

# Working overtime

## Statistics in focus

### POPULATION AND SOCIAL CONDITIONS

11/2004

#### Population and living conditions

Authors  
*Christine Vaguer,  
Aloïs Van Bastelaer*

## Contents

12% of female employees and 17% of male employees worked overtime in spring 2001..... 1

8 hours of overtime per week .... 2

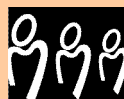
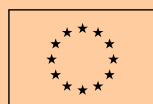
Women worked 3 hours of paid overtime and men 5 hours ..... 2

Overtime prevalent among prime-age employees ..... 3

Paid overtime of machine operators and assemblers ..... 4

Unpaid overtime of managers and professionals ..... 4

Overtime prevalent in medium-sized and large establishments. 6



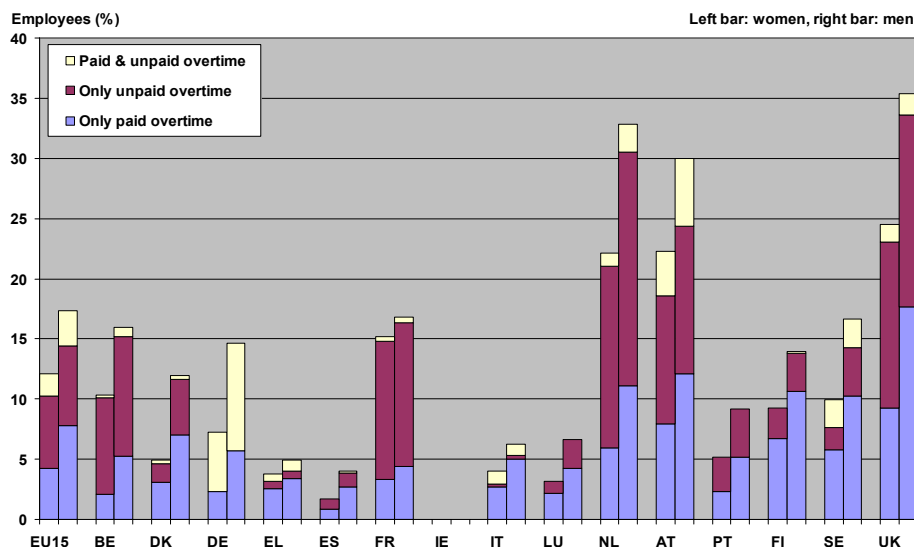
Manuscript completed on: 12.07.2004  
ISSN 1024-4352  
Catalogue number: KS-NK-04-011-EN-N  
© European Communities, 2004

### 12% of female employees and 17% of male employees worked overtime in spring 2001

In spring 2001, 12% of female employees and 17% of male employees in the European Union Member States worked overtime. The relative frequency of overtime is much lower among part-time than among full-time employees. Some 18% of male full-time employees worked overtime, but only 8% of male part-time employees. The difference is smaller for women. These data were published in a previous Statistics in Focus (theme 3 – No 7/2004). This issue of Statistics in Focus provides more details about the amount of paid and unpaid overtime and differences by age, occupation and size of the establishment.

In EU-15 in 2001, most overtime hours were worked by male full-time employees, employees aged 55 or more, senior officers, managers, professionals and machine operators and assemblers. When paid overtime is distinguished, relatively more paid overtime hours were worked by female part-time employees, young male employees, machine operators and assemblers. In the whole EU-15, the number of overtime or paid overtime hours did not vary by establishment size, although overtime was more prevalent in medium-sized or large local units.

Overtime is a short-term response by the employer to increases in output demand or demand for services or to meet a deadline. However, paid overtime is an expensive solution because it is reimbursed usually at premium rates or is compensated later by hours off. The duration of paid overtime is therefore in general limited. In particular circumstances, overtime may be used to compensate for a shortage of skilled employees. Employees may have several reasons for working overtime. Some need to work paid overtime to make ends meet. Others work extra hours because they believe they must for their career or to get the work done when they are replacing colleagues or in a situation of downsizing.



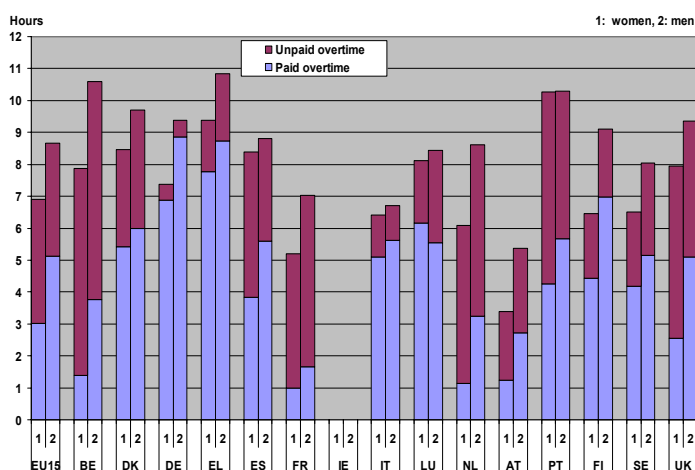
Graph 1: Employees working overtime (%) by sex, 2001

## An average of eight hours of overtime per week at the European level

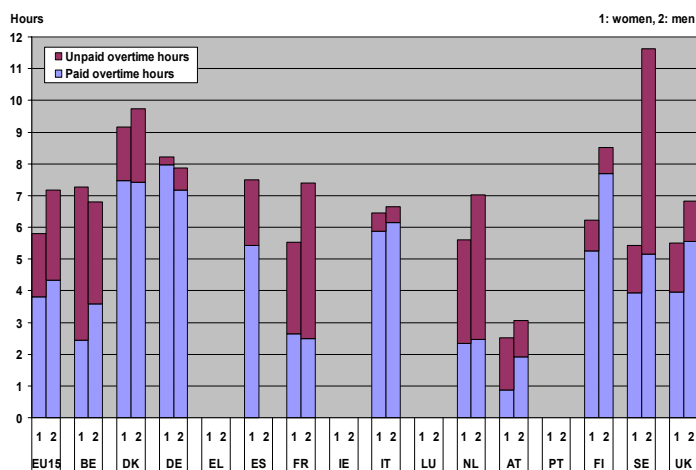
In the EU in 2001, employees worked, on average, 8 hours of overtime per week. Male full-time employees worked most overtime, almost 9 hours. Female full-time employees worked 7 hours of overtime. This is 1–2 hours more than part-time employees. Male part-time employees worked, on average, 7 hours of overtime and female part-time employees fewer than 6 hours.

In Belgium, Denmark, Germany, Greece, Spain, Luxembourg (women only), Portugal, Finland (men only) and the United Kingdom, full-time employees

worked up to 2 hours of overtime more than the EU average. Whether part-time employees in the Member States worked more overtime hours than the EU average varied by gender. In Sweden, male part-timers worked 4 additional hours of overtime compared with the EU average, but in Belgium and Spain, female part-timers worked between 1 and 2 additional hours of overtime. In Denmark, Germany and Finland, both men and women worked more overtime hours than the EU average.



Graph 2: Average number of paid and unpaid overtime hours per week of full-time employees by sex, 2001



Graph 3: Average number of paid and unpaid overtime hours per week of part-time employees by sex, 2001

## Women worked three hours and men five hours of paid overtime per week

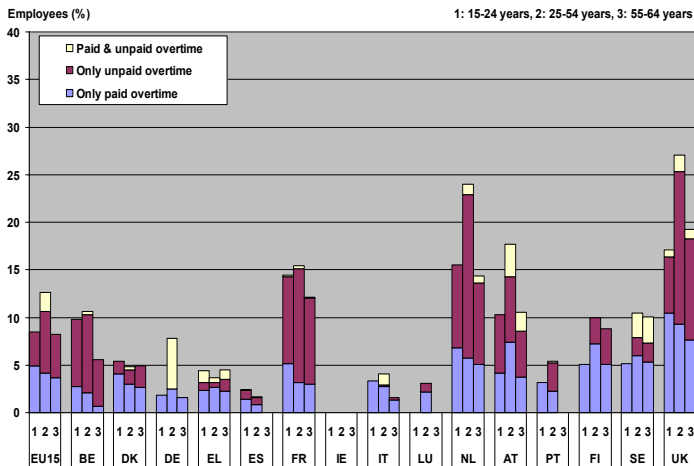
Not all overtime is paid. The overtime hours of men with a full-time job are more likely to be paid than the extra hours of women with a full-time job. In the EU in 2001, women with a full-time job worked three hours of paid overtime out of 7 hours of all overtime per week (about 40%), whereas men with a full-time job worked 5 hours of paid overtime out of 9 hours of all overtime per week (60%). Female as well as male part-timers worked about 4 hours of paid overtime per week. Although part-timers worked fewer overtime hours, relatively more overtime hours were paid, at least for women.

In Denmark, Germany, Greece, Italy and Finland, the share of paid overtime hours of full-time employees or part-time employees was much higher –at least 70%– than the EU average. In Germany, Italy and Finland, part-time employees were reimbursed for almost all overtime hours. In the United Kingdom, the share of paid overtime hours was high for part-time employees only; for full-time employees less than a half of overtime hours was paid.

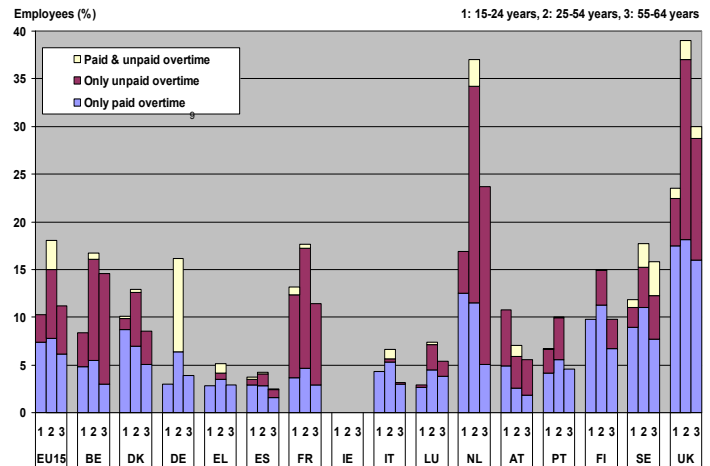
## Overtime prevalent among prime-age employees (aged 25-54)

In the EU in 2001, both female and male prime-age employees (aged 25-54) worked overtime relatively more frequently (respectively, 13% and 18%) than younger or older employees. In Germany, the Netherlands, Austria (only women) and the United Kingdom, this difference was even more pronounced.

Paid overtime varied only slightly by age. In most Member States, employees aged 55 or more worked paid overtime less frequently than young or prime-age employees. In the EU, nearly 4% of female employees and 6% of male employees aged 55 or more worked paid overtime, compared with more than 4% and more than 7% respectively of younger female and male employees.



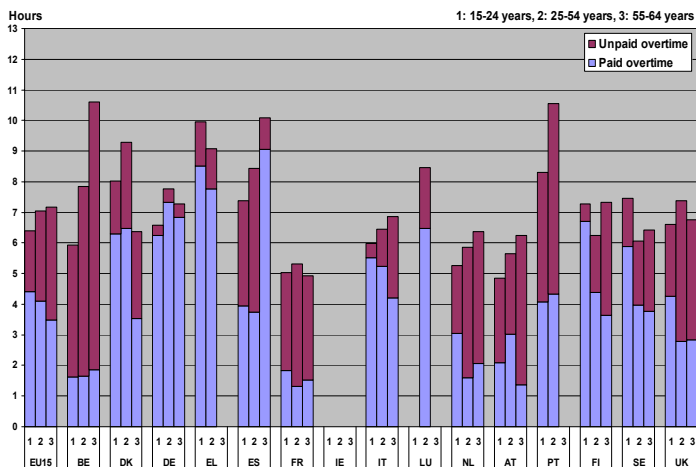
Graph 4: Female employees working overtime (%) by paid/unpaid overtime and age, 2001



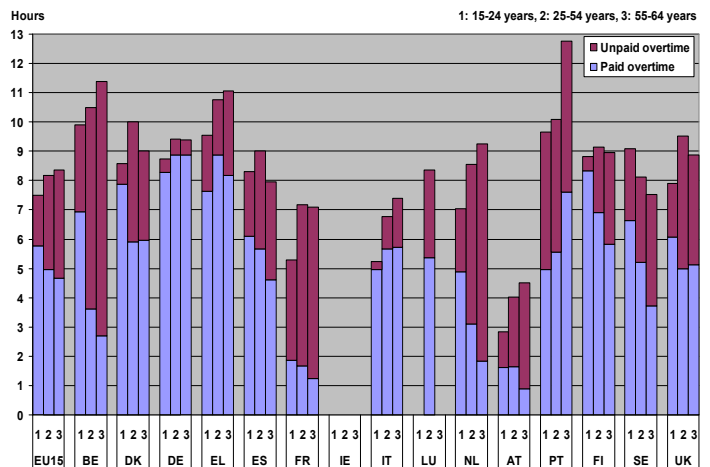
Graph 5: Male employees working overtime (%) by paid/unpaid overtime and age, 2001

Although in the EU globally, overtime was prevalent among prime-age employees, most overtime hours were worked by employees aged 55 or more. However, they worked the fewest paid overtime hours. Only a half of overtime hours was paid. Female employees aged 55 or more worked 7 hours overtime but fewer than 4 hours were paid. Male employees aged 55 and older worked

more than 8 hours overtime but fewer than 5 hours were paid. In most Member States, employees aged 55 or more worked most overtime hours, although in Sweden, young employees worked most overtime hours. In Denmark, Germany, Spain (only men), France, Finland (only men) and the United Kingdom, prime-age employees worked most overtime hours.



Graph 6: Average number of paid and unpaid overtime hours per week of women by age, 2001



Graph 7: Average number of paid and unpaid overtime hours per week of men by age, 2001

## Machine operators and assemblers worked most paid overtime hours

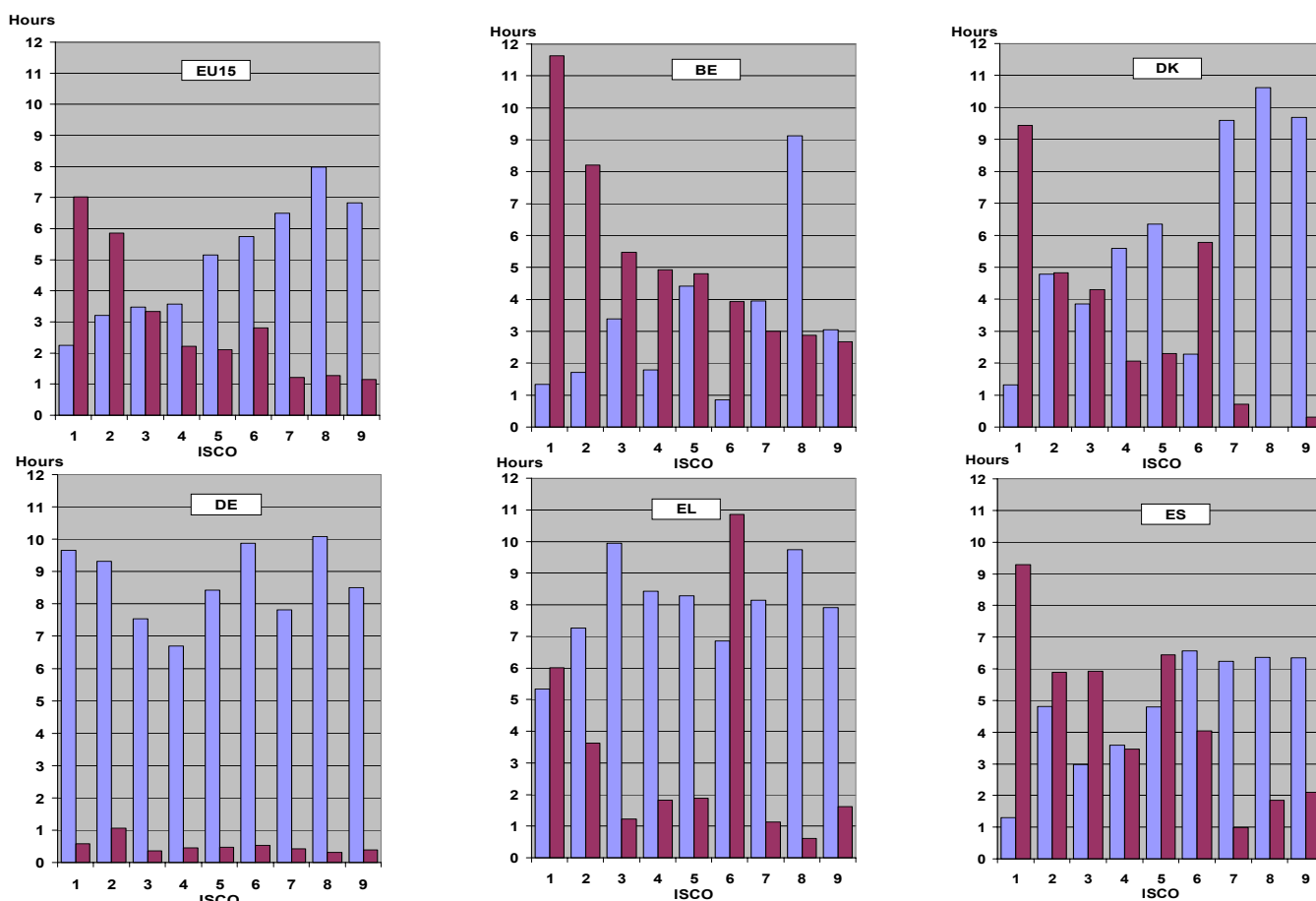
Most overtime hours were worked by senior officials and managers (ISCO 1), professionals (ISCO 2) and machine operators and assemblers (ISCO 8), but there was a marked difference with respect to the payment of these overtime hours. In the EU in 2001, most paid overtime hours were worked by machine operators and assemblers (8 paid overtime hours). The amount of their paid extra hours worked varied between 1–3 hours in France and 9 or more hours in Belgium, Denmark, Germany, Greece, the Netherlands, Finland and the United Kingdom. In some Member States, other occupations may work as many paid overtime hours as

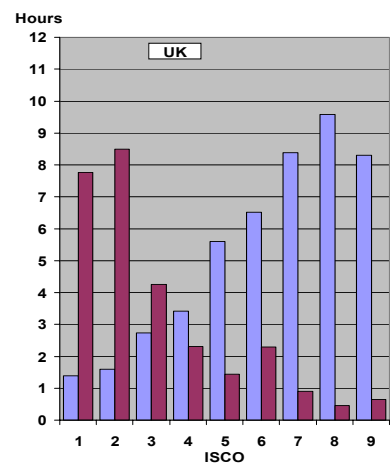
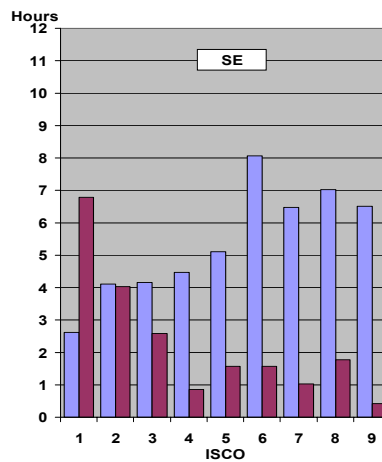
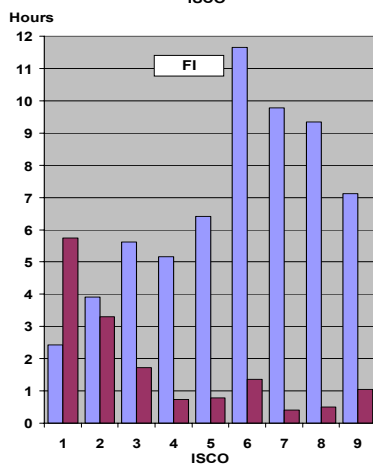
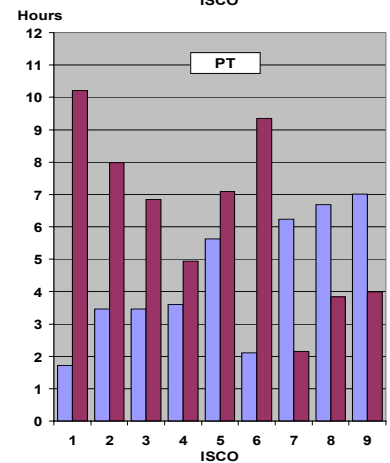
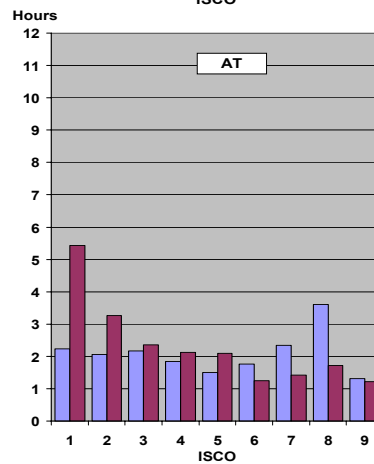
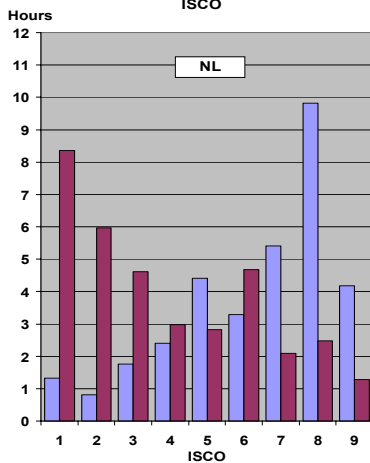
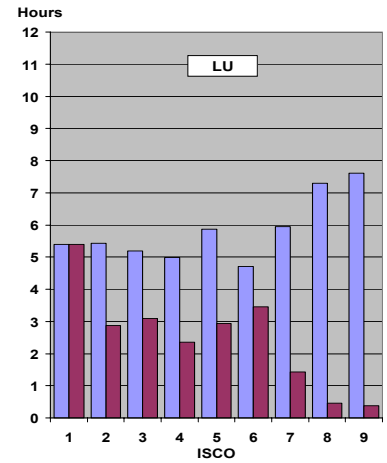
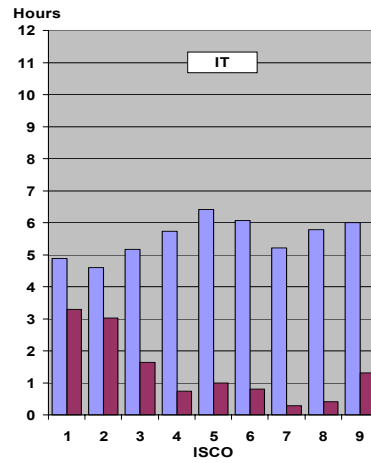
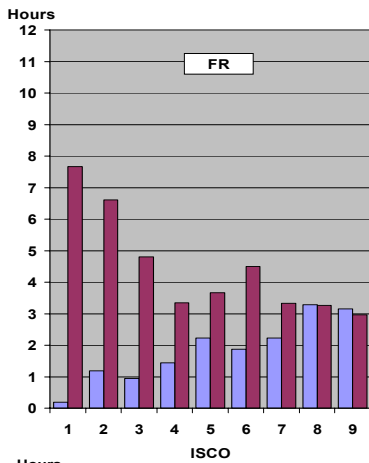
machine operators and assemblers – or even longer. Skilled agricultural and fishery workers (ISCO 6) worked many paid overtime hours, particularly in Germany, Spain, Italy, Finland and Sweden (6–12 hours). In Spain, Italy, Luxembourg and Portugal on the other hand, unskilled manual workers (ISCO 9) worked at least as many paid overtime hours as machine operators and assemblers. In highly skilled (ISCO 1-3) and non-manual (ISCO 1-5) occupations, employees generally worked fewer paid overtime hours than on average, except for Denmark, Germany, Greece, Italy, Luxembourg and Finland.

## Senior officers, managers and professionals worked most unpaid overtime hours

In the EU in 2001, most unpaid overtime hours were worked by senior officials and managers and by professionals (6–7 unpaid overtime hours). In Germany and Italy most overtime hours were paid. Senior officials, managers and professionals in both Member States worked the fewest unpaid overtime hours compared with other Member States. The amount of unpaid extra hours worked by senior officials and managers varied between less than 1 and a little bit more than 3 hours in Germany and Italy; it reached 9 or more hours in Belgium, Denmark, Spain and Portugal.

The amount of unpaid overtime worked by professionals varied from 1–3 hours in Germany, Italy, Luxembourg, Austria and Finland to 8 hours in Belgium, Portugal and the United Kingdom. In some Member States, unpaid overtime hours may be longer in other occupational groups than in these two highly skilled (ISCO 1-3) and non-manual (ISCO 1-5) occupations. In Denmark, Greece, Luxembourg and Portugal, skilled agricultural and fishery workers (ISCO 6) worked 3–11 unpaid overtime hours, this being more than professionals.





**Legend:**

- Paid overtime hours
- Unpaid overtime hours

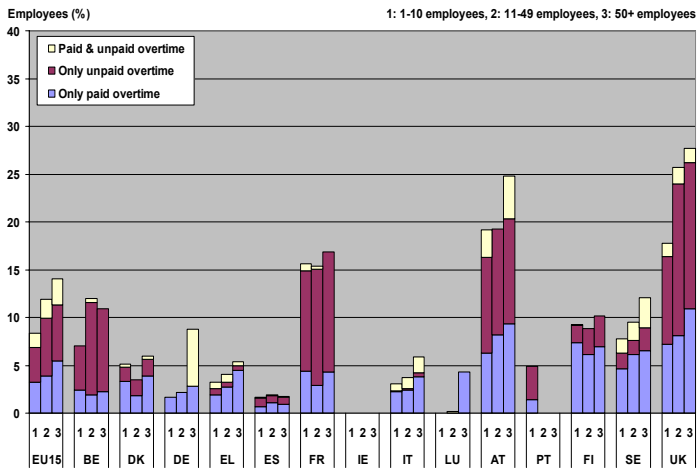
**ISCO (International Standard Classification of Occupations) categories:**

- ISCO 1 - legislators, senior officials and managers
- ISCO 2 - professionals
- ISCO 3 - technicians
- ISCO 4 - clerks
- ISCO 5 - service workers and shop and market sales workers
- ISCO 6 - skilled agricultural and fishery workers
- ISCO 7 - craft and related trade workers
- ISCO 8 - plant and machine operators and assemblers
- ISCO 9 - elementary occupations or unskilled manual workers

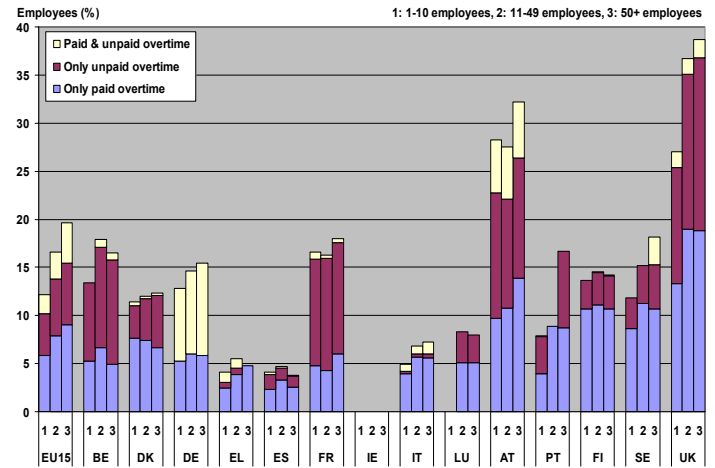
## Overtime prevalent in medium-sized and large establishments

There appears to be a relationship between the share of overtime and the establishment size. In the EU in 2001, some 14% of female employees and 20% of male employees worked overtime in medium-sized or large local units with more than 49 employees. This was more than the 12% of female and 17% of male employees working overtime in small local units with 11–49 employees, or more than the 8% of female and 12% of male employees working overtime in very small local units with fewer than 11 employees. This pattern is found across the Member States with a few exceptions.

Payment of overtime, however, was not related to the establishment size. The percentage of employees who were paid for their overtime was almost the same in the three size categories: at least 46% of male employees were paid for their overtime in medium-sized or large local units with more than 49 employees and at least 48% in very small local units with fewer than 11 employees. The difference was also very small for female employees.



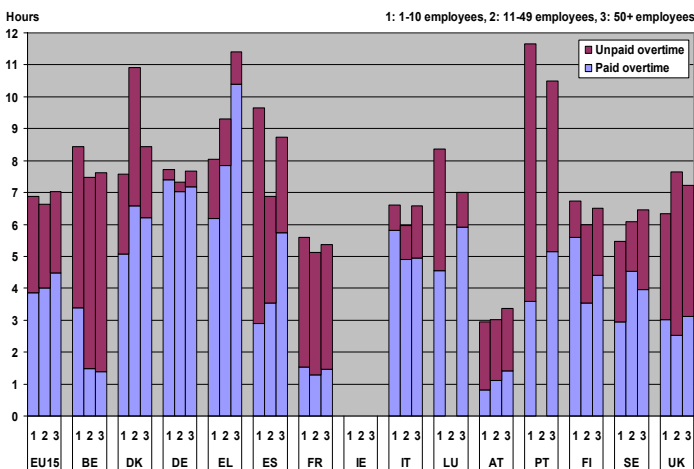
Graph 23: Female employees working overtime (%) by paid/unpaid overtime and size of local unit, 2001



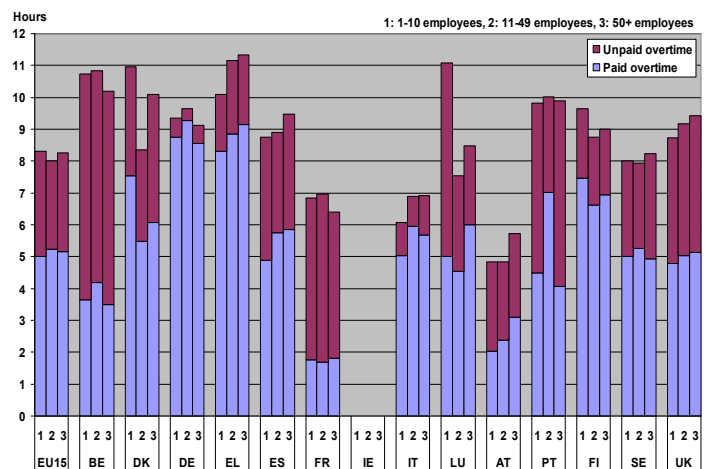
Graph 24: Male employees working overtime (%) by paid/unpaid overtime and size of local unit, 2001

Although overtime was more prevalent in medium-sized or large local units, the EU average number of overtime hours did not vary by establishment size for both women and men. There are differences in the Member States. In Belgium, Denmark, Germany, Greece,

France, Luxembourg, Austria, Finland and Sweden, most weekly overtime hours were worked by men in very small local units. In Spain, Italy and Portugal, most overtime hours were worked in this size category by women.



Graph 25: Average number of paid and unpaid overtime hours per week of women by size of local unit, 2001



Graph 26: Average number of paid and unpaid overtime hours per week of men by size of local unit, 2001

## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Source: the Labour Force Survey is a large sample survey among non-institutional households in the EU. The above results, based on an ad hoc survey in addition to the regular survey, refer to spring 2001. This year, a similar ad hoc survey will be repeated to analyse changes over time. The sample rate varies between 0.3% and 3.3% (5% in Luxembourg). It provides results not only on the labour participation of people aged 15 or more but also on persons outside the labour force. Unreliable data due to a small sample size or technical difficulties are not shown in the graphs: the EU-15 averages should be regarded as estimates. Data for the new Member States are not comparable enough.

Definitions: Employed persons are those who during the reference week performed work, even for just one hour per week, for pay, profit or family gain or were not at work but had a job or business from which they were temporarily absent.

Employees have explicit or implicit employment contracts that give them a basic remuneration that is not directly dependent on the revenue of the unit for which they work. Self-employed persons have a job where the remuneration depends directly upon the profits derived from the goods and services produced (international classification of status in employment, 1993).

The classification by a full-time or part-time job depends on the self-assessment of the employed person, except for Austria and the Netherlands where it depends on a threshold on the basis of the number of hours usually worked.

Nine major occupational groups are distinguished according to the International Standard Classification of Occupations 1988 (ISCO 1988):

- legislators, senior officials and managers (ISCO major group 1),
- professionals (ISCO major group 2),
- technicians (ISCO major group 3),
- clerks (ISCO major group 4),
- service workers and shop and market sales workers (ISCO major group 5),
- skilled agricultural and fishery workers (ISCO major group 6),
- craft and related trade workers (ISCO major group 7),
- plant and machine operators and assemblers (ISCO major group 8),
- elementary occupations or unskilled manual workers (ISCO major group 9).

The local unit is an enterprise or part thereof situated in a geographically identified place. It can be a factory, store or warehouse, office or shop. They usually have a single post address (Council Regulation (EC) No 696/93 on the statistical units for the observation and analysis of the production system in the Community, OJ L76, 30.3.1993).

The number of hours usually worked per week refers to a modal value of weekly hours over a long period; the number of hours actually worked refers to a specific reference week and may deviate from the number of hours normally worked because of absences, holidays, flexi-time or overtime. Overtime are all hours worked in excess of the normal hours, which are the hours fixed in each country by or in pursuance of laws, regulations or collective agreements or, where not so fixed, the number of hours in excess of which any time worked is remunerated at overtime rates or forms an exception to the recognised rules or custom of the establishment or the process concerned (Reduction of hours of work recommendation (No 116), ILO, 1962). Extra hours or credit hours in the case of flexi-time are not considered overtime because they are balanced when working less than the contractual number of hours on other working days.

Three categories of employees working overtime are distinguished: employees working paid overtime, those working unpaid overtime and those working overtime for whom the information on how many overtime hours were paid is missing or who worked both paid and unpaid overtime. Relatively few employees work both paid and unpaid overtime (about 0.5%): they are counted in the estimates of overtime hours with their respective amount of paid and unpaid overtime hours. Employees with missing answers on the number of paid overtime hours are excluded from the estimates of overtime hours.

# Further information:

## ➤ Databases

NewCronos, Theme 3

To obtain information or to order publications, databases and special sets of data, please contact the **Data Shop** network:

DANMARK	DEUTSCHLAND	ESPAÑA	FRANCE	ITALIA – Roma
<b>DANMARKS STATISTIK</b> Bibliotek og Information Eurostat Data Shop Sejrgade 11 DK-2100 KØBENHAVN Ø Tlf. (45) 39 17 30 30 Fax (45) 39 17 30 03 E-mail: bib@dst.dk URL: <a href="http://www.dst.dk/bibliotek">http://www.dst.dk/bibliotek</a>	Statistisches Bundesamt Eurostat Data Shop Berlin Otto-Braun-Straße 70-72 (Eingang: Karl-Marx-Allee) D-10178 Berlin Tel. (49) 1888-644 94 27/28 (49) 611 75 94 27 Fax (49) 1888-644 94 30 E-Mail: <a href="mailto:datashop@destatis.de">datashop@destatis.de</a> URL: <a href="http://www.eu-datashop.de/">http://www.eu-datashop.de/</a>	INE Eurostat Data Shop Paseo de la Castellana, 183 Despacho 011B Entrada por Estébanez Caldeón E-28046 MADRID Tel. (34) 915 839 167/ 915 839 500 Fax (34) 915 830 357 E-mail: <a href="mailto:datashop.eurostat@ine.es">datashop.eurostat@ine.es</a> URL: <a href="http://www.ine.es/produser/datashop/index.html">http://www.ine.es/produser/datashop/index.html</a> <i>Member of the MIDAS Net</i>	INSEE Info Service Eurostat Data Shop 195, rue de Bercy Tour Gamma A F-75582 PARIS CEDEX 12 Tél. (33) 1 53 17 88 44 Fax (33) 1 53 17 88 22 E-mail: <a href="mailto:datashop@insee.fr">datashop@insee.fr</a> <i>Member of the MIDAS Net</i>	ISTAT Centro di informazione statistica Sede di Roma Eurostat Data Shop Via Cesare Balbo, 11a I-00184 Roma Tel. (39) 06 46 73 32 28 Fax (39) 06 46 73 31 01/ 07 E-mail: <a href="mailto:datashop@istat.it">datashop@istat.it</a> URL: <a href="http://www.istat.it/Prodotti-e/Allegati/Eurostatdatashop.html">http://www.istat.it/Prodotti-e/Allegati/Eurostatdatashop.html</a> <i>Member of the MIDAS Net</i>
ITALIA – Milano	NEDERLAND	PORTUGAL	SUOMI/FINLAND	SVERIGE
ISTAT Ufficio Regionale per la Lombardia Eurostat Data Shop Via Fieno 3 I-20123 MILANO Tel. (39) 02 80 61 32 460 Fax (39) 02 80 61 32 304 E-mail: <a href="mailto:mileuro@tin.it">mileuro@tin.it</a> URL: <a href="http://www.istat.it/Prodotti-e/Allegati/Eurostatdatashop.html">http://www.istat.it/Prodotti-e/Allegati/Eurostatdatashop.html</a> <i>Member of the MIDAS Net</i>	Centraal Bureau voor de Statistiek Eurostat Data Shop - Voorburg Postbus 4000 NL-2270 JM VOORBURG Nederland Tel. (31) 70 337 49 00 Fax (31) 70 337 59 84 E-mail: <a href="mailto:datashop@cbs.nl">datashop@cbs.nl</a> URL: <a href="http://www.cbs.nl/eurodatashop">www.cbs.nl/eurodatashop</a>	Eurostat Data Shop Lisboa INE/Serviço de Difusão Av. António José de Almeida, 2 P-1000-043 LISBOA Tel. (351) 21 842 61 00 Fax (351) 21 842 63 64 E-mail: <a href="mailto:data.shop@ine.pt">data.shop@ine.pt</a>	Statistics Finland Eurostat Data Shop Helsinki Tilastokirjasto PL 2B FIN-00022 Tilastokeskus Työpajatu 13 B, 2.Kerros, Helsinki P. (358) 9 17 34 22 21 F. (358) 9 17 34 22 79 Sähköposti: <a href="mailto:datashop@stat.fi">datashop@stat.fi</a> URL: <a href="http://www.tilastokeskus.fi/tk/tilastokirjasto/">http://www.tilastokeskus.fi/tk/tilastokirjasto/</a>	Statistics Sweden Information service Eurostat Data Shop Karlavägen 100 - Box 24 300 S-104 51 STOCKHOLM Tfn (46) 8 50 69 48 01 Fax (46) 8 50 69 48 99 E-post: <a href="mailto:infoservice@scb.se">infoservice@scb.se</a> URL: <a href="http://www.scb.se/templates/Eurostatdatashop.aspx">http://www.scb.se/templates/Eurostatdatashop.aspx</a> Standard 22884.asp
UNITED KINGDOM	NORGE	SCHWEIZ/SUISSE/SVIZZERA	UNITED STATES OF AMERICA	
Eurostat Data Shop Office for National Statistics Room 1.015 Cardiff Road Newport South Wales NP10 8XG United Kingdom Tel. (44) 1633 81 33 69 Fax (44) 1633 81 33 33 E-mail: <a href="mailto:eurostat.datashop@ons.gov.uk">eurostat.datashop@ons.gov.uk</a>	Statistics Norway Library and Information Centre Eurostat Data Shop Kongens gate 6 Boks 8133 Dep. N-0033 OSLO Tel. (47) 21 09 46 42 / 43 Fax (47) 21 09 45 04 E-mail: <a href="mailto:Datashop@ssb.no">Datashop@ssb.no</a> URL: <a href="http://www.ssb.no/biblioteket/datashop/">http://www.ssb.no/biblioteket/datashop/</a>	Statistisches Amt des Kantons Zürich Eurostat Data Shop Bleicherweg 5 CH-8090 Zürich Tel. (41) 1 225 12 12 Fax (41) 1 225 12 99 E-mail: <a href="mailto:datashop@statistik.zh.ch">datashop@statistik.zh.ch</a> URL: <a href="http://www.statistik.zh.ch">http://www.statistik.zh.ch</a>	Harver Analytics Eurostat Data Shop 60 East 42nd Street Suite 3310 NEW YORK, NY 10165 USA Tel. (1) 212 986 93 00 Fax (1) 212 986 69 81 E-mail: <a href="mailto:euromdata@haver.com">euromdata@haver.com</a> URL: <a href="http://www.haver.com/">http://www.haver.com/</a>	

Media Support Eurostat (for professional journalists only):

Bech Building Office A4/017 • L-2920 Luxembourg • Tel. (352) 4301 33408 • Fax (352) 4301 35349 • e-mail: [eurostat-mediasupport@cec.eu.int](mailto:eurostat-mediasupport@cec.eu.int)

## For information on methodology:

Christine Vaguer, Eurostat / D1, L-2920 Luxembourg, Tel. (352) 4301 34110, Fax (352) 4301 33649,

E-mail: [Christine.Vaguer@cec.eu.int](mailto:Christine.Vaguer@cec.eu.int)

ORIGINAL: English

Please visit our web site at [www.europa.eu.int/comm/eurostat/](http://www.europa.eu.int/comm/eurostat/) for further information!

A list of worldwide sales outlets is available at the **Office for Official Publications of the European Communities**.

2 rue Mercier – L-2985 Luxembourg  
Tel. (352) 2929 42118 Fax (352) 2929 42709  
URL: <http://publications.eu.int>  
E-mail: [info-info-opoce@cec.eu.int](mailto:info-info-opoce@cec.eu.int)

BELGIQUE/BELGIË – DANMARK – DEUTSCHLAND – GREECE/ELLADA – ESPAÑA – FRANCE – IRELAND – ITALIA – LUXEMBOURG – NEDERLAND – ÖSTERREICH  
PORTUGAL – SUOMI/FINLAND – SVERIGE – UNITED KINGDOM – ISLAND – NORGE – SCHWEIZ/SUISSE/SVIZZERA – BALGARJA – ČESKÁ REPUBLIKA – CYPRUS  
EESTI – HRVATSKA – MAGYARORSZÁG – MALTA – POLSKA – ROMÂNIA – RUSSIA – SLOVAKIA – SLOVENIA – TÜRKIYE – AUSTRALIA – CANADA – EGYPT – INDIA  
ISRAËL – JAPAN – MALAYSIA – PHILIPPINES – SOUTH KOREA – THAILAND – UNITED STATES OF AMERICA