

**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*

**Executive Summary**

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## 1 EXECUTIVE SUMMARY

Treading a middle course between worker health and safety on the one hand, and a competitive economy and discretion for employees to increase their incomes by working longer if they so wish on the other, has been a difficult balancing act for many decades. Nevertheless, 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. However, hours actually worked have generally continued to come down. That trend too has now also broadly speaking flattened out.

However, hours worked are only part of the story. The last quarter century – partly as a result of increased female labour force participation rates – has brought a greater emphasis on work-life balance and part-time work. At the same time, the move towards a 24/7 economy has changed patterns of work, while the globalisation of the economy and difficult economic times in industrialised countries have strengthened the case of those who argue that further reductions or too much rigidity would harm competitiveness. The balancing act has, therefore, become if anything more complex.

This study looks at the history in EU terms of that balancing act, and in particular the impact of the 2003 Working Time Directive, and what the various impacts of the Directive could imply for any future revision of the Directive.

### 1.1 CONTEXT

#### 1.1.1 The European Working Time Directive – the first two decades

The European Commission, which has always had Treaty obligations in this respect, formally proposed specific legislation for the first time in 1990. This culminated in the Working Time Directive of 1993. It was complemented by the Excluded Sectors Directive in 2000. They were codified as Directive 2003/88/EC. This is the European Working Time Directive (EWTd or WTD) covered by this study. It set minimum standards for the Member States and covers all but a few specified groups and a handful of sectors covered by other legislation.

The Directive regulates the maximum working week (48 hours is the norm), rest periods, night work and paid annual leave of a minimum of four weeks. It recognises the need for flexibility by allowing compliance to be averaged out over longer ‘reference’ periods and allowing collective agreements to derogate from the rules on rest periods, the length of night work and the reference periods. It also allows derogations in national law for specified sectors (e.g. residential care) or for specified circumstances (e.g. long employee commutes). Derogations must be compensated for by additional rest times. A full derogation is possible for autonomous workers (executives, family members in family-run businesses). Four weeks annual leave is an immutable requirement.

No derogation is possible for the 48-hour working week limit, but Member States can allow employees to opt out of this maximum. This must be their choice, consented to in advance. The employer may not penalise them if they decline to opt out.

The European Court of Justice has clarified interpretation of the Directive in several rulings, of which the most important for the purposes of this study are the so-called SIMAP and Jaeger rulings, which have had a major impact in particular on doctors and residential care workers. The Court has made it very clear that time at the disposal of the employer in the workplace is working time, irrespective of whether the worker is merely ‘on call’. Any time that does not meet the definition of working time is a rest period. The Court has also set boundaries to the extent that rest can be postponed (Jaeger) and to use of the opt-out (SIMAP). The SIMAP judgement reinforces the principle of individual (rather than potentially implicit) consent to opting out.

In order to comply with provisions in the WTD to review the opt-out and the length of the reference period for calculating weekly working time (generally 4 months, but with the possibility of derogation up to 12 in collective agreements) and the rulings of the European Court of Justice, and at the same time to take society’s changing needs and expectations into account, the Commission launched a process of revision in 2003. It proposed restricting the use of the opt-out and envisaging a phase-out, defining a new category of inactive on-call time, setting tighter requirements on when compensatory rest must be taken, allowing the reference period to be extended to 12 months by national law, as well as by collective bargaining, and encouraging measures to improve compatibility between work and family life. The European Parliament sought to go further in protecting the position of workers, e.g. by setting a date for disappearance of the opt-out – one of the areas of the Directive where the tensions between health and safety, and competitiveness is most marked. The Council could not, however, be convinced of the necessity of the Parliament’s counter-proposals. The two were unable to reconcile their views and in 2009 the proposed revision was formally abandoned.

### 1.1.2 Key issues

The *opt-out* is possibly the most contentious issue and is a particular focus of this study. Five Member States apply it to all sectors and ten in certain activities, which in each case cover at least part of the health sector.

Other key issues are:

- the de facto differentiation between Member states where collective bargaining is still extensive across both the private and public sectors, and those where it is not – because the *reference period* can be extended to 12 months by collective agreement, but not by law.
- *on-call time* because of what is perceived a high potential cost to the public sector if all on-call time, notably in the health sector – a sector which in any event tends to be facing skill shortages, is defined as working time. The Court of Justice has already ruled out one potential avenue of compromise – expressing on-call time as a percentage of working time.
- how to deal with situations where workers have more than one employer (*multiple contracts*);

- the appropriate balance between employer and employee rights when either one is seeking flexibility when recognising the right to *work/life balance*;
- how much more stringent to make the rules on *compensatory rest*.

## 1.2 THE OBJECTIVES OF THIS STUDY

This study sets out to provide some evidence-based underpinning to the debate on the key issues to assist the European Commission to design updated legislation which can reconcile the conflicting interests and take emerging trends into account. 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.

It looks in particular at:

- The impact of important trends on the labour market on working time arrangements;
- Health and safety aspects of working time: effects of working hours on safety, health and work-life balance;
- The economic impact of the Directive on businesses;
- The impact of the Directive on the public sector;
- The use of the opt-out.

## 1.3 HOW LABOUR MARKET TRENDS ARE AFFECTING WORKING TIME

The reduction in hours actually worked, which has been measurable for more than two centuries, has come virtually to a standstill, with periods and Member States where it has actually increased. While the 48-hour week is the maximum, 40 hours is generally regarded as the norm for the actual maximum standard work week – with France at the lowest end of the spectrum with 35 hours. The actual average agreed standard work week is 38.7 hours. The number of hours worked has continued to come down, but 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.

Working hours are generally higher in new Member States than in the EU-15 and still differ significantly from Member State to Member State – with no evidence of convergence. There are some fluctuations in line with economic cycles and there is a correlation – at least in the old Member States – between prosperity and working hours. With higher incomes, workers tend to opt for more leisure time. Tax and welfare regimes influence choices. So do, collective bargaining/industrial relations traditions, where five clusters can be identified.

Part-time work and flexitime to suit employees (particularly women) – and a service-based economy - are just two reflections of the increasing diversity of working time arrangements, but there are a number of

others. Technology, for example, has made teleworking more prevalent, blurring the home/work boundary and with potential downsides in unseen/unremunerated overtime that offset 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.

In addition, the WORKS project<sup>1</sup> has documented how ‘global value chain restructuring’ has an impact on the organisation of work and of working time in companies, including through greater intensity of work (e.g. from tighter deadlines). The impact of this appears to be greatest in the knowledge-based industries, where the ability to provide round-the-clock or weekend service is a factor of competition. However, the position in the value chain makes a significant difference. The further the distance from the central node towards the periphery, represented by subcontractors, second-tier subcontractors, single freelance workers or outworkers, the greater the flexibility and the more likely contracts will be atypical.

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.

We conclude that:

- Any new or reviewed Working Time Directive will have to take into account:
  - the trend to diversity in work patterns, and
  - the factors contributing to differences across the EU.

#### 1.4 HEALTH AND SAFETY ASPECTS OF WORKING TIME

The (negative) link between *long hours* and/or the absence of adequate rest periods, and worker (or patient) safety is well documented. There is an exponential increase in the accident risk after 7-9 hours. Consistently working long hours is detrimental to personal health, and even mortality – though it appears that the nature of the job and the workload are key allied factors. The threshold appears to be around 10 hours, but there are no long-term studies of this or the effects of working long hours over the long term. 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.

*Working at ‘unusual times’*, notably at weekends, is also detrimental to safety, health, well being 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 compensate for these effects.

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<sup>1</sup> <http://www.worksproject.be/home.htm>

*Shift work* also increases the risk of impairments to safety, health, and social participation. Shift workers are susceptible to sleep, digestive and cardiovascular disorders. Shift work may be carcinogenic, although the evidence is not sufficient to be clear-cut. The more night shifts someone works, the more likely are accidents (particularly after the 4<sup>th</sup> night shift). 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.

We conclude that:

- long working hours have a detrimental impact on the safety, health, and work-life balance of the worker, and on the general public, e.g. patient safety;
- safety is at risk once the working day reached 7-9 hours, but this varies depending on the nature of the activity and when rest breaks are taken – postponement exacerbates risk; a rest period of 11 hours (as in the WTD) appears to be a minimum;
- the appropriate maximum limit for weekly working times depends on the degree of health impairment which is deemed acceptable;
- additional compensatory time off appears justified in the case of ‘unusual’ working time arrangements;
- the impact of different additive and interactive factors in combination should be taken into account; short reference periods would avoid an undue accumulation of negative effects;

- employee discretion over working hours is a positive, but cannot totally compensate for negative effects of detrimental factors.

## 1.5 ECONOMIC IMPACT ON BUSINESS

There is a lack of empirical studies on the impact on business. Consequently, given the difficulties obtaining data which would permit the specific tracking of productivity changes related to the WTD itself, the study analyses the relationship between total factor productivity and changes in the number of hours worked (whether these changes were caused by the WTD or not) in six sectors believed to be most susceptible to productivity impact. In addition, it analyses two surveys carried out by the European Commission on business – and particularly SME – awareness of, compliance with and perceptions of the WTD.

The sectors covered by the macroeconomic analysis are:

- Construction,
- Hotels & Restaurants,
- Financial Intermediation,
- Textiles,
- Post & Telecommunications, and
- Electricity, Gas & Water Supply.

These are service sectors or highly seasonal manufacturing sectors where a regulatory constraint put on working time could not be overcome by fluctuation of inventories. The context is one of highly diverse labour productivity growth rates in Europe over the last 15 years and of highly variable total factor productivity levels across Member States and sectors.

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 (old and new EU Member States) and non-EU countries, and was driven by the degree of availability of data.

Average yearly hours worked per employee (HPE) were used as a proxy for the Directive. This choice embodied the assumption that implementing the Directive or equivalent legislation would be translated into a change of HPE. HPE is also likely to be influenced by weekly working time, annual leave, resting time and in some way the reference period. The methodology took the stringency of employment protection legislation and R&D intensity into account to the extent possible.

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.

The surveys among European enterprises show gaps in knowledge and compliance. For example, it seems that a significant minority do not track working time, and that many are unaware of/have not complied with the Court of Justice rulings on on-call time. The surveys show that business is concerned about the effect working time regulation can have on competitiveness and the ability to deal with seasonal fluctuations. It is logical, therefore, that there is strong support for allowing measurement over 12 months rather than 4, both by law and by collective agreement – as opposed to merely the latter at present. Companies in countries where the opt-out is in use in some form want it continued. The studies also show up a difference in the way “on-call” time is compensated for, i.e. the compensation is more likely to be financial (as opposed to taking the form of ‘time off in lieu’) than is the case for other forms of overtime. Other aspects of the directive are generally not contentious.

- 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.
- Companies operating in an ‘opt-out’ environment now want it to stay in place.

## 1.6 IMPACT OF THE WORKING TIME DIRECTIVE ON PUBLIC SERVICES

The findings in this area are based on fieldwork from ten countries, which looked at the impact of the Directive and the Court of Justice rulings on four sectors: health, residential care, fire services and the police – sectors which are characterised by a need for continuity of service, a culture of long working hours and a tendency to invoke the opt-out. Hospitals (and in particular in the case of doctors) and fire services also tend to make considerable use of on-call time.

*Labour market impacts:* in nearly all the EU Member States selected 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 market. Public sector spending limits have also 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 recourse to immigration as a new source of skills – some of which is creating a skills drain from new to old Member states – and moves to self-employment (particularly of doctors) in order to



take them outside the scope of the Directive. Other solutions 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:* as noted above, 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. 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.

Nevertheless, 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 in particular. 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), by providing childcare facilities or more flexible working arrangements, in some by organisations 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. Recourse to some of these solutions is difficult to unbundle from a general trend in the labour market to be more understanding of work-life balance, particularly as female labour force participation rates increase.

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.

We conclude, therefore, that:

- there is broad support for the health and safety objectives of the WTD, but public sector spending constraints and skills shortages have resulted in governments and/or employers looking for ways to reduce the impact of the WTD and the SIMAP/Jaeger rulings in the four sectors considered;
- the WTD 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 WTD 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.

## 1.7 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 to voluntarily 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.

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 necessarily extensively used in the health sector in all opt-out countries.

*The opt-out by sector:* 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 areas of the public sector (partial opt-out countries). 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 manufacturing; 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 individual opt-out:* 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.

*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.

What is clear is that the implementation of the WTD has been an important driver of shorter working hours in many EU countries, including those using the opt-out. The impact of compliance 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.

*The opt-out in practice:* Although the opt-out was viewed as a useful mechanism for ensuring flexibility in public service delivery, it does not appear to have been misused 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.

It is difficult to assess the extent to which the opt-out has been used by different types of workers, but there is some evidence that the opt-out is especially relevant to those in part-time work and multiple employment.

We conclude that:

- There is a need for more data on implementation and enforcement of the Directive. The conclusions drawn here should be treated with caution in the absence of data;
- 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, irrespective of the type of opt-out;
- There is still ignorance of the existence of/provisions of the Directive in some sectors and/or businesses, notably residential care and SMEs;
- There is no direct cause and effect between the use of opt-out and the presence of longer working hours;
- 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