement should be recognized given the risks and the responsibilities of their profession”*

The last pension reform (2010) did not change much of the framework related to arduous work while it increased the legal retirement age. The provisions related to difficult (outstanding) and special working conditions were similar to those provided by the former legislation (2001). However, some professions (like bus drivers) have been taken out of the list and that has led sectorial trade unions (metalworking sector, for instance) to fight for the preservation or inclusion of workplaces in special working conditions. Indeed trade unionists consider that: *“At the national level, the pension system is under discussion, but the difficult working conditions are not taken into consideration...; changes are necessary, like the recognition of arduous working conditions for a series of jobs...”*.

IV. JOINT RESOLUTIONS



FINAL DRAFT RESOLUTION of the European Trade Union Confederation (ETUC) and the following European Industry Federations: EFBWW, ETF, EPSU, IndustriAll, Uni-Europa on the relationship between “arduous occupations” and “early retirement schemes”.

Reached on the basis of European multidisciplinary research

- A. On the basis of a comparative study where six different occupations³ were selected from nine countries³, there is no doubt that the phenomenon of “arduous occupations” exists. These occupational activities have a substantial negative impact on the physical and/or mental health of the workers in question. Despite the fact that workers’ personal characteristics can play a role in the work experience, the negative impact of an “arduous occupation” is not personal, instinctive or subjective. The negative impact is objectively demonstrable on the basis of medical, ergonomic or psychosocial criteria. The phenomenon is statistically demonstrable on the basis of a higher outflow of workers who were employed in an “arduous occupation”.
- B. Taking into account the various parameters that characterise arduous occupations, arduous occupations can be (provisionally) defined as *“occupations involving the exposure of the worker over a period of time to one or several factors leading to professional risks susceptible to leave long-lasting and irreversible effects on his/her*

³ Processing line workers in the meat sector, bus drivers working in the public transport sector, distribution centre workers (like a typical Amazon worker which combines commerce sector and logistics sector, (metal) foundry-workers, carpenters - floor coverers, elder care workers ³ Italy, Belgium, France, Denmark, Germany, Austria, Poland, Spain and Romania.

health; these factors are related to physical constraints, an aggressive physical environment, working rhythms or psychosocial risks”.

- C. The various parameters of the risk factors are extremely difficult to measure or define objectively. The (limited) scope and funding of the project didn't allowed the project partners to explore these risks. The project partners have accepted this shortcoming and are willing to engage themselves in a follow-up or supplementary study as to the risk factors, which lead to the arduous nature of an occupation.
- D. An additional and extremely important characteristic of arduous occupations is the profound – yet dormant – impact on the physical and/or psychosocial constitution of workers in the medium (10 to 20 years) and long term (more than 20 years). Depending on the personal constitution of the worker and the arduousness of the occupation, the long-term impact can range over a period of 10 to 40 years. In certain cases this leads to irreversible health damages and subsequently to partial or total work incapacity.
- E. On the basis of the available data there is also a clear correlation between the physical and psychological constitution of workers exposed to arduous working conditions over a long period. Accordingly, psychological stress generally leads to physical stress and vice versa. This implies that any long-lasting stress under arduous working conditions has a double negative impact on the worker in question.
- F. On the basis of the available data, it appears that most workers who are employed in arduous occupations are very much aware of their working conditions. However, there is generally very little knowledge and awareness about the actual disastrous long-term consequences amongst the workers and very often neither amongst occupational health and safety inspectors. In extremely subordinated relationships of workers to employers, workers have very little or no say regarding their working conditions and the long-term consequences of it. In addition, there is often a culture of acceptance, with physical and psychological destruction being considered part of the job. Of course, this does not have to be taken for granted.
- G. Besides the “culture of acceptance of an arduous occupation” it should be noted that workers (and even good faith employers) are in many cases not able to influence the specific working situation of the workers. Even if the workers and their employers agree on resolving an arduous situation (e.g. by redesigning the workplace, abolishing heavy

weights, improved ergonomics, ...), many situations are outside their possibilities and control and linked to external factors, such as the design of a machine and materials (in the industry sector), the lack of cooperation by others (a patient who refuses to be lifted mechanically), the traffic jam (for a bus driver), ...

- H. Special attention must be paid to the “externalisation of arduous work”, whereas arduous work is often performed by workers belonging to another company or by fake self-employed. In general, the externalised arduous work is done by workers who are employed in precarious conditions, with lower wages, social protection, trade union support and access to stringent preventive control measures. Often the externalised arduous work is executed by workers who are compelled to accept arduous working conditions “without complaining”.
- I. The debate on “arduous occupations” must take place in a real context, reflecting the realities at the workplaces, where the emphasis is on the actual situation at the workplace and not on only so-called formal legislative or administrative rules and commitments that are not enforced in practice. Not sufficiently reflected is especially the cocktail of hazards worker may be confronted with. This phenomenon is not sufficiently reflected in science but especially in the prevention practices and when it comes to the recognition of work related diseases.
- J. It should be observed that some workers are exposed to arduous occupations under pressure of their employers, either because the employers are unwilling to prevent or remedy the situation or simply obliges the worker to work under these working conditions. This kind of unacceptable behaviour is an aggravating act of direct violence of the employer towards the physical and psychological integrity of the worker.
- K. The world of work is an ever changing world. All workers are permanently confronted with new combinations of technology, materials/substances and new forms of labour. These developments also generate new risks. Nobody can predict which physical or mental disorders will occur in the longer term (e.g. some 20 years later), which have been recently imposed on workers. Even if all precautionary measures are immediately taken, - based on the current knowledge – long term physical or mental disorders can never be excluded. Thus, even if we consequently minimize the existing hazards, new ones are possibly affecting another generation of workers, which are not able to stay at work till their normal pension age.

- L. It should be clearly that all working conditions perform in shift or night work must be considered as arduous. Therefore shift and night work deserve special attention and a particular sui-generis approach.

- M. The resolution stresses that the all workers are entitled to a highly qualitative working and retirement life and that no concessions can or should be made to achieve this objective.

Taking all of the above (project) findings into account, all of the (project) parties agree that:

- 1. The concept of “arduous occupations” must be recognised urgently at European and national level as a legal conceptual form of employment.

- 2. Any definition of the concept of “arduous work” must be based on actual facts and must focus on the worker. The term must be defined via a multidisciplinary approach (medical, psychosocial, social, ergonomic and statistical). This implies that any definition based on a political approach (and which consequently can be changed at any time) is totally inappropriate and must be rejected. Accordingly, it is also important that the term is acknowledged and discussed by all social partners, in both joint and tripartite consultation. Whereas the following elements could be further discussed/explored:
 - a) the concept of arduous work – aspects of arduousness;
 - b) the risk factors;
 - c) concepts/definitions of the various aspects of arduous work;
 - d) the reality of hazard-combinations;
 - e) concepts for the measurements, inspections and control for the various parameters;
 - f) tools for the evaluation at workplace level;
 - g) ...

3. Any definition of the concept of “arduous work” must take into account the strong sectoral differences and typical features of each profession and the individual working conditions of the workers.
4. There is a clear need for an extensive impact study on arduous work, in its various forms and conditions, to be assessed at European level. This way more knowledge becomes available on prevention and compensation
5. It is extremely important that there is extensive and broad awareness of the existence of arduous occupations, of the preventive and compensatory solutions and of the consequences of employment in an arduous occupation for the workers in question and their immediate environment. This awareness must be shared by social partners and governments.
6. At European and national level, the appropriate resources must be made available to address, rectify and mitigate the phenomenon of “arduous occupations”. In particular, extra attention must be paid to those sectors with a high number of workers in an arduous occupation. Resources need to be made available to develop comprehensive strategies aimed at diminishing the negative effects of arduous occupations on the worker’s health and quality of life, offering compensation for the incurred ill-effects due to one’s occupation, and gradually limiting the incidence of arduous occupations.
7. The concept of “arduous occupations” and its consequences must be extensively present in all academic discussions and in vocational education and training offered to the workers. It is extremely important that awareness takes place in the earliest stages of the education and working life and that it is continuously repeated. For workers it is important that the awareness and training is as practical and tailor-made as possible and that workers see for themselves what might happen to them.
8. The European, national, regional and company trade unions must act pro-actively in adequately avoiding that any worker is exposed to any form of arduousness and that the matter is result-oriented discussed with either the competent labour, social or health inspectorates and the respective employers representatives.
9. It should be an immediate policy priority for all those who make and enforce policy, from the European central level to the actual workplace, to start work on developing a genuine preventive policy applicable to everyone and in which “arduous occupations”

are identified and that practical preventive actions are immediately implemented so as not to further expose the workers in question to arduous working conditions. In this connection, obligatory collective and individual risk analyses/assessments of workers' workplaces and working conditions are necessary, including the mandatory required checks and other obligatory tracking measures. In the event of a clear refusal, immediate, compelling, stringent and dissuasive sanctions and protective measures must be imposed to protect the worker's integrity.

10. As the arduousness of an occupation is clearly linked to the individual working-time arrangement of the worker (in particular overtime, flexible working time, shift work, night work, on-call arrangements, ...), it is of utmost importance that any working time arrangement must avoid that the worker encounter any form of arduousness. Thus any working time legislation or arrangement must take into account the arduous nature of the arrangement on the individual worker and set-up preventive and compensation measures.
11. It is very important that the worker's quality of life is taken as the starting point primarily, and the worker's life expectancy secondarily.
12. The study clearly demonstrated that labour Inspectorates in virtually all countries and often occupation health and safety inspectors are not fully aware of the arduous nature of an occupation and their long term consequences for the workers. The arduous nature of an occupation is completely different for each profession and industry and often not immediately visible. As prevention is the key condition to reduce arduous occupations, all inspectors (labour, social and OSH) must be granted adequate resources in terms of staff, training and competences to detect and adequately (re)act when workers are employed in an arduous occupation.
13. With a view to resolving situations where there are “concealed arduous occupations”, it is absolutely necessary to have an analysis performed in every country on the unseen victims of arduous occupations, i.e. workers who had to accept another job for medical reasons, be it due to work incapacity or out of sheer necessity. These workers are entitled to an express acknowledgement that the policy did not work and are therefore entitled to compensation.

14. For certain categories of workers, for whom the preventive measures have no benefit or are not applied, the workers must be entitled to immediately cease their occupational activities and the employer must be obliged to immediately offer the worker another job. This must not negatively impact the labour law situation. Where appropriate, the employer is obliged to educate the worker free of charge, bearing in mind a realistic transition period for the worker.
15. In this connection everyone must have the possibility of anonymously submitting complaints to either trade unions, workers representatives or competent national/regional/company bodies, which will be rapidly acted upon.
16. Bearing in mind the typical sectoral and professional characteristics of an “arduous occupation”, which can have major differences, but generally lead to the same result, it is very important that, in the first place, all measures are realistically discussed/negotiated between the sectoral social partners at central and company level. Accordingly, a target result must be worked out, not just some commitments.
17. Bearing in mind the negative medium-term and long-term impact of the exercise of an arduous occupation, an occupation should be deemed to be “arduous” while taking into account the actual state of health of the worker, including the possibility of a compensatory approach via early retirement schemes, in the 1st, 2nd and 3rd pension pillar. The definition and categorisation of specific occupations into ‘arduous occupations’ must be enacted legally and for those that are legally defined as arduous, then early retirement schemes must be made available with regard to 1st and 2nd pillars. These schemes must be negotiated by the representative social partners and take due consideration of the arduousness of the occupation.
18. The national trade unions are strongly urged to submit the issue of arduous work on the negotiation table whether within the framework of bi-partite collective bargaining or the tri-partite negotiations with the national authorities/government and the employers.
19. European policy pushing for a uniformly prolonged working career has proved to be not appropriate and must be modified. Accordingly, all parties reject the unilateral political decision that all workers must prolong their working career under all circumstances. This kind of blind policy takes no account of the reality of “arduous occupations”.
20. The link between “arduous work” and “precarious work” is a matter of primary concern and leads to the overall conclusion that “precarious workers” not only suffer from poor

working conditions and social protection, but also from the danger of jeopardizing their physical and psychological wellbeing.

21. In this relation a special focus must be placed on the situation of foreign workers, especially coming from Eastern European countries, who are subject to arduous work but do not have access to trade-union or Administration’s help because of their situation (non-declared work) or out of fear of being fired.
22. It is important that all external factors, which directly or indirectly contribute to the development of an arduous nature of an occupation, such as production processes, tools/instruments/machineries, HR developments, ... should be assessed in a broader context in order to have an overall picture of all factors and by identifying the share of responsibility to all parties. This issue could not be dealt with in this project. Nevertheless an ambitious R&D project on arduous work, would be recommended.

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v. STEERING GROUP MEMBERS AND LIST OF NATIONAL EXPERTS

PROJECT MANAGEMENT

EFBWW, Werner Buelen, wbuelen@efbh.be

EUROPEAN COORDINATING EXPERT

SYNDEX, AnaIsabel Martinez Garcia, ai.martinez-garcia@syndex.fr

STEERING GROUP MEMBERS

European Transport Workers' Federation

Philippe Alfonso

EPSU

Richard Pond

UNI Europa

Dimitris Theodorakis

INDUSTRIALL

Sophie Jänicke

ETUC

Claudia Menne

Ellen Nygren

EFBWW

Ulrik Spannow

European Federation of Food, Agriculture and Tourism Trade Unions

Estelle Brentnall and Enrico Somaglia

NATIONAL EXPERTS

Mr Eckhard Voss, national expert Germany, Austria

Ms Ana Isabel Martinez Garcia, national expert France and Spain

Mr Fabrice Warneck, national expert Belgium

Ms Katarzyna Szczpanik, national expert Poland

Mr Marcel Spatari, national expert Romania

Mr José Serrano, national expert Spain

Mr Jens Jensen and Torben Bruun Hansen, national experts Denmark

Mr Mario Giaccone, national expert Italy