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European Commission

DG for Employment, Social Affairs and Equal Opportunities

*Study to support an Impact Assessment
on further action at European level
regarding Directive 2003/88/EC and the
evolution of working time organisation*

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Services**

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The authors accept sole responsibility for this report written at the request of the European Commission. The views presented here do not reflect necessarily those of the Commission.

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1 INTRODUCTION

Deloitte Consulting has conducted, on behalf of DG Employment - European Commission, a 'Study to support an Impact Assessment on further action at European level regarding Directive 2003/88/EC and the evolution of working time organisation'. This document constitutes the final report to the study.

The Final Report is structured as follows:

- **Chapter 2** provides an overview of the policy context and the recent developments concerning the Working Time Directive;
- **Chapter 3** includes a study on the impact of important trends on the labour market on working time arrangements;
- **Chapter 4** contains the study on the health and safety aspects of working time – effects of working hours on safety, health and work-life balance;
- In **chapter 5**, we analyse the economic impact of the Working Time Directive on businesses;
- In **chapter 6**, we assess the financial and organisational impact of the Working Time Directive on public services;
- **Chapter 7** contains a study on the use of the 'opt-out';
- **Chapter 8** presents the main and overall conclusions of the study.

2 CONTEXT

2.1 DIRECTIVES 93/104 AND 2003/88: THE BEGINNING

2.1.1 A short history of working time regulation

Regulation of working time always involves striking a delicate balance between two competing interests. On the one hand, both employers and workers have a clear pecuniary incentive to work long hours. It is obvious that employing workers for longer hours increases the profit margins of their employers. Workers may be well inclined to work longer hours in order to earn a higher pay and to improve their living conditions, especially in the private sector¹. On the other hand, working for too many hours may have negative health and safety effects due to insufficient rest and the excessive duration of the professional activity (e.g. increased risk of an occupational accident due to fatigue, burn-out etc.).

Efforts to reduce working hours are a feature of employment law for already a very long time. The first labour laws that were enacted in the 19th century were designed to reduce the number of hours to be worked by vulnerable people at work, in particular women and children. Later on further measures were taken to reduce working hours for all workers, regardless of the sector of professional activity where they are working. These measures have certainly contributed to an effective and dramatic reduction of working time: whereas in the early decades of the 19th century more than 4000 hours' work per person per year was not uncommon, the typical full-time worker in Western Europe worked at the end of the 20th century on average 1600 to 1900 hours per year². The estimates given here look on the low side as this would be equivalent to between 33 and 40 hours per week (excluding the 4 weeks annual paid leave). The most recent available EUROSTAT figures give a substantially higher average – (EU-27) of 41.8 hours worked per week of full-time employment in 2007 in the main job. Self-employed and workers with an additional second job worked longer hours.

The movement to reduce working hours gained important strength by the activities of the International Labour Organisation (ILO), the specialised international agency on employment and social matters that focused on the reduction of working time very early after its inception in 1919. In fact, the Hours of Work (Industry) Convention already came about in the same year. The ILO continued its work on working time through e.g. the Hours of Work (Commerce and other Offices) Convention of 1930, the Forty-Hour Week Convention of 1935, Holidays with Pay Convention of 1936, the Weekly Rest (Commerce and Offices) Convention of 1957 and the Holidays with Pay Convention (Revised) of 1970. It is thus not surprising that recital 6 of the Directive 2003/88, like recital 6 of the Directive 93/104, explicitly refers to the work of the ILO and mentions that account should be taken of the principles of the ILO with regard to the organization of working time.

2.1.2 EU primary legislation and working time

The concern to enhance the workers' health and safety at work is also to be found in the EC Treaty and its successor, the Treaty on the Functioning of the European Union (TFEU). Article 153 TFEU provides that the Parliament and Council may adopt – by means of Directives – minimum requirements for improvements, especially of the working environment, to ensure a better level of protection of the safety and health of workers.

¹ We present here the assumption that longer hours means higher pay. This is not always the case – in public services of some Member States, on-call work has traditionally been unpaid or paid at very low rates.

² Advocate General RUIZ-JARABO COLOMER, Opinion in *Dellas* Case, C-14/04.

This goal was also established in the Community Charter of the Fundamental Social Rights of Workers of 9 December 1989, which stated that:

- “The completion of the internal market must lead to an improvement in the living and working conditions of workers in the European Community. This process must result from an approximation of these conditions while the improvement is being maintained, as regards in particular the duration and organization of working time and forms of employment other than open-ended contracts, such as fixed-term contracts, part-time working, temporary and seasonal work
- Every worker in the European Community shall have a right to a weekly rest period and to annual paid leave, the duration of which must be progressively harmonized in accordance with national practices.
- Every worker must enjoy satisfactory health and safety conditions in his working environment. Appropriate measures must be taken in order to achieve further harmonization of conditions in this area while maintaining the improvements made.”

The link between the improvement of the working conditions and the reduction of working time made by the Community Charter of the Fundamental Social Rights of Workers is even more clearly reflected in Article 31 of the Charter of Fundamental Rights of the European Union. This Charter has been given legally binding effect as of 1 December 2009 by the Lisbon Treaty. Article 31 provides as follows:

'Article 31

Fair and just working conditions

1. *Every worker has the right to working conditions which respect his or her health, safety and dignity.*
2. *Every worker has the right to limitation of maximum working hours, to daily and weekly rest periods and to an annual period of paid leave.'*

2.1.3 EU secondary legislation and working time: the directive 93/104

The first Working Time Directive or Directive 93/104/EC, the most important directive, was introduced on 23 November 1993 and was built upon a proposal made by the Commission in 1990³. This intervention in the area of working time was the first step towards a common legal limit regarding the length of the working week and numerous other aspects of working time.

Directive 93/104 was amended in 2000 by the Excluded Sectors Directive (Directive 2000/34/EC)

When adopted in November 1993, the Directive excluded air, rail, road, sea, inland waterway and lake transport, sea fishing, offshore work and the activities of doctors in training as it was decided that these sectors required individual specific legislation to accommodate working time measures.

On 15 July 1997 the White Paper on Sectors and Activities excluded from the Working Time Directive was presented and the European Parliament asked the Commission in July 1998 to submit a proposal to amend the existing Directive.

The Excluded Sectors Directive which addressed the road, air, sea and rail transport, inland waterways, sea fishing, and other works at sea sectors and the activities of doctors in training, entered into force on 1

³ Proposal for a directive concerning certain aspects of the organisation of working time – COM (90) 317, of 20 September 1990.

August 2000. Regarding the doctors in training a transitional period of 9 years was introduced in which the maximum weekly working hours were gradually reduced and are as from August 2009 set at 48 hours.

Finally, the Directive 93/104 has been replaced by the Directive 2003/88/EC which merely codified the provisions of Directive 93/104 and the Excluded Sectors Directive.

2.1.4 The general principles of directive 2003/88/EC

The aim of the Working Time Directive is to ensure minimum safety and health requirements for the organisation of working time. The Directive deals with both minimum periods of daily rest, weekly rest and annual leave, breaks and maximum weekly working time and certain aspects of night work, shift work and patterns of work.

The common minimum requirements for all member states, established by the Directive 2003/88, include:

- Limits to weekly working time for workers: generally, a 48-hour maximum working week on average, including any overtime;
- Daily and weekly rest periods for workers: normally, a minimum period of 11 consecutive hours' rest per 24-hour period and an uninterrupted rest period of at least 24 hours per each 7-day period, thereby limiting the number of working days to a maximum of 6 per week (a daily rest period of 11 hours to be followed by a complementary minimum uninterrupted rest period of 24 hours);
- Extra protection for night workers:
 - o A maximum of eight hours' night work on average in any 24-hour period;
 - o Work must not exceed 8 hours in any 24-hours period, if it involves special hazards or heavy physical or mental strain;
 - o A health assessment for night work;
 - o Right to a transfer 'whenever possible' to day work, if suffering from health problems connected to night work;
 - o Measures to require employers who regularly use night work, to notify the responsible authorities if the latter so request.
- Paid annual leave for workers: a guarantee of at least four weeks' paid annual leave;
- A rest break during working time: if the working day is longer than 6 hours.

It must be recalled that the Working Time Directive has nothing to do with the remuneration of the work being done. The European Court of Justice (ECJ) has already held that the Working Time Directive does not apply to the remuneration of workers, including overtime pay (see e.g. Court of Justice, *Dellas*, C-14/04, § 38 and *Vorel*, C-437/05, § 36). Moreover, Article 153 TFEU makes it clear that matters relating to workers' pay are a matter to be left to national law only.

2.1.5 The scope of flexibility allowed by Directive 2003/88/EC

Although the Directive is relatively detailed and concrete in its provisions, it incorporates many derogations and exceptions which allow a degree of flexibility in order to cope with the differences between national working time rules or the specific character of certain occupations and professions:

- **More protective provisions:** The Directive sets *minimum* rules; Member States can maintain or introduce rules which are more favourable to the protection of workers' health and safety (Article 15). For instance, many member states, like Belgium, Denmark and France, have set maximum weekly working time below 48 hours.
- **Reference periods:** The Member States may also lay down reference periods (Article 16). As to the weekly rest period, they may apply a reference period that may not exceed 14 days. This means in practice that if during a given week the weekly rest period is not observed, this rest

period must be provided to the worker during the next week together with and on top of the weekly rest period pertaining to that week. Thus, every worker is entitled to two uninterrupted rest periods during every period of 2 weeks. As to the maximum weekly working time, a reference period not exceeding 4 months may be provided for by the Member States. This means that at the end of the reference period of 4 months the average weekly working time may not exceed 48 hours.

- **Collective bargaining:** Derogations by collective bargaining (Article 18) are possible (in any activity) regarding the timing of minimum daily and weekly rest periods, the limits to the length of night work, and the reference periods for calculating weekly working time (which can be extended to a maximum of 12 months by collective agreement).
- **Derogations by national law:** Almost the same derogations (as those available by collective bargaining) are also available by legislation (Article 17). The differences are:
 - o these are not available for all activities, but in the wide range of activities set out at Article 17(3) of the Directive; including where there is a need for continuity of service or production (hospitals, residential care, film and TV production, public utilities, certain industries where production cannot be interrupted on technical grounds...), a foreseeable surge of seasonal activity (tourism, postal services, agriculture...), long-distance commuting by the worker, in emergencies or accidents, and for most rail transport workers).
 - o the maximum reference period allowed under legislation is 6 months, compared to 12 months by collective bargaining (Article 19).
- **Condition of compensatory rest:** Both the derogations by collective bargaining, and the derogations by legislation, mentioned above are subject to a condition: the worker concerned must (in all but very exceptional circumstances) be provided with 'equivalent compensatory rest'. This effectively means that there is flexibility to *postpone* (in whole or part) the hours of minimum daily rest and minimum weekly rest fixed by the Directive – but not to *reduce* them.
- **The 'opt-out':** the above mentioned derogations that can be made by collective bargaining or by national legal provisions do *not* apply to the 48-hour limit. However, the Directive includes an 'opt-out' clause (Article 22) which gives Member States the option not to *apply the* 48-hour limit, subject to free advance consent of the worker concerned to working longer hours.
- A particular category of workers for whom national law may provide derogations are the so called **“autonomous workers”** (Article 17 (1) (a) of the Directive), i.e. workers who can decide autonomously on the length of their own working time, such as managing executives or workers in family-run businesses who are family members. For this particular category, derogations are possible regarding timing of minimum rest periods, rules on night work, and (unusually) the 48-hour limit to average weekly working time.
- **Special rules for certain groups:** All the rules and derogations set out above are those which apply to workers generally. The Directive also contains specific provisions for certain groups (seagoing fishing boats, mobile workers in inland waterways), which are not the focus of the present review.
- **Separate rules under sectoral working time directives/regulations:** Moreover, the Directive does not apply where another Community directive or regulation fixes more specific requirements for organising working time in specific occupations or activities (Article 14). There are sectoral working time directives and regulations in force for several such groups (seafarers, mobile aviation workers, long-distance road transport workers, cross-border rail workers).

Finally, it has to be stressed that no derogations can be made as to paid annual leave. The Directive does not provide for *any* derogation from the right to a minimum 4 weeks' annual paid leave. This point has

been underlined several times by the Court of Justice which regards the worker's entitlement to 4 weeks of paid annual holiday as a particularly important principle of EU social law (see e.g. ECJ, *Zentralbetriebsrat der Landeskrankenhäuser Tirols*, C-486/08).

2.2 CASE LAW OF THE EUROPEAN COURT OF JUSTICE

The Working Time Directive has already been the subject of some judgments of the European Court of Justice. The most important judgments are the *SIMAP*, *Jaeger* and *Dellas* judgments (C-303/98, C-151/02 and C-14/04). These judgments had a major impact on working time regulations in the health sector, particularly among the employee groups of doctors and residential care workers.

2.2.1 Definition of working time and rest period

First of all, the ECJ has clarified the notion of working time. Working time is defined as follows by Article 2 (1) of Directive 2003/88:

“Working time means any period during which the worker is working, at the employer's disposal and carrying out his activity or duties, in accordance with national laws and/or practice.”

Working time does not require that the employee is actually carrying out an activity, i.e. is working. There can also be working time when the employee is at the work place, is there at the employer's disposal and is thus carrying out his duties ECJ, *SIMAP*, § 48; ECJ, *Jaeger*, § 49 and § 63; ECJ, *Dellas*, § 48).

Moreover, the ECJ has expressed the view that the notions of working time and rest periods are mutually exclusive (ECJ, *SIMAP*, § 47). Consequently, in case a certain period cannot be qualified as working time, it must automatically be regarded as rest period. This view is completely in line with the definition of rest period in Article 2 (2) of Directive 2003/88:

*“Rest period means any period which is **not** working time.”*

Consequently, there is no place within the framework of the Working Time Directive for any intermediate category between working time and rest period: every period is either working time or rest period (ECJ, *Dellas*, § 43).

Finally, the notions of working time and rest period that the Member States use in their national legislation must be interpreted in the same way as the notions of working time and rest period of Article 2 of Directive 2003/88 (ECJ, *Jaeger*, § 59 and § 82; ECJ, *Dellas*, § 45).

2.2.2 On-call duty and working time

In the *SIMAP*, *Jaeger* and *Dellas* judgments, the European Court of Justice has consistently expressed the view that a period of on-call duty (at the workplace or at another place chosen by the employer) is in its entirety working time, regardless of the work actually done by the person concerned during that on-call duty (ECJ, *SIMAP*, § 52; ECJ, *Jaeger*, § 75; ECJ, *Dellas*, § 46).

The decisive factor for holding that the whole period of on-call duty is to be considered working time is that the workers on on-call duty are required to be present at the place determined by the employer and to be available to the employer in order to be able to provide their services immediately in case of need. Moreover, it is for the employees concerned impossible to choose the place where they stay during waiting periods. For the same reason, the period of on-call duty (at the workplace or at another place chosen by the employer) during which an employee is not actually carrying on any professional activity cannot be regarded as a rest period (ECJ, *Jaeger*, § 63).

On-call duty must be clearly distinguished from the obligation to be on stand-by, i.e. to be contactable at home or at a place chosen by the worker. Periods during which an employee is on stand-by do not have to be counted in their entirety as working time. Although employees are then at the disposal of their employer, in that it must be possible to contact them, they can still manage their time with fewer constraints and pursue their own interests (ECJ, *SIMAP*, § 50). However, periods spent providing services in response to a call during stand-by are to be counted as working time.

2.2.3 Reference periods

As observed earlier, the basic rule is that maximum weekly working time of 48 hours must be respected at the end of a reference period of 4 months at the latest (Article 16 of Directive 2003/88). However, national legislation can extend the reference period in certain activities to a maximum of 6 months. Collective agreements can even extend the reference period on a maximum of 12 months in any activity (Article 19 of Directive 2003/88).

It is thus clear that the reference period may in no circumstances exceed 12 months. Therefore, every employee has a minimum right whereby the reference period for the implementation of the maximum duration of their weekly working time must not exceed 12 months (ECJ, *SIMAP*, § 69 and § 70).

2.2.4 Compensatory rest

The European Court of Justice is also of the opinion that periods of work must be regularly alternated with rest periods. Moreover, in order to rest effectively, the worker must be able to remove himself from his working environment for a specific number of hours which must not only be consecutive but must also directly follow a period of work in order to enable him to relax and dispel the fatigue caused by the performance of his duties (ECJ, *Jaeger*, § 95).

Conversely, a series of periods of work completed without the interpolation of the necessary rest time may, in a given case, cause damage to the worker or at the very least threaten to overtax his physical capacities, thus endangering his health and safety with the result that a rest period granted subsequent to a series of periods of work is not such as correctly to ensure the protection of the workers' interests (ECJ, *Jaeger*, § 96).

Therefore, compensatory rest must be granted on a regular basis in order to avoid uninterrupted periods of work that may go on for too long (ECJ, *Jaeger*, § 97). Compensatory rest must be provided in the immediately following period, i.e. for missed daily rest within the following 24-hour period. This is not only necessary for the workers concerned to recover from the fatigue engendered by their work. This must also reduce as much as possible the risk of affecting the health and safety of their colleagues (ECJ, *Jaeger*, § 92).

2.2.5 The opt-out

Finally, in order to make use of the opt-out provided for by Article 22 of Directive 2003/88, the consent of the individual worker is required. The worker's consent can thus not be replaced by the consent of the trade union in the context of a collective or other agreement (ECJ, *SIMAP*, § 73)

Moreover, the consent to the opt-out must be given not only individually but also expressly and freely. Therefore, it is not sufficient that the relevant worker's employment refers to a collective agreement which permits an extension of the weekly working time beyond 48 hours. A worker may be in no doubt about the intentions of the employer to employ him for more than 48 hours a week (ECJ, *Pfeiffer*, § 82, § 84 and § 85).

2.3 THE PROPOSED REVISION OF THE WORKING TIME DIRECTIVE (2003-2009)

According to the original Working Time Directive a review on two specific points was foreseen within a seven year period reckoned from the deadline for transposition by the Member States, i.e. prior to 23 November 2003. These points were the opt-out and the length of the reference period for calculating weekly working time.

In December 2003, the Commission adopted a **Communication (COM (2003) 843 final/2)** which analysed experience on the length of the reference period and the use of the opt-out (particularly in the UK, based on detailed studies), but also considered the impact of the Court of Justice's rulings in *SIMAP* and *Jaeger*, and the 'need for greater compatibility between work and family life [which] stems from sociological change in European societies..' The Communication stated that it was launching a wide ranging **consultation process** aimed at seeking the views of the Council, Parliament, Economic and Social Committee and the Committee of the Regions, on the one hand, and also of the **social partners at European level**, on whether there was a need to amend the Directive regarding these issues.

In the meantime the Parliament has already launched (in June 2003) an own-initiative report drawn up by MEP Alejandro **Cercas**, which was adopted in January 2004. The Report called for an amending proposal as soon as possible, underlined the importance of addressing problems in the health sector arising from the *SIMAP-Jaeger* rulings, deplored Member States introducing opt-outs to resolve these problems, supported additional steps to reconcile work and family life, called for further in-depth studies on several points, and demanded the abolition of the opt-out derogation as soon as possible.

In a **second phase consultation document** (SEC (2004) 610) the Commission noted that all contributions received from the European social partners favoured revising the Directive. The paper asked whether the social partners wished to initiate a dialogue on these issues themselves (under Article 139 EC Treaty) and indicated that if they did not wish to do so, the Commission envisaged proposing to amend the Directive with a view to:

- imposing more stringent conditions for using the opt-out and reviewing how it could be phased out as soon as possible,
- including a definition of on-call time, defining a new category of 'inactive on-call time', and allowing compensatory rest to be taken within 72 hours or within a 'reasonable period'
- allowing the reference period to be extended to 12 months by national law, as well as by collective bargaining
- encouraging measures to improve compatibility between work and family life

As the social partners did not wish to initiate a dialogue, and after completing an impact assessment (SEC (2004) 1154 dated September 2004) the **Commission duly adopted in 2004 a legislative proposal** (COM (2004) 607 final) to amend Directive 2003/88/EC.

Following the Parliament's Resolution on its position in first reading (11 May 2005) and the Opinions of the Committee of the Regions and the European Economic and Social Committee, the Commission adopted an amended legislative proposal in 2005 (COM (2005) 246 final). However, the Council did not reach a political agreement on its first reading until 10 June 2008 (and then, by qualified majority). The first reading was formally adopted by a majority in the Council on 15 September 2008 as a Common Position (a substantially revised version of the Commission's proposal) The Parliament, however, then adopted a number of substantial amendments to the Council Common Position, in its position on the second reading (adopted on 17th December 2008), largely reinstating its position on the first reading. These changes were in turn rejected by the Council's second reading in February-March 2009.

The principal points of the amendments proposed by the European Parliament were as follows:

- The **opt-out clause** would disappear three years after the entry into force of the new Directive. Moreover, an individual agreement on an opt-out would only be valid for six months instead of one year. It would also not be possible to enter into such an agreement during the probationary period.
- The **inactive part of on-call time** would remain in its entirety working time. However, inactive parts of on-call time might, by collective agreement or other agreement between the social partners or by means of law or regulation, be calculated in a specific manner in order to comply with the maximum weekly average working time. Is meant by “on-call time”: any period during which the worker has the obligation to be available at the workplace in order to intervene, at the employer’s request, to carry out his activity or duties. Is meant by “inactive part of on-call time”: any period during which the on-call worker is on call but is not required by his employer to actually carry out his activity or duties.
- **Multiple contracts**: where a worker has more than one employment contract, the worker’s working time would have to be the sum of the periods of time worked under each of the contracts. In other words, the maximum weekly working time would no longer be per employment contract: an employee should in principle work no longer than 48 hours per week, regardless of the number of employment contracts the employee would have.
- It is not enough for the European Parliament to **encourage reconciliation of work and family-life**. Employers would have to inform workers well in advance of any change in the pattern of work. Moreover, workers would have the right to request changes to their hours or patterns of work and employers would be required to consider such requests fairly, having regard to the flexibility needs of employers and workers. An employer would only be able to refuse such a request only if the organisational disadvantages for the employer would be disproportionately greater than the benefit to the worker.
- The notion of “**autonomous workers**” would be further defined and restricted to chief executive officers (or persons in comparable positions), senior managers directly subordinate to them and persons who are directly appointed by a board of directors.
- **Compensatory rest** would have to be given as soon as possible following a period of time spent on duty.

Given the co-decision nature of the Directive, an agreement must be reached between the European Parliament and the Council to agree on an identical text before any proposal can become law. Despite the fact that both Council and Parliament could each reach a position within their body, no draft document could be found on which the Council and the Parliament could agree. Several amendments and new proposals were drawn up, but the Council did finally decide on 9 March 2009 not to approve the European Parliament’s amendments and consequently to convene the Conciliation Committee in accordance with article 251(3) of the EC Treaty.

The Conciliation Committee decided on 29 April 2009 – with an overwhelming majority within the EP delegation on the Committee (15 votes in favour, 5 abstentions and 0 against) – that it was not possible to reach an agreement on the proposed directive on working time. As no compromise could be found in conciliation, the 2004-2009 proposal lapsed and the current directive 2003/88/EC remains in place.

2.4 KEY THEMES OF THE FOCUS OF PUBLIC DEBATE

2.4.1 The use of the individual opt-out

Average weekly working hours within the EU are below the 48-hours limited fixed by the Directive, and reducing, but some groups of workers continue to work longer average hours, with a wide range from 49, to over 80, hours per week. Drivers of working longer average hours appear to be new work patterns leading to more autonomous and mobile employees, pressure on employees related to increasing competition, precarity of employment or low wages, seasonal fluctuations of the workload, shortages of

skilled labour, the increasing importance of 24-hour public services, and individual career ambitions (enabled by pay-for-performance principles).

The Directive allows the 48-hour limit to be calculated on a flexible basis by averaging weekly hours over periods up to 12 months, which particularly responds to the needs of sectors characterised by seasonal fluctuations, **subject to the condition of collective bargaining.**

However, exceeding the 48-hour average is only allowed by two derogations:

- A derogation for so-called autonomous workers;
- The individual opt-out.

The individual opt-out is provided by Article 22 (1) of the Working Time Directive. This article gives the Member States the possibility to allow employers to require more than 48 hours' work per week, provided that the consent of the workers concerned has been obtained beforehand. No employee may be discriminated against because he has not agreed to work more than 48 hours a week. The employer has to keep up-to-date records of all workers who work more than 48 hours a week.

The opt-out is one of the most contentious issues of the Working Time Directive. It proved to be one of the major stumbling blocks that have prevented the adoption of the proposal made by the European Commission in 2004 to amend the Working Time Directive. The opinions as to this subject are much divided. According to the European Parliament, most of the trade unions and some Member States, no employee should work more than 48 hours on average a week since working long hours can be detrimental to the employee's health and safety. There is also a fundamental right as to just and equitable working conditions at stake. According to other Member States and a lot of employers' organizations, keeping the opt-out is necessary to safeguard companies' competitiveness. Moreover, an employee should be allowed to work long hours if he wants to. One should be very careful not to generalize about social partners' positions. For instance, some trade unions have expressed their preference to keep the present rules as to the opt-out, while some employers' organizations and individual employers are not that opposed to a phasing-out, i.e. a gradual abolition of the opt-out.

The opt-out is a very contentious issue since it is the focus of debate between two divergent attitudes as to what the scope and the content of labour law should have to be. According to some, the same rules must be applicable to all workers, e.g. in a specific sector of professional activity, since their rights are only then adequately protected (a more collective approach to labour law). According to others, labour law must allow much more scope for flexibility so that individual employers and employees can resort to the solution that is tailored the best to their particular needs (a more individualistic approach to labour law). However, evidence-based policy making, i.e. making decisions on the basis of actual facts and figures obtained by impact assessments amongst other things, can help to find a solution that may be acceptable to the adherents of both schools of thought as to the role to be played by labour law. Evidence-based policy making can also contribute to refute the veracity of certain assumptions that may obscure the debate for the time being.

There are a number of studies available on the use of the opt-out in the Member State where it has been used since 1993 (the UK). However, much less material is available on its more recent introduction in a number of other Member States.

The use of the opt-out has recently increased across the EU. 5 Member States use the opt-out in all sectors of the economy, while 10 Member States apply the 'opt-out' in activities with a high prevalence of on-call time. Based on a preliminary desk research, the following Member States have chosen to make use of the Opt-Out clause:

Table 1: Overview of the opt-out countries⁴

Applying the opt-out in all sectors (5)	Applying the opt-out in certain activities(9)
United Kingdom (from 1993)	Germany (since 2003, public health services, local police and firefighters, and 2008, federal civil servants)
Malta (from 2004)	Spain (from 2003, doctors and nurses in public health services)
Cyprus (from 2004)	France (from 2002, public healthcare services)
Estonia (from 2004)	The Netherlands (from 2004-2005, health workers and firefighters)
Bulgaria (from 2007)	Hungary (from 2003, health sector and so-called stand-by jobs in private sector)
	Poland (from 2007, doctors and other professionals in health care establishments with 24 hour care)
	Slovenia (since accession, health and medical services)
	Slovakia (since 2007, medical workers)
	The Czech Republic (from 2008, health services)
	Belgium (currently introducing opt-out for certain health service professionals)

2.4.2 The reference period

Article 6 of the Working Time Directive provides that the average working time for each seven-day period, overtime included, may not exceed 48 hours. Member States may lay down for the application of Article 6 a reference period not exceeding four months. This means that at the end of a period of maximum four months the average working time per week may not have exceeded 48 hours.

In some sectors (e.g. care, agriculture) or for certain activities (e.g. security guards, dock or airport workers), the reference period may be brought to a maximum of 6 months, provided that particular conditions are met (Articles 17 (3), 18 and 19 of the Working Time Directive).

Finally, the reference period can be put at a maximum of 12 months by means of a collective agreement or an agreement signed by the two sides of industry (Article 19 of the Working Time Directive). There must be an objective or technical reason or a reason concerning the organization of the work for this prolongation of the reference period.

This final possibility is very useful for these Member States that are characterized by collective bargaining agreements that are applicable to all workers or at least a substantial majority of them. Most of the countries that were an EU Member State before 1 May 2004 match this description. In these countries, all employers can benefit from a prolonged reference period of up to 1 year, provided the social partners have consented to it and concluded a collective bargaining agreement to that effect.

However, other EU Member States do not have a collective bargaining tradition. The United Kingdom is a case in point where mainly the pay and working conditions of public sector workers are regulated by collective agreements. Moreover, collective agreements only reach a small minority of employees in a lot of Member States that joined on or after 1 May 2004. For them, the possibility to prolong the reference period to a maximum of 12 months by means of a collective agreement is thus not that helpful⁵.

⁴ The Commission has provided to the contractor details with regard to the use of the opt-out in each of the Member states concerned.

⁵ EUROPEAN COMMISSION, “Proposition de directive modifiant la directive 2003/88/CE du Parlement européen et du Conseil du 4 novembre 2003 concernant certains aspects de l’aménagement du temps de travail. Evaluation d’impact approfondie”, 22 September 2004, SEC (2004) 1154, p. 17-19.

Providing the possibility in the Working Time Directive to prolong the reference period up to a maximum of 12 months by legislation bridges the gap between the Member States characterized by a collective bargaining tradition and the other Member States. Moreover, such a provision can also have an impact as to the individual opt-out, in that allowing a much longer reference period can reduce the need to resort to an individual opt-out. However, consideration also needs to be given to whether workers' health and safety will be sufficiently protected, if the reference period can be extended to 12 months without the benefits of the collective bargaining process.

2.4.3 Multiple employment contracts

Another issue is that there is some uncertainty about how to apply the 48-hour limit when a worker has more than one contract of employment at a time with the same employer, or with different employers. Should the limit to weekly working time (48 hours per week on average, including any overtime) apply to total hours worked, or to each contract? How to enforce effective control over time spent by one worker under contracts with different employers?

2.4.4 On-call time

As observed earlier, on-call time proved to be one of the major obstacles to reaching a consensus on the proposal to amend the Directive 2003/88/EC. It must be stressed that on-call time is particularly common in some sectors: 24-hour healthcare services, residential care and emergency services. However, it is also clear that these sectors do actually require that employees should be present at the workplace 24/7 in order to intervene in emergency cases if need be.

Moreover, the sectors concerned are primarily funded by the government. It is often argued that the financing of these services would be put in jeopardy when the total period of on-call time would have to be considered as working-time, since this would require the payment of lots of overtime payments or the hiring of a lot of new staff members who may often be very hard to find, during a period when public health and care systems already face major challenges (e.g. demographic ageing).

However, some periods of on-call time may be characterised by high levels of activity over long periods without any real possibility to rest. These periods of heightened activity would have to be compensated as soon as possible by rest periods in order to avoid that people would work for too many hours in a row and would commit mistakes due to fatigue. Conversely, in other situations on-call at the workplace may involve long periods of inactivity where calls to work are relatively rare. The position varies very considerably between different activities and different Member States.

A possible solution could be an equivalence system. That is a system whereby only a fraction of the on-call time (e.g. $\frac{1}{2}$ or $\frac{1}{3}$ of the on-call time) is regarded as working time. This fraction could be determined in accordance with the probability of professional activity or intervention in emergency cases during the period of on-call time. The higher the probability that the period of on-call time will be interrupted by an intervention, the higher the fraction of on-call time to be equated with working time can be. However, such an approach would require a change to the existing Directive, since the Court of Justice expressly held in *Dellas* that counting on-call time as a percentage of normal working time was contrary to the Directive.

2.4.5 Reconciliation of work and family life

The reconciliation of work and family life is a topic that has gained prominence during the last couple of years. Such reconciliation can be brought about by keeping the patterns of work as fixed as possible. In that way, the employees know exactly when they have to work and can organise their lives accordingly. However, fixed work patterns seem to be unrealistic in settings whereby it is vital for the employer to reorganise his workforce in order to respond to fluctuations in demand, and where workers may also need some flexibility about the precise hours they work in order to respond to family needs.

Perhaps a better balance between the employee's interests and the employer's interests can be struck by obliging the employer to inform the employees well in advance of any envisaged change as to work pattern so that the employees have sufficient time to adapt to the new working time arrangement. However, it may not always be possible for the employer to respect the obligation to inform well in time. In some cases, the employer may sometimes be forced to cut or increase working time from one day to the next, e.g. to respond to an unexpected order. Some peak periods can be well planned in advance. However, other peak periods can arise all of a sudden. Working time regulation must take account of this distinction. Moreover, the obligation to inform the employees may cause administrative burdens, especially SMEs.

Granting the employee a legal right to request his employer for more flexible hours may be also a possible avenue. The employee's needs and wishes as to flexibility can indeed differ substantially over the course of his career. There may be times when the employee has no problem to work long hours, but there may be other times when the employee would like to work less in order to take more time for other responsibilities such as family, charity, training and so on. Moreover, it may be assumed that the employee knows best what is most suited to his particular situation. It will however not always be easy for the employer to meet an employee's request to work less. Especially SMEs can encounter grave problems when an employee is not carrying out his activities for some time. Conversely, short-time working has been successfully used by many employers to cope with periods of low demand.

2.4.6 Compensatory rest

A final major issue is the issue of compensatory rest, more particularly the issue that the compensatory rest has to be provided as soon as possible or in any event immediately after an extended shift.

It is clear that this rule serves to prevent that workers who have for an uninterrupted long time would become overtired and would as result commit mistakes which may pose health and safety tasks, not only for themselves but also for colleagues and third parties (e.g. patients). Moreover, it goes without saying that productivity decreases when people are working long hours.

In accordance with this principle, the Court underlines that compensatory rest is intended to serve the health and safety objectives of the Directive by making sure that workers get adequate rest periods - and emphasises that for that reason, compensatory rest should be taken promptly and before beginning the next working day or week.

3 THE IMPACT OF IMPORTANT TRENDS ON THE LABOUR MARKET ON WORKING TIME ARRANGEMENTS

In the first section, we explore how working time will be affected by contemporary labour market trends. We start with a historical perspective and briefly present how current working time arrangements are the result of a long process. In a second section, we try to predict how working time arrangements will change in the future, and what particular aspects will have to be protected by future regulation. The third section explains that we can expect a continuing diversity in working time arrangements within Europe.

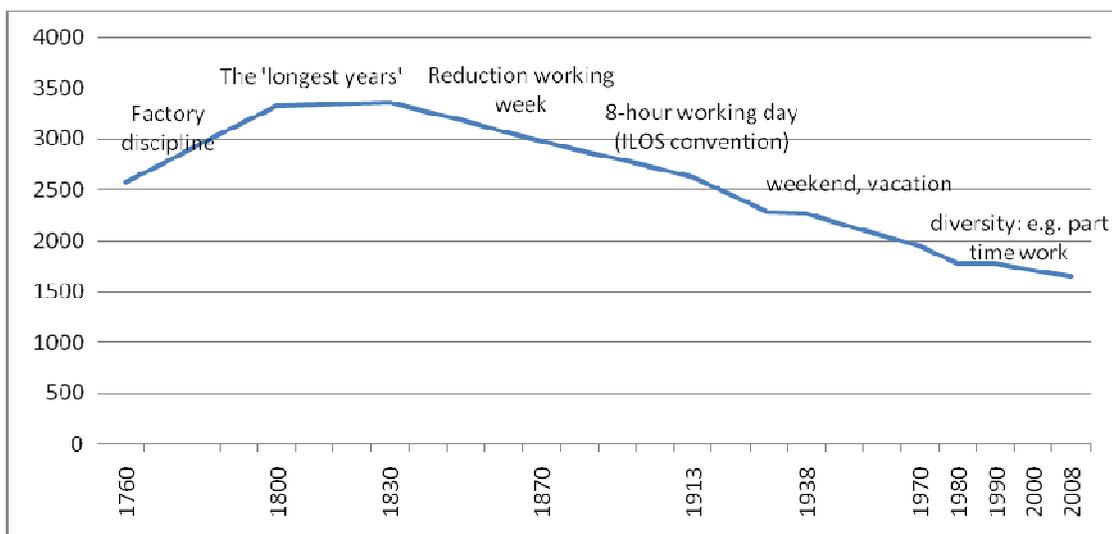
3.1 THE EVOLUTION OF WORKING TIME IN THE PAST

3.1.1 The ‘longest’ years of working time

The concept of working time as we know dates back some 250 years ago when industrial relations spread across Europe. The nature of work changed ‘in revolutionary way’, which is usually explained by the introduction of the steam engine. As important as the steam engine was for the changes in the world of work, so was the simultaneous introduction of the modern clock. The steam engine changed the place and quality of work. Autonomous craftsman working at their own pace and place were replaced by employees working at the rhythm of the machine in a factory. The modern clock, and this is more important for working time changes, kept the workers in these factories for a well defined amount of time, and kept them at work when they were at the employer’s premises. The clock became a weapon used by employers to eliminate the gaps in the traditional work day (Cross, 1989). In other words, the time during which workers were productive was counted for the first time. The concept of ‘working time’ was born.

Workers in factories had to work longer hours than before. The length of the working year in the 19th century was longer than in the 18th century. Voth indicates that no accurate figures can be found for the number of hours employees worked at these times, but “it is of conventional wisdom about the Industrial Revolution that workers toiled for longer hours in 1830 than in 1760” (Voth, 2000). Estimates indicate shifts from 2500 to 3000 hours a year and from 3000 to 4000 hours a year between the mid-18th and mid-19th century.

Figure 1: Trend in annual hours worked, 1760-2008 (UK)



Sources: HIVA, based on Voth, Maddison, OECD

Working time expanded at that time because of the rise in the number of working days per year. The number of hours worked per day did not really change. In the era before factory work, the most important goal of 'Saint Monday' was to recover from the weekend. And Saint Monday was accompanied by many other 'holy days'. Voth (1998) shows that Saint Monday disappeared in this period. And a similarly large change occurred in public and religious holidays. Between the 1750s and 1800, the number of 11-hour working days rose from 208 to 306.

3.1.2 The period of declining standard working hours

From 1850 on, annual working time started to decline. There began to be more interest in the well-being of the industrial workforce, with working long hours being a key aspect of this. A pioneering experiment at the Mather and Platt engineering working in Manchester in 1884 is an interesting example of the attitude towards working time in the second half of the 19th century. The management took the somewhat radical step of abolishing before-breakfast working and was able to demonstrate that a reduction in weekly hours actually increased production as well as reduced absence for sickness (Spurgeon, 2003). Of course, employers offered this working time reduction at least partly as a response to demands from employees. Labour strikes to limit work hours began as early as the 18th century in Europe (Golden, 2008).

The industrial work year has fallen from a high of 3000 to 3600 hours to the contemporary standard of 1650 to 2000 hours in about one century (Cross, 1989). In the first phase, this was achieved by reducing the working week from 72 hours in the second half of the 19th century to some 55 hours at the end of the 19th century to the 48-hour week as the norm in many industrialised countries by the middle of the 20th century (Spurgeon, 2003). An ILO convention embodied the labour movements' demand for the 8-hour working day, the sign for a gradual change in all countries to the 'standard' of 8 working hours a day (McCann, 2004).

By the mid- 20th century, working time was reduced in more ways than the reduction of the working day to eight hours. The weekend, the paid vacation and retirement were the characteristics of the modern solutions to the conflict between time and money, leisure and work. The increase in the number of non-working days explains the decline in the annual working time up to the beginning of the 1980s (Cross, 1989; Evans, Lippoldt & Mariana, 2001). The successful demand for shorter 'standard' work weeks could only be achieved because new institutions were established in the early 20th century, such as trade unions, the labour movement and favourable labour protection laws (Golden, 2008).

3.1.3 The period of growing diversity in working hours

It is often reported that the speed of reductions in working hours in the industrialised world has slowed since the mid-1970s (Lee, 2004). The average decline in annual working time in the 1970s was 10%, in the 1980s 5%, and in the two most recent decades 2%. There is even an increasing trend in the number of hours worked since around 1990 in some countries, e.g. in Sweden, Denmark and Hungary.

The 'speed break' in the reduction in annual working time can be situated as late as 1984 as shown in on figure 1. Annual working time reduced by about 1% a year in the period 1970-1980. Since the 1980s, the pace has slowed significantly. The annual change has fluctuated by around -0.5% since then, with a very short period of growth in annual working time in the mid-1990s.

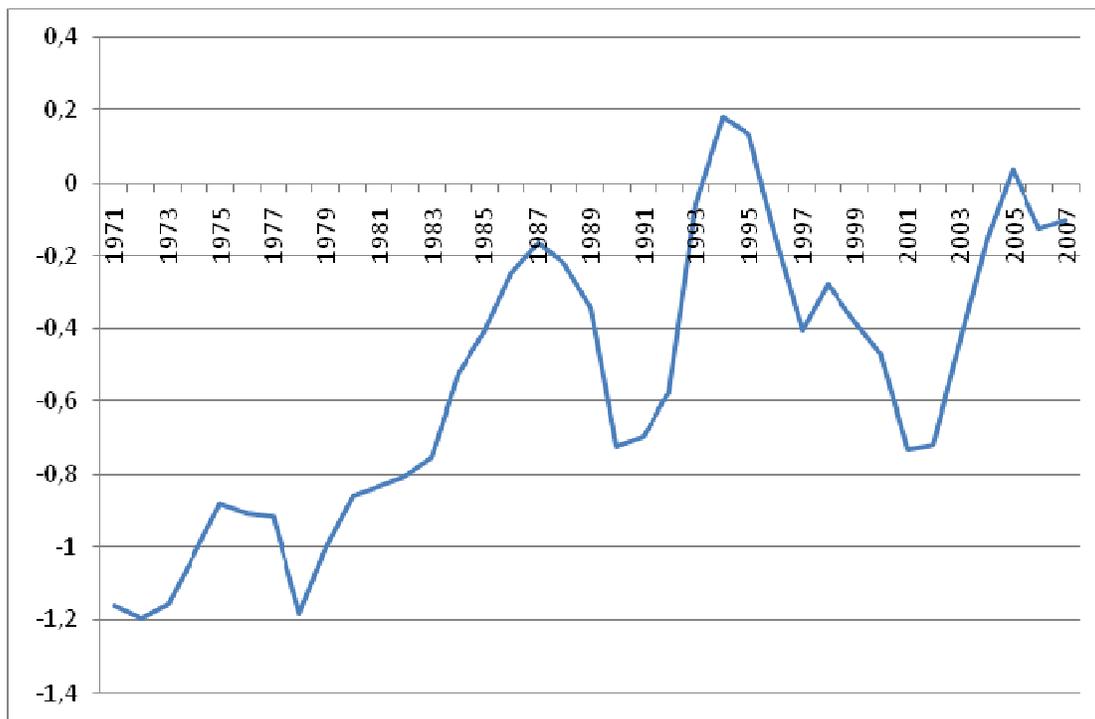


Figure 2: Moving average of the annual change in working time (EU countries)

Sources: HIVA, based on OECD⁶

The first reason for the change in working hours over the 1990s was a small reduction in the number of hours worked by full time employees (Evans, Lippoldt & Mariana, 2001). This can be explained by legislative changes in a limited number of countries (e.g. the introduction of the 35-hour week in France, via the so-called Aubry law) and the reduction in the number of people working very long hours. The proportion of persons employed working more than 48 hours has decreased in Europe from 19% in 1991 to 14% in 2005 (Eurofound, 2006)⁷. The actual overall average for agreed weekly hours in Europe is 38.6 hours (EuroFound, 2010), only a fraction below the 40-hour standard that was agreed decades ago. The average number of actual weekly hours of full-time workers reflects this bargained standard, and is slightly above 40 hours. We conclude that the number of hours worked by full-time workers is not the main reason for the recent working time decrease.

The second, and most important, reason for the decrease in the number of hours worked by the average employee has been the increasing proportion of people working part time since the 1980s. The average number of hours worked by full-time and part-time employees remained the same in most European countries, but the proportion of part-time workers has continued to increase (Evans, Lippoldt & Mariana, 2001; Eurofound, 2010). The rise of part-time employment can partly be explained by the increasing participation of female workers on the labour market in this era (see below).

⁶ OECD figures on annual working time were used as input for the calculations. For the first year used in the time series, data for 8 EU countries were found. Gradually, the number of countries with available data increased. The data refer to the average growth in working time.

⁷ EuroFound report <http://www.eurofound.europa.eu/pubdocs/2006/85/en/1/ef0685en.pdf> - data for EU12 countries were included in the 1991 survey, EU15 in the 1995 and 2000 survey, and EU15/25 in the 2005 survey.

Contemporary reductions in EU working time are caused by the growing diversity in working time arrangements on the labour market. Part-time work may have the most important impact on working time, but other non-standard working time arrangements are worth mentioning. The nine-to-five routine, the standard working day in the 1960s, is becoming increasingly less common. Traditional hours are being replaced by a whole range of different work patterns. Flexible working time arrangements in Europe increased from 25% in 1988 to 29% in 1998 (Eurofound, Reorganisation of time over the life course). More than half (56%) of all establishments with 10 or more employees in the EU-27 used some type of flexi-time arrangement in 2009, a substantial increase compared to 2005 (Eurofound, 2009). Not all flexi-time arrangements are minimal changes in the standard work relationship, such as part-time work or fixed-term contracts for significant periods. A recent study also found a growing number of workers working in 'very atypical work', namely part-time work of fewer than 10 hours a week, very short fixed-term contracts, working 'zero' hours and unwritten contracts (Eurofound, 2010).

A different change in working time arrangements is averaging daily or weekly working hours over a longer (or shorter) period. The compression of the usual weekly number of hours is becoming more and more popular, with employees working fewer days on longer shifts than standard (Spurgeon, 2003). Systems averaging hours over a period longer than one week are also used more and more. The reference period can be as long as one year (Spurgeon, 2003).

Working in irregular shift systems happens more often in specific contexts that require a 24-hour service (e.g. medical services, public transport). That is why working 'unsocial hours' in the evenings, at night or in the weekend is common for specific occupational groups. The proportion of employees working 'unsocial hours', has not increased over the recent period.

3.1.4 Divergence with America

Recent developments in working time in the EU have been remarkably different from the evolution in the USA. Alesina, Glaeser and Sacerdote (2005) observed that the same number of hours was worked in the United States and in Western Europe in the early 1970s. However, since the turn of the century, the hours worked per person are less in Europe than in the United States. In 1970, the average number of hours worked was 1,902 in the US compared to 2,048 hours in France and 1,942 hours in the UK. In 2008, the annual number of hours worked was 1,792 in the US, 1,542 in France and 1,653 in the UK.

Alesina et al. (2005) argue that two factors largely explain the difference in the way they have evolved. On the one hand, Americans have twenty fewer days of vacation and holiday than Italians and Germans, and fifteen fewer than the French. On the other hand, Europeans work fewer hours per week because of the growing number of part-time workers in Europe. According to OECD data, the number of part time workers remained close to 13 % in the USA during the 2000s, and went up with about 2 percent points in most European countries. In short, the developments which have shortened European working time between 1970 and 2000 (more holidays, and a growing diversity in working time arrangements) have been less prominent in the US. The authors indicate that social partners and labour regulations have been the main drivers of this evolution. OECD (2004) adds cultural and macro-economical factors to explain the differences in working hours between USA and Europe. Cultural differences refer to Americans willing to work longer hours in order to enjoy higher earning levels. The macro-economical explanation refers to the higher tax levels on earnings in Europe, pushing workers to choose for vacation days instead of working time.

3.1.5 Preliminary conclusion

In the last two centuries, there has been a continuous decline in the actual working time of European employees. In the first phase, the number of days worked and the number of hours worked a day dropped. The end of this period can be situated in the mid 20th century, when the 40-hour working week became the standard. In the second period, reductions in the time spent at work were the result of introducing free days at the weekend and in paid holiday periods. The third period of working time reduction started in the

mid 1980s. Since then, the (annual/weekly) number of hours worked by an employee in a standard employment relationship has remained unchanged. As the number of workers in non-standard work has increased since then, the average working time of employees continued to fall. More and more people work in working time arrangements with less than standard working hours, and the average time worked has been mainly influenced by this evolution.

As the demand for flexibility and adaptability will not change in the near future, we expect the number of part-time workers and those with individualised time arrangements to increase. As a result, we expect a moderate reduction in the average (annual) working time and a growing diversity in the days and hours workers spend in the workplace.

3.2 THE FUTURE OF WORKING TIME

Looking at the past, we might – as we concluded in the previous section - expect a further moderate reduction in working time and a growing diversity in working time arrangements in the near future. Recent trends in the world of work confirm this probable evolution as explained in this section.

Companies have to operate in a very different world from a few decades ago. The European Commission funded WORKS project⁸ aimed at improving the understanding of the major changes in the knowledge-based society from the perspective of value-chain restructuring. The project indicated that restructuring trends are determined by a complex array of drivers, “in particular the globalisation of markets, the liberalisation of trade, the development and spread of new information and communications technologies, the deregulation of labour markets and the marketisation of the public sector” (WORKS project website). This recent international restructuring of labour processes has been particularly strong “partly as a result of the standardization and automatisisation of manufacturing processes and partly as a result of the rise of new industries, such as the manufacture of electronic elements.” (Huws, 2009) The speed of the restructuring process of the economy has been impressive, and business process re-engineering processes, management buyouts, outsourcing or relocation of the production, downsizing announcements, takeovers or mergers of multinational companies have never been quite prominent in the media in the last few years. In addition to external realignments, companies are in a continuous process of internal reorganisation, transforming individual functions into separate cost or profit centres, or floating them off as separate companies (Ramioul and Huws, 2009). This ‘global value chain restructuring’ has an impact on the organisation of work and of working time in companies.

3.2.1 Globalisation and working time

The popular press sees an easy link between globalisation and working-time developments. The competitive demands of globalised trade and production require increases in hours and work-time flexibility. The globally integrated economy, we are told, means more sweat (Burgoon and Raess, 2009).

Employees working in IT-based services may be one of the most vulnerable occupational groups for processes of globalisation and internationalisation. WORKS project cases have indicated that IT professionals face global ‘speeding-up’ processes through tighter planning and schedules. They have to keep up with unusual working time demands due to the need for global synchronisation. This has created an increasing demand for more flexible working time patterns (Krings et al., 2009).

In knowledge-intensive occupations (IT occupations), it becomes clear that working time regulations are used in international competition. Flexibility and overtime, for example, provide Hungarian IT employees with a competitive advantage, as work councils do not allow working time at weekends in Austria and Germany. We also find a requirement for flexibility and job precariousness resulting from value chain restructuring in the public sector. In other sectors, e.g. the food industry, this picture is not observed. Working time competition is not yet a general characteristic of all sectors (Krings et al., 2009). On a

⁸ <http://www.worksproject.be/home.htm>

labour market scale, globalisation rarely leads to the anticipated large change in working time structuring. Burgoon and Raess (2009) even concluded, after analysing German Establishment Survey data, that globalisation generally lightened rather than increased standard hours for full-time core workers. At the same time, work time flexibility increased: temporary and fixed-contract work and balancing-time accounts increased.

3.2.2 Knowledge-based work and the organisation of working time

The WORKS project has illustrated that “changes in work organisation and at the workplace, accrued from the new global division of labour, are accompanied by (and in some cases enabled by) the codification of skills and knowledge leading simultaneously to new forms of flexible and autonomous 'knowledge work' but also to new forms of Taylorism⁹. This can result in a dual process of decomposition and recomposition of skills and occupational identities, and to different ways of achieving flexibility.” (WORKS project website)

On the one hand, standardisation and outsourcing processes enable the fragmentation of the value chain into separate ‘networking’ companies. Whereas big companies used to control the whole value chain in industrial economies, information technology has facilitated decisions on in/outsourcing of parts of the production process to subcontractors. With regard to working time, demands for flexibility are shifted on to subcontractors or units further down the value chain who in turn pass them on to their employees. The WORKS case studies revealed significant differences depending on the position within the value chain. The further the distance from the central node of the network company towards the periphery, represented by subcontractors, second-tier subcontractors, single freelance workers, outworkers, the greater the flexibility (Huws et al, 2009; Krings et al, 2009). It is this kind of decentralisation of flexibility needs that helps explain the rise of ‘very atypical contracts’ (Eurofound, 2010). The outsourcing company communicated standardized tasks to subcontractors asking for tight deadlines, as it does not have to bargain on working conditions with employees to assure production. The client has to make sure the tasks are performed and has to guarantee flexible production and, as a consequence, flexible working times. Lower-cost regions, labour markets or employee groups are confronted with these high flexibility demands. Employees working for these subcontractors are at greater risk of having atypical working times and being in atypical contracts with regard to duration, contractual arrangements, etc.

On the other hand, workers in the ‘network hub’, in the core activity of the outsourcing company, are to a large extent protected against poor working contracts. This does not mean core activities are not affected by value chain restructuring processes. Implementation of internal competition or through technical integration of workflows beyond single organisations intensifies work across segments (Huws et al., 2009). The consequence of these processes is an ever increasing intensification of work. Employees have to work to tighter deadlines than before, at a higher speed, or more often without enough time to get the job done (Eurofound, EWCS 1990-2005). The number or the timing of working hours may remain unchanged for core workers – they have to work harder than before with a risk of stressful outcomes. It may be only a side-effect of working time, but it is a very important side effect, as it can have negative health and safety effects.

More and more ‘core’ employees, especially more highly educated employees and/or professionals and managers, are allowed to take work home. Teleworking, another form of work organisation enabled by information technology, is a contemporary answer that meets the flexibility demands of both employers and employees. Employers are assured that employees can perform their tasks. Employees choose when (in the day, in the evening) and where (in the company, at home) they work, and have the opportunity to find a better work-life balance. The challenge for employees (and employers) is to beware of the risks of ‘blurring’ the home/work boundary (Felstead, 2001; Hardill, 1997). Reading and processing work-related

⁹ The term 'neo-Taylorism' was coined to refer to a modern version of Taylorism, applied to knowledge-based production. It refers to an organisation of work that, while incorporating post-Taylorist features (e.g. reprogrammable technology, skilled workers), remains essentially Taylorist (by precluding worker initiative and intensifying rather than upgrading work). Often used as a synonym of neo-Fordism.

e-mails from remote (private) locations was technically impossible in the past, but has become an everyday habit for a number of workers in knowledge and communication intensive jobs. The household implications of taking work home are not necessarily positive, and – more important in the light of working time bargaining – the amount of unobserved overtime work (or, in the opposite case, non-working hours) can easily explode.

3.2.3 The 24-hour economy

There is a trend in Western societies towards guaranteeing longer service hours, as a result of changing consumer demands. This is facilitated by new information technology and sophisticated communication. Public services, such as health care and fire brigades, have for a long time had to guarantee a 24-hour service. Recently, however, there has been an increasing demand for longer service hours in private services such as banking, wholesale, retail or customer support.

The 24-hour economy has consequences for the working time of employees who have to secure the service. That is why we see a move towards non-standard patterns of working hours. An increasing number of people have to work in forms of shift working which include night work, or are required to adjust to flexible and irregular work patterns (Spurgeon, 2003). As mentioned above, some occupations, for example emergency services, have always required shift working. As the need for continuous provision or production extends into more and more areas of life, employers in more occupations are expected to use shift working. The provision of these services in need of longer working hours is likely to be combined with outsourcing decisions, with (see above) a higher risk of atypical working hours. An example is the provision of 24-hour customer support, a classic activity which companies have outsourced to call centres providing a non-stop service and offering ‘very atypical’ working conditions to their employees.

3.2.4 Female employment

The participation of women in the labour market has been increasing since the 1960s. Working time regulations have become increasingly diverse over the same period. This is no surprise, as the participation of both women and men in the labour market has challenged the time organisation of households. It has become more and more difficult to reconcile work and family life when both partners work in traditional 9-to-5 jobs. Thus, the feminisation of the labour market has been going hand in hand with the flexibilisation of the labour market. For example, more women than men are found in flexitime regimes and/or part-time work.

Female participation in the labour market is still lagging behind that of men. Further growth in the number of women in the labour market will probably be accompanied by more non-standard working schedules. In the long run, it will be necessary for all jobs on the labour market to be possible in ‘family compatible’ working arrangements, pushing the diversity of working time regimes even further (Fagan, 2004).

The integration of women in the labour market has been facilitated by the opportunity to work part-time, but it is not necessarily the case that women will continue to prefer part-time work once they stay in the labour market. Danish and Swedish women have illustrated that part-time work has been a ‘transitional arrangement’ to integrate women into the labour market. In future labour markets, employees of either sex will have to adjust their working time to accommodate family responsibilities, and working arrangements in general will have to be made more ‘family compatible’ (Fagan in Messenger, 2007). Of course, there are also many women in the current EU labour market preferring longer working hours. Many employees work involuntarily in part-time contracts (OECD, 2010) and/ or combine several contracts to work more hours (EuroFound, 2008).

3.2.5 An ageing workforce

The European labour force will continue to grow slightly over the next few years. The labour force in Europe will be at the maximum level at the end of the 2010s. Over the period 2018 to 2050, the labour force is expected to shrink. This is mainly the outcome of projected declining trends for the working-age population and a shift in the age structure of the population towards older, less participating groups – a consequence of the baby-boom generation approaching retirement and the succeeding lower birthrate cohorts reaching working age (Carone, 2005). Working time arrangements for older workers will not necessarily diverge from those of the average employee. We do see an increase in the number of older people in part time arrangements, but differences are unlike the gender differences in working time patterns. We believe the ageing workforce will be of limited importance for working time patterns in Europe. It is equally important for this group to respect the maximum number of hours worked a week, and the periods of rest and holidays.

3.2.6 Individual career orientations

Several authors have recorded a changing attitude to career management among the working population. Traditional careers are gradually changing to become ‘boundaryless’ careers (or sequences of job opportunities that go beyond the boundaries of single employment settings) (Arthur and Rousseau, 1994), protean careers (in which the person, and not the organisation, manages the career) (Hall, 1976) or post-corporate careers (where employees move out of large into smaller, more entrepreneurial firms and into individual, consultant-type roles) (Peiperl and Baruch). Traditional careers focused on gradual hierarchical advancement in one company. Formal educational programmes in the company supported periodic promotion, and employee loyalty was rewarded by job security. Although the large majority of employees still work in traditional careers, employees in specific labour market segments choose careers that move away from this picture. Small, entrepreneurial organisations require more individual career choices. Contemporary employees in these settings have to ensure their employability, and look independently for sequential opportunities of ‘interesting’ work.

In traditional organisations, working time is based on collective agreements. These arrangements are based on criteria such as stability, security and predictability. On the one hand, one would expect new careers to be served by flexible workplace arrangements that are bargained with individual employees. On the other hand, these ‘new careerists’ are more vulnerable to find themselves working with very atypical contracts. A collective agreement on working time arrangements (e.g. in a European Directive) for this kind of ‘consultancy-like’ work might protect employees in new careers against poor working conditions.

3.2.7 Preliminary conclusion

Important trends in the labour market will continue to influence the regulation of working time in Europe. Companies will restructure and control the value chain, albeit not necessarily keeping all the work to be performed by their own staff. Through different arrangements, demands for flexibility will be shifted to subcontractors or units further down the value chain. They in turn will pass them on to their employees. In this context of value chain restructuring, there is an obvious risk of more precarious working arrangements. These trends will inevitably also influence the work of the employees of the controlling company, where a closer relationship with individual client demands, the opportunities of information technology and global competition for performance gains will push workers to work in flexible work schemes more often. At the same time, technological innovations will continue to facilitate opportunities to answer work-related issues from remote areas, as mobile phones and blackberry’s already illustrated recently for knowledge and communication intensive occupations.

At the same time, the demand from workers for more flexible working times is increasing all the time. A growing diversity of the labour force (with more older, but especially more female, employees) asking for a diversity of working time arrangements is a major driver of this. At the same time, traditional careers (8 hours a day, 5 days a week, 40 years for the same company) are evolving toward individual career tracks characterised by individualised working time arrangements.

These needs driven by demand and supply will result in a further reduction of the number of workers with a standard employment relationship, i.e. an open-ended full time contract for a nine-to-five job at the company's premises. This means we will find more and more workers with temporary contracts, independent professionals with subcontracts, part-time contracts, flexible working times, or work at home. These trends will inevitably result in new risks for workers in the 21st century. Workers will be more vulnerable to negative outcomes from the increasing intensification of the work process at the workplace (e.g. from work-related stress), and from the blurring of the home/work boundary (e.g. from threats to the work-life balance).

3.3 CONVERGENCE OF WORKING TIME ARRANGEMENTS IN EUROPE

Taking into account the EU integration process, we might expect working time arrangements in the different Member States to converge. Figure 3 illustrates how working time has developed in different European countries. Rather than a convergence, we observe a status quo in the relationships between European countries. The ranking of countries on the basis of the annual hours worked by the average worker remains more or less unchanged. Countries working the longest hours have been working long hours for a number of years; countries with the lowest number of average hours worked have consistently been at the bottom of the graph. In this section, we estimate if this divergent picture can persist within Europe in the future.

Table 2: The evolution in annual working hours (Selection of EU countries; 1950-2008)

	1960	1970	1980	1990	2008
Greece			2116	2121	2120
Czech Republic				2092	1992
Hungary		2228	1975	2061	1988
Poland				1988	1969
Italy		1859	1867	1861	1802
Slovak Republic				1815	1769
Portugal			1963	1765	1745
Finland	1982	1849	1769	1750	1728
United Kingdom	1943	1773	1771	1712	1653
Austria				1658	1631
Spain	2040	1912	1741	1731	1627
Sweden	1730	1517	1561	1642	1625
Denmark	1884	1659	1539	1581	1610
Ireland			1988	1719	1601
Belgium			1658	1545	1568
Luxembourg			1766	1662	1555
France	2048	1860	1705	1591	1542
Germany				1473	1432
Netherlands			1352	1374	1389
Average	1929	1799	1741	1717	1676

Source: HIVA, based on OECD

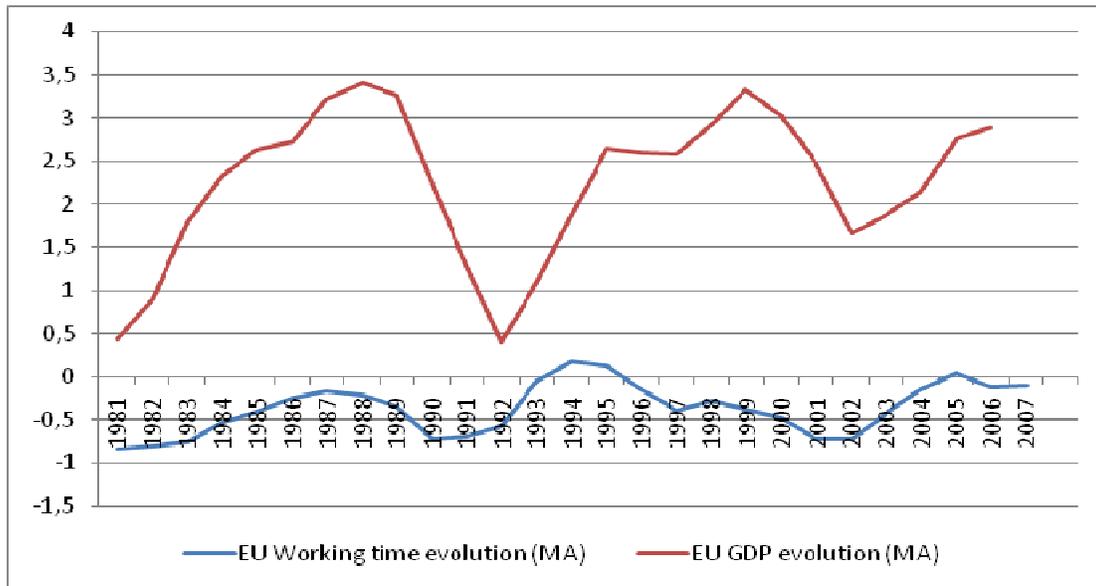
3.3.1 The economic cycle

Wages and/or income may affect the levels of hours worked. Higher wages will result in an ‘income effect’ and a ‘substitution effect’. An individual can afford more leisure time with a higher income (income or wealth effect). At the same time, working becomes more attractive than not working when wages are higher (substitution effect). The actual outcome will depend on the strongest effect (Bishop, 2002).

At a macro-level, the income effect seems to be the strongest effect in the post-war period. A rapid rise in hourly earnings in the post-war period in Europe produced a strong preference for more leisure. A large part of the extra earnings was used to increase leisure time (Owen, 1988).

Figure 4 illustrates the parallel between working time reduction and the economic cycle in recent times. The average working time has risen (or reduced more slowly) in periods of increasing GDP growth (mid-1980s, 1994-1995, 2004-2007). When GDP growth was decreasing (1970s, 1989-1992, 2000-2002), there was a more negative trend in the evolution of annual hours worked in Europe. Crises are resolved by reducing overtime or spreading the work over more employees in order to save jobs. For example, work sharing was a popular reaction in several European countries in order to avoid layoffs in the 2009 crisis period (Crimann et al., 2010; OECD, 2010).

Figure 3: Moving average of the annual change in working time and of GDP growth



Sources: HIVA, based on OECD and IMF data

Preferences for (more or less) working hours can be affected by both individual-level and country-level characteristics. It seems that individuals with a higher living standard (higher educated households with a high income and older employees) prefer shorter working hours, and vice-versa. But there is also an important effect at macro-level, both economic and social. In countries with high levels of economic development (as measured by GDP per capita) and low economic inequality, employees (both male and female) prefer to reduce the time spent in paid work (Stier, 2003). Looked at from this point of view, the consequence of GDP growth in the ‘new’ EU Member States, where GDP and average income is lower than in the 15 ‘old’ EU Member States, might not be the same.

3.3.2 Institutional characteristics

There is a link between the welfare regime and working time options people take in the life course (Eurofound, 2005). Particular institutional arrangements influence the participation of national citizens in the labour market. Economists stress that differences in tax rates go a long way to explaining differences in average hours worked in different countries. Different papers show a negative relationship between tax rates and hours worked per employed individual (Causa, 2008). Tax rates are of course only one way to deduce labour market behaviour. 'Time policy' orientations will shape the decisions of men and women on the number of hours they prefer to work. This is obvious in the case of a reduction of the standard working week. The Aubry law in France had an impact on people working over 35 hours a week. But there is also a link between 'time policies' and working time, e.g. policies supporting part-time work, child care provision, etc. Anxo et al. (2007) show that 'working time policies' have an obvious impact on average working hours.

Working time develops differently in countries with strong industrial relations from countries with a more liberal way of organising working time (and it results in another typology that can be used to differentiate country clusters). Countries with strong industrial relations will opt for bargained solutions on wages and working conditions on a larger scale. An example is the evolution of working time in the late 1970s in different European countries. This is in contrast to the US, for example., European countries placed working time reduction as a policy for sharing the scarce employment opportunities in this crisis period at the top of the bargaining agenda in a number of industries (Owen, 1988; Messenger, 2004). Unions in particular will tend to advocate work-sharing arrangements in declining industries (Causa, 2008).

An important result of the social dialogue in European countries is the working time regulation. Collective bargaining is of major importance in the development of the weekly hours worked in EU countries. EIRO has been conducting annual updates on working time for 11 years (from 1999 to 2010). Data for the EU-15 and Norway in this period indicated that average agreed weekly working hours have remained at the same level in the first decade of this century. The average agreed weekly working hours have fallen only from 38.6 hours to 37.9 hours a week. All of this reduction occurred before 2003. Since then, there has been virtually no change in the average for Europe. A general reduction in working hours has scarcely featured on the collective bargaining agenda in these countries over this same period (EuroFound, 2010). The influence of the bargained weekly working time is clear, but not total. On the one hand, the average number of actual weekly hours of full-time employees is lower in countries with the lowest agreed number of working hours (France, Belgium, Finland, Denmark), and higher in countries with a bargained working week of 40 hours (mainly in the 'new' Member States). On the other hand, the (average) actual number of hours worked is higher than collectively agreed in any country.

Working time flexibility can be achieved in many ways. The European Foundation for the Improvement of Living and Working Conditions (Eurofound) in Dublin has developed a typology of working time flexibility profiles based on how companies organise their working time flexibility and work-life balance options. There seems to be a wide variety in the companies' flexibility patterns within Europe, reflecting different results in the quest for equilibrium between flexibility and security within Europe. Some countries show a pattern of worker-oriented flexibility (e.g. leave options, flexible working hours, part-time work); in other countries, flexibility better serves the expectations of companies (e.g. prevalence of unsocial working hours, flexible contracts).

The different typologies all have a similar geographic clustering of European countries. This is illustrated in table 2. As some individual countries might move between clusters depending on the classification, we have not explicitly labelled all countries within a cluster. Nevertheless, it is possible to see a different approach to working time arrangements in five clusters of countries, each of them representing a different approach on how to arrange the working time of employees.

Table 3: Clustering of European countries according to different perspectives influencing working time arrangement

Typology	Life course arrangements (Anxo, 2007)	Flexibility profiles (European Foundation, 2007)	Industrial relations (own assessment based on previous EuroFound work)
Nordic countries	Universal breadwinner model	High flexibility, worker-oriented	Centralised bargaining, co-responsibility
Central European countries	Different models of ‘maternal part-time’ work	Low/intermediate flexibility, company-oriented	Self-regulation of social partners, usually at industry-level
Mediterranean countries	Exit or full time work	Low flexibility, company-oriented	State-led regulations, antagonistic relationship with social partners
Anglo-Saxon countries	‘Maternal part-time work’	Low/intermediate flexibility	Decentralised bargaining, weak organisations
Eastern European countries		Low/intermediate flexibility	Decentralised, weak organisations

As a result, we expect no convergence of working time arrangements within Europe. Although all countries are influenced by the Northern and Central European model and have an ever increasing rate of female labour market participation, there are several characteristics that split the European countries into different clusters, each of them advocating a different logic of how to arrange working time arrangements.

In Nordic countries, the co-responsibility of social partners in policymaking enabled the development of the ‘universal breadwinner model’. Worker-oriented flexibility and investments in childcare provision have resulted in high employment rates, and female workers choosing a reduction of hours to part-time work only when children are very young. In Mediterranean countries, regulations are developed by the state in an antagonistic relationship with trade unions in particular. Flexibility is designed mainly to allow companies to organise their work. The difficult combination between working hours and family obligations pushes women out of the labour market. In Mediterranean labour markets, part-time work is less common and the average working time is high. In Eastern European countries, with less developed industrial relations, the average working time is higher and there is even less worker-oriented flexibility.

These policy choices are changing only very slowly, so we may expect that the divergence in the number of hours worked in different Member States will persist in the near future. The number of hours worked and the variety of working time arrangements will depend on taxation systems, industrial relations systems and/or the welfare state regime advocated in a particular Member State.

3.3.3 Preliminary conclusion

In this section we have addressed the question of whether common European regulation (such as the Working Time Directive) can be a driving force in more unity in the way working time arrangements are developed in the Member States. We conclude that the variety in working time arrangements has been great in the past, continues to be great nowadays, and will be in the future. The average number of hours worked a year varied from under 1400 (in the Netherlands) to over 2100 (in Greece) in 1980, and this was still the case in 2008. Nor is it likely that the picture will change in the near future.

Different European countries follow different strategies to develop their working time policies. These strategies will not change overnight, as they are visibly rooted in the cultural choices of Member States, the way industrial relations systems have developed, and/or the welfare state regimes. The working time policies in different (clusters of) Member States will therefore remain quite specific, each of them reflecting a different view on how to provide an answer to the demands for flexibility demands from companies and workers. Any review of the Working Time Directive will have to take account of this European diversity.

3.4 CONCLUSIONS

European full-time workers enjoyed significant working week reductions until the middle of the 20th century. At that time, a working week of about 40 hours became the standard. Ever since, the standard working week and the actual number of hours worked a week has largely remained unchanged.

This does not mean working time arrangements are not evolving. We have observed an ever continuing reduction in the average number of hours worked per year in Europe because of the growing diversity in working time arrangements, an evolution that has not yet come to an end. The future European labour market will be characterised by an ever increasing diversity of working time patterns. The standard employment relationship, i.e. an open-ended full-time contract for a nine-to-five job at the company's premises, will become less prominent. Workers will have more temporary relationships with employers, will engage in part-time work, and will work remotely. The diversity of employment relationships will increase, and more workers will also find themselves dealing with very atypical working time arrangements and/or precarious working conditions.

The reason for the erosion of the standard employment relationship can be found in requests from both companies and workers for more flexible working times. Although both partners in the employment relationship are seeking more tailor-made working time arrangements, it is important to address this growing variety of time spent at work in any review of the Working Time Directive. The trend towards individually arranged working time agreements inevitably results in new risks for workers in the 21st century. Workers will be more vulnerable to negative outcomes from the increasing intensification of the work process at the workplace and from the blurring of the home/work boundary. This is developed in next chapter, which includes a detailed discussion on health and safety risks, including in non-standard employment.

There will be no standard working time on the future labour market, nor will there be one way to implement any reviewed Working Time Directive in national legislation – as is clear from the emphasis we have placed on the fact that there is not one 'European model' of working time arrangements. Several characteristics split European countries into different clusters, each of them representing a different logic of how to arrange working time. We expect that the divergence in the number of hours worked in different Member States will persist in the near future. The number of hours worked, and the variety of working time arrangements will depend on taxation systems, industrial relations systems or the welfare state regime advocated in a particular Member State.

4 HEALTH AND SAFETY ASPECTS OF WORKING TIME: EFFECTS OF WORKING HOURS ON SAFETY, HEALTH AND WORK-LIFE BALANCE

4.1 INTRODUCTION

On 2005-03-23 at 01:20 pm an explosion occurred at the BP refinery at Texas City, USA, resulting in 15 deaths and 180 injured, and financial losses exceeding US\$1.5 billion. The board operator responsible had worked 29 12-hour shifts on consecutive days, without any day off. The US Chemical Safety and Hazard Investigation Board, which analysed the accident, came to the conclusion that fatigue was a likely contributing factor.

Although such single events do not prove anything at all, this case is an interesting illustration of at least two of the central problems in the organisation of working hours that are addressed in the Working Time Directive:

- working long hours, thus reducing the daily rest period and time for recuperation, and
- postponing weekly rest periods.

Long hours and insufficient rest can substantially affect the safety of operators, the plant and the environment surrounding the plant, as well as the general public. The BP case neatly demonstrates the findings of our review of the effects of the organisation of working time on health and safety.

The findings and conclusions are based on:

- an updated review of the effects of long work hours;
- a special review of more recent results on the effects of different aspects of rest periods and their postponement;
- a review of the effects of working at unusual times, e.g. Saturdays, Sundays, or evenings;
- a summary of the findings of the effects of working shifts, and/or nights and/or flexible working hours;
- our expertise in the field of the ergonomics of working time.

We have also carried out additional statistical analyses of data sets in the fields of long working hours and working unusual hours (EWCS and national German data).

This chapter summarises the essential findings and answers the questions raised by the Commission. A more detailed account of the findings, together with the bibliographic references, can be found in the Annex to the Final Report.

4.2 LONG WORKING HOURS

4.2.1 Long working hours and safety

Long-standing studies (dating from the beginning of the last century) and more recent reviews both clearly show a consistent relationship between long working hours (both per day and per week) and the risk of accidents. There is on average an exponential increase in the accident risk beyond the 7th, 8th or 9th hour of daily work, depending on the type of accident (and also probably on the type of work), as well as on other characteristics of working time organisation, e.g. the incidence of rest breaks (see below). This increase can result in a doubling of the accident risk for the 12th hour of a shift as compared to that of the 8th hour. The same holds for hours per week, where the risk of accidents again increases substantially as the number of working hours increases.

It has been shown by Folkard & Lombardi (2004) that the risk further increases (again exponentially) for successive shifts (with empirical evidence up to the 4th shift in succession), indicating a lack of adequate

daily rest. This increase over successive shifts is higher for night than for day shifts, indicating an adverse effect of night work on safety.

The exponential increase in the accident risk after 7 to 9 hours of work is an indication that, beyond that number of daily working hours, the person is unable to keep or return to a stable steady state (see section below on rest breaks). This could point to 7- 9 hours as an advisable limit for the limitation of daily working hours under otherwise comparable conditions (e.g. type of task, workload, day work, rest breaks). Such a clear limit cannot be recommended with regard to weekly working times given the increased complexity of the dynamics of work and rest over a longer period of time. There is, up to now, no such point at which the functional relationship between the number of working hours and safety deviates from linear development, so that no cut-off point can be determined. However, as stated above, there is an increase in the accident risk with an increasing number of hours worked per week.

There is also evidence that where medical staff in the health care sector have long working hours (both nurses and junior doctors), this can lead to an increased risk to patient safety. Intervention studies have shown that working hours in accordance with the provisions of the WTD can lead to a reduction in medical errors and thus to an increase in patient safety.

These results take no account of the history of long working hours of the individuals concerned. Since nearly all assessments are based on an estimate of the number of hours worked at one point in time, it is not possible to differentiate the results for long- versus short-term exposure to long working hours in terms of the accident risk or the health of workers. However, accidents can be regarded as a short-term consequence of working long hours, whereas health effects seem to result from long-term exposure to working long hours.

4.2.2 Long working hours and health

As with the accident risk, there is a clear relationship between working long hours and the health of workers. Several reviews and empirical studies consistently demonstrate various negative health effects of extended working hours: long working hours are associated with poor perceived health, more illness, or even increased mortality. This is true for all kinds of health impairments, e.g. general health, cardiovascular, gastrointestinal and psycho-vegetative disorders, as well as musculo-skeletal complaints.

In contrast to safety problems, the relationship between the number of working hours per week (which in this case is the reference period used most often) and the risk of health impairments is nearly linear, going from part-time employment to work featuring more than 80 hours/week. This is most probably due to the requirement of long- (or at least longer) term exposure before the effects become obvious. The linear increase is demonstrated consistently across different studies, as is the amount of the increase as working hours increase – if standardised measures are used, controlling for the different types and numbers of impairments, and their scaling, as well as the different levels of prevalence reported in different (sub-)samples or surveys, etc. Thus the conclusion is that working longer hours is always associated with a greater risk of health impairment.

This linear relationship¹⁰ thus does not allow for any empirically based recommendation of a cut-off point or a maximum number of hours of work where no work-related impairments to health can be observed. Work-related health complaints also occur, although with a lower probability, under part- time conditions. Working long hours increases this probability substantially. Setting a limit in this context is thus a matter of how many (work-related) health impairments one is prepared to accept.

¹⁰ A linear relationship between two variables describes a proportional increase in the dependent variable (e.g. accident risk) with an increase in the independent variable (e.g. number of working hours). An exponential relationship, in contrast to a linear relationship, indicates a disproportionate increase of the dependent variable with an increase of the independent variable, e.g. a higher increase of the dependent variable per unit change of the independent variable.

It should be borne in mind that long working hours are not the primary reason for health impairments. More important (in terms of causation and explanation of variance) are the type of job and the workload associated with it, as well as a number of other factors. However, when controlling for individual and job-related factors, e.g. by analysing aggregated data and thus controlling for inter-individual variation, the effects of doing a job for a different number of hours become evident, showing the linear relationship referred to above between the number of hours worked and the extent of (or the proportion of those with) health problems – with a substantial proportion of the variance explained.

It should be further borne in mind that in addition to the direct effects on health of working long hours, there are also indirect effects, e.g. via a reduced work-life balance (WLB) and maladaptive behaviours (e.g. consumption of coffee or alcohol, smoking, lack of exercise) which are increased by long working hours and which add to the direct effects.

Most of the studies reviewed predominantly relate to hours per week and health impairments, but analyses using the number of days where more than 10h/day were worked (e.g. from the EWCS surveys) yield comparable results: an increase in health problems linked to an increasing number of days of 10 hours of work or more.

A methodological caveat is required in any attempt to try to determine a suitable limit to the number of working hours in order to avoid health risks. Most studies use subjective reports of average or typical numbers of hours worked per week or during the preceding week. This rather imprecise measurement does not affect the validity of information on the structural relationship between working long hours and health, e.g. the increase in (reported) complaints with an increasing number of (reported) hours. However, these data are not very suitable for point estimates, e.g. estimating the proportion of sleep problems that could be expected linked to a given number of working hours. Such an estimate would require factual data, at least in terms of the number of hours worked, and preferably over an extended period of time.

In any event, extending working hours beyond the limits of the current WTD would result in an increased risk of health impairments – while a reduction of working hours should lead to a reduction in health problems.

Another problem with the data and reviews is that the estimates of the effects of long working hours are based on (a) rather small samples (as compared to studies on people working between 35 and 45 hours), and which (b) most probably represent selected or self-selected (survivor) populations. This may be one reason why the trends in increasing health problems in this area (> 45 hours) which they report are still linear and not exponential, as might be expected; the estimates of the risk increase might thus be rather conservative.

The selection/survivor hypothesis for those with long working hours can be supported by an inspection of their demographics and job characteristics, which deviate from those working “normal” hours. Controlling for such variables, e.g. workload does not, however, affect the evidence of a link between an increase in health problems and an increase in the number of working hours, but it does change the level of complaints reported across the whole range of working hours.

It can thus be concluded that even for those working long hours “voluntarily”, the risk of health problems will increase as the numbers of hours they work goes up, as is the case with self-employed workers. Therefore, this will most probably apply also to those using the opt-out feature, although the data and reviews available do not take this into account. We have not found empirical data or empirically-based evaluations to test this hypothesis. So this must remain a hypothesis, although one that is well founded.

Another serious problem that appeared during the analyses is a complete absence of studies addressing the (long-term) effects (or dynamics) of long-term exposure to working long hours. As mentioned above, most of the studies are based on a spot assessment of the number of hours worked, without paying any attention to the temporal dynamics of working hours over an extended period of time before the actual assessment. Thus, the effects of long-term exposure, e.g. over a number of years or a whole life span,

cannot be reliably estimated. Such studies are urgently required, even if they were simply retrospective and not the prospective studies, which would be most useful.

4.2.3 Long working hours and work-life balance/social participation

Time for work, sleep and leisure activities can be regarded as a zero-sum game: An increase in working hours inevitably leads to a reduction in time for sleep and/or leisure activities. Given the minimum amount of sleep required, compensating for longer working hours by a reduction in sleeping time is only partially and temporarily possible (with associated negative effects for safety and health). This leaves leisure or social activities as the candidates for the compensation, i.e. a reduction in time for such activities must be expected. It is thus not surprising that the results of the vast majority of studies show that family life and/or work-life balance (WLB) are clearly negatively affected by increasing the number of working hours per week, especially beyond 40 hours per week.

Usually, the ratings of work-life balance which are reported are subjective, and that means relying on adaptable subjective standards for the comparison. Studies assessing the actual amount of time spent on different activities are rather scarce. Since there could again be such a zero-sum game among leisure and social activities, it would be interesting to see which activities are reduced first and most, or whether there is a general reduction in all leisure activities. Empirical evidence shows that different strategies are employed to cope with such situations, e.g. reducing household vs. reducing social or leisure activities, depending inter alia on the additional responsibilities of those concerned (e.g. for children, for care giving), and eventually leading to the fact that in some cases practically no time remains for leisure activities.

Such a reduction in time for social activities is a clear impairment of social participation, with consequences not only for those directly concerned, but for their families, e.g. spouses and children, their immediate and wider social environment, and for society as a whole. In our research we did not find any studies examining the effects on children of one or both of their parents working long hours, although it is well known from shift work research that children with a shift-working father are less likely to attend higher education. The same could be expected for children with fathers and/or mothers working long hours, but we have no evidence for this. The same is true for participation in interest groups, e.g. political parties, trade unions, or participation in community councils, where we also have no empirical evidence of how working long hours affect such activities. However, it would seem important to look at such possible effects of long hours, both from the perspective of the individual as well as from that of society.

4.3 WORKING AT “UNUSUAL” TIMES

4.3.1 Working on Sundays, Saturdays and in the evenings

Working at unusual times, i.e. Sundays, Saturdays and in the evening (apart from working shifts) has been increasing in recent decades, and with the move to a ‘24/7’ society, there are numerous attempts to extend the ‘normal’ working day to such unusual hours, e.g. in the retail sector. However, our society is still characterised by a clear social rhythm in which the hours in the evenings and at weekends have a much higher value for social interaction than do other hours/days of the week. Evenings and weekends are normally reserved for different functions, e.g. rest, recuperation and social interaction, so that working during these hours can be expected to be associated with physical and psychosocial impairments.

A great number of empirical studies show exactly this. Working at unusual times is associated with impairments to safety, health, well being, and work-life balance. While the latter is rather plausible, the detrimental effects of working on Saturdays and Sundays to health and especially safety are less obvious. However, the (albeit rather scarce) evidence available, clearly shows that those who work on Sundays (apart from working shifts) display a substantially increased risk (about 30%) of causing/suffering an accident, leading to work-time lost. Whether there is an increased risk of having an accident on a Sunday itself (as opposed to a generally increased risk of working on Sundays) is not yet clear. There are some indications that this might be true as well, but this would require more studies using factual data on the

number of accidents and the exposure to work on Sundays, controlling for the different a priori risks for different jobs.

Controlling for such confounding job factors reduces the risk attributable to working on Sundays, but a significant increase in the risk of an accident remains, except when controlling for work on Saturdays. Working on Saturdays is more common than working on Sundays and thus statistically explains more variance than working on Sundays – which is usually associated with work on Saturdays. The reverse is not true (i.e. those working Sundays usually also work Saturdays, while those working Saturdays do not necessarily also work Sundays).

These results therefore demonstrate at the same time that work on Saturdays is also substantially associated with an increased accident risk. This leads to the conclusion that both weekend days have a special function of recuperation from work-related demands which conflicts with working during the weekend. This also seems to be the reason why there is a substantially higher risk of health impairments for work, including work at weekends and especially Sundays, as opposed to the situation where no work occurs at the weekends.

It is worth mentioning that these effects do not require regular work on Sundays but that the effects can already be observed with occasional work on Sundays or just one Sunday per month. It should further be kept in mind that these effects can be observed in spite of the fact that work on Sundays must normally be compensated for by a day off during the week in order to comply with the regulation of weekly rest in the WTD. Sundays thus obviously have a special function for recovery, which cannot be compensated for by a different day off.

4.3.2 Working shifts

It is well known, well documented and legally accepted in some countries that working shifts increases the risk of impairments to safety, health and social participation. Working shifts, and especially shifts including night work, leads to a desynchronisation of physiological (and mental) functions from their circadian rhythm. This in turn leads to a disturbance of these functions and as a consequence to impairments in health, especially in those domains which underlie a circadian rhythm. The main symptoms linked to shift work are thus sleep and digestive problems. Further health problems associated with shift work include cardiovascular disorders.

In recent years, the possible association of shift work (including night work) with cancer has been discussed. The hypothesis is that the circadian disruption, especially in melatonin production, is a causal agent for the development of cancer. Experimental studies with animals show that it is possible to elicit cancer by a severe disruption of the circadian rhythm, whereas the epidemiological evidence for humans is less clear. A few epidemiological studies show a significant but rather weak association between cancer and night work, while others do not. This is why the International Agency for Research on Cancer (IARC) has classified shift work, including a disruption of the circadian rhythm, as “probably carcinogenic” to humans.

The problem with the evidence available for humans is that it has not been clearly defined what such a “circadian disruption” really is, how it could be (quantitatively) assessed, and how this disruption is associated with working shifts – e.g. what kind of shift systems lead to which degree of disruption, and what degree of disruption over which time span can be expected to trigger cancer. This is one of the reasons why the exposure to “night work” including a “circadian disruption” as the causal agent has not yet been adequately classified, so no dose (circadian disruption)-response (cancer) assessments can be performed.

Another problem with the evidence available is that night work is often combined with other working conditions which make it difficult to attribute the effects clearly to the night work (e.g. work in hospitals or as cabin attendants in the air traffic sector). The evidence for the association of night work and cancer must thus till now be regarded as insufficient. More valid research results are required to assess any possible risk of cancer associated with night and shift work.

It has also been shown that shift work increases the risk of an accident, especially if successive night shifts are worked. The risk of an accident increases with the number of successive night shifts, with the increase showing an exponential function (with empirical evidence until the 4th night shift, but theoretically and most probably continuing from there), starting at an elevated level as compared to day work and increasing at a higher rate. So there is a clear effect of night work on safety, which is exacerbated by working successive night shifts.

Besides the desynchronisation with the circadian physiological rhythms, shift work (even if it does not include night work, e.g. morning and afternoon shifts) also leads to a desynchronisation with the social rhythm of society. Shift work thus leads to psychosocial impairments for those working shifts, but also for those living with shift workers (e.g. spouses and children). It has been shown that the children of shift workers achieve lower performance at school and have a lower chance of attending higher education compared to the children of day-working fathers. It has further been shown that shift workers show a higher incidence of broken relationships and less involvement in the pursuit of their interests in public life (e.g. participating in local councils, political parties, unions, work councils, action groups and so on).

It should be noted that “shift work”, even continuous shift work, represents a whole class of different systems with different characteristics – with different impacts on safety, health and work-life balance. Shift schedules that lead to less desynchronisation of both the circadian and the social rhythm usually lead to less negative effects on health and work-life balance.

4.4 EFFECTS OF REST PERIODS AND POSTPONEMENT OF REST PERIODS

It has been clearly demonstrated during the last century that, beyond a certain limit, the relationship between work, strain and their effects (e.g. fatigue) is not linear but follows an exponential function. This is due to the feedback function, where the same workload meets a reduced capacity for work. This has been demonstrated for both physical and mental work. Furthermore, the function of recovery from fatigue also follows an exponential, non-linear function, with the greatest amount of recovery occurring during the first part of a rest break.

This has led to strategies for avoiding fatigue by early scheduling of short rest breaks after short periods of work, as opposed to a strategy of recovery from fatigue after longer periods of work. Due to the underlying recovery function, these definitely require longer rest periods for a return to baseline conditions (completely rested).

Reviewing the more recent evidence available on the effects of rest breaks has not shown any conflicting evidence with these well-established principles, but has rather confirmed them.

It has been shown that where rest breaks are postponed (either as scheduled rest breaks or as voluntary rest breaks), and where they appear after a longer period of uninterrupted work, the risk of an accident is increased compared to schedules where the rest break is inserted after a shorter period of work.

Postponing rest breaks during the working day thus leads to an increased risk to safety, due to the principle of accumulating fatigue.

Although the evidence in relation to daily and especially weekly rest periods (and in particular their postponement) is rather scarce, the same general principle (avoiding the accumulation of negative effects over extended work periods) seems to apply also to such longer work periods. This can be supported by evidence from shift work research, where shift schedules using a backward rotation (i.e. with a sequence of night-afternoon-morning shifts), and thus a reduction and temporary postponement of rest periods, lead to more physical and psychosocial impairments than those systems which allow for adequate daily and weekly rest (e.g. forward rotating systems with the inverse sequence of shifts). As already noted, the risk of an occupational accident increases with successive shifts, and this is most pronounced where rest

periods between work periods are insufficient for the person to return to his/her baseline. This would argue for an extension of the weekly rest period, resulting for example in five workdays per week.

One of the problems with evaluating the effects of postponement, especially of daily rest periods results from the fact that postponing the rest periods is often due to an extension of working hours, i.e. working long hours. This automatically leads to a reduction in rest periods and often to a reduction in sleep. The question then is whether the effects are due to working long hours (e.g. the accumulation of fatigue), the reduction/postponement of rest periods (insufficient recovery), or to both. Comparing backward with forward rotating shift systems (with identical numbers of hours worked, so the effect cannot be due to extended work hours) indicates that there is a detrimental effect from postponing rest, e.g. by compressing work periods which are separated by overly short rest periods in order to accumulate rest periods into (postponed) greater blocks of rest.

Some results from a very special situation, i.e. oil rigs, show that a shorter work-rest cycle, e.g. one week on – one week off, is preferable to longer ones (2 – 2), although this is not usually the workers' preference because of a loss of leisure time from having to commute more frequently and thus a higher total commuting time.

Results from a time series analysis using actual (overtime) work hours per month and those accumulated over a period of five years on a working time account, which in this case generally represented a postponement of rest periods, showed that both the actual and the accumulated (overtime) work hours were negatively associated with time lost due to accidents and illnesses. This would again argue against any postponement of rest periods, since the effects of a preceding work period should be compensated for as soon as possible in order to avoid any further deviation from baseline conditions.

All this would caution against an extension of reference periods for calculating average work hours (or rest periods) since longer reference periods allow for a greater accumulation of work within certain time spans within the reference period and thus for an accumulation/increase of fatigue, instead of avoiding negative effects like fatigue right from the outset by providing adequate work- rest dynamics. Since compensating for accumulated negative effects, i.e. to return to baseline conditions, requires longer rest periods, they can be further associated with a reduction in time for leisure activities.

In general, the specific empirical evidence on postponing rest periods is rather weak. Those results that are available, however, support the theoretical and empirical long- and well-founded ergonomics concept, implying that rest periods should not be postponed, but taken as early as possible in order to avoid the development and accumulation of fatigue or other impairing effects.

Leaving the decision of taking or postponing rest periods to the worker, which is sometimes recommended in order to increase the workers' autonomy, may lead to certain problems. If workers decide to take a rest break based on feelings of fatigue, then fatigue has already manifested itself and has not been avoided, thus requiring longer rest periods to return to the baseline. So, in general and from an ergonomics point of view, scheduling rest periods seems to be preferable to leaving the decision on when to take rest periods at the discretion of the worker. At the same time, safeguards are needed to ensure that such scheduled rest periods can in fact be taken and will not be postponed or cancelled. Workers will usually control their work activities and expenditure of effort in accordance with the anticipated work-rest cycles/schedules, and expend more effort when a break for recuperation is imminent. If such a break is postponed or cancelled, this will most probably result in some kind of overload and associated impairing effects.

4.5 FLEXIBLE WORKING HOURS

Flexibility in working time arrangements can be found in a number of different forms (e.g. flexitime or working time accounts), each with a number of different specific implementation approaches, which thus cannot be reviewed in detail, because the effects depend on the specific form of implementation. A more promising approach is to extract the basic dimensions of flexible working hours arrangements and to

assess their impact on safety, health and work-life balance. Such basic dimensions are the variability (or irregularity) of working hours, the control of the working times by employees and/or the employer, and the degree to which the resulting real hours worked reflect the schedules, i.e. the incidence of frequent rescheduling or changes.

The evidence clearly shows that a high degree of variability or irregularity of working hours has detrimental effects on health and well-being, comparable in nature to that of shift workers (e.g. sleep and digestive problems, reduced social participation), and most probably also due to a (partial) desynchronisation of physiological and social rhythms. The evidence available also shows that “company-controlled” variability has stronger negative effects than “employee-controlled” variability, but this evidence demonstrates also that employee control over variability cannot fully compensate for the negative effects of working time variability, especially in the event of high irregularity.

This already points to the fact that autonomy of workers in controlling their working hours usually has a positive moderating effect on the reported outcomes of working flexible working hours with regard to health and social participation. Whether this is due to a cognitive reinterpretation (e.g. self-attribution of “blame” for working such hours) or due to a factually different organisation of working hours, however, remains to be analysed, since most data, e.g. the EWCS, do not contain the information necessary for such analyses.

Apart from the variability of flexible working hours, the extent to which the worker can rely on schedules being respected plays an important role with regard to both physical and psychosocial wellbeing. If flexibly arranged working times are unreliable, e.g. because of frequent rescheduling, emergencies or work on call, the risk of health and psychosocial complaints is greater. The causes of the detrimental effect on work-life balance are rather trivial, e.g. conflicts between work and non-work activities, as well as a lack of control over one’s private and social life. The causes of the health effects, however, are less clear. Most probably they are due to a temporary desynchronisation of circadian and social rhythms.

This is most probably the case where flexible hours are combined with shift work; so that no stable form of (an at least relative) adaptation is possible. Shift work with highly variable and predominantly company-controlled working hours (apart from the variability resulting from shift or night work itself) thus leads to the highest amount of physical and psychosocial impairments, compared to other types of flexible working hours.

4.6 INTERACTIONS

The paragraphs above show that there are effects on health and safety which result from a combination of different characteristics of working hours and their interactions. These effects can be purely additive, as is the case with long working hours and shift work, but also interactive, as is the case with flexible and long working hours. In the latter case, this means that, if the work schedule is variable, the increase in health impairments with an increasing number of working hours per week is steeper than if the work schedule is fixed/regular. So the difference in impairments between flexible and fixed hours increases as the number of working hours increases.

Thus, working a relatively lower number of hours/week seems to facilitate coping with variable working hours, whereas both long and variable working hours are more likely to result in negative effects. It should be remembered, however, that even under part-time conditions there is a negative effect resulting from a high variability of working hours.

As mentioned before, there is a combined effect of type and intensity of workload with working long hours. Exposure to a high workload over long daily working hours (and thus reduced daily rest periods) leads to higher proportions of reported health problems. These effects are mostly additive (i.e. independent of each other), whereas theoretically an interactive (e.g. multiplicative) effect would have been expected. However, the results available point to an additive effect. It is not quite clear why this is so, but (self-)selection effects could be one possible explanation. More research into this would be useful.

The same kind of additive effects seem to hold for autonomy and working long hours. Autonomy always shows a beneficial effect, both for health and work-life balance, irrespective of the number of hours worked. However, providing autonomy to employees is not sufficient to compensate for long, highly variable or unsocial working hours.

Working long hours also interacts with working unusual hours. As noted above, working unusual hours has detrimental effects on safety, health, and work-life balance. Working long hours in combination with unusual hours further increases these effects on health and well-being, whereas this has not yet been demonstrated for safety issues due to the small sample sizes of workers reporting an occupational accident.

Beyond a certain amount of weekly working hours the work schedule inevitably also includes unusual hours, e.g. evenings or work at the weekend. Thus, in this case, increased detrimental effects to health and work-life balance – or social participation – must be expected. As can be shown in analyses of the EWCS data, working on Sundays with a compensatory day off during the week is not comparable to working on workdays only, with the Sunday as the day of rest.

Comparing both situations at the point of equal impairment (e.g. where the same proportion report health problems or the same level of work-life balance) shows that these points for health and work-life balance are about 15 to 20 hours of work per week apart, indicating that those working on Sundays reach the same degree of impairment with 15 to 20 hours/week less than those who do not work on Sundays. Even if this is not a linear relationship, it clearly emphasises the special importance of working on Sundays.

We noted above that an interaction of working long hours with the postponement of rest periods is nearly always present, and it is not quite clear where the effects come from (most probably from an interaction of both). This is not a major obstacle with regard to practical solutions or the design of working time arrangement. Both would suggest a limitation of working hours followed by an adequate period of rest. This should not be postponed in order to avoid any accumulation of fatigue or detrimental effects to safety, health and work-life balance.

4.7 CONCLUSIONS

The evidence available clearly shows that long working hours have a detrimental impact on the safety, health, and work-life balance of the worker. Besides this impact on the worker, there is also an impact on the general public, e.g. with regard to environmental or patient safety.

The data do not allow for a distinction between the long-term and short-term effects of long-term vs. short-term exposure to long working hours.

Safety considerations highlight the risks arising when, in general, 7-9 hours working time per day are reached, depending among other things on the activities to be performed and the rest breaks available.

It is not possible to specify maximum limits for weekly working times based on health (as well as on safety) considerations. Since there is a linear increase in health impairments as the number of working hours increases, the question in setting a limit is how much impairment one is prepared to accept.

Based on the effects of long working hours on work-life-balance, combined with the evidence on the accumulation of and recovery from fatigue accumulated over subsequent workdays or shifts and the duration of weekly rest periods, there appears to be a case for a reduction in the maximum number of weekly working hours.

Work-life balance begins to decline substantially beyond 40 hours/week. Weekly rest periods of one day are often not sufficient to avoid an accumulation of adverse effects and to achieve full recuperation from

work – especially when there is a high workload to be dealt with. This would argue for an increased weekly rest period and thus a reduction in the number of work days to five per week.

Combining this with the evidence on daily working time and safety yields a recommendation of 5 x 8 = 40 h per week, which would be in agreement with the limit indicated by the effects on work-life balance.

The increase in the accident risk and impairments to health depend, of course, on the nature and intensity of the work activities. However, the reported risk increase linked to increasing hours of work is consistent across different jobs with different workloads. Both additive and interactive effects between work hours and work load can be found.

Rest periods should be taken/scheduled with the aim of avoiding impairing effects, e.g. fatigue. Rest periods should thus be provided prior to a manifestation of any of these effects. This would argue against any postponement of rest periods and any accumulation of fatigue.

This would also argue for short reference periods, in order to avoid an undue accumulation of negative effects during certain times within the reference period.

If fatigue cannot be avoided, rest periods should be scheduled so as to achieve complete recovery from fatigue (or other negative effects). This, of course, depends on the nature and intensity of the job activities. In general however, for daily rest periods, a rest period of 11 hours – as provided for in the current WTD – appears in fact to be the minimum daily rest required. Longer daily rest periods can be expected to have beneficial effects on safety health and work-life balance.

Working unusual hours, i.e. work on Saturdays, Sundays, in the evening, and working nights or shifts, increases the risk to safety, health and work-life balance, especially in combination with long working hours. Since work at unusual hours restricts the utility of the remaining hours off work, working at unusual hours would best be compensated for by additional time off or a reduction in the amount of working hours.

Variability of working hours that leads to a desynchronisation of the circadian rhythm, and with the social rhythm of society, should be avoided as far as possible.

Granting discretion to the workers to decide on the arrangement of their working hours in general has a beneficial effect in that it reduces negative outcomes. Discretion, however, cannot compensate for violations of the ergonomic principles of the design of working hours.

5 ECONOMIC IMPACT ON BUSINESS

5.1 INTRODUCTION

The objective of this study was to provide empirical evidence on the impact of the Working Time Directive on business. The focus of the analysis therefore lies, on the one hand, on two large surveys of European enterprises (micro approach) and, on the other hand, on the implications for productivity (macroeconomic approach)¹¹.

In the first part of this study, we present the methodology used to perform the macroeconomic analysis and a summary of the results.

In the second part, we present the analysis of the surveys of European enterprises (European Business Test Panel – EBTP, and Listen SMEs – LSME). Both surveys dealt with the main requirements of the Working Time Directive (WTD), their impact on the enterprises and potential future modifications.

Finally, we present an integrated conclusion of the main results of both our macroeconomic analysis and the surveys.

5.2 MACROECONOMIC ANALYSIS

5.2.1 Objective and Methodology

The objective of the macroeconomic study is to investigate whether the business has been able to adapt at no cost to the implementation of the WTD. Of course, the WTD would only have an effect if it was more restrictive than national legislation at the time of transposition and if there is not opt-out. In addition, transposition of the WTD can be spread over time (some articles transposed before other) and might not translate instantaneously into practice. Given the difficulties in obtaining time series data representing the implementation of the WTD, we decide to use the average number of hours worked per year as a proxy. This variable captures most of the direct impact of the implementation of the WTD in a synthetic way.

A more robust analysis of the link between the actual average hours worked (as it might result from working time regulation in general and WTD in particular) and a measure of the impact on business is much more insightful for future policy than a before/after analysis based on a straight WTD implementation “metrics”.

The impact on output of a decrease in the average hours worked can be partly or fully or more than offset by an increase of number of employees, a change in labour composition towards more productive labour, an increase in capital intensity, investment in ICT, etc. The business will implement the mix of these changes that will minimize costs under the new working time constraint. Total cost of production might rise as a consequence of these changes but not necessarily if the decrease in the average hours also triggers costless improvements in production efficiency: changes in the institutional organisation of production, systematic changes in worker effort, technical change that is not included in the labour and capital factors....

The best available measure of all these costless improvements is the total factor productivity (TFP). The more TFP increases when average hours worked decreases, the less costly it is for business to adapt to working time regulation.

Empirical analysis of the economic impact on business is best carried out at sector level. Working time regulation can be expected to have a different impact on the various sectors due to differences in capital

¹¹ See the complete macroeconomic analysis and the survey analysis in annex.

intensity, fluctuations in demand, variable capacities to store output, etc. Hence, a macroeconomic study of the impact of working time regulation on aggregate output or demand for factors would not lead to useful results. On the other hand, empirical microeconomic studies of the individual behaviour of producers in response to working time regulation cannot be implemented with EU coverage as there is a lack of measured data. Analysis based on case studies or interviews might help understand how business reacts to working time regulation. However, this approach suffers from two drawbacks: it may not be representative of general behaviour and may be affected by biases caused by subjective perception or unreliable data.

The meso-economic level of analysis is, therefore, the most appropriate for carrying out an empirical analysis of the economic impact of working time regulation on business because:

- it acknowledges the idiosyncrasies of sectors as determinants of the impact on working time of business performance;
- data related to performance of sectors and their underlying factors are extensively available, over a long period of time and across countries.

The study was conducted for six sectors which are believed to be most susceptible to productivity impact, namely Construction, Hotels & Restaurants, Financial Intermediation, Textiles, Post & Telecommunications, and Electricity, Gas & Water Supply. The focus is on service sectors or highly seasonal manufacturing sectors which are unable to use fluctuation in inventories to overcome a regulatory constraint on working time. The retail sector was not included because the widespread use of part-time work makes the Directive less relevant to this sector. Transportation and Storage were left out of the scope since there are no detailed statistics available at sub-sector level that could capture the impact of the different regulations on e.g. road, rail, maritime transport.

The study examines the specified industries across a panel of countries for the time period 1970-2007. The selection of countries takes into account both EU Member States (old and new) and non-EU countries and was driven by the degree of availability of data. This led to the following selection:

Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Slovenia, Spain, Sweden and UK as EU Member States, and Australia, Canada, Japan and US as non-EU countries.

Given the scope limitations in terms of the sectors, the results of the study should not be generalised to other sectors. The data shows, for the sectors examined, how productivity reacts to a change in the number of hours worked by an employee on a yearly average basis. Assuming the Directive has an impact on this number, these productivity changes are indirect results of the Directive. (If this assumption does not hold, then the productivity changes should not be linked to the Directive.)

In the following three sections, we briefly review prior research on the interaction between labour market policies and productivity, provide some information on the methodology followed in this study and on the data sources used.

5.2.1.1 EMPIRICAL ANALYSIS OF LABOUR MARKET POLICIES AND PRODUCTIVITY

As noted above, there is not enough data to carry out empirical analysis at EU level, but it is nevertheless interesting to note here briefly the findings from empirical analysis of labour market policies and productivity that does exist.

An in-depth study of the OECD in 2003 (covering 23 industries in manufacturing and business services in 18 OECD countries over the period 1984-1998) finds evidence that stringent regulatory settings in the product market, as well as strict employment legislation, have a negative bearing on productivity at industry level. The indicators on the stringency of product market regulation include several aspects, such as inward-oriented state control, barriers to entrepreneurship (ranging from regulatory and administrative

opacity to legal barriers to competition), explicit barriers to international trade and investment, and other regulatory barriers (Nicoletti et al, 1999).

Bassanini and Venn (2007) assess the impact of four labour market policies on productivity in 18 OECD countries over the years 1982-2003. The labour market policies under investigation are employment protection legislation, minimum wages, parental leave and unemployment benefits. The clearest result from the analyses is that strict statutory employment protection for regular contracts appears to dampen productivity growth (Bassanini and Venn, 2007; Bassanini et al, 2008). The results for the three other policies are less clear.

Scarpetta and Tressel (2002) also present a study on the impact of institutional settings on productivity across a panel of 23 industries in 18 OECD countries. Again, the authors find a negative impact of stringent employment protection legislation on productivity growth.

In France, Crépon, Leclair and Roux (2004) analysed the impact of the 35-hour work week regulation on employment, output and productivity. They found that the shift from 39 to 35 hours, a 10% decrease, had a negative impact of 3.7% on total factor productivity (TFP). In their study, TFP is specified with labour input measured in terms of number of employees instead of number of hours worked. Hence they conclude that the reduction in working time would have increased TFP, when measured on an hourly basis, by as much as 6.3%. This study demonstrates that a decrease in hours worked, when combined with sticky wages, is likely to trigger efficiency improvements to offset the direct negative effects of higher hourly wage rate on competitiveness.

5.2.1.2 METHODOLOGY

The methodology followed in this study is a regression analysis of panel data (a panel is created by having both a time dimension and a country dimension) for each sector selected. The key variable of interest – the dependent variable – is Total Factor Productivity (TFP). This is a measure of productivity that captures how efficiently a country is able to transform inputs (mostly labour and capital) into outputs. Hence it is closely related to business performance.

The independent variable needed to be a proxy for the impact of the Directive that meets the two requirements. First, the proxy needed to measure the impact and not merely the existence of the Directive. In other words, if a Member State was already compliant with the provisions of the Directive, adopting the Directive would not have any relevant impact. Hence adoption as such should not be reflected in the proxy variable. The second requirement of the proxy was that it cover as many aspects of the Directive as possible, since the Directive covers multiple aspects of working time regulation (including average weekly hours, the reference period and annual leave).

These requirements, along with the restrictions on data availability in terms of country, period and sectors, led to the use of the *average yearly hours worked per employee* (HPE) as a proxy for the Directive. This choice embodied the assumption that implementing the Directive or equivalent legislation would translate into a change in the HPE. This would thus meet our first requirement. Since HPE is also likely to be influenced by weekly working time, annual leave, resting time and in some way the reference period, the second requirement was also met.

When testing the relationship between the hours worked per employee and productivity, the impact of Employment Protection Legislation (EPL) and R&D intensity are included as control variables where possible.

Research shows that more accurate estimates for TFP are obtained when both the contributions of labour services and of capital services are further split. The contribution of labour services is therefore split into the contributions of hours worked and of changes in the labour composition in terms of educational attainment, age or gender. In the contribution of capital services, a distinction is made between ICT capital and non-ICT capital. TFP has therefore been calculated as follows:

$$\Delta \ln TFP = \Delta \ln Y - w_{LC} \Delta \ln LC - w_H \Delta \ln H - w_{KIT} \Delta \ln KIT - w_{KNIT} \Delta \ln KNIT \quad (Eq.1)$$

with:

Y	Value added		
LC	Change in labour composition	w_{LC}	Share of labour composition change in value added
H	Hours worked	w_H	Share of hours worked in value added
KIT	ICT capital services ¹²	w_{KIT}	Share of ICT capital in value added
KNIT	Non-ICT capital services	w_{KNIT}	Share of non-ICT capital in value added

The model for our study specifies TFP as the dependent variable and the average yearly hours worked per employee (HPE) as an independent variable. A time and country effect is included in order to allow for country- and year- specific impacts. EPL and R&D intensity are included as control variables where the data allows. Accordingly, the model is:

$$\log TFP_{-I_{it}} = \alpha + \alpha_i + \alpha_t + \beta_i \log HPE_{it} + \gamma EPL_{it} + \delta (EPL_{it} * \log HPE_{it}) + \xi \log R \& D + \varepsilon_{it}$$

Where:

$\log TFP_{-I_{it}}$	Log of TFP (industry value added based) index (1995=100) in country <i>i</i> at time <i>t</i> in the industry considered
$\log HPE_{it}$	Log of actual average hours worked per employee per year in country <i>i</i> at time <i>t</i> in the industry considered
EPL_{it}	Employment protection legislation in country <i>i</i> at time <i>t</i> (same for all industries considered)
$R \& D$	Research and Development intensity
ε_{it}	Error term – potentially with heteroskedasticity and autocorrelation
α	Overall intercept
α_i	Country-specific intercept
α_t	Year-specific intercept

This model investigates whether there is a substitution effect between ‘total hours worked per employee’ and ‘number of employees’. Taken together, these are the factors that constitute labour input (when measured as total hours worked). If there is perfect substitution among the factors, β_i is equal to zero. This would imply that one can for instance decrease the number of employees and increase the hours that each remaining employee works (HPE) without having an effect on productivity. However, if $\beta_i < 0$, a decrease in hours worked per employee would increase productivity, providing proof that the additional hours worked per employee are less productive. Conversely, $\beta_i > 0$ suggests that the additional hours are more productive than the ‘basic’ hours.

The country-specific fixed effects (α_i) capture the TFP base level for each country. This is required since we are using an index. If no country-fixed effect were introduced, that would imply that all were at the same base level of TFP. That, of course, does not represent reality.

¹² ICT: Information and Communication Technology

5.2.1.3 DATA SOURCES

The EU KLEMS database¹³ release of November 2009 is the main source for our data¹⁴. This database, containing growth and productivity accounts, was created to analyse **productivity** in the European Union and provides (amongst other measures) TFP at the industry level for European Union Member States from 1970 onwards. The measures are developed for individual European Union Member States, and are linked with ‘sister’ KLEMS databases in the United States and Japan.

We aspired to include data on both EU and non-EU countries in this study. The availability of TFP data in those countries was the only criterion to determine whether to include a country in the panel or not. This resulted in the following list of countries:

EU Member States	Non-EU countries
Austria	Australia
Belgium	Canada
Czech Republic	Japan
Denmark	United States of America
Finland	
France	
Germany	
Hungary	
Ireland	
Italy	
Netherlands	
Slovenia*	
Spain	
Sweden	
United Kingdom	

**Slovenia is not represented in every analysis due to lack of data.*

The European NACE revision 1 classification was applied to the industries in the EU KLEMS database (although the level of detail varies across countries, industries and variables due to data limitations). The classification codes of the selected industries are:

¹³ www.euklems.net

¹⁴ Much effort has been made in building the EUKLEMS database to ensure comparability of statistics across countries and to minimize measurement biases. As an example, when the deflator for ICT related assets did not contain an adjustment for quality change, a harmonized deflator based on the US deflator has been used to ensure consistency of statistics.

Industry	Code
Textiles	Code 17-19
Hotels & Restaurants	Code H
Financial Intermediation	Code J
Post & Telecommunications	Code 64
Electricity, Gas & Water Supply	Code E
Construction	Code F

The explanatory variable of interest, the **average hours worked per year per employee** (HPE), is created by dividing the total hours worked by employees in a particular industry per year by the number of employees in that same industry and year. We retrieved both numbers from the EU KLEMS database.

The degree of stringency of **EPL** is quantified using the overall indicator of EPL provided by the OECD STAN database¹⁵. This indicator measures the procedures and costs involved in dismissing individuals or groups of workers, and the procedures involved in hiring workers on fixed-term or temporary work agency contracts (OECD, 2004). The overall EPL indicator, scaled from 0 to 6, with 6 being the most restrictive, is available at country level from 1985 onwards, but not at industry level. Accordingly, this variable will have the same values in all industries.

There are two restrictions on using the EPL data in our model. The first is country scope. There is no EPL index for Slovenia. Slovenia is therefore omitted when EPL is included in the regressed model. The second restriction relates to the time-series. The EPL index is only available from 1985 onwards, 15 years after the start of our original time-series. We overcame this large loss of data by using the 1985 value for all years from 1970 until 1985. However, since most countries remained at their original level of 1985 for several years before moving to another index score, we believe that the possible negative effect of having estimates (versus statistics) for EPL from 1970 until 1984 is outweighed by the overall advantage of having a longer time-series.

Our last variable, **R&D intensity**, is the ratio of R&D expenditure to value added. This data is provided in the OECD ANBERD database¹⁶. The availability of data for this variable does not however cover our country-period panel for all six sectors. As a result, we only have sufficient data to incorporate the variable for the Construction and Electricity, Gas & Water Supply industries. Furthermore we lose a lot of our time-series (data from 1987 onwards) and some of our country observations. The inclusion of this control variable is reported and critically discussed per industry in the extended report.

5.2.2 Summary of results of the macroeconomic analysis

The table below presents an overview of the country-specific impact on productivity of the hours worked per employee per industry/sector investigated. Only the significant effects are displayed.

In **Textiles** and in **Financial Intermediation**, there is an overall positive impact of decreased yearly working hours on productivity. If one assumes that the Directive would decrease the average yearly working hours per employee, this would imply a **general positive effect of the WTD on productivity** in these two sectors. There are, however, **differences in the country-specific impacts** when comparing these two sectors. For instance in Hungary, Spain and the US, the WTD showed a high impact in the

¹⁵ www.oecd.org/sti/stan/

¹⁶ http://www.oecd.org/document/17/0,3343,en_2649_34451_1822033_1_1_1_1,00&&en-USS_01DBC.html

Financial Intermediation industry, but no impact in Textiles. (These are also the only two sectors where a country-specific significant effect of the EPL control variable was found.)

The **Hotels & Restaurant** industry shows very scattered results from +2.57 to -2.07, meaning that decreasing the number of hours worked per year by one percent would result in a productivity change ranging from an increase of 2.57% to a decrease of 2.07%. Nine of the 19 countries display no effect. We can conclude that there is **no clear impact in this industry**.

For the **Post & Telecommunications** and **Electricity, Gas & Water Supply** industries, a **significant impact** on productivity from decreasing yearly hours worked per employee was found in only six and seven of the 19 countries respectively. The countries are: Spain, Finland, France, Germany, Ireland, and the US for Post & Telecommunications, and Austria, Denmark, France, Germany, Spain, Slovenia, and the UK for Electricity, Gas & Water Supplies. Not only are these small portions of the sample investigated, but there is also **no clear line in the effects**. In Post & Telecommunications, the six significant effects range from +3.92 to -2.87. In Electricity, Gas & Water Supply, five of the seven countries showed a positive effect, Denmark and Slovenia showed negative effects. Spain, France, and Germany showed a significant effect in both industries. However, Spain showed both a negative and a positive effect on productivity from decreasing average working hours, while the other two countries consistently showed a positive effect over the two sectors.

In **Construction**, only seven countries showed a **significant impact** on TFP from decreasing hours worked, namely Belgium, Canada, Denmark, Japan, Netherlands, Spain, and US. Six countries displayed an increase in productivity when HPE was decreased. Japan was the only country where the effect on TFP of decreasing hours worked was negative.

If one compares the country effects over the industries, it is not possible to distinguish a pattern. A country may display a strong impact from a change in yearly hours worked per employee in one industry, while in another industry, the situation remains stable for the same change in hours per employee.

Table 4: Overview of significant country impacts on productivity from decreasing average yearly hours worked per employee (HPE) (%)

The table shows the percentage change in productivity for each 1% decrease in HPE. (***, **, *): significant at the 1%, 5% and 10% level respectively)

	Textiles	Hotels & Restaurants	Financial Intermediation	Post & Telecommunications	Electricity, Gas & Water Supplies	Construction
Australia	2.59***	1.00**				
Austria	1.39***	0.77***	0.95***		3.65***	1.26***
Belgium	0.91***	0.39**	3.75***			
Canada	1.16***	-2.07***	0.81*			1.53**
Czech Republic						
Denmark	0.34***	0.97*	4.29***		-2.54***	0.71**
Finland	0.38***	2.57***	0.71**	-2.87***		
France	0.65***	-0.99***	1.01***	3.92***	1.91***	
Germany	0.15***			1.33***	1.34**	
Hungary		-2.03***	8.94***			
Ireland	1.07***			-1.32***		
Italy	-0.39***		0.93***			
Japan	-0.52**	-0.31*	2.38**			-1.08***
Netherlands	0.66***		-0.01**			0.40**
Slovenia	-		-		-8.09**	
Spain			1.92***	-1.37***	0.64**	1.65***
Sweden	-0.53***		0.08***			
United Kingdom	1.91***		0.97***		1.11*	
US		1.48***	3.72**	-2.17**		1.89*

Source: Deloitte calculation

5.3 SURVEYS ON THE IMPACT OF THE WTD ON BUSINESSES

5.3.1 Objectives and methodology

Given the failed attempts at amending Directive 2003/88/EC (the WTD) over the period 2004-2009, it continues to apply for working time regulation at European level, despite ongoing monitoring having identified certain doubts as to the conformity of national law or practice with Community law, as well as evidence of problems of application in practice, and insufficient legal clarity on a number of issues.

In order to identify the most appropriate course of action, and to better evaluate the comparative effect of different options in this field it is important to take into account the needs of businesses as well as those of workers.

Indeed, while the WTD has historically pursued the objective of health and safety for workers, globalisation and the current economic and financial crisis have increasingly pushed the focus of the debate towards the impact of working time regulation on productivity and enhancing competitiveness.

This is because, despite a general reduction in average weekly working time in the EU due amongst other things to increased productivity¹⁷, economic reality has made working time flexibility a key instrument for many businesses' survival, as well as reflecting a shift from manufacturing to services, and a corresponding progressive de-standardisation of individual working time.

For the Commission it is therefore vital that a new balance be found between protecting workers' health and safety across the EU and affording sufficient flexibility to businesses and workers in the organisation of working time to ensure productivity and competitiveness.

The Commission has already consulted businesses throughout Europe to identify their main perceptions of possible action on working time regulation.

The consultation took place through two surveys performed by the Commission over the summer of 2010:

- the Listen SME Working Time Directive survey (LSME survey), which surveyed 1581 businesses, and mainly SME's (1335);
- the European Business Test Panel Review of EU minimum rules on organisation of working time (EBTP survey), which surveyed 531 businesses, also mainly SME's (409).

Both surveys aimed to gain insights into businesses' views of the current impact of the WTD and possible courses of action on working time regulation at European level, focussing mainly on the four key themes linked to the WTD that were the subject of the Commission's previous proposals for amendments and of the ensuing inter-institutional debate¹⁸:

¹⁷ Average weekly working hours have decreased from 39 hours in 1990 to 37.8 hours in 2006, and 37.2 hours excluding the 10 Member States that joined the EU in 2004 (Eurostat data).

¹⁸ During the period 2004-2009, there were extensive discussions between the Commission, Council and Parliament on Commission proposals to make a number of changes to the Working Time Directive. The co-legislators were ultimately unable to reach agreement on this proposal, despite wide initial consultations by the Commission, and a focus on four key issues. Two of these issues (the 'opt-out' derogation and the reference period for calculating working time limits) were ones on which the Directive

- the measurement of weekly working time;
- the treatment of on-call time;
- average working hours;
- minimum rest periods.

Analysis of the surveys, and in particular cross-analysis between them (made possible by the fact that the questions in both surveys were almost identical), allows us to gain a number of insights into businesses' views on possible courses of action on working time regulation at European level. However, limitations on the statistical robustness of the results in representing the views of European businesses should be borne in mind¹⁹. Furthermore, the responses of companies from some countries are very much over-represented by the survey results and those from other countries very much underrepresented in comparison to what we would expect from the countries' share of the EU GDP or share of number of companies. In addition, it is often difficult for businesses to distinguish between the effects of the WTD and those arising at national level or by virtue of collective bargaining, given that many countries have rules in place which go beyond the WTD.

We structure the insights from the LSME and EBTP surveys in the following sub-sections according to the four key themes identified above.²⁰

5.3.2 The measurement of weekly working time

Most companies surveyed measure weekly working time, but it is worth noting that this is nonetheless not the case of 49.3% of companies responding to the LSME survey²¹, and 35.1% of companies responding to the EBTP survey. Moreover, according to the LSME survey, a higher proportion of SME's than large enterprises do not track average weekly working time. A significantly lower proportion use a reference period of 6-12 months for this. Some do not track it at all.

Of companies tracking average weekly working time, most use a reference period of up to 4 months (46.2% of LSME respondents tracking working time²¹ and 50.6% of EBTP respondents tracking working time).

A majority of companies (51.4% of LSME respondents and 65.3% of EBTP respondents tracking working time) believe that a regulation change to have the option to calculate average weekly working time over up to 12 months by law and not only by collective bargaining would be useful. This suggests that they feel the 4-month reference period in the WTD is too short to take into account fluctuations in their activities. (Businesses with strong fluctuations in their activity are even more likely to believe that increasing the flexibility in the distribution of hours worked over time in such a way is an important competitive factor for them and would be useful).

itself required a review within the decade after its adoption and the other two (the treatment of 'on-call' time and the timing of compensatory rest) were linked to numerous requests for clarification.

¹⁹ cf sections 1.1 and 1.2 of the Analysis of the LSME and EBTP surveys on the Working Time Directive - Annex to "Study to support an Impact Assessment on further action at European level regarding Directive 2003/88/EC and the evolution of working time organisation."

²⁰ As per preceding footnote.

²¹ Based on companies specifying a period over which working time is measured in the LSME survey

This also indicates that businesses operating in sectors or countries where there is no collective bargaining to define working time (46.7% of respondents in the EBTP survey mentioned that collective bargaining does not define working time in their company) consider that the current rules which allow for flexibility mainly through collective bargaining put them at a disadvantage.

Also noteworthy is the fact that 10-20% of companies in both surveys use reference periods of over 12 months. In both surveys, slightly more SME's do so than large enterprises.

These results tend to align with the previous Commission proposal *“to allow the reference period for the averaging of weekly working time to be extended to a maximum of 12 months by law (and not only by collective agreement as in the current Directive)”*. Allowing national law to fix a reference period of up to 12 months would make the rules less dependent on the industrial relations model or the size of the business, with which working time fluctuations may not be directly correlated.

It also appears from both surveys that SME's are more sceptical than large enterprises about the effects of such a change in regulation, notwithstanding the fact that a higher proportion of large enterprises have their working time decided partly or wholly by collective bargaining (86% vs. 44% of SME's as per the EBTP survey).

5.3.3 The treatment of on-call time

Of the companies using “on-call” time²² (3.8% of LSME respondents and 2.6% of EBTP respondents), the majority consider that counting all “on-call” time as working time (i.e. applying the SIMAP-Jaeger rulings) would have a negative impact, i.e. 54.6% of LSME respondents using “on-call” or “stand-by” time, and 69.3% of EBTP respondents using “on-call” or “stand-by” time. Substantial problems requiring a major reorganisation of work patterns were the impact most cited. This could indicate that many companies are not fully aware that this rule is already applicable and that they are not well prepared to take it into account.

In terms of the attention levels required of workers during “on-call” time, a majority (53.6%) of those respondents to the LSME survey using “on-call” time said a low level of attention is required from their workers during these periods. The figure was rather less in the EBTP survey – 46.4%.

Again, these results tend to align with the previous Commission proposal *“to treat on-call time differently from normal working time, by distinguishing between active and inactive periods at the workplace,”* based on the companies' perception that counting “on-call” time 100% as working time, while at the same time setting a 48-hour limit, could have damaging consequences for the functioning and financing of businesses that would need special flexibility in the treatment of on-call time as working time. Also worth noting is that results in both surveys were similar for SME's and large enterprises.

It appears from this that EU businesses consider that alternative options should be investigated in order to provide sufficient protection to the health and safety of workers while ensuring the competitiveness of the

²² “On-call” time is any period where a worker:

- is not required to carry out their normal work with the usual continuity;
- but has to be ready to work if called upon to do so.

Both surveys included “stand-by” time as part of “on-call” time, i.e. time when the worker has to remain available for work at short notice, but can remain *at home*, or at another place of their own choosing, until they are called). We use the strict (hence the true) definition of “on-call” time in this report (which normally excludes “stand-by”/“on-call time at home”).

business. These could include disregarding inactive periods of on-call time at the workplace when calculating working time, or calculating inactive periods at less than 100% as working time and proportionate to the level of attention required – the so-called equivalence system).

Furthermore, “on-call” time seems to be linked to greater flexibility in the compensation of overtime. A higher proportion of companies using “on-call” time allow compensation both financially and by the recovery of worked time than is the case of companies not using “on-call” time, where there is a greater insistence on recovering the overtime with time off. This may also indicate potential focus areas for other adaptations to WTD rules for companies using “on-call” time.

5.3.4 Average working hours

A significant proportion of companies use some form of overtime: 51.4% of LSME and 51.5% of EBTP responses identified workers other than senior management working more than 40 hours per week on average (including “on-call” time at the workplace).

There are both sectoral differences and size-related differences. A higher proportion of large enterprises have workers on overtime than SME’s. This may to a certain extent be explained by the fact that a higher proportion of large enterprises than SME’s measure average weekly working time, and by country-related differences in the proportion of companies using overtime. The link to the opt-out system, which is only applicable in certain EU countries, does not seem clear but this may be due to the small sample size at country level.

The most often cited reasons for having employees working more than 48 weekly hours on average are to ensure competitiveness and to respond to seasonal fluctuations.

Overall, a number of the main reasons cited for the existence of these long average weekly working hours were relatively well aligned between the EBTP and LSME surveys:

- responding to seasonal fluctuations (27% for the LSME survey and 25% for the EBTP survey);
- providing continuous service outside business hours (15% for both the LSME survey and the EBTP survey).

Others were significantly different between the two surveys:

- ensuring competitiveness (28% for the LSME survey but only 15% for the EBTP survey);
- employees’ free choice in order to progress faster or earn more (only 8% for the LSME survey but 15% for the EBTP survey): the LSME responses thus identified a much lower proportion of “voluntary overtime”.

Use of the opt-out derogation to the 48 hour average weekly working week has increased substantially across the EU in recent years, mostly where on-call time is prevalent. When asked about the potential effect of changing the rules so that workers could not agree to work longer average hours than the 48 hour limit, the companies surveyed in opt-out and partial opt-out countries responded that the impact would be negative (53.4% of LSME respondents using the opt-out, and 75.9% of EBTP respondents using the opt-out). This shows that the companies in these countries clearly value this regime.

These results do not argue in favour of the previous Commission proposals “to either abolish the individual opt-out from the 48-hour rule progressively, or subject it to extra protective conditions and a stringent review clause”.

5.3.5 Minimum rest periods

Minimum rest periods covered by the WTD (essentially minimum daily and weekly rest periods) can be taken when due in most cases (68.6% of LSME responses and 85.2% of EBTP responses), and generally more so in SME's than in large enterprises. When this is not the case, minimum daily rest is affected more than minimum weekly rest (64.4% of cases where minimum rest periods cannot be taken affect minimum daily rest in the LSME survey vs. 35.6% which affect minimum weekly rest in the same survey), although generally infrequently in both cases.

From these results it appears that the WTD currently allows sufficient flexibility in delaying some or all of a minimum rest period for most companies. It is also apparent that mainly large companies would be in favour of the previous Commission proposal “to award compensatory rest with more flexibility about timing (to be provided within a ‘reasonable period’”).

Finally, most companies surveyed (67.4% of LSME responses and 64.9% of EBTP responses) responded that there was no other impact on them of other EU working time rules. (All workers are entitled to at least four weeks' paid annual leave; normal hours of work for night workers should not exceed 8 hours per night on average; night workers should not work longer than 8 hours in any night at particularly stressful or dangerous work; night workers suffering from health problems linked to their night work may transfer where possible to suitable daytime work).

Nonetheless, between 22% and 25% of respondents to both surveys consider that the rule imposing four weeks' paid annual leave has an important impact on their company. This is indeed obviously the rule with the broadest and most significant financial impact on respondents.

We can interpret these results as a positive integration of the health and safety rules in the companies surveyed.

5.3.6 Summary of the results of the surveys

Overall, the results of the Commission's consultations (through the LSME and EBTP surveys) show that EU companies are globally in line with the Commission's previous proposals to adapt the WTD. The main conclusions on the key topics covered are:

- For the measurement of weekly working time:
 - the majority of companies measure weekly working time, although a non-negligible minority do not;
 - the highest proportion of companies tracking average weekly working time use a reference period of 4 months;
 - most companies believe that a regulation change to have the option to calculate average weekly working time over up to 12 months by law would be useful.
- For the treatment of “on-call” time:

- the “expected” impact on the companies using this of counting all “on-call” time as working time (which should already be the case under the SIMAP-Jaeger rulings) is negative, with substantial problems requiring a major reorganisation of work patterns being the most often cited impact. This tends to indicate that companies are not fully in line with the current regulation;
- “on-call” time seems to be linked to a greater flexibility in the compensation of overtime as a higher proportion of companies using “on-call” time allow compensation both financially and by the recovery of time, rather than just by compensating for time off.
- For average working hours:
 - a significant proportion of companies use overtime. While there are sectoral differences, there does not seem to be a country effect linked to the opt-out system, which is only applicable in some EU countries;
 - the most often cited reasons for having workers work average weekly hours above 48 are to ensure competitiveness and to respond to seasonal fluctuations;
 - companies in countries using the opt-out or partial opt-out perceive its potential elimination negatively, showing they value this measure and would potentially be against abolition.
- For minimum rest periods:
 - minimum rest periods can be taken when due in most cases, tending to indicate further flexibility might not be a priority for businesses;
- For other working time rules:
 - most companies do not experience significant impacts from other WTD working time rules. The ‘other’ working time rule with the most impact is the entitlement of all workers to at least four weeks' paid annual leave.

5.4 CONCLUSIONS

The impacts of the working time directive on businesses are multiple. One of the main impacts is the reduction of the working time for health and safety reasons. Our macroeconomic analysis demonstrates a generalised positive impact from decreased yearly working hours on productivity in two sectors – textiles and financial intermediation. European enterprises continue to use on-call time (without always considering it as working time) and to use overtime (compensated for with rest or financially). Despite the findings of our macroeconomic analysis, one of the most often cited reasons for having workers work more than 48 weekly hours on average is to ensure competitiveness.

While there are sectoral differences in the use of overtime, there does not seem to be a country effect linked to the opt-out system applicable in some EU countries. Nevertheless, companies in countries using the opt-out or partial opt-out perceive its potential elimination negatively.

Considering on-call time as working time is also viewed negatively by the enterprises. Firstly, this tends to indicate that companies are not fully in line with the current regulation as on-call time should have

been considered as working time since the SIMAP-Jaeger rulings. Secondly, probably to avoid extra wage costs, and therefore to maintain a certain benefits, “on-call” time seems to be linked to greater flexibility in the compensation of overtime.

Therefore, the measures from the directive that impact companies most and therefore pose a high risk of non-compliance are measurement of working time (during a specific reference period) to make sure that the working time does not exceed the legal limit, on-call time and the opt-out.

6 IMPACT OF THE WORKING TIME DIRECTIVE ON PUBLIC SERVICES

6.1 INTRODUCTION

We present in this section the results of our analysis of the impacts of the Working Time Directive on a selection of public services. The objectives of this specific study were to collect data and perform analysis on the financial, social and organisational costs and benefits arising in Member States for key public services (health, fire, ambulance and police) from the Court of Justice's rulings in the SIMAP, Jaeger and Dellas cases on the interpretation of the Working Time Directive in Member States. There is a particular focus in this task on the implications for hospitals providing 24-hour services and for residential care facilities.

Our analyses cover ten countries: BE, DE, DK, FI, FR, MT, PL, PT, RO and UK. The country sample represents a mix of full opt-out countries (MT, UK), non-opt countries (DK, FI, PT, RO) and countries which have allowed an opt-out in specific public services (BE, DE, DR, PL). Moreover, the sample includes both 'old' Member States and 'new' Member States, and ensures a balanced geographical coverage.

For all the sectors, we carried out desk research (notably data collection on the legal provisions related to working time) and conducted focus groups with officials, employer and employee organisations. For the hospital and residential care sectors, we conducted in-depth bilateral interviews with HR managers and employees from different institutions. The sample of hospitals and residential care institutions surveyed was a mix of large, medium-sized and small institutions located in urban, semi-urban and remote areas. The aim of this interview was to test and complete the findings from the literature review and the focus groups with case studies in health and care institutions in the Member States selected. The approach performed "real world" testing of the data collected, taking into account the local contextual factors.

The study specifications also requested a number of clearly defined types of data on working time patterns in the healthcare and residential care sector.

The following sections deal with social impact (6.3), organisational impact (6.4.) and financial impact (6.5.). Within each of these sections, after a short general introduction, we present our findings for each of the four sectors concerned.

In the last section, we present our overall conclusion related to the impact of the Directive on public services.

6.2 QUANTITATIVE DATA COLLECTION

6.2.1 Introduction

In this section, we present the quantitative data that we collected in the ten countries covered by this specific study. As requested by the Commission, we collected data on:

- the (maximum and average) weekly hours actually worked in practice by key employees in public health and care systems;
- how much of their working time is on-call time, and what levels of activity are required during on-call time;
- their remuneration rates for excess hours.

The data come directly from hospitals and residential care facilities. For the latter, our fieldwork mainly covered rest homes and to some extent children's homes. In most cases, the data are estimates coming from managers of the institutions and are not actual data/statistics. In addition, the number of observations per country (ten per sector at most) is not sufficient for the production of statistics. For this reason, we present in our tables minima and maxima, and estimates.

We also provide cross analyses and interpretation of the numbers below each table.

6.2.2 Maximum and average weekly hours actually worked

The table below contains data on the maximum weekly hours actually worked of employees in individual hospitals and residential care institutions. Data in this table, and the following tables, have been extracted from the case studies conducted in a selection of Member States. The table provides a range of minima and maxima of the average hours worked by individuals working the longest weeks and come from the case study reports of each Member State.

Table 5: Maximum weekly hours actually worked

MAXIMUM WEEKLY HOURS ACTUALLY WORKED			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
BE	• 56-70 h per week	• 48-50 h per week (however outliers of 70 h were observed)	• 48-52 h per week (however outliers of 60 h were observed)
DE	• Opt-out: 58-66 h per week • Non opt-out: 48-55 h per week	• Opt-out: 60 h per week • Non opt-out: 45-55 h per week	• 48-60 h per week
DK	• 48 h per week (in very few cases)	• 48 h per week (in very few cases)	• 45-48 h per week (in very few cases)
FI	• Max. 88 h (over a 2-week period) /128 h (over a 3-week period).	• Max. 88 h (over a 2-week period) /128 h (over a 3-week period).	• Max. 42 h per week

MAXIMUM WEEKLY HOURS ACTUALLY WORKED			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
FR	<ul style="list-style-type: none"> • 48-60 h per week (depending on the specialties) • No clear view on numbers of hours performed by doctors-in-training 	<ul style="list-style-type: none"> • 42-45 h per week 	<ul style="list-style-type: none"> • Usually not above the legal limit of 35 h, except in exceptional cases (e.g. heatwave or temporary shortage)
PL	<ul style="list-style-type: none"> • Opt-out: 70 h per week • Non opt-out: no info 	<ul style="list-style-type: none"> • Opt-out: 70 h per week • Non opt-out: 40-48 h per week 	<ul style="list-style-type: none"> • Rarely more than 48 h per week
PT	<ul style="list-style-type: none"> • 50-54 h per week 	<ul style="list-style-type: none"> • No info 	<ul style="list-style-type: none"> • No info
MT	<ul style="list-style-type: none"> • 48-60 h per week 	<ul style="list-style-type: none"> • 61-63 h per week 	<ul style="list-style-type: none"> • 64-80 h per week
RO	<ul style="list-style-type: none"> • 35-40 h per week (with outliers of 60-70 h per week) 	<ul style="list-style-type: none"> • 35-40 h per week 	<ul style="list-style-type: none"> • 38-40 h per week
UK	<ul style="list-style-type: none"> • 60 h per week (in some specialties) 	<ul style="list-style-type: none"> • 48-60 h per week 	<ul style="list-style-type: none"> • 48 h per week

Source: Deloitte, 2010 (based on case studies)

The table below provides an insight into the average weekly hours actually worked by employees in the hospitals and residential care institutions surveyed.

Table 6: Average weekly hours actually worked

AVERAGE WEEKLY HOURS ACTUALLY WORKED			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
BE	<ul style="list-style-type: none"> • 45-50 h per week 	<ul style="list-style-type: none"> • 38-40 h per week 	<ul style="list-style-type: none"> • 38-40 h per week
DE	<ul style="list-style-type: none"> • Opt-out: 48-58 h per week • Non opt-out: 40-50 h per week 	<ul style="list-style-type: none"> • Opt-out: 42-58 h per week • Non opt-out: 38.5 h-41 h per week 	<ul style="list-style-type: none"> • 30-39 h per week
DK	<ul style="list-style-type: none"> • Junior doctors: 37-38 h per week • Senior doctors: 37-45 h per week 	<ul style="list-style-type: none"> • 37-38 h a week 	<ul style="list-style-type: none"> • 30-38 h per week
FI	<ul style="list-style-type: none"> • 38.25 h per week • Other options for normal work time are 76.5 hours over a 2-week period or 114.75 hours over a 3-week period. 	<ul style="list-style-type: none"> • 38.25 h per week. • Other options for normal work time are 76.5 hours over a 2-week period or 114.75 hours over a 3-week period. 	<ul style="list-style-type: none"> • 38.25 h per week

AVERAGE WEEKLY HOURS ACTUALLY WORKED			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
FR	<ul style="list-style-type: none"> • 48 h per week + 20 annual working time reduction 	<ul style="list-style-type: none"> • 32.5 h per week (night work) • 37.5 h per week (day work) • On average 35 hours/week because compensated for by RTT 	<ul style="list-style-type: none"> • 32.5 h per week (night work) • 37.5 h per week (day work) • On average 35 hours/week because compensated for by RTT
PL	<ul style="list-style-type: none"> • Opt-out: 60 h per week • Non opt-out: 40-60 h per week 	<ul style="list-style-type: none"> • 37-38 h per week 	<ul style="list-style-type: none"> • 37-38 h per week
PT	<ul style="list-style-type: none"> • 42 h per week 	<ul style="list-style-type: none"> • 35-40 h per week 	<ul style="list-style-type: none"> • 35-40 h per week
MT	<ul style="list-style-type: none"> • 40 h per week 	<ul style="list-style-type: none"> • Opt-out (about 80%): 46-47 h per week • Non opt-out: 40-43 h per week 	<ul style="list-style-type: none"> • 46 h per week
RO	<ul style="list-style-type: none"> • 35-40 h per week • A minority states they are working 54-56 h per week 	<ul style="list-style-type: none"> • 35-40 h per week 	<ul style="list-style-type: none"> • 40 h per week
UK	<ul style="list-style-type: none"> • 40-48 h per week 	<ul style="list-style-type: none"> • 38-40 h per week 	<ul style="list-style-type: none"> • 38-42 h per week

Source: Deloitte, 2010 (data from case studies)

For doctors, the longest average weekly working hours in the Member States surveyed were found in Poland, at 60 hours per week, and the shortest in Denmark and Finland, at 37-38 hours and 38.25 hours respectively. Evidence was found in Malta, Poland and Romania that the number of hours for doctors only applies to those working on the basis of an employment agreement. Many doctors work also in other hospitals on a self-employed basis (including in some cases, as ‘artificially’ self-employed). This increases the number of actual worked hours.

For nurses, the longest average weekly working hours were found in Malta, at 46-47 hours, and the shortest in France and Portugal, at 37.5 and 35-40 hours.

The working hours of nurses are normally precisely recorded and available to HR in hospitals, while those of doctors in training are often fixed by direct agreement between the doctor and his/her supervisor. This situation raises potential problems since the doctor may depend on the supervisor for achieving specialist qualifications or for career progression

In the residential care sector, Malta, where there is an overall skill shortage in public services, recorded the longest weekly working hours (on average) for care staff, at 46 hours per week. The shortest was found in Germany, Denmark and Finland, at 30-39 hours, 30-38 hours and 38.25 hours respectively.

In opt-out countries, it is generally doctors who agree to opt out; nurses do so only to a lesser extent (mostly in emergency services, surgery departments or anaesthetics). In all opt-out countries, employees in health and residential care rarely work the maximum allowed number of hours. In Germany and

Poland, for example, employees could theoretically work up to 78 hours per week, but this rarely happens in practice.

6.2.3 Proportion of on-call time in total working time

The table below shows the data collected with regard to the ratio of on-call time to total working time.

Table 7: Proportion of on-call time in total working time

RATIO OF ON-CALL TIME TO TOTAL WORKING TIME			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
BE	• Only some specialties have on-call systems, mostly emergency services, surgery and anaesthetics.		• No on-call systems in place
DE	• Only for some specialties: in most cases officially around 0-33%		• No on-call systems in place
DK	• In most cases, only on-call time in surgery, anaesthetics and emergency departments • On-call duty twice per week	• In most cases, only on-call time in surgery, anaesthetics and emergency departments • 1 on-call duty per week at the hospital (from 3 pm till 8 am)	• No on-call systems in place
FI	Only some specialties have on-call systems, mostly emergency services, surgery and anaesthetics.		• No on-call systems in place
FR	• Included in the working-time, usually 2 on-call periods per week	• Usually no on-call time (shift system)	• No on-call systems in place
PL	• 20%-50%	• 20%-50%	• No on-call systems in place
PT	• In most cases, only on-call time in surgery, anaesthetics and emergency departments: 0-35%	• In most cases, only on-call time in surgery, anaesthetics and emergency departments: 0-35%	• No on-call systems in place
MT	• 20%-40%	• 20%-40%	• No on-call systems in place
RO	• 15%-50%	• 15%-50%	• No on-call systems in place
UK	• Usually no on-call time (shift system)	• Usually no on-call time (shift system)	• No on-call systems in place

Source: Deloitte, 2010 (based on case studies)

Across the EU Member States surveyed, on-call time systems are often only used in some specialties in hospitals (e.g. emergency services, anaesthetics and surgery). In some Member States (e.g. BE, FI, FR), interviewees were not able to give a proper insight in the proportion of on-call time in total working time of employees. It often depends on different factors such as the period in the year, the specialties and shortages.

A large majority of the residential care institutions in our sample do not use on-call time. They mainly work with shift systems. It is possible that on-call time is more used in other types of residential care “non-care” institutions. According to the small number of observations we collected on this type of residential care facility, institutions still use “inactive” on-call time systems.

6.2.4 Level of activity during on-call time

The table below contains data with regard to the level of activity of employees during on-call time. In many Member States (BE, DK, FI, PL, PT, UK), interviewees were not able to give a proper insight into the level of activity during on-call time.

A particular situation was found in Germany, as the level of activity during on-call time determines whether employees can opt-out from the EWTD provisions (exceeding the collectively agreed number of working hours). However, an evaluation of workload and activity required during on-call shifts appear to be complex. Opt-out for employees is only enabled in combination with on-call shifts, defined as time characterized with a maximum workload of 49 percent. In practice, interviewees state that in many on-call shifts this limit is exceeded, so that the workload and resulting constraints for the employees remain high. Several hospitals ask, doctors to detect their workload within one on-call-shift by themselves, which generally leads to an underestimation of workload. Beside this, whether workload during one on-call-shift is high or not is unpredictable and not controllable by the central HR department, which therefore cannot guarantee the health protection of the staff. Experts agreed on the fact, that a permanent in-depth detection of the actual activity and workload during on-call shifts would mean an immense administrative effort and cost a lot of time which hospitals often do not have.

Table 8: Level of activity during on-call time

LEVEL OF ACTIVITY DURING ON-CALL TIME			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
BE	• No consistent information		• Not applicable
DE	• Level of activity differs widely from department to department: in most cases around 30-60%	• Level of activity differs widely from department to department: in most cases around 30-60%	• Not applicable
DK	• No consistent information		• Not applicable
FI	• No consistent information		• Not applicable
FR	• Usually low level of activity but could be higher in accident and emergency departments	• Usually no on-call time	• Not applicable
PL	• No consistent information		• Not applicable
PT	• No consistent information		• Not applicable
MT	• 70% -100 % active	• 70% -100 % active	• Not applicable
RO	• 80% -100 % active	• 80% -100 % active	• Not applicable
UK	• No consistent information		• Not applicable

Source: Deloitte, 2010 (based on case studies)

A particular situation was found in Germany, as the level of activity during on-call time determines whether employees can opt out of the EWTD provisions (exceeding the collectively agreed number of working hours). However, an evaluation of workload and activity required during on-call shifts appear to

be complex. Opt-out for employees is only enabled in combination with on-call shifts, defined as time characterised by a maximum workload of 49% during the on-call time period.

In practice, interviewees state that in many on-call shifts, this limit is exceeded, so that the workload and resulting constraints for the employees remain high. Several hospitals ask doctors to determine their workload within one on-call-shift by themselves. This generally leads to an underestimation of workload. Moreover, whether workload during one on-call-shift is high or not is unpredictable and not within the control of the central HR department, which therefore cannot guarantee the health protection of the staff. Experts agreed that a permanent in-depth detection of the actual activity and workload during on-call shifts would mean an immense administrative effort and cost a lot of time, which hospitals often do not have.

6.2.5 Remuneration for excess hours

The table below gives an overview of how remuneration for excess hours is regulated in the hospitals and residential care institutions of the Member States surveyed. In most countries covered by our study, overtime regulation is quite complex, involving rules set by legislation and by collective bargaining. These are often interlinked with other rules relating to the length and flexibility of working time. The data available are rarely comparable. The problems with comparability of the data mean that they cannot be analysed extensively.

The collected data demonstrate that the share of remuneration for excess hours in the total salary costs of hospitals and residential care institutions is significant in some Member States (e.g. PT and MT). In practice, it means that employees consider working overtime as an important way to supplement their basic salary. Case studies reveal that in these countries employees consider the EWT as a negative measure which will lead to a loss of income in particular in the residential care sector where the average wages are often low.

Based on the remuneration of excess hours, we can expect that overtime is least extensive in Germany, Denmark, Romania and the UK, where employees have little incentive to work overtime. Although legislation in Romania and Denmark allows remuneration for overtime, employees are not longer financially compensated, as a consequence of budgetary constraints of their national governments and individual hospitals.

Table 9: Remuneration for excess hours

REMUNERATION FOR EXCESS HOURS			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
BE	<ul style="list-style-type: none"> • In some cases, overtime is not compensated for financially, but only by time off in lieu. • Working night shifts and Sundays: + 35% and 56% • Working on Saturday: +26% 	<ul style="list-style-type: none"> • Extra compensation is specified by national law – however local agreements differ greatly from national law. • In some cases, overtime is not compensated for financially, but only by time off in lieu. • Working night shifts and Sundays: + 35% and 56% • Working on Saturday: +26% 	<ul style="list-style-type: none"> • Extra compensation is specified by national law – however local agreements differ greatly from national law. • Excess hours: +50% • Working night shifts and Sundays: + 35% and 56% • Working on Saturday: 26%

REMUNERATION FOR EXCESS HOURS			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
DE	<ul style="list-style-type: none"> Excess hours of hospital doctors are mainly remunerated financially because of staff shortages. In some cases employees prefer compensation in free time instead of financial remuneration. This applies more to female physicians who want to reconcile hospital and family obligations. Older physicians, who are located higher up in the hierarchy and therefore get the right to choose, especially if they have their own health issues, also prefer time off in lieu. 	<ul style="list-style-type: none"> Excess hours are usually remunerated with free time. Some residential care institutions have employed more unskilled care helpers in order to limit the excess hours of the qualified staff. 	<ul style="list-style-type: none"> Excess hours are usually remunerated with free time. Some residential care institutions have employed more unskilled care helpers in order to limit excess hours of the qualified staff.
DK	<ul style="list-style-type: none"> Overtime is normally remunerated at 50% extra. As a result of cuts in connection with the financial crisis, overtime is usually compensated for by free time, although extra work in evening and night shifts can be remunerated by payment. 	<ul style="list-style-type: none"> Overtime is normally remunerated at 50% extra As a result of cuts in connection with the financial crisis, overtime is usually compensated for by free time, although extra work in evening and night shifts can be remunerated by payment. 	<ul style="list-style-type: none"> Overtime is normally remunerated at 50% extra As a result of cuts in connection with the financial crisis, overtime is usually compensated for by free time, although extra work in evening and night shifts can be remunerated by payment.
FI	Remuneration rate for excess hours is: <ul style="list-style-type: none"> A 50 % increase in the hourly wage for the first two excess hours during a shift and a 100 % increase in the hourly wage for the additional excess hours during a shift. A 50 % increase in the hourly wage for the first five excess hours during a work week and a 100 % increase in the hourly wage for the additional excess hours during a work week. In cyclical work a 50 % increase in the hourly wage for the first 12 excess hours during a two-week cycle or the first 18 excess hours during a three week cycle, and a 100 % increase in the hourly wage for the additional excess hours during a cycle. Or compensated for with an equivalent amount of leisure time. 		
FR	If not compensated for with rest breaks: <ul style="list-style-type: none"> €360/day €470 for on-call time (night and weekend) 	If not compensated for with rest breaks: <ul style="list-style-type: none"> + 25% up to the 14th working hour + 27% for the next hours Sunday: +€47 	
PL	Remuneration rates for excess hours, including those agreed in an opt-out, are paid in accordance with national law – an additional 50% or 100% of basic rate (if during night or holiday).		
PT	<ul style="list-style-type: none"> 15-20% of total salary costs of hospitals is attributable to the remuneration of excess hours Major differences between hospitals observed: no consistent information is available. 	<ul style="list-style-type: none"> 15-20% of total salary costs of hospitals is attributable to the remuneration of excess hours. Major differences between hospitals observed: no consistent information is available 	<ul style="list-style-type: none"> Major differences between institutions observed: no consistent information is available

REMUNERATION FOR EXCESS HOURS			
	HOSPITALS		RESIDENTIAL CARE
	<i>Doctors</i>	<i>Nurses</i>	<i>Care staff</i>
MT	<ul style="list-style-type: none"> Doctors receive a flat rate up to the first 45 hours and above this they get an overtime rate. Overtime rates for doctors are paid at the rate of 1.5 hourly rates for every hour worked. On Sundays the rates are doubled and on public holidays, the rate goes up to 2.5 times the hourly rate. 	<ul style="list-style-type: none"> When nurses work beyond the baseline hours (46-2/3 hours), they are paid at overtime rates (1 hour is paid at the rate of 1.5 hours). On Sundays the rates are doubled and on public holidays, the rate goes up to 2.5 times the hourly rate. Overtime is normally worked on the nurses' days off. 	<ul style="list-style-type: none"> When care staff work beyond the baseline hours (46-2/3 hours), they are paid at overtime rates (1 hour is paid at the rate of 1.5 hours). On Sundays the rates are doubled and on public holidays, the rate goes up to 2.5 times the hourly rate. Overtime is normally worked on the nurses' days off.
RO	<ul style="list-style-type: none"> Overtime is compensated for with money or paid free time, leaving the choice of option to collective contracts per sector (for all public services). Overtime is compensated for with paid free time during the 30 days following the working of overtime, or payment for overtime is negotiated in the work contract and cannot be less than 75% of the basic salary). Both sectors – hospitals and residential care – have chosen to compensate for overtime with paid free time in the context of the current financial deficit in the public sector. 		
UK	<ul style="list-style-type: none"> Remuneration for excess hours follows standard intensity banding systems, and varies with intensity of work. Where intensity is high, remuneration would be set at basic pay + 50%. 	<ul style="list-style-type: none"> Remuneration for excess hours follows standard intensity banding systems, and varies with intensity of work. Where intensity is high, remuneration would be set at basic pay + 50%. 	<ul style="list-style-type: none"> Excess hours are generally paid at normal hourly rates, with some exceptions where contracts entitle staff to an additional 60 pence per hour.

Source: Deloitte, 2010 (based on case studies)

The data collected demonstrates that remuneration for excess hours is a significant element of the total salary costs of hospitals and residential care institutions in some Member States (e.g. MT, PT). In practice, it means that employees consider working overtime as an important way of supplementing their basic salary. The case studies revealed that in these countries employees consider the EWTD as a negative measure which can be responsible for a loss of income, particularly in the residential care sector where the average wages are often low.

6.3 SOCIAL IMPACT

6.3.1 Introduction

This chapter assesses the ‘social impacts’ – social costs and benefits – of the implementation of the European Working Time Directive (EWTD) on public services in EU Member States. Particular attention is paid to the impact created by the SIMAP and Jaeger rulings. When assessing ‘social impacts’, we looked at the impact in the following areas²³:

- Employment and labour market:
 - job creation or job losses;
 - particular professions, groups of workers, or of self-employed, and in particular specific negative consequences;
 - supply of and demand for labour;
 - the functioning of the labour market.
- Standards and rights related to job quality:
 - pay and benefits;
 - working conditions (contractual arrangements, mobility, working time);
 - participation in social security schemes;
 - job security;
 - health and safety at work; access to training and career prospects (pay and status);
 - social dialogue and participation.
- Social protection, health, social security and educational systems:
 - services (quality and access);
 - equality of access to health (geographic, administrative, organisational or financial barriers);
 - organisation and financing of social services.
- Public health and safety:
 - health and safety of patients and citizens.

The types of impact that might be anticipated from social policy measures are inherently diverse and complicated (different social groups, territories, economic sectors) and may be difficult to unbundle from economic and other factors affecting the working environment. Our aim is to make the different social costs and benefits visible and to identify what happens to whom.

²³ Selection from the paper ‘Guidance for assessing Social Impact’, DG EMPL.

6.3.2 Healthcare

6.3.2.1 IMPACT ON EMPLOYMENT AND LABOUR MARKET

In nearly all the EU Member States selected (BE, DE, DK, FR, MT, PL, PT, RO, UK), the implementation of the Working Time Directive has led to an increased demand for specialised and qualified labour in the healthcare sector.

However, there are severe shortages of qualified personnel on the supply side of the medical labour market in all EU Member States, so the strong demand for nurses and doctors has only partly resulted in the creation of extra jobs. The result has been:

- Growing or fierce competition in some Member States among and between healthcare providers and residential care facilities to attract and retain nurses and doctors (evidence found in BE, DE, PT).
- Increasing reliance on the part of the health institutions in the EU-15 Member States on immigration as a solution to recruiting additional staff (BE, DK, DE, FR, UK): Higher wages and better working conditions enable them to attract nurses and doctors from non-EU countries, but also from Estonia, Poland, Portugal and Romania. However, in the EU-12, the emigration of qualified staff to Western and Northern European countries makes an already precarious labour market situation worse, with severe shortages of nurses and doctors (MT, PL, RO).
- Re-engineering of work patterns in the public services in many EU Member States so as to comply with the provisions in the Working Time Directive and to ensure the continuity and quality of service in the future: This has already occurred or is under way in a number of Member States (BE, DE, DK, PL, RO, UK). The goal is more efficiency and maximisation of the potential of the existing staff. Health institutions realise that the possibilities for additional recruiting are limited, not only because of the severe shortage of qualified personnel on the labour market, but also because the economic crisis has created serious budgetary constraints for their national governments.
- A tendency among doctors in teaching hospitals in some Member States to shift away from a full-time salaried status (as hospital doctors with an employee contract) to becoming self-employed (BE, PL). Self-employed doctors are not subject to the provisions of the Working Time Directive. According to HR directors, doctors choose themselves to change their status in order to be able to earn more money. However, we have indications that some of these cases could be considered as fake self-employment. Concrete examples are: doctors signing a contract as an employee and a second contract as 'self-employed' with the same hospital to do on-call work, or defining all doctors in the hospital as 'independent managers' irrespective of actual level or status. It should be noted that calling someone 'self-employed' is not a definitive solution: whether these persons fall within the scope of the Directive ultimately depends on the facts of the relationship between the contracting parties.
- A tendency in one Member State (PT) towards outsourcing hospital activities, especially in emergency services. Some of these firms were established by doctors who were previously employed in these hospitals and now provide their services as a self-employed person. This places them outside the coverage of the Working Time Directive. Outsourcing medical activities in Portugal happens more in smaller hospitals than in large ones.

- In the UK, temporary/agency staff are widely used to provide flexibility. This has an impact on hospital budgets rather than the pay levels of employees.

However, the increased demand for specialised labour in public services cannot always be attributed directly to the Working Time Directive. There are also other developments which explain the increased demand for skilled labour: the baby boom generation leaving the labour market and a more sophisticated healthcare system are examples of these.

6.3.2.2 IMPACT ON THE STANDARDS AND RIGHTS RELATED TO JOB QUALITY

Pay and benefits

The evidence of the impact of the Directive on pay and benefits is rather mixed. We have noted:

- Growing or fierce competition in some Member States among and between healthcare providers and residential care facilities to attract and retain nurses and doctors (BE, DE, PT). Family-friendly working time arrangements are increasingly considered as a competitive advantage for attracting nurses and doctors (evidence found in DK, DE, FR). Hospitals in remote regions unable to offer flexible and family-friendly working time arrangements face major difficulties in recruiting nurses and doctors.
- Examples in one Member State where implementation of the Directive has led indirectly or directly to higher wage levels in collective agreements for doctors and nurses (PL) in hospitals. However, that is certainly not the case in all Member States as wage levels in the public sector are usually strictly defined.
- Loss of income in hospitals where overtime pay accounts for a large proportion of total salary. Employees say compliance with the Directive and the SIMAP and Jaeger rulings means they can work less overtime, and therefore are suffering a loss of income. In Malta and Portugal, examples were found where overtime amounts to more than 20% of employee's basic salary. As a result, a number of hospitals which introduced alternative working arrangements initially faced resistance to change among some groups of employees who were concerned about a loss of income (DE, MT, PT).

Employee health and safety

All the evidence shows that the Working Time Directive (and the general decrease in average working time) has had a clear positive impact on employee health and safety at work (BE, DE, DK, FI, FR, MT, PL, PT, RO, UK).

The consequences of the EWTD include:

- Improved working conditions for employees and increased job satisfaction, particularly for doctors and doctors-in-training. In the healthcare sector especially, there is more compliance than in the past with minimum daily and weekly rest periods (BE, DE, DK, FR, and PL). Nevertheless, whilst most hospitals might claim that they are compliant with the EWTD, we found some

examples of employees (B, PT) indicating working hours and/or duty periods which are in excess of those laid down in the Directive.

- A contribution to increased awareness of the influence of working time and rest periods on employee health and safety, including in Member States that decided to enable an opt-out clause in some public services (BE, DE, FR, MT, PL, UK). Some hospital HR managers admitted that they had to “force” doctors to stay at home if their presence at the workplace was not requested.
- A legal requirement for German employers to analyse the working constraints on their employees on a regular basis. More than 1,000 hospitals in Germany introduced a regular analysis of health hazards (including physical constraints and work pressure). Moreover, in some institutions, a special job position has been created to manage health hazards, analyse constraints and offer burn-out consultation hours.
- Difficulties in practice in exercising rights to time off in lieu: some representatives of employee associations in the health sector (BE, DE, FR, PL, RO) state that some employees face difficulties in taking up time off in lieu when they have been working overtime, as there is nobody to replace them. There were examples in the healthcare sector in emergency services and operating theatre staff. In France, civil servants can store working days in a time account. The number of stored days is limited per year and should be taken within 10 years, but even so, doctors work beyond legal time limits without being paid or receiving time off in lieu because of budget and staffing constraints.

Training and education

In many Member States (BE, DE, DK, FI, MT, UK), the introduction of the Working Time Directive has led to debate on the training and education of care staff, particularly with regard to doctors-in-training. Almost all hospitals in these countries shared the same concern with regard to the impact of the Directive on training and education. They fear that curbing the working hours of doctors-in-training will mean they have fewer opportunities to gain practical experience and learn ‘on the job’.

However, it is too early to assess the real impact of the Directive on the level of experience of future doctors, and on the quality of care. Belgium, for example, is currently working on solutions to ensure the same level of training, for example by re-designing university studies for medicine. According to the Royal College of Surgeons of England²⁴, “*the introduction of the requirement of the EWTD in August 2004 has further reduced the operative experience of surgical trainees to a point where it may be difficult to achieve the present level of training required for the Certificate of Completion of Training (CCT) within the current time-scale of 6 years*”. As a result, the UK Secretary of State for Health invited Medical Education England (MEE) to carry out a review of the impact of the EWTD on the quality of training of doctors, dentists, healthcare scientists and pharmacists. The result of the review, the Temple Report²⁵, can be summarised as follows:

- Service gaps (or rota problems) result in lost training opportunities. Gaps in rotas are often at night, when there is minimal supervision or fewer training opportunities. Trainees are used to fill these service gaps and sacrifice their planned, supervised training opportunities during daytime.

²⁴ Annals of the Royal College of Surgeons of England. 2007 May; 89(4): 452

²⁵ TEMPLE, J., Time for Training, Review of the impact of the European Working Time Directive on the quality of training, May 2010, http://www.mee.nhs.uk/pdf/EWTD_Final%20report.pdf

- The impact of the EWTD is most significant in specialties with high emergency and out-of-hours workloads;
- The classic, traditional models of training and service delivery waste learning opportunities in reduced hours. Consultants' ways of working – resulting in limited supervision by senior staff and trainees delivering the majority of out of hours service – often keeps these traditional training models alive.
- The Working Time Directive might be a driver behind service and training re-design. According to the report, organisations that have proactively designed new ways in which they work and train benefited from the reform.

Work-life balance

The evidence is rather mixed as to the extent to which the Working Time Directive has also impacted employees' work-life balance.

On the one hand, a majority of the hospital HR managers interviewed recognise that the Directive has had (or could have) a positive impact on the work-life balance of their employees. The Working Time Directive forced – mostly non opt-out – hospitals to move away from a culture of long working hours, a phenomenon which was very prevalent in the hospital sector before the SIMAP and Jaeger rulings.

In the United Kingdom, a report published by the Royal College of Anaesthetists and the Royal College of Surgeons pointed to how: *'Trainees agreed that work-life balance in most cases had improved since the implementation of the Directive, albeit at the expense of their training. Many still came in to the hospital outside of their rostered hours to gain extra experience. In addition, they reported that working conditions had generally improved with trainees saying they were less fatigued and HR recording that in some cases sickness levels had reduced'*²⁶.

In public services that have introduced alternative ways of organising working time to cope with the consequences of the SIMAP and Jaeger judgments, employees had to adjust their private life to the new working time situation (BE, DE, UK). Initially, employees in the healthcare sector were on the whole not in favour of excessively rotating shifts, one of the widely introduced compliance measures to move away from 24-hour shifts (BE, DE, UK). However, where rosters took the employee's working time needs into consideration, satisfaction among employees slowly increased. The Directive is increasingly considered to be a family-friendly measure, restricting weekly working time hours and facilitating a healthy work-life balance (BE, DE, FR).

Flexibility and ownership appear to be the key words when reorganising working time. In some hospitals (BE, DK, DE, FR), up to 90 per cent of the roster planning is in the hands of the employees themselves. Rosters are decided in each unit and employees (nurse and doctors) can decide to work more than the legal limit. In many cases, rosters are planned weeks or even months ahead in order to ensure a high level of predictability.

In order to create a family-friendly environment (and to attract healthcare staff), one German hospital paid the costs of day care for children of employees who are on on-call or who are called in for emergencies. Many German hospitals have established their own day-care centre for children of employees. The feminisation of the care sector and shortages of skilled labour have, however, been other important drivers in establishing a more family-friendly working environment.

²⁶ Skills for Health: The Royal College of Anaesthetists and The Royal College of Surgeons of England: EWTD - Implications and Practical Suggestions to Achieve Compliance (2009)

6.3.2.3 ACCESS TO AND EFFECTS ON PUBLIC SERVICES

In terms of access to the services, many employers in the healthcare sector across EU Member States were initially afraid that they would not be able to maintain the same service level if the SIMAP and Jaeger case law were to apply, particularly given the difficulties in recruiting additional staff (BE, DE, DK, FR, UK). Ensuring the quality of care has also been one of the key drivers behind the choice of a growing number of Member States to opt out fully or in some sectors that have a high prevalence of on-call time (BE, DE, FI, MT, PL, UK).

In Member States that are not yet fully compliant with the SIMAP and Jaeger rulings (DK, BE²⁷), this fear about service quality is still present. According to some employers in these Member States, if public services cannot manage to recruit additional resources, the only alternative would be to lower their service levels. This could result in longer waiting lists for citizens or patients as was suggested in the UK when the working limit was set at a maximum of 48 hours per week in the health sector. In Denmark, the argument is used that budgetary constraints in the health sector and public sector in general could worsen the impact of the Directive on current public service levels.

Particular problems in complying with the EWTD while at the same time ensuring service continuity were identified in rural areas in some Member States (both large and small, i.e. DE, FR, RO and UK on the one hand, and MT on the other). It is much easier for hospitals in major conurbations – for example, where the big teaching hospitals are situated – to manage EWTD compliance than for smaller public services in rural areas. The variability of the workload, including seasonal variations, is difficult to manage in smaller hospitals. In certain situations, this has resulted in service reconfiguration (and in some cases, closure of services). This has been particularly true of surgical services in the healthcare sector (DE, FR, MT, UK). In some hospitals in rural areas, there is not a sufficient volume of activity at night to warrant keeping a number of specialised personnel at work (due to a mixture of EWTD requirements and affordability).

Combined with the recruitment difficulties, it becomes especially challenging that those who are employed are not allowed to work as much. Consequently, as focus group participants highlighted, sleeping on-call arrangements are still practised at the workplace without being counted as working time in certain cases. Of course, this creates unequal access to public services and health for citizens in remote areas.

A concrete example of the principle that ‘size matters’ with regard to compliance with the Directive was found in Belgium, where two HR hospital managers stated that a merger process, which their hospital had been going through and which created scale advantages, would enable them to cope with the challenges of complying with SIMAP and Jaeger.

Although examples of longer waiting lists were found during the data collection phase (UK), it is difficult to attribute them directly to the implementation of the Working Time Directive. In the healthcare sector, a significant number of German employers stated that successful reorganisation of work and the introduction of new work patterns had enabled service levels to be maintained, at least in the short term. Most of the Belgian HR directors stated that alternative working time models are very helpful, but will not be sufficient to cope fully with the consequences of SIMAP and Jaeger.

²⁷ In Belgium, a draft proposal is waiting to be voted in the Federal Parliament.

6.3.2.4 IMPACT ON PUBLIC HEALTH, SERVICE QUALITY AND PATIENT SAFETY

The Working Time Directive aims to set weekly and daily rest period requirements, as well as maximum working hours for employees. Ensuring service quality and patient safety can be regarded as an indirect benefit of the implementation of the Working Time Directive.

In the UK, with long working hours still practised for some people in hospitals, there are risks to patient safety as people make more mistakes when they are tired²⁸; there are also risks to the health and safety of the individual (e.g. fatigue increases the risk of car accidents). According to a representative of the Romanian Council of Doctors, some doctors have developed a “defensive” mentality, which manifests itself in increasing reluctance to perform surgery or other complex medical acts after a night of on-call duty.

There are also particular concerns in many Member States about patient safety, e.g. linked to good quality handovers (BE, DE, DK, PL, UK). As a result of changed shift patterns, work is more intensive. This puts pressure on the effectiveness of the management. If management is fragmented, this increases the risk of patient safety and clinical errors. In addition, a minority of German HR managers expect an increase in patient complaints about medical staff changing on a daily basis. They refer to concrete examples, pointing at difficulties in organising a proper handover between doctors at the end and beginning of shifts, which impaired quality of care.

However, a majority of German HR directors think that overall, the quality of care has increased since the implementation of the Directive. Most of the institutions consulted cope successfully with overlapping handovers of shifts. A survey conducted among patients in one hospital revealed a constant level of quality of care, consistent with earlier surveys. Despite the rapidly rotating shifts, the survey reported no decrease in the quality of care.

6.3.3 Residential care

6.3.3.1 IMPACT ON EMPLOYMENT AND LABOUR MARKET

In nearly all the EU Member States selected (BE, DE, DK, FR, MT, PL, PT, RO, UK), limited evidence was found that the implementation of the Working Time Directive has led to an increased demand for specialised and qualified labour in residential care institutions. There are other important developments which have caused the increased demand for skilled labour in the residential care sector: people living longer and ‘baby-boom’ care staff leaving the labour market are examples of these.

The residential care and healthcare sectors are fishing in the same pool for recruiting. From our interviews, it seems that there are severe shortages of qualified personnel on the supply side of the medical labour market in all EU Member States, so the strong demand for nurses and care staff has only partly resulted in the creation of extra jobs. As in the healthcare sector, the result has been:

- Growing competition in some Member States among and between healthcare providers and residential care facilities to attract and retain nurses and doctors (evidence found in BE, DE, PT).
- Increasing reliance on the part of residential care institutions (for elderly persons) in the EU-15 Member States, on immigration as a solution to recruiting additional staff (BE, DK, DE, FR, UK).

²⁸ For more information on these specific elements, please see chapter 4 on Health and Safety aspects.

6.3.3.2 IMPACT ON THE STANDARDS AND RIGHTS RELATED TO JOB QUALITY

Pay and benefits

The evidence of the impact of the Directive on pay and benefits is rather mixed. We have noted growing or fierce competition in some Member States among and between healthcare providers and residential care facilities to attract and retain nurses and doctors (BE, DE, PT). Fringe benefits (mobile phone, free internet, etc.) are increasingly used to attract care staff (BE). Family-friendly working time arrangements are increasingly considered as a competitive advantage for attracting nurses and doctors (DK, DE, FR).

Employee health and safety

All the evidence shows that the Working Time Directive (and the general decrease in average working time) has had a clear positive impact on employee health and safety at work (BE, DE, DK, FI, FR, MT, PL, PT, RO, UK).

The consequences of the EWTD for the residential care sector include improved working conditions for employees and increased job satisfaction. However, in residential care (BE, UK), we found evidence that employers do not always comply with requirements relating to compensatory rest. This situation is often accepted by the employees in order to benefit from longer periods of postponed rest.

Training and education

We did not identify any impact of the EWTD on training and education in residential care.

Work-life balance

As for the hospitals, the evidence is rather mixed as to the extent to which the Working Time Directive has also impacted on employees' work-life balance.

On the one hand, almost all residential care managers interviewed recognised that the Directive has had (or could have) a positive impact on the work-life balance of their employees. The Directive is increasingly considered to be a family-friendly measure, restricting weekly working time hours and facilitating a healthy work-life balance (BE, DE, FR). However, employees had to adjust their private life to the new working time situation (BE, DE, UK).

The feminisation of the care sector and shortages of skilled labour have, however, been other important drivers in establishing a more family-friendly working environment.

6.3.3.3 ACCESS TO AND EFFECTS ON PUBLIC SERVICES

In terms of the access to service, few employers in the residential sector across EU Member States are afraid that they would not be able to maintain the same service level if the SIMAP and Jaeger case law were to apply.

6.3.3.4 IMPACT ON PUBLIC HEALTH, SERVICE QUALITY AND PATIENT SAFETY

The Working Time Directive aims to ensure service quality and patient safety, setting weekly and daily rest period requirements, as well as maximum working hours for employees. Most interviewees in the residential care sector state that the EWTD will not undermine the quality of their services, nor the safety

of their patients. However, it should be noted that in a number of cases employees do not respect the minimum requirements for compensatory rest. Moreover, there were some concerns in a number of Member States about patient safety, e.g. linked to good quality handovers (evidence found in BE, DE, DK, PL, UK). As a result of changed shift patterns, work is more intensive. This puts pressure on the effectiveness of the management.

6.3.4 Police

6.3.4.1 IMPACT ON EMPLOYMENT AND LABOUR MARKET

We found (limited) anecdotal evidence which reveals additional recruiting needs in the police (cf. an example from Poland given below).

6.3.4.2 IMPACT ON THE STANDARDS AND RIGHTS RELATED TO JOB QUALITY

Pay and benefits

No evidence was found of the impact of the EWTD on pay and benefit of police officers.

Employee health and safety

Evidence shows that the Working Time Directive has had a clear positive impact on employee health and safety at work (BE, DE, DK, FI, FR, MT, PL, PT, RO, UK). Nevertheless, the work of the police, especially in urban areas is perceived, as painful due to the stress and unpredictable long hours in case of specific interventions.

In practice, there are difficulties in exercising rights to time off in lieu: some representatives of employee associations in the police sector stated that some employees face difficulties in taking up time off in lieu when they have been working overtime, as there is nobody to replace them. In many cases, police staff are usually organised in shifts, which does not make it possible to compensate for high numbers of additional time with rest. In the Polish police, many officers have been working full time and doing much more overtime since introduction of the national legislation consistent with the Working Time Directive. Normally, they are asked to compensate for all excess hours within a specified reference period (3 months). However, they cannot do this as there are not enough staff to make it possible. This has resulted in an immense backlog.

The problem is particularly acute for fire services in Poland as there is a statutory requirement to give time off in lieu rather than provide financial compensation. In the police, the rules are not so rigid.

We also identified this issue in France, where civil servants can store working days in a time account. The number of stored days is limited per year and should be taken within 10 years, but even so, police officers work beyond legal time limits without being paid or receiving time off in lieu because of budget and staffing constraints.

Training and education

We could not identify any impact of the EWTD on training and education activities in the police.

Work-life balance

We could not identify any impact of the EWTD on work-life balance in the police.

6.3.4.3 ACCESS TO AND EFFECTS ON SOCIAL PROTECTION, HEALTH AND SOCIAL SECURITY

We could not identify any impact of the EWTD on the access to police services for citizens.

6.3.4.4 IMPACT ON PUBLIC HEALTH, SERVICE QUALITY AND PATIENT SAFETY

We could not identify any impact of the EWTD on the quality of service in police.

6.3.5 Fire

6.3.5.1 IMPACT ON EMPLOYMENT AND LABOUR MARKET

We have found (limited) anecdotal evidence which reveals additional recruiting needs in fire services (cf. an example from Poland below).

6.3.5.2 IMPACT ON THE STANDARDS AND RIGHTS RELATED TO JOB QUALITY

Pay and benefits

We found some evidence showing a loss of income for firefighters in fire services where overtime pay accounts for a large proportion of total salary. Employees say compliance with the Directive and the SIMAP and Jaeger rulings means they can work less overtime, and therefore are suffering a loss of income. In Malta and Portugal, examples were found where overtime amounts to more than 20% of the employee's basic salary. As a result, a number of fire services which will have to introduce alternative working arrangements initially faced resistance to change among some groups of employees who were concerned about a loss of income (DE, MT, PT).

Employee health and safety

All the evidence shows that the Working Time Directive (and the general decrease in average working time) have had a clear positive impact on employee health and safety at work (BE, DE, DK, FI, FR, MT, PL, PT, RO, UK). Many fire services were or will be forced to reorganise their work patterns to comply with the Directive.

The consequences of the EWTD for fire services include:

- Improved working conditions for employees. In the fire sector especially, we expect more compliance than in the past with minimum daily and weekly rest periods (BE, DE, DK, FR, PL). We found evidence (BE) that employers do not always comply with requirements relating to compensatory rest. This situation is often accepted by the employees in order to benefit from longer periods of postponed rest.
- A contribution to increased awareness of the influence of working time and rest periods on employee health and safety, including in Member States who decided to enable an opt-out clause in some public services (BE, DE, FR, MT, PL, UK).
- Difficulties in practice in exercising rights to time off in lieu: some representatives of employee associations in the fire services (BE, DE, FR, PL, RO) state that some employees face difficulties in taking up time off in lieu when they have been working overtime, as there is nobody to replace them, particularly in remote areas. As mentioned above, in the Polish fire services, many officers have been working full time and doing much more overtime since introduction of the national legislation consistent with the Working Time Directive. Normally, they are asked to compensate for all excess hours within a specified reference period (six months for the fire service, three months for police). However, they cannot do this as there is not enough staff to make it possible. This has resulted in an immense backlog (e.g. about 10 m hours for firefighters). The problem is particularly acute for fire services in Poland as there is a statutory requirement to give time off in lieu rather than provide financial compensation. In the police, the rules are not so rigid.

Training and education

We could not identify any impact of the EWTD on training and education activities in fire services.

Work-life balance

The evidence is rather mixed as to the extent to which the Working Time Directive has also impacted on employees' work-life balance. Focus group participants stated that the Directive has had (or could have) a positive impact on the work-life balance of their employees. The Working Time Directive forced – mostly non opt-out – fire services to move away from a culture of long working hours without taking compensatory rest, a phenomenon which is still very prevalent in fire services.

In (the limited number of) fire services that have already introduced alternative ways of organising working time to cope with the consequences of the SIMAP and Jaeger judgments, employees had to adjust their private life to the new working time situation (BE, DE, UK). Initially, employees in fire services were not in favour of excessively rotating shifts, one of the widely introduced compliance measures to move away from 24-hour shifts (BE, DE, UK). Groups of public service firefighters in Germany petitioned against discontinuing their existing system of regular 24-hour shifts of standard working time followed immediately by on-call time at the workplace. The firefighters considered that the high physical and psychological stress of their work was better compensated for by long recovery phases involving several consecutive free days in each week than by regular rotating shifts designed to comply with the Jaeger judgment's requirement for immediate compensatory rest.²⁹ Professional firefighters

²⁹For examples see petitions 5/2007 (firefighters), 667/2006 (police officers); for petitions wishing to enforce *Jaeger*, see for example petitions 852/2005 and 546/2002 (firefighters).

usually live at the fire station for 24 hours, but these are not all working hours and in some countries are even not considered as on-call time. In Belgium, firefighters had difficulties complying with the 11-hour minimum compensatory rest period between two shifts. Moreover, it should be noted that many firefighters in EU Member States have a second job. According to many of our interviewees, the SIMAP-Jaeger interpretation of the Directive seemed incompatible with firefighters holding a second job.

6.3.5.3 ACCESS TO AND EFFECTS ON PUBLIC SERVICES

We could not identify any impact of the EWTD on the access to fire services for citizens.

6.3.5.4 IMPACT ON PUBLIC HEALTH, SERVICE QUALITY AND PATIENT SAFETY

We could not identify any impact of the EWTD on the quality of service in fire services.

6.4 ORGANISATIONAL IMPACT

6.4.1 Introduction

In this section, we summarise the impacts on the public service organisation of the Working Time Directive observed in the different sectors analysed.

In general terms, the organisation of working time in these sectors is characterised by a great diversity even at national level. Factors explaining this diversity include:

1. The practice in each organisation: practices vary across public institutions even in a single country depending on management experience and the social *acquis*. In the health care sector, there may even be differences between different medical units of the same hospital;
2. The skills shortage: in remote regions in particular, public institutions have to put pressure on staff planning and organise the work to fulfil rota gaps. Demands from the staff, who know that they are in strong negotiating position, are also influenced by the skills shortage;
3. Citizens' needs: depending on the location, citizens have different expectations or at least different requirements. For instance, in rural areas, where the age pyramid tends to reverse, the pathologies are different from those in urban areas. The same principle of an urban/rural difference applies to the police and firefighters.

The impact of the WTD and in particular of the SIMAP/Jaeger rulings has been different depending on the influence of these factors.

In the next sections, we present a cross-analysis of the organisational impacts per sector and per factor.

6.4.2 Health

In the health sector, which was a particular focus of our study, there has been a clear organisational impact from the WTD and the SIMAP/Jaeger rulings. This is particularly the case in Member States where medical staff, in particular doctors, previously used to work more than 48 hours per week without respecting the requirement for daily rest. Some of these Member States decided to use the opt-out to cope with the weekly time limit (BE, DE, FR); others (such as the UK) decreased the working time with a perceived negative impact on medical service delivered, e.g. long waiting lists for the patients.

6.4.2.1 IMPACT ON THE PRACTICE AT INSTITUTION LEVEL

In all Member States, there is national legislation on working time organisation that transposes the WTD requirements. Nevertheless, this leaves areas of discretion for each hospital. In each hospital, all nurses usually have to work according to the same rules with differences between night and day work. Specific medical units, such as accident and emergency departments, obstetrics and gynaecology, surgical specialties and anaesthetics, may organise working time differently from other parts of the hospital because they have a duty to provide continuous care. In these units, both doctors, and to a lesser extent nurses, could work “atypical” hours (e.g. more than 13 hours continuously, postponed daily and compensatory rests, more than 48 hours/week). These medical specialties are those that are the most impacted by the SIMAP/Jaeger rulings.

As an illustration of the difficulties faced by some specialties, the table below gives statistics on the expected level of compliance with the 48 hours/week in anaesthesia and surgery in the UK by 2009.

Table 10: Expected level of 2009 compliance with the 48- hour average week in anaesthesia and surgery

Level of 2009 compliance	Anaesthesia	Surgery
Fully 2009 compliant	33%	18%
Partly (ie some rotas compliant)	39%	59%
None	27%	23%

Source: Royal College of Surgeons, WTD – Implications and Practical Suggestions to Achieve Compliance (2008)

In order to comply with the SIMAP/Jaeger rulings (and also with even more restrictive national regulations), the hospitals and the national authorities have developed different solutions:

- **Increased staff budget to hire additional human resources** (e.g. DE, FR, UK)
The national authorities refunded public hospitals in order to hire additional resources in the medical units that were affected by the reduction of working time. This reduction was not only due to the WTD, e.g. FR introduced an overall limit of 35 hours per week and the UK decided not to use the opt-out. This significantly decreased working time in hospitals. This solution did not fully solve the problem, as many medical specialties suffer from skills shortages. Therefore, additional staff budgets are often used to pay overtime and for other alternative solutions, such as temporary contracts with external doctors.

- **Use of on-call and stand-by times** (e.g. DE, DK, RO, UK)
Some countries instead of continuing to use on-call times decided to switch to a shift system in which doctors must work full shifts. In the UK, shift work accounted for 10% of total doctors' working hours in 1999; by 2009, it accounted for 80%. This decision was taken in order to decrease the uncertainty linked with the use of on-call times and therefore the risk of working more than the legal ceiling. The use of shift systems makes it easier to plan working hours, but could either create extra costs for hospitals or, as has been argued in the case of the UK, where the issue is particularly sensitive, lead to longer waiting lists.

In Denmark, the use of shift systems with fixed staff responsible for the evening and night shifts was the rule before the SIMAP/Jaeger rulings. There is a tendency to reduce the use of (the relatively well remunerated) on-call time, as it is seen to be an expensive way of ensuring coverage of care around the clock. Nevertheless, when used, there is a tendency for only the active hours during on-call duty to be included in the calculation of average weekly hours.

In Germany, a very common alternative time organisation in hospitals has been the introduction of a rotational shift system – in this case in close co-operation with the employees. Some hospitals revised their shifts and adjusted working time models to the requirement of the Directive and the employees' needs.

Romania, on the other hand, decided to use on-call time extensively to solve issues related to doctor shortages and therefore the increase in working time for the medical staff. This solution appears to be very expensive for the hospitals. In terms of financial burden, the estimates range from 4% to almost 30% of total salary budget of sums paid for on-call working time. Explanations for the big differences could come from the medical services delivered by each hospital. Nevertheless, if it is assumed that one doctor would usually perform 1-2 on-call sessions per week (that is 19 to ≈36 hours in addition to the 35-hour minimum), doctors could be doubling their income. In a generic hospital, some 20% of employees are doctors.

- **Contracting with external doctors** (e.g. BE, FR, PL, PT, RO)
In hospitals that have suffered from a lack of doctors due to the reduction in working time and shortages, medical units have had to hire external and freelance doctors for a limited period of time and/or for specific tasks. This solution appears to be very expensive for the hospitals as these external doctors offer their services to the highest bidder. In France, this practice is particularly prevalent in accident and emergency departments, but is also found on an ad hoc basis in other units.

In Portugal and Romania, there are hospitals that hire part-timers from other (larger) hospitals or use junior medical doctors (residents) who are not allowed to take responsibility for the full range of medical actions.

The Polish case is particularly interesting because hospitals were forced to develop new organisational strategies in order to meet the requirements of the Directive (especially compulsory rest periods, on-call time counted as working time, etc.) One coping strategy was to hire more doctors on civil-law contracts (i.e. they were self-employed). They are then not covered by the WTD limits (BE). As a consequence, doctors can work in more than one place (e.g. in one place on an employment agreement basis and in the other(s) on a civil-law contract basis). This is common. Although the number of doctors signing civil-law contracts has increased since the SIMAP-Jaeger rulings, this phenomenon is not completely new. It was already used *inter alia* to cope with shortages of particular specialists and as a way to increase doctors' earnings.

- **Redeployment** (e.g. FR, RO, UK)

In some countries, the skills shortages and the reduced working time have been addressed by redeployment:

- role substitution: extending the roles of nurses, e.g. midwife and other non-medical health care professionals, to free up doctor time;
- cross-cover: a doctor or team of doctors from one specialty provide cover across one or more specialties as well as their own, typically during the out-of-hours period. Here again, emergency departments were often mentioned.

British Research undertaken by the Royal College of Surgeons and Royal College of Anaesthetists (*'WTD - Implications and Practical Suggestions to Achieve Compliance', 2008 – op. cit.*) noted that the use of nurse practitioners in some surgical specialties, particularly trauma and orthopaedics, has proved beneficial. However, they note that a nurse practitioner cannot replace the need for a surgeon to be present, and hence is not appropriate for every specialty.

- **Management by hazard and workload evaluations** (e.g. DE)

In order to comply with the Directive and the SIMAP/Jaeger rulings, hospitals have had to optimise the use of the scarce resources without affecting patient health and safety. In Germany (but it is also the case in the other countries selected), the implementation of the EWTD resulted in hospitals taking into account hazard and workload evaluations, case management and patient numbers when organising working times. This brought about a more efficient use and operation of the staff in general. For instance, the beginning and end of shifts were adjusted to patients' actual needs, e.g. implementation of a shift starting at midday when statistics show that most patients are hospitalised and/or entering emergency rooms.

The extended use of statistics and cross-unit evaluations empowered the central HR department within the hospitals as a "working time coordinator". In many hospitals, each unit is responsible for its internal working organisation (rota design, shifts, etc.) and the HR department has often been considered as support or even "controller" of the application of the legal and internal general rules. With cross-unit analysis, the HR departments have to be more involved in day-to-day unit organisation. They have, for instance, to develop common monitoring tools in order to collect data on working time peaks and patient satisfaction. This practice tends to decompartmentalise hospitals.

Nevertheless, it is not yet current management practice and culture to measure precisely the level of activity during on-call time, at least for doctors. Employees usually report their activity during on-call shifts precisely and not via a time stamp clock for instance. In order to weight the working time during on-call sessions to reflect actual work, stakeholders interviewed proposed applying pre-agreed ratios based on statistics per medical specialty. Some hospitals have admitted that they already apply this system to remunerate on-call time in breach of the SIMAP/Jaeger rulings.

- **Use of the Opt-out** (e.g. BE, DE, FR, MT, UK)

Some Member States under review decided to use the opt-out to cope with the SIMAP/Jaeger rulings. This was particularly true in the health sector. The most illustrative case of the use of the opt-out in this sector is the French one. In France, only doctors in public hospitals are allowed to average more than 48 hours per work week. The opt-out is only applicable to this group. In the UK, on the other hand, doctors are the worker category not allowed to invoke the opt-out (see Chapter 7 on the use of the opt-out).

The level of activity during “opt-out hours” may be lower (e.g. on-call time or consultation) than “normal” working time, but this is not the rule. We have found many anecdotes of doctors who work more than 48 hours continuously (up to 80 hours) at their own request. This large amount of working time is not “calmer” than the previous or next 48 working hours.

In Belgium, legislation has been drafted to use the opt-out in the health sector. This decision is a demonstration of the difficulties that the Belgian authorities perceive that they are facing in coping with the SIMAP/Jaeger rulings.

The opt-out can also be costly. There are hospitals where it has engendered more overtime than the hospital can afford to pay for. In France, this has led some hospital HR directors to “contractualise” the maximum working hours each year with the heads of medical units. Where there are major discrepancies with the budget that cannot be properly justified, overtime is not paid. The responsibility lies with the head of unit, but doctors rapidly realise that they have to limit their working time to their rota.

- **Management by democracy** (e.g. FR, DE)
Another evolving practice to cope with the reduced working time and therefore its organisational impact is the active involvement of the employees in working time organisation. Traditionally, medical units organise themselves according to their specific requirements and needs. In several countries, but more particularly in France and Germany, hospitals have developed new practices for debating working time organisation directly with the employees concerned.

In Germany, the development of alternative forms of working time organisation in many hospitals was handled via co-operative workshops with employer and employee. These have resulted in many different working time arrangements even at institutional level.

The individualisation of working time often leads to theoretical compliance with the legislation on working time. It means that the main challenge associated with the Working Time Directive today is not the impact it has had on organisations, but the actual practice of time recording and remuneration. In the UK, stakeholders generally agreed that it would be a mistake to assume that the 48-hour limit has been properly introduced, as many people continue to work excessive hours without this being counted as working time. Hence, there is a real issue in that there is a theoretical compliance, while practice often remains significantly different due to factors such as shortage of staff or self-interest in learning opportunities or training. Stakeholders claim that today’s working time organisation is based on implicit local arrangements not to challenge the regulation and ensure theoretical compliance.

6.4.2.2 SKILLS SHORTAGE

In all Member States, aside from the compliance with the Directive’s requirements and SIMAP/Jaeger rulings, staffing and skills shortage (doctors and nurses) are the main issues in the health sector.

In Germany, for example, there are an estimated 15,000 to 25,000 vacancies, while the unemployment rate is already below one percent. In Romania, according to the SANITAS health union, there is currently a deficit of 25,000 employees in the health sector. During the last 3-4 years, some 4,000 medical doctors have left Romania for jobs in other EU countries or the US. This situation puts pressure on the hospital directors, who have to spread a large amount of work across fewer and fewer employees.

In large countries (DE, FR, RO, UK,), hospitals in rural areas in particular have problems recruiting skilled employees. The generally long trips to the workplace in these areas (and the attractiveness of the larger hospitals in urban areas) make it especially difficult to find enough personnel.

Skills shortage in countries with strong social security systems is often linked with national policies such as a ‘*numerus clausus*’, i.e. a limit on the university intake of medical students designed to limit health expenditures, and is not only related to working time reduction. Nevertheless according to stakeholders (e.g. in FR), the SIMAP/Jaeger interpretation has led to a 20-25% decrease in medical working time in the hospitals.

6.4.2.3 THE PATIENTS’ NEEDS

Another factor that reinforces the skill shortage problem is the increased need for healthcare due to higher life expectancies across the EU.

Two factors make the situation in rural areas more acute:

- the higher average age in rural areas because of the exodus of younger people to urban areas;
- reluctance of young doctors to work in rural areas.

6.4.3 Residential care

The impact of the SIMAP/Jaeger rulings on the residential care facilities depends on the target groups (old people, children and young people, the disabled). Moreover, residential care is not always provided by “institutions” but by individuals even in public services. This is for instance the case for remunerated people who host young people full-time (foster parents). It is hard to make the interpretation of working time for such work fit with the SIMAP/Jaeger rulings.

In this study, we have looked in particular at nursing and rest homes, due to their high representativeness within the residential care facilities group. We present below the impact of the SIMAP/Jaeger rulings at institution level, on skill shortages and on patients/residents.

6.4.3.1 IMPACT ON THE PRACTICE AT INSTITUTION LEVEL

In all the Member States visited, institutions that provide continuous care organise working time in shifts (which are organised differently depending on the institutions). They usually do not use on-call time. Therefore, there was no or only a very limited impact from the SIMAP/Jaeger rulings. We only found examples of on-call time in large institutions where doctors have on-call duties during nights (e.g. in PL). In this case, some employees agreed to opt-out or the institutions hired new doctors on a civil-law contract basis.

Moreover, part-time contracts are a usual practice in this sector (e.g. BE, DE, DK, RO), so actual working time usually remains within the legal limit. In the case of overtime, the extra hours are not paid for, but compensated for with additional days off.

In the opt-out countries (e.g. MT, UK), we found examples of excessive numbers of working hours being directly requested by the employees themselves in order to maintain necessary level of income as jobs are generally low-paid. Our UK case study indicated that the Directive is implemented on a fragmented and ad hoc basis. Employees sign opt-outs allowing them to work additional hours, with 60 hours per week being common.

In institutions where the activity during the night is lower than by day, e.g. boarding schools and orphanages, employees who may sleep are usually paid according to their actual work and more often with a fixed on-call allowance. The hours spent in the workplace remain within the legal limit but do not always comply with the rest requirements (e.g. in the UK).

6.4.3.2 SKILLS SHORTAGES

In general, we have not noticed significant skills shortages in this sector, but in the health sector (hospitals) there is a deficit of nurses. Only in remote rural regions (e.g. FR, PL) or in countries where skills shortages are structural (MT) are there some examples of shortage, but this is definitely not a common issue.

The impact of the SIMAP/Jaeger rulings is therefore limited because the employees can easily compensate with overtime for short periods.

We have found breaches of SIMAP/Jaeger in the UK, but they are unrelated to skills shortages.

6.4.3.3 PATIENTS' NEEDS

The demand for residential care facilities, and more specifically in rest homes, is increasing as life expectancy increases. This is bringing with it an increase in workload because of higher levels of dependency. This produces physical strain, which causes injuries that force many employees to leave the sector.

In countries where employees used to work 48 hours per week on average or more (e.g. MT, RO, UK), health and safety issues are exacerbated even in institutions that respect legal requirements on rest periods. The SIMAP/Jaeger rulings have not improved the situation of these employees because they usually do not use on-call time.

6.4.4 Police

The organisation of working time in the police is very different across and within Member States. There is, however, generally no use of on-call time as the police mainly rely on shift working. The only exception identified for this study was in Denmark, where 3/4 of the duty hours performed during on-call duty at the workplace are included in the calculation of weekly hours. This does not mean that this country is the only one that does not consider all time spent at work as working time. In many Member States (e.g. DE, FR, MT, RO), the police is regarded as a sector that complies with the WTD, or is even outside the Directive's scope (e.g. UK) because of its "natural" specificities. Police officers covering a call-out or on an investigation often have to work more than the legal limit. In Romania, for instance, missions lasting more than 24 hours represent between 10-20% of total working time. In many Member States, this overtime is often not compensated for with rest time, and is stored in time accounts that grow over the years (e.g. FR).

A combination of factors are at work, e.g. skills shortages (e.g. BE, DE, DK, MT), budget constraints, and demands for increased levels of security. Skills shortages vary by location, and are higher in urban areas. So there is an urban/rural divide in the likelihood of non-compliance with the Directive.

6.4.5 Fire

Organisation of working time for firefighters is usually broken down into active work and on-call time during 24 hour periods at the workplace, but with many variations (e.g. 12 or 8-hour shifts, and 24-, 48- or 72-hour rest periods between two shifts) in the Member States. In many cases, firefighters live in the fire station for 24 hours and go out on calls alternately or collectively when necessary.

Despite the SIMAP/Jaeger rulings, several Member States (e.g. DE, DK, FR, UK) continue to apply the principle of inactive on-call time. Denmark and France, for instance, use a system based on equivalences, e.g. one on-call hour equals 4/5 of an actual working hour.

For stakeholders in these countries, maintaining a clear distinction between active and inactive 'on-call' time is considered critical for the future viability of fire service provision. Workload during on-call times depends on the area (urban or rural) and the number of daily call-outs. According to stakeholders in these countries, the assimilation of all on-call time hours as working hours could threaten the overall structure of the systems. In Germany, opting-out is common in fire services in order to make longer shifts possible (24h), with a relatively low workload.

In some local systems (e.g. DK, DE), firefighters are free to organise their own working time. In Germany, for instance, fire departments have chosen a model based on shifts the employees can pick and sign for. They then negotiate with their colleagues once everyone has expressed their wishes. In another example in Denmark, personnel on 24-hour on-call duties concentrate their work in 3 days in one week. This means that they can subsequently have relatively long periods of time off. Consequently, the rules on compulsory rest periods are not respected.

In countries where it seems difficult or impossible to comply with the SIMAP/Jaeger rulings, the possibility of using the opt-out is under discussion. An alternative solution found by Polish fire departments was to move some administrative staff to active units where the presence of an adequate number of officers is crucial. This had negative consequences for the administrative work (e.g. number and quality of controls) because the remaining limited number of employees could not cope.

Another major constraint in relation to the Directive's requirements is the reliance on volunteers in many Member States. The International Fire and Rescue Service Association highlighted the fact that many firefighters throughout the EU are part time or volunteers. The part-time staff often perform this role for little money to protect their local community, and they do it in addition to their general or normal employment. As a consequence, since their 'available working hours' are already fully used in meeting their primary employment duties, strict application of the Directive would preclude this additional voluntary or part time work.

Fire and rescue services in many Member States rely fully on such a system made of two types of operational firefighters: professionals and volunteers, who receive compensation for the work performed and on-call/stand-by times. For instance, in France, there are 39,000 professionals and 200,000 volunteers.

6.5 FINANCIAL IMPACT

6.5.1 Introduction

This chapter aims to identify the financial costs and benefits for employers, employees and government from implementation of the Working Time Directive in public services. We deal in detail only with the healthcare and fire services, because the case studies showed that the impacts were nothing like as significant in the other two sectors.

Employers, employees and government incur financial costs and benefits from compliance with the Working Time Directive. These are illustrated below:

- Costs and benefits to employers:

Financial costs	Financial benefits
<ol style="list-style-type: none"> 1. Increased personnel costs, as a result of additional recruiting 2. Increased administrative burden related to introduce of alternative working models (one-off) and working time recording 	<ol style="list-style-type: none"> 1. Decrease in overtime and on-call payments

- Costs and benefits to employees:

Financial costs	Financial benefits
<ol style="list-style-type: none"> 1. Loss of income for some groups of employees/in some Member States 	<ol style="list-style-type: none"> 1. Higher wages or fringe benefits for some groups of employees/in some Member States

- Costs and benefits to government:

Financial costs	Financial benefits
<ol style="list-style-type: none"> 1. Extra funding of public services: <ul style="list-style-type: none"> ○ for additional recruiting ○ to set up alternative working time models 	None.

6.5.2 Healthcare Sector

6.5.2.1 COSTS AND BENEFITS TO EMPLOYERS

6.5.2.1.1 Increased personnel costs from additional recruiting for employers

Compliance with the maximum working time of 48 hours per week, including all time spent on call, means that public services in all EU Member States were and are obliged to recruit additional staff to ensure the same service levels (BE, DE, DK, FI, FI, MT, PL, PT, RO, UK,). The healthcare sector and fire services across Europe were particularly seriously affected by the SIMAP and Jaeger rulings, while, based on the case studies conducted in the Member States, police and residential care facilities were only slightly affected³⁰.

After the Jaeger ruling, governments in many Member States raised serious concerns about the consequences for their public services. A German government official stated that if on-call time were to be fully counted as working time, overall staffing requirements in German hospitals would increase by some 24%. Germany estimated that additional costs for the healthcare sector would run to €1.75 billion³¹. The UK Government said that additional costs in healthcare would come to between £380 and £780 million³². Malta estimated that it would need 35% more healthcare staff to be able to be compliant with the Working Time Directive. In practice, most of the hospital directors surveyed stated that additional recruiting of doctors and/or nurses was required (DE, FR, MT, PL, PT, RO, UK,). In Member States where the SIMAP and Jaeger rulings (BE, DK) have not yet been translated into national legislation, a need for additional recruiting is also anticipated.

The situation is less acute in relation to nurses, as the vast majority of nurses (and health care staff) in these countries are not affected by on-call times (BE, DE, PL, RO). However, where there is a high prevalence of on-call time for nurses (MT), there is an accompanying need for additional recruiting – approx. 800 according to the Maltese Union of Midwives and Nurses

The case studies on doctors-in-training provided mixed evidence. UK junior doctors have been subject to the EWTD since August 2004, but there was a 5-year phased transition, with a gradual reduction in maximum weekly hours. A 48-hour maximum average weekly working limit has applied since August 2009. The focus group discussions and published information showed that there has been a considerable effort by the NHS to ensure compliance with the EWTD and, in particular, significant investment in additional junior doctors, with an increase of approximately 66% in the numbers of new doctors in the past decade.

However, overall, additional recruiting of doctors appeared to be relatively limited in practice, simply because there is a shortage of doctors on the labour market in all Member States.

³⁰ In the UK residential care sector, interview findings strongly imply that the EWTD and SIMAP/Jaeger rulings have in practice not had a great financial impact, mainly due to a generally low awareness among both employers and employees of the requirements set out in European legislation and in the rulings. It seems that the stipulations of the EWTD are often not respected or employees sign opt-outs allowing them to work longer, e.g. up to 60 hours. Consequently, direct costs associated with EWTD implementation can be assumed to be limited in the sector as a whole.

³¹ Document COM (97) 334 final, point 64.

³² Ibid.

In Romania, demand could not be met because healthcare employees were actually leaving the sector because of low salaries and poor working conditions. As already mentioned in the section on organisational impact, some 4,000 doctors have left Romania during the last few years for jobs in other EU Member States or in the United States. The whole sector is said urgently to need about 25,000 additional employees, especially in certain specialties such as anaesthesia and radiology.

In Finland, national authorities say that they consider it extremely difficult to treat inactive on-call time fully as working time within the public health service in view of the continuing shortage of qualified staff in Finland – there are 9% fewer doctors than needed, despite expanded training opportunities – and the reluctance of many doctors to accept on-call work due to its implications for family responsibilities.

In the UK, recruiting was further complicated by changes to UK immigration laws, so that international graduates are no longer in a position to apply for a training post in the UK. Traditional recruitment ‘pools’, such as South Africa, are consequently no longer available.

Hence, despite some exceptions in Poland where hospitals faced increases, elsewhere overall labour costs increased only slightly. However, reliable data with regard to effects on labour costs could not be found.

As the ‘easy option’ of recruiting more doctors or qualified personnel was not available in the Member States in the sample, public services re-engineered their working time models. Nevertheless, even with the new rotas and new positions in place, a number of gaps remain to be filled to fully staff hospital teams in some countries (BE, PL, UK).

In the UK, interviewees noted that there is a need for flexibility in resourcing in hospitals because rotas are on average only about 70% full. There is therefore a need to find additional resources. While traditionally, there may have been a reliance on internal staff working on a locum basis, the EWTD has brought considerably increased reliance on external locums (PT, UK). This is costly, given that about 10-15% of UK hospitals’ budgets is typically spent on locums, according to the Department of Health.

6.5.2.1.2 Costs arising from increased administrative burden for employers related to introduction of alternative working time models and working time recording

Public services that introduced alternative working time arrangements also had to carry the costs related to the change management process. However, no specific and comparable information about costs related to the introduction of alternative working time models could be found.

In many countries (BE, DE, FI, FR, MT, PL, RO, UK), compliance with the Working Time Directive resulted in an increased administrative burden. Many hospitals recruited additional administrative staff to cope with the increase in administration, or invested in IT systems which monitored the working time hours of employees. Roster planning, monitoring working time and keeping records of employees' work patterns was described generally by our interviewees as a burden on hospitals – and on residential care and fire services.

6.5.2.1.3 Savings related to remuneration of overtime and on-call working for employers

In Member States where employees are financially compensated for overtime hours and on-call time (evidence found in B, D, DK, UK), reducing working time to 48 hours has also resulted in cost savings as hospitals in general have paid less in banding supplements.

More specifically, a UK hospital interviewee pointed out that the main financial costs materialised with the 2004 implementation, when working hours were reduced from 56 to 48 hours. In this case, much of the cost was financed by cost savings as a result of reduced 'intensity banding' (remuneration for excess hours), where e.g. a doctor would go from basic salary +80% in intensity banding to basic salary +40-50% in intensity banding. With a rota of 6-7 doctors, this added up to providing the hospitals with cash to reinvest in new positions. This, in turn, will of course have had a financial impact on the income of the worker.

The costs and benefits of this process can be further exemplified through a good practice example in the Accident and Emergency unit of Causeway HSS Trust identified in a 2003 publication on guidance on working patterns for junior doctors³³. An initial rota involved six doctors working a full-shift pattern, which was non-compliant due to breaks. By introducing an extra post, the rota was reworked to improve cover and thus allowing breaks to be taken. As the band level dropped the costs of funding, seven doctors in the relevant band came to less than the original six doctors that were remunerated at a higher band.

However, according to research undertaken by the Royal College of Surgeons and the Royal College of Anaesthetists, EWTD compliance has generally led to increased costs of personnel wages and salaries. Despite the fact that reducing working hours to 48 hours has also resulted in cost savings as hospitals in general have paid less in banding supplements, a number of new posts could not be financed by these costs savings, and consequently hospitals have taken on additional personnel costs.

6.5.2.2 COSTS AND BENEFITS TO EMPLOYEES

6.5.2.2.1 Increased wage levels and benefits for some group of employees

In Poland, EWTD compliance created financial benefits for employees, as their economic situation improved. Employers were forced to rearrange their work organisation and to hire additional staff. This created the opportunity for doctors and other professionals to negotiate better employment conditions (including higher wages). It was achieved inter alia through strikes and group protests. According to data presented by the Polish Ministry of Health, a salary increase was recorded in the first period (8 months) following the transposition of the EWTD, and the SIMAP and Jaeger rulings into national legislation. For doctors, the increase varied on average between 20 and 25 %, depending on specialisation and level of experience; for nurses and midwives, it was between 9 and 15%.

Furthermore, the salary increase for health sector employees' also had other positive consequences. Employees were satisfied with their higher income level. This led to a situation where some doctors gradually began to work less. A concrete example: whereas previously some employees did about seven or eight on-call duties per month (which vary from 16 to 24 hours each), they currently do about 4-5 on-call duties per month. Employees have more time now to reconcile work and family life.

6.5.2.2.2 Loss of income for some groups of employees

In Malta and Portugal, hospital doctors have to work long hours to supplement their basic pay in order to receive a decent wage³⁴. Tackling the current shortage of nurses and doctors and increasing their basic

³³ Department of Health, Social Services and Public Safety Northern Ireland: Guidance on Working Patterns for Junior Doctors (2003)

³⁴ In the case of Faro Hospital, 22% of all remuneration (more than €40 million) was to pay supplementary wages (mostly for excess hours) for 2009. This can give an idea of the extent of remuneration due to extra hours.

pay are generally considered as key prerequisites to be able to implement the Working Time Directive. However, increasing healthcare costs might not be sustainable in the long-run.

In Germany, younger employees in the health care sector in particular do not mind working long hours, excess hours or extra shifts – based on contracts that are not covered by any collective agreement – in order to earn more money. They consider the limitation of working hours as a constraint, as fewer working hours means less income.

There is evidence in the UK as well, that employees in the healthcare sector perceived a loss of income, as overtime hours were curbed.

6.5.2.3 COSTS TO GOVERNMENT

6.5.2.3.1 Costs of funding transitional measures for governments

In most of the Member States selected, governments provided funding to the health and residential care sectors to cope with the consequences of the SIMAP and Jaeger case law, and the Directive in general (evidence found in BE, PL, UK).

In the UK, it is worth noting that hospitals were provided with government funding from the Department of Health (an estimated total of £350 million) to implement the EWTD in 2009-2010³⁵. However, there seem to be several issues with the effectiveness of this funding in addressing the real challenges, particularly with regard to the accountability of the funding provided.

The Polish Ministry of Health also provided funding to assist Polish healthcare institutions. During the first six months following the transposition of the Directive into national legislation, the Ministry provided health facilities with about PLN2.4 billion (about €600 million³⁶) to cover additional expenses. However, in the opinion of hospital representatives it was still not sufficient. Furthermore, the number of residents (doctors who are doing their specialisation) sponsored by the Ministry of Health has increased as well (e.g. from 1,135 in 2007 to 3,156 in 2008). Although the increase in the number of residents could not be fully attributed to the Directive, it was given as one of the reasons.

In order to fulfil the most urgent needs of Belgian hospitals, the Belgian government initiated a pilot project in thirty Belgian hospitals in 2008, financing the establishment of so-called ‘mobile teams’. These mobile teams were established to correspond to the most urgent capacity needs of hospitals. The first results of the pilot project were published in 2009. The Belgian government financed extra recruiting for hospitals participating in the pilot project (1FTE per 30 beds) to reinforce the mobile teams.

6.5.3 Residential care

The only cost or benefit identified was the potential for higher personnel costs for employers.

In most countries, the residential care sector was affected neither by the European Working Time Directive nor by the SIMAP and Jaeger rulings, as the maximum working hours do not exceed the 48 -

³⁵ According to the annual Public Expenditure Statistical Analysis 2009 by the HM Treasury, total expenditure by the UK central and local government in healthcare amounted about £110 billion in 2009.

³⁶ According to Eurostat – Government Expenditure, total expenditure in Health of Poland amounted about €18.4 billion in 2008.

hour average. In residential care for elderly persons, there is hardly any use of opt-out (BE, DE, DK, FI, PL, RO). Only in some cases, where doctors have on-call duties during nights, were some additional costs recorded due to the need to hire additional staff or to ask current employees to agree to opt out (PL). Overall, on-call systems are not common in the residential care sector, although we found a number of examples of on-call systems in child care institutions (BE, FR, RO).

In the UK residential care sector, interview findings strongly imply that the EWTD, and SIMAP and Jaeger rulings have in practice not had a great financial impact, mainly due to a generally low awareness among both employers and employees of the requirements set out in European legislation and rulings. It seems that the stipulations of the EWTD are often not respected, or employees sign opt-outs allowing them to work e.g. up to 60 hours. Consequently, direct costs associated with EWTD implementation can be assumed to be limited in the sector as a whole.

6.5.4 Police

We identified anecdotal evidence of increased personnel costs by employers and loss of income for some groups of employees. In most countries, the sector was only to some extent affected by the European Working Time Directive or by the SIMAP and Jaeger judgments, as maximum working hours do not exceed the 48 hour average and other Working Time Directive provisions are respected (evidence found in BE, PL, DK).

6.5.4.1 INCREASED PERSONNEL COSTS FROM ADDITIONAL RECRUITING BY EMPLOYERS

One example was found in the case of the Police Force in Malta, if overtime were to be restricted – which is not the case, as Malta introduced a full opt-out system – the extra duties would be compromised and additional staff would have to be recruited. This would mean additional costs to government. In 2005 it was calculated that an additional 108 police officers would need to be recruited to in order to cover the extra duties on payments which were at the time being performed through overtime.

6.5.4.2 LOSS OF INCOME FOR SOME GROUPS OF EMPLOYEES

In Malta, Police officers normally take on extra duties for payment which are carried out on their off-days. The decision whether to take on extra duties is left up to the workers, who often see this as a way of supplementing their baseline income. Overtime is normally automatically added on to the baseline hours of officers who are investigating crimes in the homicide, vice, and drug squads. These are paid at overtime rates. According to the Maltese Police, no one wants to work in offices, as these employees do not have overtime. Respondents in the focus group said that workers would not mind reducing their number of hours as long as their remuneration remained the same. If overtime were curbed, policemen would probably seek better remunerated work elsewhere. This would impoverish the work force, which would lose experienced staff.

6.5.5 Fire

We identified increased personnel costs by employers, loss of income for some groups of employees and costs from funding of transitional measures for governments.

6.5.5.1 INCREASED PERSONNEL COSTS FROM ADDITIONAL RECRUITING FOR EMPLOYERS

In Germany, given the current financial difficulties in many German cities and rural communities, the Working Time Directive adds to the challenge of financing. Moreover, the regulations regarding workers' rights and working times sometimes differ widely from the laws and regulations at the federal state level, which makes it impossible to present consistent findings that apply to all fire departments and their implementation of the EWTD within Germany.

Anecdotal evidence suggests a rather difficult implementation of the Working Time Directive in the federal states of Berlin and North Rhine-Westphalia. Additional recruiting was absolutely necessary to meet all the requirements of the Directive; however, the public authorities were facing serious financial constraints. In Berlin, for example, it was only possible to recruit 75 additional firefighters, a mere 2% of the total staff number and largely insufficient to cover the personnel needs. In other federal states', however, fire departments – pushed by public protests – succeeded in recruiting enough personnel to meet all requirements.

In Malta, the Fire department already faced shortages of fire workers. If Malta had not enabled the opt-out system, the fire department would not have been able to maintain the same service level as today. As Malta faces budgetary constraints, the Fire Department has been asked to stop all recruitment.

Although, in Denmark, fire staff in the public sector typically stay under the limit of 37 hours per week when the average is calculated, their working time in the weeks where they are on duty comes to around 72 hours or more, and it seems that there may be problems about respecting the rules on obligatory rest periods between periods of work. The employers' organisation (KL) suggested that they might consider using the opt-out clause provided by the Directive's Article 22 during the next collective negotiations in autumn 2010 in order to ensure that there is no legal infringement.

In the UK, evidence suggests that the financial impact of the EWTD on fire and rescue services are particularly significant for retained fire fighters. "Retained Duty System" (On-call), or RDS firefighters, make themselves available to respond when they receive an emergency call. A pre-requisite to employment as an RDS firefighter is that they must live and/or work within five minutes' travelling time of the local RDS fire station. Across the UK as a whole, geographically the RDS provide around 90% of fire and rescue emergency response, typically in city suburbs, smaller towns and rural areas where the number of call-outs is not sufficient to justify economically and operationally the provision of wholtime fire and rescue cover.

Unlike the wholtime duty system, the RDS has had long-standing recruitment and retention problems. There is currently a 13% shortfall in the number of RDS firefighters against the number of posts. It gets far fewer applicants and loses a greater proportion of staff each year than the wholtime duty system. Any changes would fundamentally affect the viability of services.

In the focus group discussions, an estimate of a UK-wide shortage of retained fire fighters was provided — between 3,000 and 5,000 across the country. Consequently, there is a strong need to improve the recruitment and retention of fire fighters in order to ease the pressure on retained fire fighters and to comply with the directive. One might make the case that a negotiated common fire service position on issues such as record keeping, on-call time and enforced rest breaks could mitigate some of the EWTD's more restrictive affects on worker flexibility.

The focus group showed that the lack of a clear distinction between working time and on-call time linked to the SIMAP and Jaeger decisions risks imposing financial and practical challenges on fire and rescue

services. In terms of economic impacts, it is likely that the fire services will face increased financial burdens if a large number of individuals are categorised as being on-call during extended rest periods.

Similarly, according to a local authority association: ‘ (...) if no distinction between ‘active’ and ‘inactive’ on-call time is made then the calculated working hours of employees on ‘call-out’ or ‘standby’ arrangements would be significantly increased’ and as the overall cost of running a retained fire station is 10% of a normal fire station, enforcing this distinction will have vast economic implications.

6.5.5.2 LOSS OF INCOME FOR SOME GROUPS OF EMPLOYEES

In Germany, EWTD implementation brought to an end the 24-hour shift system which had been very commonly applied. As a result, fire workers faced a loss of income and had to rebalance their work and family life in line with their new working time schedules. With no more 24-hour shifts, firefighters have to work more shifts to reach their agreed monthly number of working hours. They also have to drive to work and home more often. This brings additional costs, particularly for those who drive long distances from home to work. Moreover, according to employer representatives, a significant number of particularly younger employees at the fire departments who have multiple jobs, or work in ‘honorary capacity’ - e.g. in voluntary fire departments (which exist in many villages) – feel restricted by the Directive’s provisions. They have fewer possibilities to work longer shifts and excess hours. Trade union representatives, on the other hand, do not wish to use this argument, as an increase in pay would resolve this practice of ‘doing multiple jobs’.

In Malta, one firefighter wage is currently equivalent to 1.4 man hours (including national insurance payments, leave, sick leave, overtime etc). It might be that the money used to pay overtime could fund additional recruiting instead, but employees would lose income. If there were a full staff complement and overtime were to be reduced, it would probably not remain viable for them to continue working in this sector as the pay for the baseline hours would be not sufficient³⁷. A representative of an employees’ organisation stated that “there is no point of having free time when you don’t have enough money to go round and when your standards of living drop”. Respondents said understanding the local context is important: the male breadwinner model prevails and families often get by on one wage.

6.5.5.3 COSTS FROM FUNDING TRANSITIONAL MEASURES FOR GOVERNMENTS

In Poland, in the year following the transposition of the EWTD (and the SIMAP and Jaeger rulings) into national law, the Polish government funded the additional recruiting of 200 people for the State Fire Service in order to fill the gaps resulting from the weekly 40-48 hours maximum limit. However, in the opinion of Fire Service representatives, this was still not sufficient. Additional recruiting is required.

6.6 CONCLUSIONS

As a first conclusion, we can state that the philosophy behind the EWTD is regarded positively. Health and safety at work is seen as a very important and contemporary issue. The limitation of long working hours is a way to tackle this and the EWTD a good way to ensure harmonisation in the EU. Nevertheless, the effects of the EWTD and SIMAP/Jaeger rulings have not been as great as they might or should have been, in particular because of skills shortages and budget constraints in the public services. These are obviated by use of the opt-out in various forms and mechanisms for circumventing the requirements (e.g.

³⁷ Workers have on average accumulated over 4,500 hrs of leave (equivalent to 6 months of leave), which clearly indicates that the rest and reference period is not being respected.

self-employment). There also appears to be a degree of non-compliance. This is not always a deliberate employer tactic, but sometimes the result of low levels of awareness or the desire of low-income staff to increase their earnings by working longer hours.

Nevertheless, there is no doubt that the Directive on working time and the SIMAP/Jaeger rulings have had an impact on hospital, residential care facilities, firefighters and the police, but not to the same extent. The impact on hospitals and fire service in all Member States covered by our study is noticeably more marked.

In terms of costs, public services in many EU Member States, and particularly in hospitals, were and are obliged to recruit additional staff to ensure the same service levels. The healthcare sector and fire services across Europe were particularly seriously affected by the SIMAP and Jaeger rulings, while, based on the case studies conducted in the Member States, police and residential care facilities were only slightly affected. Some figures on the costs of the EWTD exist but are not based on thorough analyses of the specific financial impacts of the EWTD. In some cases, namely in UK where public authorities decided not to apply opt-out in the hospitals, the cost of the EWTD was financed by cost savings as a result of reduced 'intensity banding'.

In **hospitals**, the SIMAP/Jaeger rulings do reduce the working time for the doctors by interpreting the on-call times as working time. The on-call time for doctors in many Member States is a duty and part of the normal working time. For doctors in training, it is even a way for them to compress their service obligation into a short period of time. For both categories it was not uncommon to be at the workplace for 36 consecutive hours. The SIMAP/Jaeger rulings have forced hospitals to limit these practices and to change behaviour which has been in place for years.

In nearly all the Member States selected, the implementation of the Working Time Directive has led to a decrease in working time and to a correspondingly increased demand for specialised and qualified labour in public services. However, despite the increase in the staff budget, there are severe shortages of qualified personnel on the supply side of the medical labour market in all EU Member States (partly due to national policies aimed at reducing the social security expenditures), so the strong demand for nurses and doctors has only partly resulted in the creation of extra jobs. This aspect tends to create competition between hospitals at national level; in general terms, it seems that small hospitals in remote regions suffer more from this problem than larger hospitals in urban areas. In order to cope with this, hospitals had to use different strategies aimed at, on the one hand, increasing efficiency (e.g. staff redeployment at hospital level, reorganisation, workload evaluations), and on the other hand creating avoidance mechanisms. The hiring of self-employed doctors (or changing the contracts of doctor employees into self-employment contracts) is generalised in some Member States. Others are considering the possibility of introducing the opt-out in this sector where they have not already done so.

Competition between hospitals tends to increase the cost of attracting and retaining skilled staff. Better working conditions, flexible working times and family friendly rosters have been developed for retaining skilled staffs that are in short supply (i.e. nurses and doctors) but create extra costs for the hospitals. The new generation of doctors and nurses seems to attach more importance to these aspects than the previous generation. Moreover, the personnel shortage also creates extra direct costs because additional hours performed by the medical staff are more expensive and it is not always possible to compensate for them with additional days off. It is not clear yet whether the savings resulting from the increased efficiency of the staff compensate for these costs.

Almost all hospitals shared their concern with regard to the impact of the Directive on training and education, and particularly for young doctors in training. They fear that curbing the working hours of doctors-in-training will mean they have fewer opportunities to gain practical experience and learn 'on the

job'. Nevertheless, there is as yet no concrete evidence on the negative impacts of the Directive on training. Some Member States are investigating alternative solutions in the medical curriculum to address this issue.

A fear that was and is still present in the Member States relates to the quality and the continuity of the services for the patients. Alternative solutions, such as reorganisation of the services, generally allow a similar quality of care as that which existed before the Directive, at least in the short term. On the other hand, work is more intensive as a result of changed shift patterns. The skills shortage coupled with the effect of the Directive (and national savings policy) has led to some hospitals closing less productive departments, while the distance between patients and specialist medical departments may increase in rural areas. On the other hand, the review of existing practices to which the EWTD and the SIMAP/Jaeger rulings has led has resulted in some instances in more family-friendly working conditions or more citizen-friendly practices (e.g. greater availability of doctors in hospitals at the periods of peak admissions).

Better health and safety protection created by the EWTD is generally recognised in many Member States. In general, there is more compliance than in the past with minimum daily and weekly rest periods. The hospitals in some countries even had to oblige their doctors to stay at home when their presence at work is not specifically requested. Other countries have implemented legal constraints for employers to analyse the working constraints on their employees on a regular basis, and especially in hospitals, by conducting regular analysis of health hazards.

There have been fewer impacts from the SIMAP and Jaeger rulings in the case of **residential care facilities** than on hospitals, at least for non-medical staff, for which shortages are not common in the Member States. Nevertheless, residential care facilities that employ nurses face the same problem in recruiting and retaining them as the hospitals.

The impact of EWTD on the health and safety of the staff seems to be positive in general, but in small institutions and in some Member States, we found evidence that employers do not always comply with requirements relating to compensatory rest. Sometimes, the employees themselves ask for more consecutive working hours in breach of the EWTD provisions in order to earn more or to have longer rest periods.

Most of the residential care institutions apply shift systems. They do not usually use on-call time. This is the case for the institutions in which activity during the night is high even if not as intensive as daytime activities. In institutions where the activity during the night is lower than by day, employees who may sleep are usually paid according to their actual work and more often with a fixed on-call allowance. The hours spent in the workplace remain within the legal limit, but do not always comply with the rest requirements.

The impact of the EWTD and the SIMAP/Jaeger rulings is significant in the **firefighters** sector in almost all Member States. This sector uses on-call time extensively and it is still common for firefighters to spend 24 consecutive hours at the workplace. Despite the SIMAP/Jaeger rulings, several Member States continue to apply the principle of inactive on-call time. The on-call hours are not equivalent to the actual working hours.

In this sector, the possibility of using the opt-out is currently under consideration in many Member States in order to cope with the EWTD provisions.

In the Member States that have integrated the EWTD provisions it seems that there is a clear positive impact on employee health and safety at work.

The Directive's provisions with regards to the maximum working hours per week are difficult to reconcile with the volunteer systems operating in several Member States. Using volunteer firefighters limits expenditure and strengthens communities as citizens want to be involved in the protection of their local community. The limitation of the total working hours coupled with an overall shortage in this sector in many Member States could threaten the survival of the volunteer forces in some areas, particularly rural areas.

In the **police** sector, the impact of the EWTD and the SIMAP/Jaeger rulings seems to be limited. This is in part because the police are considered to be *sui generis* among public services because of "natural" specificities requiring long consecutive and unpredictable working hours in breach of EWTD provisions. Sometimes, police are even not considered to be within the scope of the EWTD.

There are many different working time arrangements in this sector, which impose rolling night and day activities. Demand for increases in policing and shortages of police officers (largely because of budgetary constraints) put pressure on working time. Overtime is often not compensated or paid for.

In general, the EWTD has not modified behaviour in this public service.

We conclude, therefore, that:

- there is broad support for the health and safety objectives of the EWTD, but public sector spending constraints and skills shortages have resulted in governments and/or employers looking for ways to reduce the impact of the EWTD and the SIMAP/Jaeger rulings in the four sectors considered;
- skills shortage in particular have significantly impacted the effects pursued by the EWTD in the public services; the sectors were often not able to recruit additional staff to cope with the EWTD requirements and had therefore to develop alternative solutions;
- in the hospitals and residential care facilities in particular and to a less extent for firefighters, the EWTD has contributed to the improvement of working conditions for employees and increased job satisfaction;
- the EWTD and the SIMAP/Jaeger rulings can provide leverage for employees to negotiate or receive better working conditions or overall pay, but in some cases, there can be a loss of income in the absence of an opt-out;
- the EWTD and the SIMAP/Jaeger rulings can act as catalysts for efficiency gains and measures to improve work/life balance for employees and the quality of service for citizens.
- the EWTD and the SIMAP/Jaeger rulings when applied created extra personnel costs, in particular in hospitals. This is nevertheless mostly based on the perception of the national players as no study exists on the financial impact of the EWTD in each Member State.

7 USE OF THE ‘OPT-OUT’

7.1 INTRODUCTION

The 1993 European Working Time Directive³⁸ included the possibility of an opt-out from Article 6 in respect of the maximum 48-hour average working week over the reference period. The Directive was then amended and further clarifications were made in respect of particular issues on working time in Directive 2003/88/EC. The possibility for individual workers to ‘opt out’ remained in the 2003 Directive.

Under the opt-out, workers may at the request of their employer consent to 'opt out' of the 48-hour limit to weekly working time³⁹. Article 22 of the Directive makes provision for the opt-out. In particular, it states that:

A Member State shall have the option not to apply Article 6, while respecting the general principles of the protection of the safety and health of workers, and provided it takes the necessary measures to ensure that:

- (a) no employer requires a worker to work more than 48 hours over a seven-day period, calculated as an average for the reference period referred to in Article 16*
- (b) unless he has first obtained the worker's agreement to perform such work ; no worker is subjected to any detriment by his employer because he is not willing to give his agreement to perform such work;*

It should be noted first that the opt-out only relates to the 48-hour limit to average weekly working time. Rest periods are compulsory under the EWTD, regardless of whether a worker opts out.

The opt-out is not required for 'autonomous workers' who are covered by the derogation in Article 17(1) of the Directive. Subject to general health and safety principles, Member States can derogate from the 48-hour average limit for 'autonomous workers'.

7.1.1 The Opt-Out derogation from the Working Time Directive

The legal information on the use of the opt-out in different Member States is based on information provided by the Commission services to Deloitte for the purposes of this study⁴⁰.

A distinction can be made between EU Member States that:

- i) do not allow the use of the opt-out at all;
- ii) those that allow the use of the opt-out across all sectors, and

³⁸ Council Directive 93/104 EC of 23 November 1993

³⁹ Article 17(1) (Derogations) states that ‘With due regard for the general principles of the protection of the safety and health of workers, Member States may derogate from Articles 3 to 6, 8 and 16 when, on account of the specific characteristics of the activity concerned, the duration of the working time is not measured and/or predetermined or can be determined by the workers themselves’

⁴⁰ See now European Commission, *Report on Implementation of the Working Time Directive*, COM (2010) 802 and SEC (2010) 1611.

iii) those that confine the use of the opt-out to more limited activities.

There are:

- five Member States that allow use of the derogation across all sectors: Bulgaria, Cyprus, Estonia, Malta and the United Kingdom;
- a further 11 Member States allow use of the opt-out only in sectors which explicitly or implicitly make extensive use of “on call” time for public sector workers, such as public health services and emergency services.

A distinction can be made between:

- countries⁴¹ that allow use of the opt-out in limited activities and confine this to public health services, and
- those countries that allow its use across other public services using extensive on-call time (such as Hungary, Slovenia and Slovakia).

In some countries, such as the Netherlands and Spain, the opt-out is explicitly linked to use of on-call time by national law, and in the Czech Republic, it is only possible to use the opt-out in health services working on a 24-hour basis.

The assessment of the extent of use of the opt-out (and its impacts – positive, negative) must therefore reflect the diversity of approaches as to how the opt-out is used. For example, in some Member States, there is an **upper limit on weekly working time** for the opt-out whereas in others, there is **no maximum number** of working hours.

In Spain, Estonia and the Czech Republic, for example, an upper limit applies of 51, 52 and 56 hours respectively. Conversely, in Bulgaria, Cyprus, Poland and the UK, national law does not specify any upper limit to maximum average hours that can be worked by an opted-out worker. That being said, in all countries that use the opt-out, 48 hours is the limit everywhere else, except of course under Art 17.1, the requirements for daily and weekly rest periods mean that the maximum possible upper limit is assumed to be 78 hours per week.

Likewise, there are also variations in **protective conditions**. Some Member States specify protective limits for the use of the opt-out beyond those expressly required by the Directive, while others do not. In Member States such as Germany and the Netherlands national law requires a collective agreement before the opt-out can be used. In Malta, collective bargaining agreements on the opt-out have been widely adopted as a matter of practice although there is no legal requirement to do so. In the UK, there is generally only limited collective bargaining, and where this does exist, it does not relate to the opt-out. In France, doctors working in health services may agree to work additional hours on a voluntary basis.

It is worth stressing that in instances where an opt-out has been negotiated through a collective agreement, this does not *replace* the need for individual consent (*Pfeiffer* ruling), but a Member State may choose to require it as an *additional* condition for using the opt-out. As a minimum, the Directive requires the free and informed consent of individual workers.

The 48-hour average limit on weekly working time under the Directive applies to all workers in both the public and private sectors, with limited exceptions where specific sectoral working time rules are laid down by other EU Directives or Regulations (such as long-distance road transport drivers, seafarers, or mobile workers in civil aviation). As an exception, special transitional arrangements were provided for the period to 1st August 2009 for applying the 48-hour limit to doctors in training. In the UK, for example, a five-year transition period was implemented for junior doctors with full EWTD requirements entering

⁴¹ Belgium, Czech Republic, France, Germany, Latvia, the Netherlands, Poland and Spain.

into force from 1st August 2009.

However, in countries using the opt-out, doctors may still agree with their employer to opt out, subject to appropriate conditions. Belgium is in the process of introducing an opt-out for doctors in training (an agreement in principle was reached in early 2010 between public authorities, teaching hospitals and doctors in training).

The rationale for using the opt-out differs between different EU Member States and the drivers underlying opt-out usage are explored in the next section of the report.

7.1.2 Methodological approach

A four step approach was adopted for the methodology:

- **Step 1 – Research design:** during Phase 1, initial desk research was carried out and interview checklists on the opt-out were drafted.
- **Step 2 – Desk research:** during Phase 1 and 2, documents were reviewed relating to the use of the opt-out and its impact.
- **Step 3 – Interview programme:** Discussions were carried out with relevant stakeholders, including: national authorities, trade unions and employers’ organisations, professional bodies, national labour inspectorates and sectoral organisations.
- **Step 4 – Analysis of research questions and impact assessment.**

The selection of Member States was suggested by the Commission in the tender specifications. This was based on a representative sample since it would have been impossible to cover all countries concerned within the study timescale available. The table below identifies those EU countries selected for analysis for the opt-out case study interviews and the sectors covered in the interviews. The country selection included a balance between countries in which the opt-out is used across all sectors and those where it is used but confined to limited activities.

Table 11: Country coverage – study on the use of the opt-out

Member State	Study on the use of the opt-out
	<i>Interviews</i>
Bulgaria	All
Cyprus	All
Estonia	All
France	Only Health – opt-out issues to be included in focus group 2.3.
Malta	All
Germany	Only on-call time sectors
Poland	Only Health – opt-out issues to be included in focus group 2.3.
United Kingdom	All

Source: Deloitte

7.2 RESEARCH FINDINGS

7.2.1 Overview – use of the opt-out (full opt-out countries)

Five Member States currently allow use of the opt-out derogation across all sectors ('full opt-out'). These are: Bulgaria, Cyprus, Estonia, Malta and the United Kingdom.

7.2.1.1 RATIONALE FOR THE USE OF THE FULL OPT-OUT

Among the main reasons cited for the use of the opt-out in **full opt-out countries** are:

- **Meeting the demands of 24/7 public service provision** - the difficulty in providing public services without resourcing flexibility, for example in rural areas and in some regions.
- **Maintaining competitiveness** – some sectors operating in a global 24-hour environment, such as financial services, argue that a full opt-out is necessary to enable them to compete effectively.
- **Business flexibility** - especially in sectors with seasonal demand, and other peaks and troughs in workflows.
- **Individual choice** – where there is a view that employees should be able to elect to work longer average weekly hours if they consent to do so when asked by their employer.

The policy rationale in EU countries using the full opt-out has centred on both **competitiveness** (e.g. the need to ensure maximum flexibility for businesses, for example in responding to varying levels of demand, and adapting to seasonal work) and the importance of retaining **individual choice** (the employee should determine how many hours they work and whether they wish to voluntarily exceed the maximum statutory limit set under EWTD).

The sectors most commonly affected by the use of the opt-out in the private sector include:

- **Sectors operating in a 24 hour global environment** – e.g. financial services, IT;
- **Sectors that are close to the market and driven by consumers' final preferences** - e.g. textiles, clothing manufacturing;
- **Sectors with seasonal peaks of supply and demand** - e.g. tourism, hotels and catering;
- **Sectors in which a long hours culture is prevalent** – e.g. construction, transport and distribution, some public services (e.g. education, residential care, also among managerial and professional workers), financial services and the film industry.

It is important to note however that Member States have not confined the opt-out Derogation to specific sectors. Rather, the possibility of opting out either applies across all sectors (full opt-out countries) or is confined to particular activities using on-call time or areas of the public sector (partial opt-out countries). However, long-hours working is also possible via other mechanisms, for example, through the Article 17.1 derogation on autonomous workers, which allows a Member State to exclude senior managerial and professional workers from the 48-hour limit to weekly working time.

7.2.1.2 USE OF THE OPT-OUT – SHORT SUMMARY

Bulgaria allows use of the opt-out in all sectors. Prior to Bulgaria's accession to the EU on January 1st 2007, national legislation was adopted on the EWTD in 2006 allowing scope for an individual opt-out.

Protective measures for workers and employees were developed in the Labour Code (Art. 113). Employees must express in writing to their employer their consent to work more than 48 hours per week. If the employee does not agree to work more than 48 hours, refusal to sign an opt-out cannot result in any form of negative employment treatment.

In **Cyprus**, the transposition of the Working Time Directive was negotiated through an established system of tripartite collective bargaining between national authorities, trade unions and employers' associations as part of Cyprus's commitment to ensure that its legislation was harmonised with the *acquis communautaire*. The Ministry of Labour played a key role in shaping employment legislation within the tripartite system of industrial relations and functioned as the main organisational body for discussion of EWTD prior to Cyprus's accession to the EU. Cyprus incorporated opt-out derogation as part of an overall package of employment legislation. Law No. 63(I) of 2002 implementing Directives 93/104/EC and 2000/34/EC concerning the organization of working time came into force on 1 January 2003, prior to EU accession.

Protective measures were introduced within the framework of the Industrial Relations Code. These include the legal enshrinement of a five-day working week in the public and private sectors, with the exception of retail, where there is a six-day week due to the different patterns of work organisation in the retail trade. The Industrial Relations Code is the foundation of social dialogue in Cyprus. As such, it is an important point of reference in respect of issues around working time.

In 1993, a Framework Agreement was signed between the employers' and trade union organisations, which provided for a gradual reduction in weekly working hours from 40 to 38 by 1998, thereby lowering the threshold of maximum working hours. There has also been a trend towards shorter working hours in Cyprus since before EU accession.

In **Estonia** the opt-out can be used in all sectors, with a maximum limit of 52 average weekly working hours, averaged over 4 months. The new Employment Contracts Act (*ECA*) came into force on 1st July 2009. This legal act replaced the Working and Rest Time Act. The new regulation is based on Directive 2003/88/EC, but also takes into account subsequent European Court of Justice decisions, including SIMAP-Jaeger.

An agreement was reached between the social partners and the Ministry of Social Affairs to allow workers to sign an individual opt-out in all sectors. During the negotiations, a consensus was reached on the need to permit overtime work over and above the 48-hour week. In terms of protective conditions, employers in Estonia are required to compensate for overtime work through time off equal to the amount of overtime worked, unless it has been agreed that overtime is financially compensated. If overtime is compensated, the rate is 1.5 times the normal wage.

In 1993, the **UK** became the first EU Member State to allow use of the opt-out and it continues to do so across all sectors. The EWTD was originally implemented in the UK through the Working Time Regulations 1998 and then the Working Time (Amendment) Regulations 2002 and 2007. The Department for Business, Innovation and Skills (BIS) has lead responsibility within UK Government for EWTD implementation. With regard to protective conditions, there is no upper limit on the amount of hours that can be worked. This is up to employees who have signed an individual opt-out. The UK Government makes clear that while employees are free to sign an individual opt-out if they wish to do so, there should be no coercion by employers⁴².

In **Malta**, the opt-out is also permitted across all sectors. There is no specific limit on maximum working hours in Maltese legislation⁴³ but given the requirements for daily and weekly rest periods, the upper limit is assumed to be 78 hours per week. On-call time is considered as working time and paid accordingly, even if no actual work has been carried out.

⁴² http://www.direct.gov.uk/en/Employment/Employees/WorkingHoursAndTimeOff/DG_10029426

For example, the DirectGov website states that 'You shouldn't be sacked or unfairly treated (for example refused promotion or overtime) for refusing to sign an opt-out. You can cancel your opt-out agreement whenever you want - even if it is part of your employment contract. However, you must give your employer at least seven days notice. This could be longer (up to three months) if you previously agreed this in writing with your employer. Your employer is not allowed to force you to cancel your opt-out agreement.'

⁴³ Organisation of Working Time Regulations (Legal Notice No. 247 of 2003)

With regard to protective conditions, consent to opt out has to be provided in writing and can be withdrawn by the employee on giving the statutory notice period set out in Maltese law on working time. Working time is negotiated through collective agreements between trade unions and employers. Working time arrangements, including protective conditions, are stipulated within the framework of collective agreement in order to avoid abuses such as employees being forced to accept overtime as a precondition of their employment.

Working time is normally averaged over periods longer than 6 months in the manufacturing, tourism and catering sectors. In these sectors, the reference period is normally fifty-two weeks.

7.2.2 Overview - use of the opt-out in countries in which it is used in limited activities

A further 11 Member States currently allow use of the opt-out in more limited activities, mainly in respect of “on call” time in hospitals to ensure continuity in service delivery.

Examples of Member States that allow the opt-out include Belgium, Germany, France and Poland. There has been an increase in the number of EU countries using the opt-out since 2004 first as a result of the SIMAP-Jaeger ECJ rulings and the interpretation of on-call time as working time and secondly following EU enlargement. All the new member states except Romania and Lithuania have decided to allow use of the opt-out, either across all sectors or in limited activities.

7.2.2.1 RATIONALE FOR THE USE OF THE OPT-OUT (LIMITED ACTIVITIES)

Among the reasons cited for the use of the opt-out in countries in which it is used in more limited activities include:

- **Ensuring service continuity in public services** – maintaining flexibility in resourcing in light of the SIMAP-Jaeger ECJ judgements in respect of on-call time;
- **Addressing resource constraints in rural/less populated areas** – in some EU countries, there are shortages in the availability of doctors in hospitals – either generally, or linked to particular medical specialities, particularly in acute medicine (e.g. surgery, obstetrics and gynaecology).

The requirements of the public health service in providing a 24/7 continuous service, while at the same time respecting ECJ judgements in respect of on-call time, are among the most important factors behind the use of the opt-out. However, it should be stressed that the opt-out is not extensively used in the health sector in all opt-out countries⁴⁴.

Illustrations of the different ways in which the opt-out is currently being used across different Member States using the partial opt-out included in the sample are:

In **France**, the opt-out only applies to public sector healthcare, and is limited to doctors and pharmaceutical staff working in public institutions. According to the results from the focus group discussion, the opt-out was seen as necessary for two main reasons. First, there was a need to address problems in relation to managing on-call time in light of the SIMAP-Jaeger rulings. Secondly, in more rural and less populated regions of France, there are shortages of doctors. Doctors in rural areas often work up to 60 hours per week and there is no maximum limit.

The extent of usage of the opt-out varies across France. While there does not appear to be any data on the current prevalence of usage of the opt-out, this depends on different variables: the location of the hospital

⁴⁴ For example, in the UK, the largest EU country using the full opt-out, doctors are subject to the requirements of the EWTD. Junior doctors’ working hours were phased out progressively over a five year period from 2004 with transitional arrangements for phasing-in compliance with EWTD and full compliance with the 48-hour week implemented from August 2009. According to the UK’s Department of Health, the large majority of doctors in training are reported to be working in accordance with the 48-hour average working week.

(whether located in a conurbation or in a less populated area), the type of service (emergency departments and anaesthesia are often mentioned as the services that use the opt-out), how well regarded the hospital is (well-known hospitals do not suffer from recruitment shortages), and the age structure of the workforce.

The reference period for calculating working time averages in France is 4 months. However, in practice, in many cases, hospitals continue to measure working time on an annual basis. Opt-outs are negotiated at the beginning of the year between Heads of Service and the Director of the Hospital. Agreements to work longer hours are incorporated as a formal part of employment contracts, since working hours are part of contractual arrangements and determine hospitals' annual budgets. This places pressure on Heads of Service to maintain the amount of hours agreed in work rosters. In theory, individual opt-outs in France are only permitted when there is agreement between the doctor and the employer about working additional hours. However, in practice, due to recruitment shortages and the need to maintain service continuity, doctors do not always feel that working additional hours represents a genuine choice.

Doctors having signed an opt-out and working additional hours can either take additional rest periods in lieu, be paid or carry over their overtime for up to ten years. Opt-out hours are usually performed for on-call time during the weekend and at night. When overtime is not recovered through additional rest periods, doctors receive a fixed amount for on-call time (+/- €300 per half-day, whether this relates to additional opt-out hours or is required during their normal hours).

In **Poland**, the opt-out is limited to medical workers on-call in the health sector to ensure 24/7 medical care in the absence of sufficient numbers of trained specialists. No fixed limits have been set in national legislation in respect of weekly working time of workers agreeing to sign an individual opt-out. Theoretically, doctors could work up to 78 hours per week (the maximum number of hours possible taking into account daily and weekly rest periods). However, in practice, some health institutions specify a limit in weekly working hours in individual contracts between hospitals and other healthcare institutions and doctors. The limit varies, but the research found examples of contracts where a limit of 65 hours was stipulated.

Employees who agree to opt out are remunerated for additional hours through overtime pay. This is typically 50%-100% more than the basic rate, depending on whether the work takes place during a normal working day, at night or during a holiday period. The longest period of consecutive presence at the workplace is 24 hours on-call duty. Compensatory rest must be provided immediately.

National data on the proportion of doctors that have signed an individual opt-out is not available in Poland. The task of collecting and collating statistical trends on the use of the opt-out is the responsibility of individual medical institutions and practices vary widely depending on their approach to working time organisation. It was not therefore possible to quantify the number of doctors whose average weekly working hours exceed 48 hours. Average working hours were found to vary widely between different medical specialties and different working practices of individual hospitals. There are also likely to be variations in working hours between regions.

Accurate statistics are not available on the amount of on-call time as a proportion of an employee's total working time. In the case of full-time doctors who have agreed to sign an individual opt-out, the amount of on-call time as a percentage of total weekly working time generally varies between 25 and 50%. Overall, in Poland, the opt-out was perceived as providing the necessary flexibility to address resource shortages in specific areas within the Polish health sector. These have been exacerbated since EU accession by some medical professionals leaving to work in Western European countries. The opt-out was seen as a useful mechanism for providing continuity in health service provision given these shortages.

In **Germany**, the partial opt-out is also used in some areas of public service in jobs which include a significant amount of on-call time, and by law it requires a collective agreement as well as the consent of the worker concerned. According to the research, widespread use is being made of the possibility to opt out through collective agreements, particularly in German hospitals, ambulance and allied services, fire departments, in the security service sector and in the public transport sector.

In the health sector, hospitals that use the opt-out must negotiate the conditions of the opt-out through collective agreements. This applies to the largest health service providers, which include municipal institutions and university clinics, as well as institutions run by charitable organisations, such as the *Diakonische Werke* (an emanation of the Protestant churches) and *Caritas* (an emanation of the Catholic Church).

Private healthcare clinics must also negotiate opt-outs through collective agreements. According to the Federal Ministry of Labour and Social Affairs (BMAS – *Bundesministerium für Arbeit und Soziales*), approximately 90% of all hospitals in Germany make use of the opt-out derogation. Statistics from the Association of Communal Employers in Bavaria show that the majority of opt-out employees are doctors/physicians and medical specialists. There are a small number of job categories, such as intensive care and surgical nurses, and the medical-technical service, where health care and nurse staff frequently work on-call shifts. As a result of the Jaeger ECJ ruling, many workers have signed individual opt-outs in order to continue to be in a position to provide on-call cover.

Under national legislation, the opt-out is only permitted in areas of the public sector in which there is a need for on-call time. A survey conducted by BMAS to ascertain how the opt-out is used at the Länder level showed that ten of 16 federal states in Germany make use of the opt-out for public servants using on-call time. Five Länder have not as yet made any arrangements in respect of provisions for the use of the opt-out, and one did not provide any feedback. The use of the opt-out at the Länder level is almost entirely restricted to sectors of general interest⁴⁵. The main reason for the implementation of the opt-out has been the ECJ's Jaeger ruling concerning on-call time.

The majority of workers that have signed an individual opt-out in Germany are doctors. According to an interviewee from BMAS, the number of non-doctors concerned by the opt-out is rather low. Very few residential care institutions have staff who have signed an individual opt-out. This was attributed to the fact that the sector has a high ratio of part-time staff in Germany. Statistics regarding the number or proportion of workers in the care sector that have opted out were not however available.

The most common reasons given by employers for using the opt-out relate to the shortage of doctors in German hospitals (there are an estimated 5,000 vacant positions for doctors in Germany) together with the need for further technical and procedural reforms in hospitals to make the necessary adjustments to the organisation of working time in order to comply with the 48-hour working week. On the employees' side, among the main reasons for opting out according to BMAS and the *Deutsche Krankenhausgesellschaft (DKG – German Hospitals Association)*, include earning additional income and the benefits in terms of hospitals allowing those that do opt out a greater say with regard to their work organisation.

In exchange for working longer hours, as in Poland, German doctors were able to obtain in return longer uninterrupted free time and this was seen as useful in bringing about the successful reconciliation of work and family life.

The German Association for Health Insurance and Patients (DGVP) is concerned about individual free choice when signing an opt-out agreement, particularly in cases where the agreement is provided at the same time as the work contract. Young and non-consulting hospital doctors are considered to be particularly affected by this issue. The German Hospital Association has claimed that, if the entire staff of one hospital were to refuse to sign opt-out agreements, the management would face wide-ranging problems, such as staff shortages and would consequently need to adjust working time models and personnel requirements.

Participants in the focus groups identified advantages and disadvantages linked to the use of the opt-out in Germany. Potential abuse of the opt-out in Germany has been curtailed by the inclusion of protective

⁴⁵ General-interest services are services considered to be in the general interest by the public authorities and accordingly subject to specific public-service obligations, such as health care.

conditions which provide safeguards in national legislation on working time. These include confining the use of the opt-out to services of general interest within the public sector, imposing maximum weekly working time limits, and restricting the usage of the opt-out to on-call time only.

As noted in the introduction, a number of other Member States also only use the opt-out in limited activities. These include the **Czech Republic, Hungary, the Netherlands, Slovenia, Slovakia** and **Spain**. However, these countries were not part of the country sample.

It is worth noting that the way in which the opt-out is used does vary considerably between countries. For example, in the **Netherlands** and **Spain**, the link to on-call time is an explicit legal requirement. In other countries, such as **Hungary** and the **Czech Republic**, linkages with on-call work are implicit, but this is not included in national legislation. A distinction can be made between countries that limit the use of the opt-out to health institutions providing 24-hour care, and those countries such as **Latvia, Slovakia** and **Slovenia** that limit its usage to the health sector.

7.2.3 Levels of awareness about the individual opt-out

Levels of awareness about the opt-out among both employers and employees are an important factor in the extent of prevalence of workers signing the opt-out.

Research on awareness levels about the opt-out is scant in large part because many countries that use the opt-out have only done so for a comparatively short period, and there is little empirical research on this subject, with the exception the UK, where various surveys have asked workers and employers about their awareness of both EWTD and the opt-out. In countries only using the opt-out in relation to specific activities, there is even less information about levels of awareness.

According to discussions with stakeholders in the **UK**, such as the Department for Business and Innovation and Skills (BIS) and the Confederation of British Industry (CBI) there are high levels of awareness about the Working Time Directive and the maximum 48-hour average working week. However, low levels of awareness were found in a 2003 survey undertaken by the TUC. While more recent data is not available, the TUC does not believe that awareness about either EWTD or the opt-out has increased much in the intervening period. In the view of the TUC, there remains a poor level of awareness especially among small employers and a common misconception that the UK has opted out of the EWTD altogether.

The Chartered Institute of Personnel and Development (CIPD) in the UK carried out a survey⁴⁶ in 2004 on the implementation of Working Time Regulations. Among the findings were that the majority (79%) of those working more than 48 hours per week had heard of the EU Working Time Directive, and among those who worked particularly long hours (60+) the figure was even higher, at 85%. Men (84%) were more likely to have heard about the Directive than women (68%). The level of awareness was found to be high across all industry sectors and occupation levels. Levels of awareness about the EWTD were 20 percentage points higher than awareness about the opt-out. In response to the question, *'Are you aware that the EU has introduced an opt-out clause so that employees can choose to work more than the maximum 48-hour working week if they want to?'*, 59% were aware, of whom 37% had actually signed an agreement.

Evidence from the interview programme and focus groups carried out as part of research in the UK for this study found that in some areas of public services, there were low levels of awareness about the opt-out and how it operates, notably in the residential and social care sectors. While many workers in these sectors exceeded the 48-hour average working week (multiple employment was comparatively common), in many instances, neither care workers nor their employers were aware about the need to sign an opt-out in order to be legally allowed to do so. This was especially the case in smaller care homes.

⁴⁶ *The Working time regulations, Calling time on working time*, Survey report, Chartered Institute of Personnel and Development (CIPD) (2004)

The UK government has undertaken some activities to maximise awareness about the opt-out (and the safeguards to prevent employers from abusing it), while at the same time ensuring that workers are aware that the Working Time Regulations 2003 are an important piece of health and safety legislation and in informing them about their rights. A key initiative to raise awareness about EWTD in the UK was the setting up of the Pay and Work Rights Helpline, a confidential helpline and supporting internet site⁴⁷ that provides advice on government-enforced employment rights, including the right not to have to work more than 48 hours a week.

It has proved difficult to assess levels of awareness in other countries that use the opt-out since there is a lack of either survey-based data or other empirical research on this topic. Another factor limiting the amount of information in other countries is that in many cases (both in full and partial opt-out countries), the opt-out Derogation has only been adopted relatively recently.

That being said, some opinions were obtained through the discussion programme from stakeholders concerning levels of awareness about the opt-out.

The research in **Bulgaria** suggests that awareness levels about the opt-out were relatively low. Only larger firms appear to be using the opt-out and many SMEs and their employees are not aware about the existence of an opt-out, according to the responsible authorities.

In **Cyprus**, there is not generally a long-hours culture, and consequently the opt-out has been used less extensively than expected. No specific initiatives have been undertaken to promote awareness of the opt-out. Generally, awareness levels were seen as being quite low because there has not been much need to use the opt-out.

In **Malta**, the fact that the opt-out is relatively prominent in public debate among the social partners has meant that awareness levels are quite high, although no data is available to confirm this. Moreover, the opt-out is relatively widely used, which in itself suggests that awareness may be quite high. According to the Malta Chamber of Commerce, Enterprise and Industry, the largest employers' organisation, *'workers are normally informed and aware of the provisos of the WTD especially where the workers are unionised. However, in Malta there are a lot of micro enterprises where workers may not be unionised'*.

In **Estonia**, awareness about the provisions of the Working Time Directive in general, and the opt-out in particular, were discussed at the focus group. Employer representative organisations mentioned that there are higher levels of awareness in those occupations where there is a higher incidence of people signing an individual opt-out, such as healthcare and fire and rescue services. There was no data available on awareness levels.

⁴⁷ <http://payandworkrightscampaign.direct.gov.uk/index.html>

7.2.4 Usage of the opt-out

One of the aims of the research was to obtain information about the extent of usage of the opt-out among workers in the public and private sectors. The tender specifications noted the general absence of such data. Given that data on opt-out usage at national level is lacking in most EU countries, there has consequently been a need to rely on proxies for opt-out usage, such as:

- national LFS (Labour Force Survey) data on long hours working;
- opinion-based data collected through the interview programme (focus groups, face-to-face and phone interviews); and
- survey-based data, for example, surveys that asked about the extent of awareness about, and the prevalence of take-up of the individual opt-out.

In looking at issues around the extent of use of the opt-out, a distinction has been drawn between its use in the public and private sectors, since the opt-out is typically used for different reasons in these sectors.

7.2.4.1 USE OF THE OPT-OUT – PUBLIC SECTOR

The research findings are drawn from the interview programme and focus group discussions with organisations in the following public services in each of the Member States selected: hospitals and residential care, fire and the police.

The prevalence of usage of the (partial) opt-out among Member States has increased significantly since the SIMAP⁴⁸ and Jaeger⁴⁹ ECJ rulings on on-call time made in 2000 and 2003 respectively. The ECJ judgements affect a number of areas of public services in which on-call time is common – most immediately hospitals, but also by extension other public services including fire fighters and residential care workers, many of whom sleep over at the workplace. The rulings have resulted in more EU countries adopting the partial opt-out in public services to ensure that workers can continue to provide on-call cover and maintain service continuity. There is currently no distinction between active and inactive on-call time in the Directive and given the ECJ's rulings, this was commonly seen as a problem by public sector stakeholders interviewed.

The EU enlargement process in 2004 and 2006 respectively has also had a significant impact in terms of the number of Member States using the opt-out. Ten of the twelve⁵⁰ new Member States that joined the EU in 2004 and 2007 respectively use the opt-out. Four new members use the opt-out across all sectors, (BU, CY, EE, MT), with the remainder do so mainly in the health sector.

Relatively limited data was available at national level on the extent of opt-out take-up by public sector workers. However, some statistics and quantitative estimates about the extent of opt-out usage were obtained through the interview programme. The analysis necessarily relies on information on the opt-out based on survey data. Surveys in some areas of public services suggest that the **proportion of workers having signed an individual opt-out is relatively low.**

This does, however, vary considerably depending on whether there is a tradition of collective bargaining in a particular country. While in the **UK**, a relatively small proportion of junior doctors and consultants appear to be opting out, in **Germany**, an estimated two-thirds of doctors have signed up to the opt-out, although industrial relations are organised very differently, with opt-outs having to be negotiated through collective agreements.

Information on the countries included in the sample is provided below:

⁴⁸ Case C-303/98 *Sindicato de Medicos de Asistencia Publica (SiMAP) v Conselleria de Sanidad y Consumo de la Generalidad Valenciana*. [2000] ECR I-7963

⁴⁹ Case C-151/02 *Landeshauptstadt Kiel v Norbert Jaeger*. Judgment of 9 October 2003.

⁵⁰ Romania and Lithuania do not use the opt-out.

A. United Kingdom

A.1. Health care

An important source of data in the UK on working hours among doctors and other health care professionals is the **annual national NHS staff survey**. While this does not include questions specifically on the opt-out, it provides useful data on working hours, including the extent to which different medical professionals work additional hours (and whether this is paid or unpaid). The figures from the national NHS staff survey in 2009⁵¹ were based on a survey targeted at almost 290,000 NHS staff. A 55% response rate was elicited.

The 2009 annual survey asked specific questions about the amount of paid and unpaid overtime that staff perform. Among the findings were that 75% of junior doctors⁵² said they did no paid extra hours over 48 hours, but 50% stated that they worked up to five extra unpaid hours per week. More widely, two-thirds (65%) of staff across the NHS reported working more than their contracted hours. This appears to be consistent with previous national surveys, when the corresponding statistic was 66% in both 2007 and 2008. Thirty-one per cent of all staff were paid for these extra hours (33% in 2008 and 31% in 2007) and 51% regularly worked extra unpaid hours (compared with 52% in 2008 and 53% in 2007). Ambulance staff were more likely to work additional hours (81% said they had done so) and to be paid overtime for these hours (72% compared with 31% in the rest of the NHS).

In the healthcare sector in the UK, a March 2008 (self-reporting) survey by the British Medical Association's (BMA) Health Policy and Economic Research Unit of junior doctors on EWTD found that over half of respondents (57 per cent) worked more than 48 hours on average per week in their current job. However, of those that worked more than 48 hours, only 9.4 per cent had signed an individual opt-out, which corresponds to about 5% of all junior doctors. While it should be noted that the survey was undertaken prior to the completion of the phased transition to a 48 hour week for Junior Doctors in the UK on 1 August 2009, it supports the finding that **only a small proportion of junior doctors have signed individual opt-outs**.

Indeed, according to NHS Employers, **junior doctors in the UK are unlikely to have signed individual opt-outs**, since under the New Deal they are contractually bound to a pay deal centred around a 48 hour maximum working week, in which rotas are organised collectively. A rota planned on the basis that all the doctors involved were willing to work more than 48 hours a week would be extremely difficult to implement, since this would rely on each rota member individually and voluntarily agreeing to opt out (and such agreement could be withdrawn at any time upon written notice). NHS employers pointed out that some junior doctors may be working more than 48 hours per week on a voluntary basis (without having signed an opt-out), or may decide to opt out in order to perform and be reimbursed for internal or external locum work in addition to their rostered work.

Junior doctors' pay banding generally assumes EWTD compliance (with financial implications for the NHS in terms of increased salaries if hours exceed the "New Deal" ceiling since this would result in a change in salary bands). Secondly, there is a concern in NHS hospitals that staff should not be encouraged to sign an individual opt-out, because of a principled commitment by employers to health and safety and the benefits of a better work life balance, and/or due to the risk of legal cases being brought by employees claiming to have been coerced into working long hours.

Particular concerns were expressed by some UK stakeholders, such as the Royal College of Surgeons, with regard to the quality and extent of training opportunities within the constraints of a 48-hour working week, given that junior doctors have historically been the NHS staff group most likely to be working

⁵¹ National NHS staff survey data is available from the Care Quality Commission website: <http://www.cqc.org.uk/aboutcqc/howwedoit/engagingwithproviders/nhsstaffsurveys/staffsurvey2009.cfm>

⁵² The terms 'junior doctor' and 'doctors in training' in a UK context are those in postgraduate training, starting at graduation with a medical degree and culminating in a post as a Consultant or General Practitioner

more than 48 hours⁵³. Most training activities for junior doctors take place during daytime and since EWTD was implemented, there has been an increase in the number of night shifts worked by junior doctors. Issues around the quantity and quality of training and compliance with EWTD requirements were viewed as especially pertinent in areas of acute medicine and emergency care, such as surgery, anaesthesia, obstetrics and gynaecology.

In recognition of these concerns, a 2010 study⁵⁴ (the ‘Temple Report’) was commissioned by the Department of Health on the *Impact of the European Working Time Directive on the Quality of Training*. Overall, the Temple report concluded that WTD compliance could benefit training and that the main issues to be addressed related to methods of implementation in particular areas of health. There are examples of good practices that have been developed in relation to ensuring that EWTD compliance does not jeopardise the quality of training. For example, through the National Workforce Project (NWP), which is the lead organisation to support the NHS in finding and implementing solutions to the European Working Time Directive, a number of projects have been supported to develop and implement innovative working practices⁵⁵ so as to ensure that junior doctors receive adequate training while at the same time ensuring patient safety and ensuring WTD compliance.

The report points out that there are practical constraints on whether doctors' can opt out. *'While doctors can choose to work more than 48 hours per week, employers cannot design services and rotas on the basis that all doctors working on a rota will opt out. It is not possible to negotiate a collective opt-out for a whole specialty or sector. With regard to the notice period, if an individual chooses to opt out and changes their mind, they need to give between one week's and three months' notice (depending on the period agreed when signing the opt-out). These features of the opt-out make it difficult to plan services. If a doctor in training chooses to opt out they cannot exceed an average of 56 hours of active work, or 72 hours including on-call time per week, as specified in their New Deal contracts. The employer must also agree for a doctor to opt out in their trust.'*

A number of membership surveys undertaken by the Royal Colleges identified **low levels of take-up of the individual opt-out** among UK medical professionals. For example, a survey undertaken by the Royal College of Surgeons in November 2009 found that among those that were aware of the existence of an individual opt-out, only 15% had actually signed an opt-out. Discussions with the Royal College of Physicians also indicated that many doctors at consultant level were not aware of the requirement to sign an opt-out. To a large extent, whether doctors working more than 48 hours per week had signed an opt-out depended on the specific practices adopted by individual NHS Trusts and hospitals.

A.2. Fire service

The discussions carried out as part of the fire service focus group in the UK also suggest that **the level of take-up of the opt-out among fire fighters is relatively low**. While national data was not available, it was thought unlikely that the proportion of whole time firefighters who had signed an individual opt-out exceeds 15-20%. In the case of so-called retained duty firefighters (‘on-call’ firefighters – generally outside the main conurbations, for whom this is secondary employment), the situation is complicated by the fact that the Fire and Rescue Service is the secondary, rather than the primary employer. Responsibility for monitoring working hours in aggregate across primary and secondary employment (or across multiple jobs in some cases) lies mainly with the primary employer. However, participants in the discussion were not able to quantify the proportion of firefighters having signed an opt-out.

⁵³ *Skills for Health: Calling time 18 – EWTD implementation* (2010)

⁵⁴ *A Time for Training: A Review of the Impact of the European Working Time Directive on the Quality of Training*, Study for the Department of Health, 2010, Medical Education England, Sir John Temple

⁵⁵ A good example in this regard is the work of the Homerton University Hospital NHS Foundation Trust, which implemented the project ‘Taking Care 24/7’. The length of time that consultants are in hospitals for was extended and some junior doctors were also taken off the night rota. The project observed a reduction in hospital mortality rates and in some cases maintained and improved the amount of training time.

In the UK Fire and Rescue Service (FRS), there is currently no accurate data at either regional or national level on the number (or proportion) of fire service staff (wholetime, RDS) that have signed an individual opt-out. Some individual HR departments may, however, keep records. In the absence of official data, survey-based research by the RFU (Retained Firefighters' Union) suggests that approximately 20-22% of retained firefighters have signed an opt-out. The Department for Communities and Local Government (DCLG) understands that typically, two-thirds of RDS firefighters have not signed an opt-out either with their primary employers or the FRS.

A.3. Residential and social care

In the **residential and social care sector** in the UK, no data is available on the extent of usage of the opt-out at regional or national level. However, according to the LGE (Local Government Employers) and UNISON, there are low levels of awareness about the detailed requirements for ensuring compliance with the EWTD and even less knowledge about the opt-out. This is also borne out by the phone interviews carried out with HR Managers in individual residential care homes. Moreover, although empirical research is lacking, anecdotal evidence from UNISON found that many care workers work significantly in excess of 48 hours a week, with 60 hours quite common. Many care workers have multiple part-time jobs and it is therefore a major challenge to monitor working hours effectively for this category of worker. The persistence of a long-hours culture in the social and residential care sectors reflects the fact that low pay remains a problem.

The problems specific to the social and residential care sectors resulting from ECJ judgements were raised by UNISON in a fact sheet - *Workers Required to Sleep in and the Working Time Directive*. Given that it is common in the residential care sector for workers to have sleeping-in arrangements, and that this may be considered as working time, this arguably puts added pressure on care workers to sign an individual opt-out.

A.4. Police service

With regard to the **police service** in the UK, one of the main differences with other public sector employers is that employees are not provided with employment contracts since all rules on employment issues are determined by a separate statutory process. This is due to the distinction between non-political civil service roles and political crown service roles where EU legislation does not always apply. In principle, police officers in public services in all Member States are subject to the Directive. The Police Negotiating Board (PNB) has reached agreement to amend police regulations to take account of a number of provisions covered by the regulations.

There is currently however no data on whether police officers have signed an opt-out, although the fact that there has been a recent clampdown on the amount of paid overtime that police officers are paid suggests that a reasonable proportion are working longer than the normal shift period of 42 hours.

While the **opt-out was viewed as a useful mechanism** for ensuring flexibility in public service delivery among some public sector organisations, it is seen as a **fallback option**, rather than something that is actively encouraged. This reflects the fact that many public sector employers are aware of their obligations as an employer in term of promoting worker health and safety, work-life balance, etc.

A good example from the interview programme in this regard was a local authority organisation, which viewed the opt-out as a guarantor of flexibility and a fall-back option should it be needed. It was seen as especially important for some groups of public workers, such as retained fire fighters and those working long hours to meet seasonal fluctuations in demand for services, such as road gritters (drivers spreading grit in winter). However, while seeing disadvantages associated with the potential removal of the opt-out, the first preference was to comply with the EWTD wherever possible through a combination of flexible working and innovative forms of work organisation. Substantial investment has also been made in ensuring that the UK's NHS is compliant with the EWTD, with a significant increase in the numbers of doctors in training and a specific budget available to help ensure compliance. While the Department of Health supports the retention of the UK opt-out in line with UK government policy, the NHS seeks

wherever possible to avoid unnecessary use of the opt-out, for example, through the implementation of innovative work practices.

B. Germany

B.1 Health

Under national legislation, the opt-out is only permitted in areas of the public sector in which there is a need for on-call time. The use of the opt-out in Germany is mainly limited to the health sector, although some members of the police and fire brigade have also opted out. The opt-out is only used in the public sector and in those areas of the private sector delivering public services on an outsourced basis.

A survey conducted by BMAS to ascertain how the opt-out is used at the Länder level showed that ten out of 16 federal states in Germany make use of opt-out for their employees within the public service. Five Länder have not yet made any arrangements in respect of provisions for the use of the opt-out, and one did not provide any feedback. The use of the opt-out at the Länder level is almost entirely restricted to sectors of general interest⁵⁶. The main reason for the implementation of the opt-out has been the ECJ's Jaeger ruling concerning on-call time.

Since its introduction in 2005, there has been extensive take-up by German doctors of the opt-out with the great majority of hospitals including the opt-out in collective agreements. Three major public sector collective agreements have been concluded since 2005/2006, and most hospitals have incorporated the opt-out into collective agreements and in corresponding church agreements/regulations. This applies to the four biggest providers: communal institutions, university clinics as well as institutions run by the clerical charity organisations *Diakonische Werke* and *Caritas*.

According to the research, the opt-out is also in widespread use among ambulance and allied services, fire departments and in the security service sector, as well as car drivers/motorists and crew members on marine ships.

In 2007, the German Hospital Institute (GHI) published figures in its report "Krankenhausbarometer". This showed that about 90% of hospital doctors make use of the opt-out, mainly in response to the SIMAP ruling on on-call time. According to the *Bundesministerium für Arbeit und Soziales (BMAS)*, these figures suggest a high level of acceptance of the need for an opt-out among hospital employees. The research found that about two-thirds⁵⁷ of German doctors have signed an opt-out agreement. Greater use of the opt-out has been made in surgery, and in acute medical care, including accident and emergency services compared with other areas, although precise data on usage both overall and by medical discipline was not available.

According to BMAS, while the number of doctors affected by the opt-out is quite high, the number of wider staff affected in the health sector is low. Most employees that opt-out are doctors/ physicians and medical specialists. In a small number of other job categories, such as intensive care and nurses with a surgery specialisation or working in the medical-technical service, healthcare and nursing staff also work on-call shifts and they are required to opt out of EWTD should their total number of hours exceed the 48 hour average over the reference period.

The *Deutsche Gesellschaft für Versicherte und Patienten (DGVP)*, the German Health Insurance and Patients Association, expressed concerns with regard to whether German doctors opting out represented a freely made choice for individual employees, especially since the agreement is often handed out at the same time as a doctor signs their work contract. It was suggested that young doctors and non-consulting

⁵⁶ General-interest services are services considered to be in the general interest by the public authorities and accordingly subjected to specific public-service obligations, such as health care

⁵⁷ These figures are estimates only based on the research by the German country expert, drawing on the discussions with stakeholders such as BMAS and the association of communal employers in Bavaria.

hospital doctors in particular do not have a real ‘choice’ if they wish to obtain specialist medical training smoothly since there is a culture of long hours working among doctors and there is a concern that this may damage young doctors’ career progression should they refuse to work long hours.

The German hospital association, the *Deutsche Krankenhausgesellschaft (Dkg)* stated that if the entire staff of a particular hospital decided to refuse to sign opt-out agreements, then this would result in considerable management difficulties in adjust working time patterns and staffing arrangements to meet the 48 hour average working week limit.

Among the main reasons cited for the use of the opt-out include on the employers’ side, a lack of specialised medical personnel in particular specialities. Ensuring continuous service provision for patients is a key priority for hospital providers and according to the BMAS, a recent estimate found that there are currently 5,000 doctor vacancies in hospitals in Germany. Given the lack of skilled carers and medical specialists in the German health sector, many employees accept on-call time and exceeding the 48 hour week as the ‘lesser of two evils’ compared with rotational shift work. This in turn points to a conclusion that there is a lack of good practice available on the effective organisation of working time in many health sector institutions.

The determination of an explicit weekly working time limit has been left up to the collective bargaining parties responsible for the organisation of working times and conditions taking occupational safety and health of employees into account. The vast majority of the collective agreements for opt-out employees stay below the theoretical 78 hour limit. According to the BMAS, the agreed limit for opt-out employees in the bigger hospitals usually varies from 54 to 60 hours, in some cases up to 66 hours. And the working time limit for *Beamte* (civil servants) at a national level, including firefighters, lies at 54 hours per week. The weekly limit for *Beamte* (special civil servants) at a federal state level varies from 53 to 60 hours. This mainly applies to police officers.

Most collective agreements in hospitals ‘limit’ the maximum daily working times to 24 hours, corresponding to the maximum continuous working hours in case of on-call time. For example: Eight hours of regular work, followed by two shifts of eight hours of on-call time add up to 24 hours at the workplace. Alternatively permitted by law are 24 hours of consecutive on-call time. Between each regular workday the employee is entitled to 11 hours of daily rest and 24 hours uninterrupted rest once a week (traditionally Sunday). In some cases, especially in medical emergencies, the law permits a reduction of the daily rest times by 2 hours. These statutory provisions regarding daily and weekly rest times apply to all employees, regardless of their opt-out status.

In exchange for working longer hours, German doctors were able to obtain in return longer uninterrupted free time. The doctor’s union interviewed in Germany emphasised that an overall reduction in working time has gained in significance among doctors. Although precise data is lacking, it can be assumed that this applies especially for workers with care responsibilities (mostly women).

B.2 Residential care

Very few, if any, care staff in residential care institutions have opted out, probably because of the high ratio of part-time staff in this sector in Germany. While an attempt was made through the research to obtain statistics on the proportion of carers that have opted out, these are not available.

B.3 Fire service

The research found that the opt-out is being used in most fire departments in Germany. According to the interview with BMAS, approximately 84% of total employees across fire departments in Germany’s local authorities have opted out. This reflects the implications of the SIMAP and Jaeger cases, and in particular the concern that all on-call time should be treated as working time.

B.4 Police

Police departments are organised at the federal state (Land) level. There are in practice wide fluctuations between different Länder. While in some departments only a few individual employees have opted out, in others between 50 and 100% of the police officers have opted out. The proportion of police employees signing an opt-out varies according to the different responsibilities of different types of police. For example, police special forces were more likely to have opted out.

The discussions with BMAS suggested that in the fire service and police, among the most common reasons for employees opting out include the opportunity to improve their working conditions. In particular, in exchange for opting out, workers were sometimes given longer uninterrupted free time and greater flexibility in working hours, which helped to promote the reconciliation of work and family life. This resulted in less sick-leave due to greater job satisfaction.

Overall in Germany, national statistics on the numbers of employees having opted out in each sector are either non-existent or incomplete. However, according to figures evaluated by the BMAS, of about 9,000 civil servants with “Beamten“ status (civil servants) who are theoretically able to opt out, approximately 5,000 (55.5%) have actually done so.

C. France

C.1 Health

In **France**, the opt-out is only applicable in the health sector and only for doctors working in public hospitals. The opt-out is only used in some services especially emergencies and anaesthetics. The majority of doctors that do opt out do so “voluntarily”. The reference period is four months since there is no collective bargaining in public sector. In many cases, however, hospitals continue to assess working hours on an annual basis. It is relatively common for doctors to work up to 60 hours per week (especially in remote regions with demographic problems) and there is no maximum ceiling. The use of the opt-out depends on many variables, including: the location of the hospital (e.g. urban location, rural area), the medical speciality, whether the hospital is a well-known teaching hospital, and the age structure of doctors (there is some evidence to suggest that more rural areas have a greater problem with an ageing workforce).

While the opt-out is only allowed when the doctor signs an agreement to work longer hours, some stakeholder organisations that took part in the workshop expressed the view that doctors do not always feel that they have a genuine choice as to whether to sign an opt-out because of the shortages experienced in some hospitals, and the need to ensure service continuity.

Opt-outs are negotiated at the beginning of the year with the heads of service and the director of the hospital as part of the contractual process. This is necessary to finalise the hospital’s annual budget. Heads of service may experience pressure to maintain the amount of hours worked in the agreed roster. If there are too many deviations from the planned roster without specific reasons that warrant these additional hours, then the Director can decide not to pay the extra hours.

C.2 Firefighters

French firefighters do not use the opt-out. However, one of the potential problems identified through the research of concern to the fire and rescue service is that many firefighters are volunteers, mainly working on an on-call basis. If on-call time were to be considered as working time, then this would cause significant problems for the French fire service. There is also presently extensive use of “low activity” on-call time, and this is not presently considered to be working time. Any reinterpretation of on-call time as constituting working time would have an impact on the calculation of the total amount of hours worked.

D. Bulgaria

The statutory maximum working week is 40 hours in **Bulgaria**. Addenda and amendments were made to the Labour Code in 2004 in order to harmonise Bulgarian legislation with the European directives on working time (/93/104/EC and 2000/34/EC). As a result of the introduction of this legislation, the working day may be extended from eight to 10 hours, but only for a total of 60 working days a year and for not more than 20 consecutive working days. Workers also have the possibility of opting out from EWTD. Eurostat data shows that the average number of actual weekly hours of work for full-time employees (fourth quarter 2009) in Bulgaria is quite high at 40.5 hours compared with an average across EU-27 of 39.3 hours. Moreover, in comparison to average European values, Bulgarians accept “unsocial working hours” to a greater degree, both among self-employed as well as among employees (*Source: EWCS*).

According to the interviews carried out, among the benefits from the individual opt-out include the ability to meet public service commitments on a 24/7 basis.

The interview programme found that the opt-out is important for ensuring quality in some public services, such as healthcare, since there are resource shortages in particular areas.

In Bulgaria on-call time is not recognised as working time except active on-call time. This means that on-call time should not be counted as part of overall working time. Some interviewees spoken to as part of the research identified instances of violations in the treatment of on-call time whereby employees in hospitals had been asked to declare that they are standby but in the hospital, which means on call.

However, there is no data about the extent of use of the opt-out.

E. Cyprus

With regard to working hours in the public sector in **Cyprus**, most employees have fixed working hours work to a predetermined schedule and are monitored. There appears to be less flexibility in working time arrangements in the public than the private sector.

According to the Law on the Organisation of Working Time 2002 (Law 63(I)/2002), the opt-out can be used by various areas of public services, including services relating to the reception, treatment and/or care provided by hospitals or similar establishments, including the activities of medical practitioners under training, residential institutions and prisons. Employees in the health sector in Cyprus may enter into collective agreements with individual hospitals and health services in which working hours may vary.

According to data by EIRO on collectively agreed normal weekly working hours, doctors in public sector hospitals in Cyprus in 2006 worked 37.5 hours on average per week, less than the EU average of 38.8 hours. Nurses also worked 37.5 hours.

Although the Pancyprian Union of Government Doctors (PASYKI) is responsible for maintaining statistical records of health sector working time, the data available is insufficient to provide an accurate picture of the number of employees using the opt-out as well as overall working hours for health sector employees.

The Ministry of Labour stated that while there have been some impacts of the opt-out in the public sector, particularly in healthcare, but there is a lack of empirical research to substantiate findings in this area.

F. Estonia

In **Estonia**, the opt-out is used in the health, social care, and fire and rescue services.

The main reason for use of the opt-out in these sectors according to participants in the focus group from employers' organisations and trade unions was flexibility. In return for agreeing to work longer hours, workers have sometimes been able to negotiate improved working conditions so that they are able to work less antisocial out of hours work, and spend more time with their family.

In the fire service, the opt-out is used, although no data was available on the approximate proportion of fire fighters that do so. According to some of the participants in the workshop, the main incentive for signing the opt-out and working additional hours was the opportunity to increase firemen's income.

However, other factors were also cited, including perceived benefits associated with working a 24-hour, rather than a 12-hour shift. This was seen as decreasing the time and cost involved in commuting between home and work. Another interesting point mentioned was the fact that in the case of firemen, teamwork is very important. If a 12-hour shift system is implemented, then the composition of teams changes more often.

G. Malta

In Malta, the opt-out is used across a number of different public services, and the research identified a culture of long hours working and paid overtime, reflecting staff shortages in some areas of public services.

G.1. Health sector

The opt-out is implemented across the health sector. According to LFS data, 13% of Maltese workers work more than 48 hours (Eurofound, 2009) and these are concentrated in the health sector. 2006 data from EIRO on normal weekly working hours in collective agreements show that both doctors and nurses in public sector hospitals in Malta worked on average 40 hours, higher than the EU average of 38.8 hours.

Through an interview with an HR Director in a hospital, it was claimed that doctors in training are expected to work 52 hours. However, through the focus group, working hours were found to vary considerably, as did practice as to whether or not the opt-out was used. For example there is a cohort of trainee surgical doctors who have never signed the opt-out, another cohort who have signed it, and a third cohort who chose to work 56 hours without signing an opt-out because they believe that their baseline hours are still 56 hours.

Senior doctors in Malta may either work their compensatory rest as overtime or may make sure that they take all their due compensatory rest so as to enable them to work in their private practice or in private hospitals since they are able to earn additional income in this way. Few senior doctors sign the opt-out because they want to minimise their time at the public hospital in order to work in private clinics.

On the issue of trainee doctors, a respondent in the focus group expressed the opinion that there is a risk of the opt-out being abused because there is no upper limit on working hours. Additionally, compensatory rest is not enforced everywhere and the respondent believed that Malta was recognised as infringing the Directive on this point. Capping the number of hours and ensuring compensatory rest is very important for both employees and patients. Working a 24-hour shift and then going for work in the operating theatre next morning is not very safe. Respondents asked whether shift work could be a solution.

Through an interview with the HR Director of Malta's main acute general hospital, it was revealed that the baseline number of hours for doctors is 40 hours and 70% of doctors decide to opt out. This does not automatically mean that all doctors have actually signed an opt-out but according to the discussion, doctors work on the basis that they have opted out and work longer than 48 hours. There is no limit on the weekly number of hours. However, on average, doctors work between 58 and 62 hours a week. If they want to change their working time, they are obliged to give 3 months notice in order to modify their existing arrangement. Doctors normally work 1 in 4 duties after 2.30 p.m.

According to the General Health Care Services (GHCS), the average number of working hours for Maltese nurses in hospital and residential care facilities is 46.67 hours a week. The limit for nurses is 62 hours per week.

In general, nurses do not work on-call and in fact only about 60 nurses out of a complement of 2,500 do so. Of these 60 nurses only about 15 work more than 46.6 hours. These nurses work in the Renal Unit, the CAT lab where heart operations are carried out as well as in certain operating theatres and the Infection Control section.

According to the interview programme, which included discussions with the Malta Union of Midwives and Nurses (MUMN) and with individual hospitals, nurses have never been asked to sign the opt-out. But the vast majority of nurses regularly exceed 48 hours of work a week.

From an employer perspective, the main rationale for the opt-out was the importance of addressing labour shortages since there are nursing and medical staff shortages in all areas of the medical sector. For doctors and nurses, the potential to earn additional income through paid overtime was the most common factor. All overtime is paid at a rate of 1.5 times the hourly rate for every hour of overtime worked during normal working time, and double time on Sundays and public holidays. According to some interviewees, overtime is not only accepted, but is desired by the majority of workers who use it to supplement their income.

The research identified a view among health professionals that the removal of the opt-out from EWTD would have a significant impact on the health sector in Malta due to the fact that a relatively high proportion of health professionals currently opt out. Preventing them from doing so could compromise service continuity by creating resourcing problems.

There is a need to reduce expenditure on health sector employees as a result of Malta's large ageing population, which demands greater labour market flexibility in working hours and shift patterns. Such factors were viewed as having driven opt-out take-up.

G.2. Residential Care

Residential Care facilities also make use of the opt-out. Those interviewed stated that they are concerned that many facilities currently operate with only the minimum number of staff needed to ensure continuous service provision. The removal of the opt-out was viewed as requiring a significant increase in the number of workers, and shortages in the availability of staff willing to work in this sector were identified.

G.3. Fire

On average firefighters in Malta currently work about 54.8 hours a week. Some staff shortages were reported among Maltese firefighting departments. There is also a seasonal aspect to demands on the Maltese fire service, due to the increase in visitors during the summer period linked to tourism. Sometimes workers take on additional duties during this period that mean they work longer than 54.8 hours a week.

G.4. Police

There is also a long-hours culture in the Maltese Police Force. Malta does not have any 'reserve officers', so, in order to meet daily requirements, serving police officers work a considerable number of hours overtime. According to interviewees, the removal of the opt-out clause would mean that additional police officers would need to be recruited.

H. Poland

In **Poland**, the individual opt-out is limited to medical workers performing on-call time in the health sector for the purpose of ensuring 24/7 medical care. The opt-out was adopted because a problem was identified in respect of insufficient numbers of trained specialists. There is no upper limit set in national legislation in respect of weekly working time for workers agreeing to sign an individual opt-out. Theoretically, doctors could work up to 78 hours per week – the maximum number of hours possible taking into account daily and weekly rest periods. However, in practice, some health institutions specify a limit to average weekly working hours in individual contracts between hospitals and other healthcare institutions and doctors. This is commonly 60 - 65 hours.

Employees agreeing to opt out are remunerated for hours worked in excess of their contractual working hours through overtime pay. This is typically an additional 50% or 100% of the basic rate, depending on whether the work takes place during normal working hours in the daytime, or requires a night shift or work during a holiday period. The longest period of consecutive presence at the workplace is 24 hours on-call duty.

National data on the proportion of doctors that have signed an individual opt-out is not available in Poland. The task of collecting and collating statistical trends on the use of the employee opt-out is the responsibility of individual medical institutions and practices vary widely depending on their approach to working time organisation. Identifying the number of doctors whose average weekly working hours exceed 48 hours is problematic; however it is likely that average working hours vary widely between types of specialists, regions of the country and the working practices of individual hospitals. It is consequently very difficult to assess the impact of the individual opt-out across the Polish health sector.

Although there are no accurate statistics about the amount of on-call time as a proportion of an employee's total working time, in the case of full-time doctors that have agreed to sign an individual opt-out, the amount of on-call time as a percentage of total weekly working time generally varies between 25 and 50%.

Although precise data is not available on the proportion of doctors and nursing staff having signed an individual opt-out, this is known to vary considerably across medical institutions depending on a number of factors including the organisation of working time and the extent to which particular institutions experience resource shortages (which in turn is affected by location, with hospitals in less populated areas being especially affected.) In some hospitals, only a small number of individuals have signed the opt-out agreement, but there are also examples of hospitals in which more than 90% of employees have opted out.

In exchange for working additional hours, some doctors have been offered more flexibility in their shift patterns and have had greater scope to plan their own working time. Moreover for signing an opt-out, Polish doctors had been allowed to negotiate a reduction in the amount of on-call duty that they were required to provide. An indirect consequence of the opt-out, therefore, was that doctors' level of fatigue may have decreased, which can be assumed to have impacted positively on the quality of public services. Conversely, there was a concern among some trade unions that doctors signing the opt-out may experience negative health and safety impacts as a result of working long hours and difficulty in reconciling their work and family lives.

Interviews with relevant experts and medical practitioners suggest that it would be difficult to ensure quality healthcare services within the 48-hour week due to a shortage of doctors. This has been compounded in recent years among nursing staff due to increased levels of mobility by Polish nurses from Polish hospitals to hospitals in the EU-15.

Some stakeholders interviewed expressed concern as to whether, in instances in which a large percentage of the total doctor workforce had signed the opt-out, this had been a genuinely free and voluntary choice, or forced on them by employers.

7.2.4.2 USE OF THE OPT-OUT – PRIVATE SECTOR

The analysis of the use of the individual opt-out in the private sector concentrates on countries that use the opt-out across all sectors. However, there is also a focus where appropriate on Member States which allow the opt-out in private as well as public health services.

As in the public sector, the research found that there is no official monitoring data at national level on the amount or proportion of workers having signed an individual opt-out in the private sector. Two information sources have been used to overcome the lack of data: first LFS data on long-hours working and secondly survey data carried out by different organisations, where available.

LFS data has been utilised for the UK and Bulgaria as a proxy for assessing the proportion of workers that may have signed an individual opt-out. This provides only a broad approximation, since those working longer than 48 hours may not necessarily have signed an opt-out (either because they worked less than 48 hours average per week over the reference period, or because they or their employer were not aware they had to sign an opt-out).

In the **UK**, the opt-out is quite heavily used in some sectors and by SMEs, while large companies may often ask their employees to sign an opt-out as a ‘just-in-case’ measure. Less detailed information was available in other countries. In **Bulgaria**, while usage of the opt-out was not found to be prevalent, in cases where it was used, this was mainly by large firms. In **Cyprus** and **Estonia**, the opt-out was more commonly used by SMEs. In **Malta**, our research suggests that the opt-out is quite commonly used regardless of the size of the organisation.

There are variations between countries with regard to how the opt-out has been implemented. The different approaches adopted include leaving the opt-out entirely to individuals to agree on a voluntary basis with their employers, negotiating an opt-out through collective agreements between trade unions and employers, and in some cases, through negotiated workforce agreements or consultation with workers. As an alternative to using the opt-out, in some countries, businesses with strong seasonal patterns in demand have extended the average reference period for calculating working hours from 4 to 12 months through a collective agreement.

A. UK

In the **UK**, in the absence of national data on the opt-out, a useful proxy is LFS data on long hours working. As in other EU countries⁵⁸, a general reduction in working hours has been discernible in national LFS data since 1998. According to the Office for National Statistics (ONS), full-time workers average around 37.0 hours per week, part-time workers average around 15.5 hours per week and just over a fifth of people in employment work more than 45 hours a week. According to LFS data from spring 2010, 2.9 million employees work longer than 48 hours per week, (this equates to about 10% of the workforce) a significant reduction of about a quarter compared with 1998, when 4m exceeded the 48 hours average weekly working hours. The most recent LFS data on long hours working, and the sectoral composition of long hours workers is provided in the table below:

Table 12: Full-time employees usually working over 48 hours per week by industry (%)

	Total	%
Public administration, education and health	751,552	25.80
Banking and finance	551,498	18.93
Distribution, hotels and restaurants	407,218	13.98

⁵⁸ According to Eurostat data from 2009, average weekly working hours in the EU have decreased from 39 hours in 1990 to 37.8 hours in 2006.

Manufacturing	364,704	12.52
Transport and communication	373,391	12.82
Construction	252,787	8.68
Other services	109,417	3.76
Energy and water	72,871	2.50
Agriculture, forestry and fishing	30,012	1.03
Total	2,913,450	100.00

Source: UK Spring 2010 Labour Force Survey, not seasonally adjusted

Sectors in which long hours are especially prevalent in the UK include public administration, education and health (25.8%), banking and finance (18.9%), distribution, hotels and restaurants (14.0%), transport and communication (12.8%) and construction (8.7%). According to the Trades Union Congress (TUC), there are particular health risks for the 400,000 long-hours workers that LFS data suggests work more than 60 hours average per week. These are mainly concentrated in white collar employment, although some sectors characterised by a long-hours culture, such as transport and construction, also have a high proportion of blue-collar workers.

Long-hours workers in the UK tend to be concentrated at opposite ends of the labour market spectrum. A contrast can be drawn between low-paid, low-skilled workers (some of whom are paid overtime) and managers, who are primarily salaried and not usually paid overtime. Some managerial and professional workers working long hours may be exempted from the 48-hour limit through the autonomous worker provisions of the Directive. Workers in industries with seasonal peaks and troughs in activity may also experience long hours.

The TUC undertook an analysis of 2009 Labour Force Survey data on long-hours working (including whether this is paid or unpaid)⁵⁹. According to the TUC's research on long hours working, less than three in ten workers receive paid overtime for working long hours, the rest are salaried employees, and unpaid. In the same research, it was reported that 68% of long hours workers want to reduce their working time and among employees exceeding 48 hours, 1.1 million workers only work 49/50 hours (37.1% of all long-hours workers).

However, while LFS data on long hours working in the UK may help shed some light on the extent of use of the opt-out, it was pointed out by various stakeholders that there is an important **distinction between the use of the individual opt-out and long-hours working**, as monitored longitudinally in LFS data. Relying on LFS data on long hours working over successive quarters alone as a proxy for how many workers in the UK have signed an individual opt-out is not therefore appropriate.

According to the TUC, only an estimated two-thirds of long-hours workers have signed the individual opt-out. Furthermore, many employees working less than 48 hours per week have signed an individual opt-out because there is a tendency for employers to ask their employees to sign the opt-out as a 'just in case' precautionary measure. This is especially the case in sectors where employees regularly work close to the 48-hour average weekly limit. It was estimated by the TUC that **2m UK workers have signed an individual opt-out as a precautionary measure**, but are not working in excess of the 48-hour average week.

Previous research for the European Commission has shed light on the main rationale for the use of the opt-out in the UK. According to the Barnard Report, 'Opting Out of the 48-Hour Week – Employer Necessity Or Individual Choice?'⁶⁰, *'the individual opt-out is in widespread use and is regarded, in preference to other derogations, as the most convenient and effective mechanism for avoiding the 48-hour limit on weekly working time... In part because of the ease with which this limit can be avoided, the*

⁵⁹ Long-hours sectors in the UK: Briefing for the TUC General Council, January 2010

⁶⁰ The Barnard Report – 'Opting Out of the 48-Hour Week – Employer Necessity Or Individual Choice?', *An Empirical Study Of The Operation Of Article 18(1)(B) of the Working Time Directive in the UK* (ESRC, Centre for Business Research, University of Cambridge, Working Paper No. 282), 2004

Directive has so far done little to change a long-hours culture, driven by employers' perceived needs for flexibility and workers' desire to supplement their earnings or status'.

With regard to the extent of usage of the opt-out, an analysis of 2001 Labour Force Survey data in a DTI research note⁶¹ in July 2002 found that 'approximately three million people would be affected by a removal of the [individual] opt-out in the UK (because they said that they usually worked for over 48 hours on two successive quarters, when they were interviewed)'. Since the DTI study was carried out, there has been a trend towards a reduction in working hours in the meantime, but there remains a tendency among larger employers in particular to ask employees to sign individual 'opt-outs' on a 'just in case' basis. The original estimate of 3m workers in the UK having signed an individual opt-out may therefore remain broadly accurate.

A 2001 study⁶² carried out for the UK government's former DTI (now BIS), notes that '*The individual opt-out was the most common response to the need to provide for working in excess of the 48-hour week, but collective and workforce agreements were also used to change reference periods*'. According to the same report, in a survey, about half of printing and engineering employers, and virtually all the retail employers had either made or proposed a collective or workforce agreement in order to derogate from aspects of the WTD, including the opt-out.

The incidence of opt-out usage was **found to vary at the sectoral level**⁶³. The 2008 Employment Trends Survey included a question on the extent to which employers had individuals among their employees that had signed an opt-out.

The research revealed that the opt-out was used relatively commonly in many industry sectors, but that it was used more extensively in some than in others. The opt-out was most commonly used in transport and distribution (56%), professional services (52%), construction (49%) and retail (21%). On average, 27% of firms surveyed had employees who had signed an opt-out. This does not imply that all employees had done so, only that some among the workforce had.

In the 2009 CBI Employment Trends Survey, 27% of respondents stated that 75% or more of their employees had signed an opt-out. However, only 7% of respondents said that their employees regularly work more than 48 hours a week. This reiterates the point, raised earlier, that many UK employers view the opt-out as a precautionary tool to ensure flexibility and EWTD compliance. This is especially the case in sectors in which firms need to adapt to fluctuating demand, for example, linked to seasonal variations.

A Chartered Institute of Personnel and Development (CIPD) survey⁶⁴ in 2004 on the implementation of the Working time regulations found that only 30% of long hours workers had signed an opt-out. 60 per cent of respondents who had signed the opt-out clause did so after the date of signing the employment contract, with about 37% signing on the date itself. This raises the important question as to **whether those signing an opt-out did so out of personal choice**.

More than one in five (21%) stated that they felt a degree of employer compulsion to sign the opt-out agreement, while 76% signed it out of personal choice.

A variety of reasons were given as to why some people felt compelled to sign the clause, including direct pressure (29%) and indirect pressure (26%) from the employer. One in five (21%) felt that if they did not sign, it would hinder their progress in the new job, with a further 29% simply accepting that it was par for

⁶¹ *Long Hours Working: A Summary of Analysis from the Labour Force Survey* (DTI research note, Hicks, S. 2002).

⁶² *Long Hours Working: A Summary of Analysis from the Labour Force Survey* (DTI research note, Hicks, S. 2002).

⁶³ According to the 2004 Barton report (mentioned elsewhere in the case study) and the CBI Employment Trends Survey

⁶⁴ *The Working time regulations, Calling time on working time*, Survey report, Chartered Institute of Personnel and Development (CIPD) (2004)

the course and something that they should do.

With regard to **how the opt-out affects different size thresholds of enterprises**, in the UK, the opt-out was found to be used by and impact firms of all sizes. According to the 2008 Employment Trends Survey, very large firms (with >5,000 employees) and micro and small firms (<50 employees) were among the least likely to use the opt-out. But in the case of small firms, almost all employees who sign the opt-out make regular use of this flexibility, rather than treating it as a fall-back precautionary mechanism only to be used when necessary, as it is in larger firms. This may reflect the lower capacity of the smallest firms to adapt to peaks in demand.⁶⁵

Discussions with some employers' organisations were carried out. These include: EEF, the manufacturers' organisation and the British Hospitality Association (BHA). The EES Employment Survey 2009, which obtained a response from 480 companies in the manufacturing sector included questions on working time and examined the extent of use of the opt-out. It found that some two-thirds of employers have at least some employees that have signed an opt-out and 38% of respondents reported that more than half their workforce had signed an opt-out. The BHA carried out research in June 2003 and found that about 15% of workers across the hospitality sector use the opt-out (and 60% of all those working long hours). Whereas long hours workers (>48 hours) in the sector accounted for about one in six workers in 2003, which is thought to have been reduced to less than 10% by 2010.

B. Other full-opt-out countries

In **Bulgaria**, the decision to adopt the opt-out was based on adherence to flexicurity principles (i.e. the need to strike a balance between flexibility for employers on the one hand, and job security on the other). Flexicurity is an important objective of Bulgarian labour market policy and viewed as an important means of ensuring quality in public services, particularly in the health care and energy production sectors, where there appear to be persistent labour shortages.

Although there is no recent data regarding the full extent of opt-out use, seasonal industries, especially manufacturing firms, account for a large proportion of those using long working hours. The most recently available LFS data is from 2005. This included data on long working hours in Bulgaria. The data showed that a relatively small proportion of workers (5.3%) work more than 48 hours and also revealed that long hours working was found to be more common (i) amongst men than women and (ii) in the private sector compared with the public sector and (iii) among some sectors than others (e.g. construction, retail). However, the LFS data on long hours working from 2005 does not distinguish between the type of employment (e.g. fixed-term contracts, atypical workers), or whether respondents were employed or self-employed (if the latter, they would of course be outside the scope of the Directive).

The proportion of the workforce working long hours was found to be proportionally higher in 2005 than in other Member States (in subsequent years, LFS data does not provide data on long hours working). However there is no data available on the number of workers signing individual opt-outs.

Use of the opt-out since Bulgaria's accession to the EU has been lower than expected. It should be noted that the Ministry of Labour and Social Policy intends to prepare an analysis of the degree of usage and the likely impact of the opt-out in future.

In **Cyprus**, there is a lack of information on private sector use opt-out use. This was attributed to the relatively small presence of private sector employer organisations within social dialogue structures. However, in comparison with other Member States using the opt-out, the impact in the private sector was felt to be relatively minor. The opt-out derogation is not used widely in Cyprus due to low average working hours in both the public and private sectors. Issues around long hours working and the opt-out have not been a major topic of discussion within tripartite social dialogue. Trade unions in Cyprus have played a strong role in shaping working conditions for both public and private sector employees.

⁶⁵ *CBI Employment Trends Survey 2008*

Notwithstanding low usage to date, the opt-out could potentially be used more frequently in future in Cyprus. There has been a large wave of new immigration to Cyprus since 2004, primarily of low skilled workers, some of whom may be in employment requiring long working hours. Going forward, interviewees from the Ministry of Labour recognised that there may be a need to monitor working hours in the service sector more closely both to ensure compliance with the Directive, and to ensure that those working more than an average 48 hours over the reference period have signed an opt-out.

In **Estonia**, there is a lack of data on the incidence of the opt-out. Although the Estonian Labour Inspectorate is responsible for overseeing the implementation of the law on Working Time, there are several problems relating to the validity of data and problems in generalising the results to all companies. In the absence of any reliable survey data concerning the implementation of the opt-out disaggregated by category of worker, stakeholders interviewed expressed a view that low wage workers are more inclined to sign the opt-out.

It is the general assessment of employers' organisations in Estonia that use of the opt-out is most common in industries or occupations which are characterised by seasonal requirements, such as the tourism and agricultural sectors. The opt-out is considered to be particularly widespread in the health sector due to labour shortages. Increased opportunities for career progression are an important factor in the decision of individuals to sign the opt-out. At the focus group discussion, some trade unions raised the concern that there were some instances when employers appeared to have pressured workers into consenting to opt out.

In **Malta**, there is no data at national level on the extent of usage of the opt-out. However, the interview programme revealed that the opt-out is used relatively widely to address a lack of skilled workers in particular sectors and fluctuations in production and in seasonal industries, such as tourism.

With regard to average reference periods for calculating working time, in accordance with collective agreements, the manufacturing and tourism sectors have a different reference period from other sectors of 12 months. In other sectors, depending on the terms of the collective agreement, the reference period may be 4 or 6 months.

Among workers' main motivations for opting out in Malta were the opportunity to increase their income. Stakeholders interviewed stated that it is common to work long hours to earn additional money, and also to take on a part-time job in addition to a full time job. Working longer hours for extra income is considered culturally acceptable, especially among men, and is not limited to a particular grade of worker.

In other EU countries in which the opt-out is used in limited activities, the opt-out may be used in **private sector health institutions**. For example, in **Germany**, most private clinics have included the opt-out in workplace agreements, according to the Federal Ministry responsible, BMAS. The opt-out is used for similar reasons as in the public sector: to provide flexibility in resourcing and to allow for on-call time in light of SIMAP and Jaeger. In **France**, by way of contrast, opt-out usage is strictly limited to the public sector.

7.2.5 Monitoring and enforcement

Article 22 of the Directive which allows Member States to use the opt-out derogation also outlines requirements in respect of monitoring. In particular, it states that:

- (a) the employer keeps up-to-date records of all workers who carry out such work;*
- (b) the records are placed at the disposal of the competent authorities, which may, for reasons connected with the safety and/or health of workers, prohibit or restrict the possibility of exceeding the maximum weekly working hours;*

(c) the employer provides the competent authorities at their request with information on cases in which agreement has been given by workers to perform work exceeding 48 hours over a period of seven days, calculated as an average for the reference period referred to in Article 16(b).

In practice, different approaches have been adopted across different EU countries with regard to monitoring and enforcement of EWTD implementation (including the use of the opt-out in countries that use the Article 22 Derogation). In this sub-section, the focus is on the arrangements in countries using the opt-out across all sectors. The situation in other selected Member States, such as France, Germany and Poland is also summarised.

In the UK, individual employers are responsible for monitoring working hours, with no central or regional body responsible for collecting such data for monitoring and enforcement purposes related to EWTD implementation (or the use of the opt-out). Data on working hours is of course still captured through LFS data. In the private sector, monitoring practices vary widely between sectors and individual enterprises.

Some types of employees in the UK public sector are subject to more detailed monitoring of working hours compared with others. For example, individual hospitals and NHS Trusts monitor junior doctors' working hours very closely because this is an important part of contractual arrangements under the New Deal for Junior Doctors⁶⁶. Indeed, there are considerable financial costs to the NHS when additional overtime is formally requested by hospitals since doctors in training are contracted for a 48 hour week. NHS Employers regularly collects data on compliance with EWTD on behalf of the Department of Health. However, working hours for other types of doctors are less closely monitored.

In the UK Fire and Rescue Service (FRS), the difficulties in monitoring working hours and compliance with EWTD requirements effectively were noted above. While some Fire and Rescue Services monitor the working hours of wholetime fire fighters (the term in the UK for full-time employees commonly working a 42 hour shift), many do not. There was also a perception that FRS may be unwilling to pass on data to external bodies about working hours, partly due to concerns about being investigated for compliance with the EWTD. However, it should be stressed that a considerable percentage of the UK's firefighters work through the Retained Duty System – RDS - (i.e. are volunteers and typically have a primary employer, so there are difficulties in monitoring working hours in aggregate across multiple employers.) Retained Duty firefighters typically work significantly above 48 hours per week once on-call time is taken into account. The lack of clarity about the implications of the SIMAP and Jaeger EC judgements for the fire service mean that there is a concern that the opt-out is needed to ensure the viability of the RDS system.

There is a general concern among sectoral organisations (shared by employers' organisations and UK government's BIS) about the importance of avoiding burdening enterprises with onerous requirements in recording working hours. Moreover, it was felt to be inappropriate in the context of a knowledge economy to put too much emphasis on recording working hours, since there is a longstanding trend towards shorter working hours and flexible working hours are more common. Moreover, traditional time recording practices in industry of clocking in and clocking out are seen as very antiquated.

The Health and Safety Executive (HSE) is responsible for enforcing the Working Time Amendment Regulations 2003 in most UK workplaces. However, Local Authority Environmental Health departments are responsible for EWTD in some sectors: shops and retail, offices, hotels and catering, sports, leisure and consumer services, specialist agencies for air and sea travel and for heavy goods vehicles and coaches. Enforcement for more than a million workers in shops and offices is devolved by the HSE to local authorities.

Concerns were expressed by the Trades Union Congress with regard to whether there was sufficient awareness among local authorities of their enforcement responsibilities. According to a survey undertaken for the TUC of Local Authorities, approximately 50% of environmental health departments were not

⁶⁶ From August 2003 it has been a contractual obligation for all National Health Service (NHS) Trusts to ensure that all junior doctors in training comply with the New Deal (op.cit.).

aware of their responsibility for enforcement in this area. Another concern raised by the TUC was that the HSE only has the ability to investigate “on complaint” and that only a small number of HSE staff work specifically on this issue. Furthermore, there do not appear to have been many legal cases relating to the opt-out, even though some anecdotal evidence has been found through survey research (e.g. CIPD, TUC) about perceptions of compulsion to sign an opt-out among employees.

In **Bulgaria**, employers are obliged to keep records for every worker or employee that works more than 48 hours per week. This documentation should be at the disposal of the General Labour Inspectorate (GLI). The GLI has the power to ban or to limit the possibility for exceeding average weekly working time over the reference period on the grounds of protecting workers’ health and safety. If required, employers should provide the GLI with information about cases where employees and workers have agreed to work more than 48 hours per week.

However, in spite of these monitoring requirements, in practice, through the interview programme, it became clear that the authorities responsible do not have that much information with regard to whether enterprises have actually introduced these registers in practice for those signing opt-outs. That being said, GLI does make an effort through labour market inspections to improve the monitoring of long working hours and to capture information about whether overtime is recorded or not, unpaid, partially paid or paid in full). However, during inspections, the focus is on working hours generally and compliance with EWTD rather than specifically on the opt-out. According to some interviewees, the GLI has ‘neither the time nor the capacity to check on how enterprises are using the opt-out’.

There was found to be poor monitoring of the extent of use of the individual opt-out in the private sector, although relatively rigorous monitoring of working time generally. The highest proportion of violations of working time norms, rests and holidays were in sectors such as retail, hotels, the food industry, construction, clothing, and in private security. Another factor underlying weak monitoring of the individual opt-out is that many private sector employers are not always aware of their legal obligation to keep up-to-date records of the number of employees signing the opt-out. Both in-house and external accountants were seen to have a lack of experience in recording working hours and use of the opt-out effectively, due to their lack of knowledge about legislation on working time.

In **Cyprus**, although the opt-out was included in national legislation on working time in 2004, there is little evidence of monitoring or data collection by national authorities regarding the level of use of the opt-out. Equally, private sector employers rarely keep accurate records of the numbers of employees using the opt-out despite the legal obligation within the EWTD to maintain such data.

The Ministry of Labour does not have any reliable statistical data to allow for an assessment as to how widely the opt-out is used. There are two reasons for poor data collection within industrial relations in Cyprus. The first is that Cypriot law enforces a lower working hour limit than the 48-hour week required by the EWTD so employee working hours are seen as less of a priority. Secondly, the civil service has limited resources to obtain information from employers on working hours in general and use of the opt-out in particular. More generally, monitoring of individual employers was viewed as less important due to the collective bargaining system which is the main communication channel between employers and employees on employment relations.

The Department of Labour Relations has responsibility for enforcing compliance with the EWTD in cases of employer abuse or where employees seek redress. In the event that a complaint is submitted, the department will assign an employment inspector according to the sector and needs of the employee. The inspector has the authority to make on-site inspections and to call on witnesses for testimony. Depending on the severity of the breach in working time regulations, the two parties may then decide to reach a compromise out of court settlement, unless the inspector decides to submit the case for further legal evaluation. However, to date, there have been no complaints in relation to abuse of the opt-out.

In **Estonia**, in common with Bulgaria, employers are required by law to keep separate data on employees working more than 48 hours and to submit these to their local labour inspectorate. Records should also be available for employee representatives upon request. The Estonian Labour Inspectorate has a supervisory

role in monitoring working hours. However, since new legislation on working time came into force in 2009, the main emphasis of the Estonian Labour Inspectorate has been on counselling employees and employers about the new legislation and how to implement it. There are limited human resources for enforcement activities. During supervisory visits, checks are made as to whether overtime work in enterprises complies with the law. The main violations detected in 2009 related to other aspects of working time rather than the opt-out (e.g. record keeping on working time and rest periods between shifts).

The research found several examples of enterprises that had not adhered to the protective conditions included in national legislation in respect of overtime work. In particular, there were instances of a situation when employees worked more than 48 hours average per week for longer than the average reference period of four months, yet there were no agreements in place between employer and employees to apply the longer 52-hour week permissible for those signing the individual opt-out under Estonian national legislation.

With regard to monitoring in **Malta**, the position is similar to that of Cyprus. It is the employer's responsibility to keep records of hours worked. Monitoring practices and the extent to which monitoring of working hours is carried out varies between sectors and enterprises.

The focus group discussion in **France** stressed the fact that there is no specific monitoring of "opt-out hours" worked by doctors and public health professionals working longer than 48 hours. Rather, these are monitored in the same way as all working hours by employers in hospitals and public health institutions.

In **Germany**, individual hospitals are responsible for monitoring doctors' working hours and for keeping track of which doctors have signed an individual opt-out. However, the details of the opt-out have to be negotiated through collective agreements. There is no national reporting or centralised collection of data on the opt-out. Responsibility for enforcement at the federal level in Germany lies with BMAS.

In **Poland**, monitoring working hours is the responsibility of individual hospitals. The research suggests that accurate data on working hours is kept because individual employees who agree to opt-out are remunerated for the additional hours they work at overtime rates (an additional 50% or 100% of the basic rate, depending on whether the work is during normal daytime hours or night/holiday hours). There is therefore a strong incentive for employers to ensure that hours are accurately recorded, given the financial burden that this would otherwise impose.

There does not generally however appear to be monitoring data collected at the national level on the extent of usage in those countries using the opt-out for more limited activities. Some survey-based data was identified, but this was the exception rather than the rule.

7.2.6 Stakeholder views on the opt-out

It is important to take stock of stakeholder views on the opt-out. These were sounded out both through the interview programme and through a review of available literature.

The research confirmed that there is a **wide divergence of opinions among stakeholders** in countries that use the opt-out with regard to the advantages and disadvantages of the opt-out and whether it has had a positive or negative impact. This is particularly the case in full opt-out countries. It is less so in partial opt-out countries where there appears to be a broad consensus that in light of the SIMAP-Jaeger ECJ rulings, the opt-out provides the necessary flexibility to resource services of general interest, in areas of public service provision where on-call time is common, such as hospitals.

Stakeholders in favour of the retention of the opt-out cite a number of perceived benefits for employers including the need for flexibility for enterprises to maintain competitiveness especially in sectors with seasonal demand, and other peaks and troughs in workflows. In the public sector, arguments in favour of the opt-out are driven by the need to ensure service continuity, especially in more rural areas. There is also a need to maintain adequate resourcing flexibility in light of the SIMAP-JAEGER findings, which

pose particular problems for some areas of public service provision, notably hospitals, and although not tested in a court of law, also residential care and fire and rescue services.

The views of stakeholders in selected countries are now provided:

A. UK

UK government policy on working time favours the retention of the opt-out to ensure that individual choice is retained in terms of workers having the right to work long hours if they wish to do so in order to maintain flexibility for businesses. This position is common to many UK stakeholders, including the Confederation of British Industry (CBI), the British Banking Association (BBA) and the manufacturers' organisation (which has the acronym EEF). However, the Trades Union Congress and a number of other trade unions are against the retention of the opt-out on the basis that the EWTD as a piece of health and safety legislation needs to be more effectively enforced.

A central argument for the retention of the voluntary individual opt-out is that it is **essential to competitiveness** because it provides employers with flexibility. BIS argued that 'the flexibility provided by the opt-out suits both employers and employees'. The CBI stated that the opt-out 'allows businesses to meet fluctuations in demand and short-term periods of high intensity work'.

Another key argument advocated by those that viewed the opt-out positively was that, while ensuring workers' health and safety is an important objective, it is beneficial to the economy to **allow employees the individual choice** to elect to work longer average weekly hours if they consent to do so when asked by their employer.

In the UK, the BIS argued that the removal of the opt-out would have negative consequences for the UK economy. It was suggested that the immediate short-term impact of the removal of the opt-out would be a loss of output. While difficult to quantify, in a study, BIS estimated the cost of implementing the EWTD to UK businesses at £3.1 billion. Another negative aspect cited by BIS if the opt-out were to be removed was the fact that in the past decade (notwithstanding the current economic downturn and its attendant impact on employment), there has been tight labour supply. There were therefore concerns about the potential negative consequences for the UK's long-term economic competitiveness. There is evidence that the UK economy is already utilising a high proportion of its labour and skills, partly through the employment of migrant workers but also through more people working past retirement age. It was argued by both BIS and the CBI that the UK's strong labour market performance was linked in part to its reputation for labour market flexibility. This was also viewed as important in attracting multinational companies to invest in the UK.

The CBI addressed the issue of the impact of the opt-out on competitiveness in its Employment Trends Survey in both 2008 and 2009. CBI members expressed the view that the retention of the individual opt-out was vital to business success in the UK. More than one third (35%) of employers stated that the impact of losing this flexibility would be '*significant or severe*'.

In discussions with the CBI, it was suggested that the opt-out's **removal could have especially adverse implications in some sectors**, including firms operating in sectors that need to adapt to periods of fluctuating demand, including those with seasonal variations, and firms operating in a global 24 hour environment, such as financial services. Moreover, according to the CBI, in the past 18 months, businesses have provided anecdotal evidence that workers are requesting longer hours due to the recession and fears of job loss. Many employers and employees regard use of the opt-out as a matter of individual choice and a means of regulating work-life balance.

According to earlier research by the House of Lords⁶⁷, the labour market flexibility and business competitiveness arguments for retaining the opt-out are also shared by other organizations, such as the Federation of Small Businesses (FSB) and the Association of British Chambers of Commerce.

⁶⁷ *The Working Time Directive: A Response to the European Commission's Review*, European Union Committee, 9th Report of Session 2003-04, House of Lords

A report⁶⁸ published by the CBI in 2003 based on company case studies from a variety of sectors found that the voluntary individual opt-out to provide additional flexibility was “the most economic and efficient means for tackling upturns in labour demand”. According to this report, the opt-out was especially relevant in addressing labour shortages in particular situations, such as:

- Jobs requiring highly specialised skills which might be in short supply and which could not easily be done by inexperienced temporary staff brought in at short notice
- Where relatively short-term demand increases did not warrant additional recruitment costs or equipment expenditure
- Employee relations difficulties resulting from denying overtime to current employees, or from hiring staff to cope with peaks in demand and then making them redundant during a downturn
- Incidence of sectoral labour shortages (e.g. hospitality which has 12% of all unfilled job vacancies) where temporary staff are not available to do extra work
- The need for uninterrupted work processes in areas like construction and safety maintenance where, once started, work had to be completed.

Despite the economic recession, there remain concerns about the availability of suitably skilled labour in some sectors, such as **high-end manufacturing and engineering**.

Private sector stakeholders interviewed, such as the British Hospitality Association and the British Engineering Federation, shared the UK government’s view that while changes in work organisation can be made, **businesses need to retain flexibility** to meet fluctuations in demand and to address skills shortages.

Other stakeholders in the UK, particularly Trade Unions, took the opposite viewpoint on the impact of the opt-out, and on the potential impacts if it were to be removed. For example, the Trades Union Congress (TUC) argued in a paper⁶⁹ in 2008 that the opt-out does not always represent genuine individual choice and that there is sometimes an element of compulsion by employers to get employees to sign opt-outs.

In discussions with the TUC as part of the research for this case study, it was stated that *‘the right of the individual to work longer hours appears to have taken precedence over the duty to work safely and the obligation of national government to protect workers from the health and safety affects and wider adverse impacts that may result from people working excessive hours. The effects of ill-health stemming from excessive working time are often largely externalised by employers and borne by families and by the wider society via the NHS’*. In a second paper⁷⁰, statistics were presented to support the argument that employees may face undue pressure from employers to sign the opt-out. 44% of those that have signed the opt-out say that it was a condition of their employment, 23% of long hours workers have not signed the opt-out but have been put under pressure by their employers to work more than 48 hours, and 50% of long hours workers who have either raised issues about the 48 hour limit or know that such issues have been raised by somebody else in their workplace say that the issue was not resolved.

The TUC also emphasised the **societal costs of long hours working**, including the increased risk of compromising health and safety protection for workers resulting from the UK’s opt-out. *‘The effects of long hours on concentration may lead to accidents that affect third parties, such as road traffic collisions. In addition, long hours often mean work-life balance suffering and lower productivity from people being burnt out’*. The TUC expressed particular concerns about the persistence of a long-hours culture in some sectors, such as construction and transport, and among particular types of workers. This includes low-paid, low-skilled workers (some of which are paid overtime) and salaried managers and professionals. Some people within the latter group may fall under the ‘autonomous workers’ provisions and therefore be excluded from the application of the 48-hour limit) but the TUC would like to see all workers protected.

⁶⁸ *Maintaining a dynamic labour market – the Working Time Directive and Individual opt-out*, CBI, 2003

⁶⁹ *The return of the long hours culture*, Trades Union Congress, 2008 (TUC).

⁷⁰ *Ending the opt-outs from the 48-hour week, Easy steps to decent working time*, Trades Union Congress, 2008 (TUC).

A tendency was also identified by the TUC among some employers to favour long hours over the adoption of technological innovation and new forms of work organisation that would be as effective in ensuring that they remain competitive. Most employers and sectoral organisations spoken did not share this view, although there was common agreement on the trend towards shorter working hours.

The 2004 Barnard report⁷¹ found conflicting evidence in respect of the impact of the opt-out, reflected in the dichotomy of stakeholder views on its advantages and drawbacks and impacts to date. While on the one hand, *‘employers see the individual opt-out as necessary if they are to meet customer demands or client requirements that presuppose long working hours. Employees, likewise, accept a long-hours culture, which is bound up with access to higher earnings and, in some cases, a feeling of individual autonomy and control over working arrangements’*. Balanced against this, there is a perception on the part of all the relevant actors – employers and their associations, unions, and public bodies – that *‘Under certain circumstances, a long-hours culture may lead to high rates of sickness and absenteeism and lower productivity (in the sense of firms producing the same level of output for a higher level of labour inputs). Reductions in working hours can avoid some of these costs while also paving the way for the simplification of working time systems’*.

As far as **attitudes towards the impact of the opt-out in the public sector in the UK are concerned**, the majority view among stakeholders interviewed was that the EWTD opt-out provides the necessary flexibility to maintain 24/7 service provision, and to find alternative solutions to ECJ judgments on EWTD relating to on-call time, notably SIMAP-Jaeger.

While viewed as an important mechanism to ensure resourcing flexibility, the opt-out is not that particularly widely used in UK public services. Rather, it is seen as a useful fallback tool in instances where it is not possible to adjust working time organisation to comply with EWTD and the 48-hour average week.

A review of stakeholder views in other EU countries on the positive and negative views of the opt-out is now provided. In the absence of much literature on the opt-out outside the UK, this necessarily draws mainly on the discussions feeding into the case study analysis.

B. Other countries

In **Estonia**, employers stressed the positive impact of long working hours in term of higher labour productivity. The ability to opt out was seen as useful in strengthening employment and overall competitiveness - provided there were appropriate safeguards in the form of protective conditions.

However, various concerns were expressed by trade unions with regard to the potential adverse impacts of the opt-out. First, there was a concern that against a backdrop of weak labour market demand and a high unemployment rate of 20%, there is a risk that allowing workers to opt out might hold back employment creation with employers trying to squeeze more from workers. Secondly, there was a concern that the opt-out may compromise worker health and safety. Employees may be willing to work overtime, but in so doing may sacrifice health and safety, and have less advantageous working conditions in exchange for additional income, or because they are worried about keeping their jobs during the crisis.

Other negative impacts on the opt-out in the views of trade unions include the increased risk of fatigue and stress among workers that have opted out, although there is presently a lack of empirical research to confirm this assertion. A representative from the health care unions stated that there is a general issue

⁷¹ The Barnard Report – *‘Opting Out of the 48-Hour Week – Employer Necessity Or Individual Choice?’*, *An Empirical Study Of The Operation Of Article 18(1)(B) of the Working Time Directive in the UK* (ESRC, Centre for Business Research, University of Cambridge, Working Paper No. 282, 2004)

around high stress levels among employees in the Estonian workforce and that long working hours risk exacerbating this problem.

Another issue mentioned in the health sector was that workers' ability to influence the control over working conditions is very low. It was also mentioned by a representative from the health care sector union that long working hours risk worsening the reconciliation of working and family life.

However, not all trade unions were against the opt-out. Indeed, representatives from public sector unions mentioned that the opt-out has facilitated more flexible working and that this had potential to reduce absenteeism. In relation to the health and safety aspects of the opt-out, it was emphasised that a key consideration in terms of ensuring that there is flexibility for businesses while at the same time ensuring adequate health and safety for workers was for the labour protection procurator, which is responsible for enforcement to fulfil its duties effectively. This could in the view of stakeholders in favour of the opt-out alleviate the main concerns about potential abuse of the opt-out by employers.

In **Malta**, some stakeholders such as the Malta Employers Association stated that there appears to be mutual agreement among both employers and employees that overtime is beneficial so long as it is a genuine free choice to work extra hours. The reconciliation of family and working life is not high on the workers' agenda, especially since the majority of families depend on the male member of the family for breadwinning. According to LFS Q1/2010, employment rates of women are low (38.5%). Because wages are not high, families have become used to living on a salary which includes overtime pay. The general consensus was that Malta would like to retain the opt-out but with protective conditions to curb abuses in excessive working hours.

Social partners and national authorities expressed the view that if the opt-out clause were to be removed, this would negatively affect Malta's competitiveness and make it more difficult to achieve the targets set out in the country's National Action Plan for Employment. The positive benefits attributed to the opt-out included preserving employer flexibility and individual choice for employees. The opt-out was also viewed as useful by some sectoral organisations, such as the Malta Hotel and Restaurant Association in meeting resource shortages, for example, in the hospitality industry.

Stakeholder views in countries where the opt-out is used in limited activities

Feedback from stakeholders in **France** was that the opt-out has been beneficial in alleviating resource shortages in some French hospitals. The consensus at the focus group was that, provided that there are sufficient safeguards in place, the opt-out is useful because it enables hospitals to meet any resource shortages and also provides a solution to the problems caused by the SIMAP and Jaeger ECJ rulings in respect of on-call time.

In **Germany**, which uses the partial opt-out in hospitals and some other public services, there are differences in viewpoints between employer representatives and the Federal Ministry of Labour and Social Issues (BMAS), and trade union representatives and professional associations on the opt-out and its impact.

BMAS and employer representatives regard the use of the partial opt-out as a necessary and effective instrument that facilitates EWTD implementation, while at the same time allowing flexibility in respect of on-call time in light of the SIMAP-Jaeger rulings. Since an estimated two-thirds of German doctors have signed the opt-out, this does suggest that there is demand for flexibility from hospitals and their employees.

Trade union representatives were however against both the opt-out and a relaxation of its current restrictions to public services and inactive on-call time. The main criticisms made in respect of the opt-out include the attendant risks for worker health and safety protection in assuming that employees agree to opt-out agreements voluntarily.

In **Poland**, among stakeholders, there were seen to be both positive and negative impacts of the partial use of the opt-out as this applies in the health sector. Doctors identified three main positive impacts: earning additional income through paid overtime, greater flexibility in working hours (i.e. by agreeing to work longer hours, they had greater negotiating power in determining which shifts they work in and in which hospitals) and the opportunity to improve their career development prospects.

Having additional resourcing flexibility was the main argument cited by both employers and employees. The ability to ask doctors to sign an opt-out was viewed by health institutions as being useful in ensuring 24/7 medical care, without the need to hire additional staff to meet EWTD requirements.

The opt-out has helped to address resource shortages among health service professionals. These have been exacerbated since Poland's accession to the EU by some medical professionals leaving to work in Western European countries. In this regard, the opt-out was also seen as being a useful mechanism for providing continuity in health service provision. Overall, in Poland, the opt-out was perceived as providing the necessary flexibility to address resource shortages in specific areas within the Polish health sector.

7.3 THE IMPACT OF THE OPT-OUT

In this sub-section, the analysis starts with a review of the overall impact. A short summary of the overall findings is then provided.

7.3.1 Overall impact

There has been a **general trend towards shorter working hours** in many EU countries over the past decade. The reduction in long hours working means that proportionately fewer workers are affected by the opt-out than when the Directive was last reviewed.

There does not appear to be a causal relationship between using the opt-out and a high incidence of long working hours. The European Working Conditions Survey⁷² presents a mixed picture on working hours in EU countries using the opt-out and those not doing so.

EWTD has been **an important driver of shorter working hours in many EU countries, including those using the opt-out.** Ensuring compliance with EWTD has had a pronounced impact in some countries on work organisation. In the UK, for example, there has been substantial investment by the NHS to increase the number of junior doctors and to adapt working practices, shift patterns and rotas in order to ensure EWTD compliance⁷³.

Some stakeholders argued that **the opt-out has been a useful mechanism to ensure flexibility in resourcing public services and maintain continuous service provision** on a 24/7 basis. Additional flexibility was considered necessary in many EU countries, such as France, Germany and Poland as a result of the SIMAP and Jaeger ECJ rulings, particularly for doctors working on-call time in hospitals.

The implications of these legal judgements are far-reaching in terms of service reconfiguration. For example, in the UK's NHS, concerns about SIMAP-Jaeger and the interpretation of on-call time have resulted in a significant transition in working time arrangements for doctors. Whereas previously, shift work accounted for 10% of total doctors' working hours in 1999, it accounted for 80% in 2009. This has also been driven by wider factors, including the adoption of the New Deal for Junior Doctors.

⁷² For example, according to the results of the 2009 European Working Conditions Survey, in Estonia, the incidence of working long hours (22%) is higher than the EU average (17%). Conversely, in Cyprus, there is lower average weekly working time (35.6 hours) than the 2009 EU average, which across EU27 was 36.9 hours.

⁷³ It should be noted however that other factors have also driven the trend towards shorter working hours, including changes in contractual conditions for junior doctors linked to the New Deal,

The number of Member States that use the opt-out has increased markedly since EU enlargement. Several new Member States including Bulgaria, Cyprus, Estonia and Malta decided to use the opt-out in all sectors and 10 out of 12 MS use the opt-out (Romania and Lithuania are the only exceptions). The decision in four new Member States to use the opt-out across all sectors was driven by lines of reasoning around the need to ensure business flexibility and individual worker choice.

In some EU countries, an argument was made that **the opt-out provides flexibility in resourcing public services in general and in hospitals in particular.** This was especially the case for hospitals in rural areas and smaller hospitals. Reasons for using the opt-out in hospitals included: varying levels of absenteeism and sick leave during the year which are difficult to predict; fluctuations in demand for services in smaller hospitals at different times of the year (low demand for emergencies and acute medicine in summer and much higher demand during the winter); resourcing problems in some new Member States resulting from doctors and nurses seeking employment in EU15 countries, and in some medical specialties in some countries, there were also staff shortages.

In the UK, the opt-out was seen as **an important tool in providing hospitals with the flexibility to cover short-term rota gaps in staff rotas.** This was viewed as highly preferable to filling gaps in rotas through the use of voluntary internal locums. There is a reluctance to rely on external locums, given patient safety and quality of service concerns.

In the UK, there is a particular issue around the **perceived need for an opt-out to maintain service provision because of the UK's Fire and Rescue Service' Retained Duty System (RDS),** which relies on volunteers. RDS plays an important role in fire and emergency cover providing coverage for approximately 90% of the UK's surface area. The sustainability of the RDS system could be put at risk if the opt-out were to be removed, because most fire fighters have a primary employer in addition to their fire fighting duties.

In some countries, using the opt-out was viewed as **a fall-back option rather than a point of first recourse.** In other words, the opt-out was seen as a guarantor of flexibility in addressing resourcing issues and in ensuring public service continuity but that did not always mean that there was that high use of the opt-out among public sector workers.

Awareness levels

Awareness levels about the existence of the opt-out for individual workers **vary markedly between countries and sectors, and there is a lack of data** on how widely known the opt-out is. There were low levels of awareness in the country sample about the opt-out in some public services, notably residential and social care sectors. Especially in smaller care homes, neither care workers nor their employers were aware of the need to sign an opt-out if exceeding the 48-hour average working week over the reference period. This was in spite of many working between 48 and 60 hours, with multiple employment being common in this sector.

Although data is again lacking, there appear to be **lower awareness levels among SMEs** compared with large firms, who sometimes ask their employees to sign an opt-out as a precautionary measure. This is not surprising given that many larger firms have HR and legal departments.

In instances where workers are aware about the opt-out, there are **misconceptions** about what this means in practice for workers. A common misunderstanding is that by workers signing an opt-out, they are not subject to EWTD at all, while in fact all workers remain subject to EWTD requirements, such as compulsory rest breaks and compensatory rest.

Implementation

The opt-out derogation has been implemented through **a diverse range of approaches** at Member State level and in different sectors. These include the implementation of the opt-out with and without protective

conditions, negotiating an opt-out through a collective agreement between Trade Unions and Employers and negotiated workforce agreements following a consultation process with workers.

In some instances, in exchange for employees signing an opt-out and agreeing to work additional hours when required, employers have offered **more flexible working arrangements** in return. Examples were identified in Germany and Poland of doctors being allowed to negotiate more favourable working conditions, such as less night shifts and antisocial hours.

Data issues and extent of use of the opt-out

There is a **general absence of monitoring data**⁷⁴ at national level on the extent of use of the individual opt-out among the workforce – which makes it difficult to assess its impact. Better data is needed to assess how widely the opt-out is being used across different countries, differences between the public and private sectors, usage across sectors and sub-sectors, etc.

Although quantitative information is almost always lacking, the **interview programme found that the use of the opt-out is concentrated in particular sectors**. For example, in Cyprus, Estonia and Malta, the opt-out was more prevalent in sectors with seasonal fluctuations in demand, such as tourism and agriculture, hotels and catering. In Bulgaria, opt-out usage was concentrated in the construction and retail sectors. In the UK, the opt-out is more common⁷⁵ in the transport and distribution, professional services, construction and retail sectors.

In the public sector, there were found to be **wide variations** in the extent of use of the opt-out – although again, only very partial data was available. The interviews and focus groups found that the opt-out was most common in the health sector, but was also in use in residential and social care and in the fire service and to a lesser extent, also the police. While data was hard to obtain, some estimates were obtained, for example, about two-thirds of German doctors have signed the opt-out.

Overall, there is a mixed picture in terms of the extent of opt-out usage. Although data is lacking, the interviews suggest that in some countries, such as Bulgaria and Cyprus, the opt-out is not that widely used whereas in others, such as the UK and Malta, it is extensively utilised. In EU countries in which the opt-out is only used in limited activities, the instrument is used relatively widely in the health sector in some countries, such as Poland and Germany.

The lack of monitoring or statistics on opt-out usage by public authorities means that it is **difficult to assess the extent to which the opt-out has been used by different types of worker** e.g. full-time workers, fixed contracts, atypical workers. However, according to interviewees in Cyprus, Malta and the UK, the opt-out is especially relevant to those in multiple employment⁷⁶ and may therefore exceed the 48 hour average in aggregate.

Reasons for signing an opt-out

While there were a number of factors why workers may agree to sign an opt-out, the **opportunity for workers to increase their income** was the main incentive both in the public and private sectors. Increasing income was cited in a number of interviews. For example, in Malta and Poland, doctors are remunerated at overtime rates for working longer hours, and in France can either receive compensatory rest or additional pay, in exchange for agreeing to the opt-out.

⁷⁴ In the absence of data, the detailed analysis relied on proxies, such as surveys conducted by Trade Unions and Employers' Organisations, and membership surveys undertaken in particular sectors.

⁷⁵ In the UK, the longest standing country to use the opt-out, it is difficult to estimate the number of workers having signed an individual opt-out because this includes a combination of long-hours workers (monitored longitudinally in LFS data), and those working less than 48 hours that have done so as a precautionary measure for their employer.

⁷⁶ While in 2005, only 0.6 % of workers in the EU both work more than 48 hours a week on average, and work in multiple jobs (4th EWCS, 2005), discussions through the interview programme suggest this proportion may have increased as a result of the global economic crisis.

However, **in the private sector, a significant proportion of long-hours workers are not paid more** for the excess hours that they work at managerial and professional level.

Career advancement was the second most frequent factor cited in the country reports by stakeholders as to why employees opt out. In the **private sector**, long hours were sometimes regarded as essential for career progression among managerial and professional level staff (although some workers may be exempt from the 48-hour limit through the autonomous worker provisions of the Directive).

In the public sector, career advancement was also cited as a reason for signing the opt-out. Among doctors in training, the opportunity to accelerate career progression and to deepen training experience through longer hours working was sometimes a factor why junior doctors decided to opt out or to work additional, unrecorded hours over and above their contractual 48 hours per week. In the fire service, a particular issue was that some middle managers felt pressured to work additional hours both in order to meet the demands of the job and to secure career progression.

There was **mixed evidence as to whether employees ever felt compelled** by an employer to sign an opt-out. Anecdotal evidence suggests that some workers were presented with an opt-out form when they commenced employment with a new employer, while others felt that if they refused to sign an opt-out, this may hinder their career development. This was cited as a potential concern in the discussions in Estonia, Poland and the UK. However, there is no systematic proof that employers are compelling staff to sign an opt-out.

Monitoring and enforcement

There was an **absence of data** at national level on the use of the opt-out despite an express requirement under Article 22 of the Directive to keep records and to provide these to relevant authorities. This has rendered it difficult to assess the social and economic impacts of the opt-out, since the extent to which workers are opting out across different countries and sectors is only partially known.

While a requirement has been introduced in some EU countries, such as Malta and Estonia, for employers to collect data on working hours in respect of those working >48-hour week and to make this data available for inspection on request by labour inspectorates, there is **no aggregation of this data nationally**. Local and regional labour inspectorates do not necessarily collect the data systematically, and where data is collated, this is not aggregated by national authorities.

Concerns were expressed by some stakeholders with regard to the **effectiveness of enforcement arrangements to ensure that the opt-out is not misused** by employers in a way that undermines the Directive's health and safety objectives. According to some Trade Unions, the absence of monitoring data on the extent of opt-out usage, and the number of hours being worked over and above the 48-hour limit, makes it difficult for enforcement authorities to prevent abuses of the opt-out.

However, there is a **need to avoid imposing burdens on businesses** in terms of data collection on working hours. LFS data already captures long-hours working, allowing policy makers and regulatory authorities to track long hours over time, although as noted earlier, those signing an opt-out include those doing so as a precaution in addition to long-hours workers.

It may therefore be appropriate for the Member States to carry out periodic surveys of enterprises to improve the quality of data on opt-out usage in future. This could alleviate concerns about employers abusing the opt-out and overriding concerns about worker health and safety. The extent to which workers felt pressured by employers to work additional hours could also be surveyed periodically.

Some Trade Unions believe that **enforcement arrangements in respect of the opt-out should be strengthened**. While arrangements have been put in place in all EU countries to oversee EWTD implementation, in countries using the opt-out, national labour inspectorates and health and safety

authorities have assumed responsibility for monitoring and enforcement. However, enforcement generally appears to be reactive, with relevant regulatory authorities acting upon complaint only.

Although protective conditions have been included in national legislation in some opt-out countries, there have been **very few, if any, legal cases in most EU countries** that were surveyed pertaining to the opt-out. This does not suggest that enforcement has been especially rigorous.

7.3.2 Economic and social impact assessment of the opt-out

The assessment of economic and social impacts took into account both guidance produced in January 2009 by the Secretary General on impact assessment⁷⁷ and by DG EMPL in 2010 in the social impact assessment guidelines⁷⁸.

Key research questions relating to the opt-out identified in the tender specifications include the following:

- What are the main economic benefits and disadvantages of the opt-out for employers and workers?
- What are the social benefits and disadvantages of the opt-out? For employers and for workers?

In the absence of firm data, the analysis necessarily relies on qualitative research, both interviews and desk research. A wide range of views were expressed in respect of the impact of the opt-out among stakeholders that participated in the interview programme and focus group discussions.

Economic impacts

The main findings from the assessment of the economic impacts (positive, negative) of the opt-out were that:

While some stakeholders identified **considerable economic benefits** from the opt-out and linked its future retention to national competitiveness, **others saw the evidence differently**.

The opt-out was seen by some stakeholders as a **mechanism for maximising labour market flexibility**, thereby contributing to increased labour productivity. Allowing employees the choice to work longer hours on a voluntary basis was seen by employers' organisations and national authorities in some countries positively.

Those in favour of the opt-out perceived benefits, including: **higher levels of labour productivity, greater flexibility** for businesses to compete in a global environment, and to adjust to changing patterns of demand and seasonality, and the ability to ensure labour market flexibility. While there is a lack of quantitative evidence as to the precise nature and extent of these benefits, these types of impacts were commonly identified through the interview programme.

Organisations that were against the opt-out identified **negative impacts on employment, productivity and competitiveness** associated with the use of the derogation contained in Article 22 from the 48-hour limit. Some Trade Unions argued that the continued prevalence of a long-hours culture contributes to increased stress and higher levels of sick leave and absenteeism among workers, and this has impeded labour productivity. Working long hours were viewed as impacting work-life balance negatively with lower productivity in terms of the volume and quality of work produced.

With regard to sectoral productivity, the opt-out was viewed as critical by some employers' and sectoral organisations in ensuring the **flexibility to address fluctuations in demand**. This was especially the case

⁷⁷ Impact Assessment Guidelines, 15 January 2009, SEC (2009) 92

⁷⁸ Guidance for assessing Social Impacts within the Commission Impact Assessment system.

in sectors characterised by peaks and troughs in workflows, such as manufacturing and engineering, and in sectors with seasonal variations, such as hospitality and tourism.

A further negative impact on Europe's overall competitiveness in the view of detractors of the opt-out was the risk that the opt-out derogation **distorts the single market**. Some Member States use the generalised opt-out, whereas others use the opt-out in limited sectors, and others do not use it at all. This could be said to threaten the concept of a level playing field.

Social impacts

The research identified negative and positive social impacts resulting from the use of the opt-out. The evidence presented through the interview programme was mixed and depended to a large extent on whether stakeholders were in favour or against the opt-out. The lack of monitoring data also affects any assessment of social impacts, since it is difficult to obtain concrete information on what proportion of the workforce across different countries, regions and sectors have signed the opt-out.

Among the main findings in relation to social impacts were that:

Some Trade Unions presented anecdotal evidence that suggests **worker health and safety may be adversely affected by a long-hours culture**. Examples were identified in the UK of road accidents that have directly resulted from long hours working among doctors and residential care workers⁷⁹. However, there is a lack of hard evidence.

It was argued by some Trade Unions that the **ill-health effects stemming from excessive working time are often externalised** by employers. For example, the effects of persistent long hours working on concentration may lead to workplace accidents and other accidents, such as road traffic collisions. The costs of such accidents – both social and financial – are borne by families and wider society.

A negative impact of the opt-out was the **difficulty in reconciling family and professional life**. A key concern among some social partners was whether workers signing the opt-out would be able to balance their professional and personal lives. There are arguably a wide variety of potential negative societal implications of long hours working, such as relationship failures, broken homes, etc.

That said, there is an **absence of empirical research on the impact on worker health and safety (both at the workplace and outside) focusing specifically on workers signing an opt-out**. While some studies have examined the impact of long-hours working, this has not focused specifically on those signing an individual opt-out. Since some workers sign an opt-out as a precautionary measure, e.g. BG, UK, this may not equate to the same cohort as long hours workers captured in LFS data.

According to a report by the UK House of Lords⁸⁰, **there is a need for further research** to provide more conclusive proof with regard to the negative impact of long hours working. There is a need to address the lack of available evidence in respect of the impact of the opt-out as this affects different sectors, while taking into account the role that variations in work intensity play in this regard.

Protective conditions have been put in place to protect the health and safety of workers signing opt-outs in some countries (e.g. EE) but not in others (e.g. BG, UK). **Social impacts will therefore vary depending how the opt-out has been implemented**. Some countries have set a maximum upper limit on working hours, others allow workers to take compensatory rest, rather than overtime pay. However, in some opt-out countries, protective conditions have not been introduced and there is no maximum limit on working hours.

The research provides a **mixed picture in terms of the extent to which workers having agreed to opt-out feel a sense of control** over their working conditions.

⁷⁹ Source: this was attested to in the discussions with both the TUC and with the British Medical Association.

⁸⁰ *The Working Time Directive: A response to the European Commission's Review* was published on 8 April 2004

Some workers obtained **greater flexibility in working hours in return for signing an opt-out**. For example, doctors in Germany and Poland were able to negotiate better working conditions (such as less anti-social hours) from employers in exchange for signing an opt-out. There was also an option of taking longer periods of consecutive free time off in recompense for working additional hours when their employer needed them to do so.

However, **negative social impacts were also identified**, such as the perception that signing an individual opt-out does not always represent a genuine choice. Concerns have been raised by some stakeholders in relation to the circumstances in which workers choose to sign the opt-out. There is anecdotal evidence that some workers have been unable to make an objective decision due to undue pressure from employers. Some workers have also been asked to sign an opt-out upon commencing employment.

The opt-out **affects men and women differently**. Women were proportionately more likely to be engaged in multiple employment than men, which may mean they exceed the 48-hour limit in aggregate. Conversely, LFS data shows that men are significantly more likely to work long hours than women. While there is an absence of data on the gender aspects of signing individual opt-outs, due to the higher incidence of long hours working among men, men are arguably more likely to sign opt-outs.

According to some Trade Unions, **women may have less opportunity to work longer hours and to opt out compared** with men, due to childcare and/ or other caring responsibilities. This may put them at a career development disadvantage in terms of achieving a level playing field in the European labour market, especially in sectors of the labour market in which a long-hours culture is prevalent and at senior management level.

Overall conclusions

- There are variations between Member States as to whether they have a generalised opt-out or use the opt-out in limited activities (mainly health services and areas of public service provision requiring extensive use of on-call time);
- The opt-out is not seen as an ‘easy option’ for obviating the requirements of the Directive, but has been used – judiciously as far as can be assessed – as a tool for flexibility in the public sector in particular in order to provide solutions for:
 - the specificities of certain sectors;
 - resource shortages (human and financial);
 - specific forms of atypical work.
- There is no direct cause and effect between the use of opt-out and the presence of longer working hours;
- There is a need for better monitoring data on the extent of use of the opt-out;
- Enforcement and monitoring of the use of the opt-out needs to be strengthened;
- In countries where there is a generalised use of the opt-out across sectors, the opt-out is generally viewed as a useful tool that helps to maximise labour market flexibility;
- In countries that use the opt-out on a more restricted basis, mainly in health services and relating to on-call time, the opt-out appears to be relatively widely used;
- The opt-out is used in both the private and public sectors mainly in those sectors where continuity of care or service is needed or demanded by competitive conditions;
- There is still a lack of awareness about the existence of/provisions of the Directive in some sectors and/or businesses in countries that use the opt-out, notably in residential care and among SMEs;

- There are some concerns that workers have been pressured to sign an opt-out by their employer – or immediately upon commencing employment. However, the scale of this problem is difficult to assess;
- The opt-out has been implemented in different ways across different Member States, with some countries negotiating opt-outs through collective agreements and others through workforce agreements. Irrespective of which way in which opt-outs are agreed, individual workers are still required to sign an opt-out;
- The use of protective conditions in some countries that use the opt-out, but not in others, could risk undermining the aim of protecting workers' health and safety;
- Views on the economic and social impacts of the opt-out (positive, negative) vary widely among stakeholders, largely depending on whether they are in favour or against the opt-out;
- Among the main economic benefits put forwards by supporters of the opt-out include maintaining labour market flexibility and high productivity;
- Detractors of the opt-out question whether the opt-out and long hours working increases productivity and suggest that investment in innovation and new forms of work organisation could achieve similar results without risking workers' health and safety and work-life balance;
- The main social benefits include: the possibility of earning additional income and career advancement, the opportunity to negotiate better working conditions in exchange for longer / more flexible hours;
- Among the social disadvantages include: the risk of undermining worker health and safety through higher stress levels and illness associated with persistent long-hours working; and;
- Women may be less able than men to work long hours and opt-out due to their family commitments/caring responsibilities. This may put them at a disadvantage in accessing senior management positions.

8 CONCLUSIONS

This study is intended to support the Commission in identifying the requirements which working time rules in the EU need to meet over the coming decades. By looking at the impact of the 2003 Working Time Directive, it aims to enable the Commission to better evaluate the comparative effect of different options for action at Community level regarding Working Time, to inform decisions on what action should be taken, and to support better preparation of any initiative which may be decided.

It looks in particular at:

- the impact of important trends on the labour market on working time arrangements;
- the impact of working time on health and safety issues;
- the economic impact of the provisions of the Working Time Directive on businesses;
- the financial and organisational impact of the Working Time Directive on public services (hospitals, residential care facilities, firefighters and police);
- the use of the ‘opt-out’.

The findings and conclusions are based on combining the results of a literature review, stakeholder interviews in a selection of countries agreed in advance with the European Commission, and statistical analysis.

The study also takes into account clarification of interpretation of the Directive by the European Court of Justice, particularly so-called SIMAP and Jaeger rulings, which have had a major impact in particular on doctors and residential care workers. These require businesses to count time at the disposal of the employer in the workplace as working time, even if the worker is merely ‘on call’. The ruling also set boundaries to the extent that rest can be postponed (Jaeger) and to use of the opt-out (SIMAP) and make it clear that consent to opt-out must be explicit (SIMAP).

8.1 IMPORTANT TRENDS ON THE LABOUR MARKET

For almost a century, there has been a clear tendency to regulate and reduce working hours in the interests of health and safety. For the last decade or so, that trend has largely stabilised. While the 48-hour week is the maximum, 40 hours is generally regarded as the norm for the actual standard work week. The actual average agreed standard work week is 38.7 hours. In some Member States, hours actually worked have actually increased. While, overall, the number of hours worked has continued to come down, that essentially reflects the increase in part-time work and the use of flexitime (including condensation of the work week into fewer days) in place of the standard ‘nine-to-five’ working day.

Contemporary reductions in EU working time are caused by the growing diversity in working time arrangements on the labour market. Increased female labour force participation has brought a greater emphasis on work-life balance and has been an important driver behind this growing diversity. Moreover, technology has made teleworking more prevalent, blurring the home/work boundary and with potential downsides in unseen/unremunerated overtime that offsets the advantages of being able to work at home. Attitudes to careers have also changed: the concept of working in and moving up within a single company over a lifetime as the norm is no longer predominant. At the same time, the move towards a 24/7 economy has changed patterns of work (e.g. greater intensity of work, tighter deadlines). All this suggests that reductions in working time will in future be moderate, but the trend to diversity and atypical working arrangements will continue, and that there are strong economic and social factors which mean that convergence across the EU cannot be assumed.

8.2 IMPACTS ON HEALTH AND SAFETY

Regulation of working time always involves striking a delicate balance between two competing interests. On the one hand, both employers and workers have a clear pecuniary incentive in long hours. Employing workers for longer hours increases the profit margins of their employers. Workers may be well inclined to work longer hours in order to earn a higher pay and to improve their living conditions. On the other hand, working for too many hours may be detrimental to health and safety due to insufficient rest breaks, inadequate time to recuperate or excessive consecutive hours or days (e.g. increased risk of burn-out or an occupational accident due to fatigue).

Based on an analysis of the literature, we demonstrate that long working hours have a detrimental impact on the safety, health, and work-life balance of the worker. There is an exponential increase in the accident risk after 7-9 hours. The threshold appears to be around 10 hours. Long hours clearly affect work-life balance, but there are no studies which show the impact on family life as such, particularly children, or on society, e.g. from inability to participate in community life or interest groups. From a health and safety point of view, there is no appropriate maximum limit for weekly working time. Since there is a linear increase in health impairments as numbers of working hours increase, the question of setting a limit is a question of how much impairment one is prepared to accept.

The growing new trends for atypical working arrangements could lead to health and safety problems:

- *Working at 'unusual times'*, notably at weekends, is detrimental to safety, health, wellbeing and work-life balance. Despite the trend to a 24/7 society, evenings and weekends are still not seen by society as 'usual' working times, so that working during these times – even occasionally - can be expected to be associated with physical and psychosocial impairments. Compensatory rest cannot fully outweigh these effects.
- *Shift work* increases the risk of impairments to safety, health, and social participation. Shift workers are susceptible to sleep, digestive and cardiovascular disorders. The more night shifts someone works, the more likely are accidents. In addition, the children of shift workers perform less well at school and are less likely to go on to higher education. Shift workers show a higher incidence of broken relationships and less involvement in the pursuit of their interests in participative institutions (councils, trade unions, political parties etc.)
- The risk of accidents is greater where *rest breaks* are postponed or infrequent. Postponing rest breaks during the working day thus leads to an increased risk to safety, due to the cumulative effect of fatigue – though it is difficult to unbundle the effect of what are normally associated factors of long hours and lack of sleep.
- *Flexible working hours* may seem superficially attractive, but can be a mixed blessing. A high degree of variability or irregularity of working hours can be detrimental to health and well-being in the same way as shift work. The decision-making process plays a role: there is evidence that “company-controlled” variability has stronger negative effects than “employee-controlled” variability, but employee control does not totally negate the detriments.
- *Factors in combination*: there are effects on health and safety which result from a combination of different characteristics of working hours and their interactions. These effects can be purely additive, as is the case with long working hours and shift work, but also interactive, as is the case with flexible and long working hours.

8.3 IMPACTS ON BUSINESSES

In terms of the specific impact of the Working Time Directive on businesses, the focus of the analysis lies on the implications for productivity (macroeconomic approach) and two surveys of European enterprises (microeconomic approach).

Given the data available for the macroeconomic analysis, the study analyses the relationship between productivity (Total Factor Productivity – TFP) and changes in the number of hours worked (Average yearly hours worked per employee - HPE) – whether these changes were caused by the WTD or not – in six sectors:

- Construction,
- Hotels & Restaurants,
- Financial Intermediation,
- Textiles,
- Post & Telecommunications, and
- Electricity, Gas & Water Supply.

We found a general negative impact of increased yearly working hours on productivity in Textiles and in Financial Intermediation– with some country-specific differences, such as no impact on textiles in Spain and Hungary but a high impact in financial intermediation. We found no clear impact in the Hotel & Restaurant industry, but a significant impact in some countries in the Post & Telecommunications and Electricity, Gas & Water Supply industries – but with significant variations by Member State - there was a negative impact for one or other or both sectors. In Construction, there was a correlation between increasing HPE and TFP in some countries, while in others there was a decrease in productivity when HPE was increased.

Thus, there is no pattern. A country may display a strong impact of a change in yearly hours worked per employee in one industry, while remaining stable in another industry with the same change in hours per employee.

In terms of the current impacts of the Working Time Directive and future potential developments, surveys of European enterprises (notably SMEs) show that:

- measurement of the working time and the use of the reference period are not always in line with the Directive;
- many enterprises believe that a regulation change to have the option to calculate average weekly working time over up to 12 months by law would be useful;
- enterprises continue to consider on-call time differently from working time – and are apparently unaware of the implications of the Court of Justice rulings;
- companies using “on-call” appear to be readier than in the case of overtime to compensate for it financially rather than offering time off.
- a significant proportion of companies use overtime, generally ensure competitiveness and to respond to seasonal fluctuations;
- companies in countries using the opt-out or partial opt-out perceive its potential elimination negatively.

Thus, there is support in business for a change to allow measurement of working time of 12 months to be legislated for as well as negotiated in collective agreements, and support for the ‘opt-out’ among companies operating in ‘opt-out’ environments now.

8.4 IMPACTS ON PUBLIC SERVICES (HOSPITALS, RESIDENTIAL CARE FACILITIES, FIREFIGHTERS, POLICE)

We present in this general conclusion the main impacts on labour market, on the rights and job quality, on quality of care or services, organisations and finance.

Labour market impacts:

- The implementation of the Working Time Directive has led to an increased demand for specialised and qualified labour in the healthcare and residential care sectors, leaving the public sector forced to juggle between the requirements of the Directive and shortages of qualified personnel on the supply side of these labour markets.
- Public sector spending limits have constrained the ability of the public sector to hire additional police and fire service staff. There has, therefore, been little job creation effect and frequently an increase in competition between providers. Competition between providers is not necessarily based on higher pay (which tends to be regulated), but often on better working conditions (flexible hours, childcare – for example).
- There is evidence of increasing reliance on the part of the health institutions in the EU-15 Member States, on immigration as a solution to recruiting additional staff. However, in the EU-12, the emigration of qualified staff to Western and Northern European countries is exacerbating an already precarious labour market situation, with severe shortages of nurses and doctors.
- There is a tendency among doctors in teaching hospitals in some Member States to shift away from a full-time salaried status (as hospital doctors with an employee contract) to becoming self-employed. Self-employed doctors are not subject to the provisions of the Working Time Directive. Other solutions to cope with the effects of the Court of Justice rulings have been outsourcing and greater use of temporary staff. In the residential care, there is evidence of non-compliance as a result of ignorance about requirements and of high use of the individual opt-out.

Rights and job quality:

- The health sector has improved benefits (rather than pay) in order to attract and retain additional staff in the face of skills shortages (which are assumed to have been exacerbated by the implementation of the Directive). In Germany, in particular, implementation of the Directive brought in a new consciousness of risks to health and safety, and improved risk and hazard analysis. Overall, there appear to have been benefits for the work-life balance.
- There is, however, evidence of loss of income in some Member States where there was reliance on overtime pay for long hours that was de facto a standard part of the pay package.
- As a result, some hospitals which introduced alternative working arrangements initially faced resistance to change among some groups of employees who were concerned about a loss of income. There is evidence of non-compliance, either in terms of actual hours worked or in actually taking time off in lieu because of staff shortages (which may be the result of skills shortages or of public sector budget restrictions). These factors are present to some extent in all sectors.
- There are also some concerns that junior doctor training will suffer if they cannot work longer hours to get experience, but the evidence is inconclusive and the concern is also being addressed in some instances with changes to training.

Quality of care or service:

- Ensuring the quality of care or service has also been one of the key drivers behind the choice of a growing number of Member States to opt out fully or in some sectors that have a high prevalence of on-call time, and in rural areas, where hospitals are smaller and find it anyway more difficult to find staff. Fire services also suffer from recruiting problems in rural areas.
- Although examples of longer hospital waiting lists were found during the data collection phase (UK), it is difficult to attribute them directly to the implementation of the Working Time Directive.
- There are also concerns in many Member States about patient safety, e.g. linked to good quality handovers and more intensive work as a result of changed shift patterns. However, there are also instances where quality of care is perceived to have increased or be unchanged

Organisational impact:

- Any impact at organisational level has to be seen in the context of very different starting points even within Member States. These are a function of traditional practices, skills shortages and their impact on bargaining power, and citizens' needs – with different pathologies in rural areas (where there are more older people), and different policing and fire service requirements in rural as opposed to urban areas.
- There has clearly been an impact in the health sector because of its culture of long hours on on-call hours in virtually every Member State, and in particular in certain specialities – accident and emergency, obstetrics and anaesthetics. The impact has been addressed in some instances with additional funds for recruiting, in some by moving to shift systems, in some by more use of temporary, external or self-employed staff, in some by redeployment (via role substitution or cross-cover), in others by organisational re-engineering (including by the introduction of greater 'democracy', i.e. consultation of staff), and in some by use of the opt-out. These solutions may be used in combination. There is also evidence that a divergence between theoretical compliance and actual practice is often a de facto solution.
- While the impact seems to have been greatest in the health sector, the same impacts are also seen to some extent in the other sectors.

Financial impact:

- There is little data for quantifying the financial impact of implementation of the Directive, or for measuring trade-offs. While there have clearly been one-off administrative costs from business re-engineering and new systems of time and remuneration measurement, and increased personnel costs as a result of additional recruiting, figures are hard to come by. Still less is it possible to measure the trade-off with savings on overtime pay and payments for on-call time.
- The same is true of the costs and benefits to employees. There are examples of apparent loss of income from shorter working hours as a result of implementation of the Directive, but there is also clear evidence of improved fringe benefits and some evidence of employees using their bargaining power given the existence of skill shortages to increase their pay. It may also be that doctors who have moved to self-employment have improved their income or avoided a loss of income.
- Governments have in some cases provided funding for the introduction of alternative working models (though they appear to be a minority) or for additional recruiting. The data for all these costs is strongest in the health sector, but the pattern is consistent across all sectors.

8.5 USE OF THE OPT-OUT

There are EU Member States that i) do not use the opt-out at all (12), ii) use the full opt-out across all sectors (5) and iii) only use the partial opt-out (10). The opt-out is implemented in different ways, e.g. there may or may not be an upper limit on working time. In some Member States, the opt-out is used either very largely or entirely via collective bargaining; in others, the opt-out has been legislated for. Very few mechanisms appear to be in place for monitoring the use of the opt-out in practice and to ensure that there are no excesses.

The **five Member States using the opt-out across all sectors** ('full opt-out') are Bulgaria, Cyprus, Estonia, Malta and the United Kingdom. The policy rationale in EU countries using the full opt-out has centred on both competitiveness (e.g. the need to ensure maximum flexibility for businesses, for example in responding to varying levels of demand, and adapting to seasonal work) and the importance of retaining individual choice (the employee should determine how many hours they work and whether they wish voluntarily to exceed the maximum statutory limit in the Directive).

The most common uses of the opt-out in **partial opt-out countries** are first in respect of "on call" time for public sector workers (Belgium, Germany, France, and Poland) and secondly, those that allow the opt-out in public services more widely without restricting this to on-call time alone (Czech Republic, Hungary, the Netherlands, Slovenia, Slovakia and Spain). There has been an increase in the number of EU countries using the partial opt-out in the past few years, principally as a result of the impact of the SIMAP-Jaeger ECJ rulings.

In practice, use of the opt-out is actually concentrated in certain sectors – those operating in a 24-hour global environment – e.g. financial services, IT; sectors that are close to the market and driven by consumers' final preferences - e.g. textiles, clothing manufacture; sectors with seasonal peaks of supply and demand - e.g. tourism, hotels and catering; sectors in which there is a prevalence of a long hours culture – e.g. construction, transport and distribution, some areas of public services (education, residential care and among many public services, also among managerial and professional workers), financial services and the film industry.

The requirements of the **public health service in providing a 24/7 continuous service**, while at the same time respecting ECJ judgements in respect of on-call time, are among the most important factors behind the use of the opt-out. However, it should be stressed that the opt-out is not extensively used in the health sector in all opt-out countries.

Levels of awareness about the *possibility of signing an opt-out* - among both employers and employees in countries using the derogation - are clearly important factors in the extent of the prevalence of workers signing individual opt-outs. There is some evidence that awareness is low, particularly in some residential care operations and SMEs. Workers signing an opt-out appear to be financially motivated or to feel it will further their career. There is some evidence of feeling an element of compulsion, but this is from a clear minority of cases.

With regard the **impact of the opt-out**, it is difficult to establish any firm correlation between whether a country uses the opt-out and the prevalence of long hours working, given the number of other factors which have been influencing trends in working hours over the last decade. Moreover, among countries using the full opt-out, there are variations in average working hours and the extent to which a long hours culture is ingrained. There does not therefore appear to be a causal relationship between using the opt-out and a high incidence of long working hours.

On the other hand, it is clear that the implementation of EWTD has been an important driver of shorter working hours in many EU countries, including those using the opt-out. The impact of compliance with EWTD on work organisation has been especially pronounced in some areas of the public sector, such as health. In this context, the opt-out is seen as having offered the requisite flexibility for dealing with staff

and skills shortages, the particular difficulties in some rural areas, continuous service provision both in relation to hours and workarounds in relation to the use on-call time, and the use of volunteers in fire services.

Although the opt-out was viewed as a useful mechanism for ensuring flexibility in public service delivery, it does not appear to have been abused by the vast majority of public sector organisations. Indeed, its usage has not been encouraged. Rather, in many opt-out countries, the opt-out was viewed as a guarantor of flexibility and a fall-back option. While there are limited statistics on the use of the opt-out, the evidence suggests that the total proportion of employees concerned among the labour force is not that high in most opt-out countries.

8.6 OVERALL CONCLUSIONS

We conclude overall, subject to the proviso that there are major gaps in the data available in a number of areas, that:

- Implementation of the Working Time Directive has coincided with a period when the steady reduction in the length of the statutory working week and in hours actually worked has slowed considerably.
- The trends in working time are the same across the EU, but there is no convergence of the numbers of hours actually worked, nor is it possible to establish a link between the Working Time Directive and actual hours worked, because it is not possible to unbundle other factors: tax and welfare regimes, industrial relations traditions and the impact of prosperity on personal choices, i.e. for more leisure or more income, and economic cycles.
- The prevalent trends which would need to be taken into account in any future revision of the Directive are diversity in working patterns and flexibility, in particular to take work/life balance and increasing female labour force participation rates into account.
- Any future revision will need to reconcile this trend with its downsides in terms of risks to individual and collective health and safety, as the evidence is strong for the detrimental effects on health, safety and work/life balance of long hours, shift work, night work, weekend/evening work, frequent and sudden changes in working hours and postponing rest periods.
- It is not possible to establish a clear pattern of causality between working hours and total factor productivity, and therefore to make any firm deductions – even at the level of selected sectors or specific Member States – about the relationship between the two and thus of the impact of the Directive on the private sector.
- The areas of working time regulation which have the greatest practical impact on business are the 4-month limit on the reference period when the period is legislated for as opposed to the 12 months allowed in collective agreements, and the requirement to equate on-call time with working time – a requirement which is not necessarily being complied with.
- The Directive has been beneficial where it has led some public sector employers to re-engineer their businesses – either to limit working hours or on-call time, with clear evidence of an improvement in working conditions for employees in many cases, and a body of evidence that quality of care and service has not suffered.
- The Directive has also led in some cases to loss of income, a perception that a deterioration in the quality of care or services is inevitable, measures to obviate the requirements of the

Directive, compliance which is theoretical, low awareness of the requirements of the Directive, and use of the 'opt-out' in order to provide workarounds.

- The Working Time Directive and the Court of Justice rulings on interpretation of the Directive have had a significant impact on public service sectors with a 'long-hours' culture and/or required to provide continuity of service and/or which have in the past relied heavily on staff being 'on call'. Use of the opt-out has been on the increase since the SIMAP/Jaeger rulings.
- The use of the 'opt-out' is, however, not generally seen as an 'easy option', but a flexibility mechanism, which is not misused for wholesale abuse of the provisions of the Directive.
- Monitoring and enforcement of the use of the opt-out by Member States in both the private and public sectors is nevertheless an area that needs improvement.
- Stakeholders – including employers – would welcome some improvements, but are overall supportive of the objectives of the Directive.