

**Documentation of statistics for  
Register-Based Labour Force Statistics 2014**

## 1 Introduction

The purpose of the RAS statistic is to provide a description of the Danish population's affiliation to the labour market. The affiliation is compiled at the end of November and is published annually. RAS was first published in 1981 concerning the population's connection to the labour market end November 1980.

## 2 Statistical presentation

RAS is an annually labour market statistic based on the individuals connection to the labour market estimated on the last working day in November. The connection to the labour market for the people resident in Denmark is divided into three socioeconomic main groups which are employed, unemployed and people outside the labour force. The statistic is among other things also distributed on information about demography, education and information about the work place for employees. The statistic is published in StatBank Denmark and data is also available through the Division of Research Services in Statistics Denmark.

### 2.1 Data description

The register-based labour force statistic (RAS) has annual status observations of the population's attachment to the labour market at the end of November.

The most essential variable is the variable socio-economic status. By using the variable the population can be divided into 3 main groups which are;

- employed persons
- unemployed persons
- persons outside the labour force

Employed persons are either an employee, self-employed or an assisting spouse, whereas unemployed persons are gross unemployed persons. Persons outside the labour force are e.g. persons receiving other kinds of public benefits, students, children/youth or pensioners.

The RAS-statistic contains background information related to both the person and the work place. The information about the persons is among others:

- demographic information (gender, age, ancestry)
- educational information (status of education)

The information about the work place is among others:

- industry
- sector
- workplace address

The RAS-statistic has unique identification codes for both the work place and the person. Therefore further information can be connected to the register. In addition RAS is also used to compile commuting between home and workplace.

## 2.2 Classification system

RAS is compiled according to the international guidelines from ILO (International Labour Organization) for classification of the population's affiliation to the labour market. The classification is called ICSE (International Classification of Status in Employment). The ILO guidelines focus on survey based statistics. The guidelines are therefore operationalized to use for RAS since it is a register-based statistics. The ILO guidelines consist of e.g. a set of rules for prioritizing the main connection to the labour market. The guidelines prescribe that employment has higher priority than unemployment, while unemployment has higher priority than activities outside of the labour force.

The statistic follows the Danish Industrial Classification of all Economic Activities 2007 (NACE rev. 2/ISIC rev. 4). A description of the classification is available in Danish [here](#).

A conversion into DBo7 codes has been made back to 2000. In the period November 2003-November 2007 the statistic follows the Danish Industrial Classification of All Economic Activities 2003 (NACE rev. 1.1./ISIC rev. 3.1.). In the period November 1992-November 2002 the statistic follows the Danish Industrial Classification of All Economic Activities 1993 (NACE rev. 1/ISIC rev. 3). In the period November 1980-November 1992 the statistic follows the Danish Industrial Classification of All Economic Activities DSE77 (ISIC rev. 3). RAS can be distributed on sectors according to ESA (November 1994-November 2012) and ESA2010 (November 2008-November 2014).

RAS is published at municipality level in StatBank Danmark. From November 2006 the statistic is published on municipalities as they are after the structural reform which was implemented January 2007. In the period November 1980-November 2006 RAS is published on municipalities as they were before the structural reform. In November 2006 the statistic can both be distributed on municipalities as they were before the structural reform or municipalities as they are after the structural reform.

## 2.3 Sector coverage

The statistic covers all sectors.

## 2.4 Statistical concepts and definitions

**Socio-Economic Status:** Socio-Economic Status: The most essential variable in the statistic is the variable socio-economic status. The variable is formed by classifying the population according to the ILO guidelines regarding the labour force. When classifying the population according to the attachment to the labour market the reference period can have various lengths. The reference period can e.g. be one year. In this case persons who are attached to the labour market are called the usual active population. Instead a short reference period can be chosen, e.g. a single day or a single week. In that case persons who are attached to the labour market are called the currently active population or the labour force. In RAS a short reference period is used.

By using this variable “Socio-Economic Status” the population can be divided into three main groups which are: · employed persons · unemployed persons · persons outside the labour force.

Employed persons can be divided into 3 categories, which are: self-employed, assisting spouses and employees. Unemployed persons are gross unemployed persons. Persons outside the labour force are e.g. persons receiving other kinds of public benefits, students, children/youth or pensioners.

**Workplace:** A workplace is an organizational defined part of a company that is located at a given address and produces one or predominantly one kind of goods and services. A workplace can be a one-man firm or a branch in a firm with multiple workplaces.

**Commuting:** RAS contains information about residential address and workplace address, and therefore provides the background for calculating commuting between residence and workplace. A commuter is defined by a person who has paid work on an address that differs from the residential address. Thus only persons with differing addresses are included in the calculation of average commuting distance. The commuting distance is calculated as the shortest road distance between the employed persons residential address and workplace address, and the way home is not included. The calculations does not contain information about the frequency of commuting or the means of transport.

## 2.5 Statistical unit

The statistical unit is persons.

## 2.6 Statistical population

The population is the people resident in Denmark at the end of November with information about the primary connection to the labour market.

## 2.7 Reference area

Denmark.

## 2.8 Time coverage

The end of November 1980-

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

Persons.

## **2.11 Reference period**

2014-11 - 2014-11

## **2.12 Frequency of dissemination**

RAS is an annual statistic.

## **2.13 Legal acts and other agreements**

§6 in Law about Statistics Denmark.

## **2.14 Cost and burden**

RAS is exclusively compiled on the basis of administrative and statistical registers. Therefore there is no response burden.

## **2.15 Comment**

More information about RAS can be located on the sites [Labour force participation](#) and [Employment](#).

## **3 Statistical processing**

RAS is based on the Labour Market Account (LMA) which integrates and harmonizes a large number of data sources. AMR hereby makes it possible to illustrate the population's attachment to the labour market a lot better than earlier possible.

### **3.1 Source data**

Since April 2015 AMR is the data foundation for RAS. In connection with that RAS is revised back to November 2008. The data sources are various internal and external registers, e.g.: · eIncome register · The central business register · The register with information about persons receiving public benefits · The educational register · The employment classification module · The income register · The population register · The register for persons receiving maternity or sickness benefit

### **3.2 Frequency of data collection**

RAS is a yearly statistic.

### **3.3 Data collection**

The data collection is done by processing the eIncome register and interconnection with other registers.

### **3.4 Data validation**

The data foundation for RAS has since April 2015 been The Labour Market Account (LMA). LMA is produced both with and without an hourly standardization. The non-hourly standardized longitudinal register (LMA-UN) is the data foundation for RAS, and therefore the data validation takes place in LMA-UN.

From 2008 monthly information from the eIncome-register in Statistics Denmark is used as the data foundation for employees. All employers in the public as well as in the private sector are obliged to report data to the eIncome-register about which workplace a job is been conducted. The workplace is the foundation for information about industry, sector and geography. This means that the information about the employees' connection to the labour market at the end of November is of much higher quality than earlier. There are however still some uncertainties regarding the distribution on industry, sector and geography, because correct values of these variables is dependent on whether or not the the employer is reporting the correct information. There is a number of employers - especially in the public sector - whose reports are insufficient. For the municipalities incomplete reports causes uncertainties about industry, while flaws and mistakes in other sectors specially means uncertainties about the geographical placing. By means of among others the Business Data Register of Statistics Denmark the incorrect information about workplace is corrected.

There are cases where a person is registered with an 'illegal overlap'. 'Illegal overlaps' is being corrected by deleting or writing down conditions or correct to- or from-dates. An illegal overlap can e.g. be a person receiving public benefits while registered as employed. In these cases it's estimated that the information about public benefits is the most valid. The processing of overlaps thus ensures a better periodicity of the various conditions possible for the population. In addition a number of couplings of the various conditions are made. E.g. conditions in public supported employment are connected to the person's job. The same goes for temporarily absent persons, so that it is decided whether it's a matter of absence from unemployment or employment, and from which job the person in that case is absent from.

Jobs as employee are also imputed if the person is temporarily absent without pay in a maximum of 45 days. That is done because the person in that case should still be considered employed, since the absence is of short duration.

Information about working hours is from the employee statistics, and is in some cases imputed. The uncertainties about working hours for employees is falling because the part of imputed hours is reduced from 14 pct. in 2008 to just under 4 pct. in 2013. The working hours for self-employed are also imputed.

A selection of self-employed and working spouses is also done based on information about among other things the employees of the company and the age of the self-employed. From fixed requirements and the degree of certainty about whether the job as self-employed is in fact active, the employers are categories as either 'strong', 'weak' or 'super weak' self-employed.

### **3.5 Data compilation**

The data processing in LMA takes place in several steps. The first step in the data processing is to identify and correct errors in data from various sources, and put data in one joint and homogenous source data base. The correction of data is further described under 'Data validation'. Among others there is data from the statistics of persons receiving public benefits, employees and data for persons in education. Data for self-employed and assisting spouses is also imputed, as well as paid hours is imputed by means of a number of background variables. After that 'illegal overlaps' between conditions are being corrected, and connections between various conditions are made.

After the processing of overlaps a classification of the population's attachment to the labour market are made. Data is also linked the business register to get background information (industry, sector, address for the work place) concerning the work places where the employed persons work. Linking to the population register is also made with the aim of deciding whether the person is resident in Denmark at a given point in time. From this processing of data the so called LMA-UN is made, and this non-hourly standardized longitudinal register with information about the populations connection to the labour market is the data foundation for RAS. Learn more about [statistical processing in LMA](#).

The division of employees into level of skills (top managers, employees at upper levels, employees at medium levels, employees at basic levels, other employees and employees not further specified) is in some cases done by imputing. This happens when the employees work in smaller firms in the private sector, which are not obliged to rapport to Statistic Denmark's wage statistic. In these cases the quality of information about the skill level are of lower quality.

### **3.6 Adjustment**

No corrections of data besides what is described under data validation and data compilation.

## **4 Relevance**

RAS is primarily been used to structural analysis of the labour market, because the statistic has a very detailed level of information. Many external as well as internal users are using the statistic.

### **4.1 User Needs**

The RAS statistic is widely used by municipalities, counties, government departments, the news media and private organizations and enterprises. RAS is primarily used to analyze labour market structures, because it contains very detailed information. Information from RAS are also widely used in other statistical registers and databases maintained by Statistics Denmark. RAS is used in the Working Time Account (WTA). The WTA is a data source for employment in National accounts.

### **4.2 User Satisfaction**

There has not been conducted any analysis of the user satisfaction with the statistic. However, many external as well as internal users are using the statistic, and a number of users committees are set up by Statistics Denmark with the purpose to support the dialog with the users, and involve them in the development of the statistics. There is thus also a user's committee pointed out for labour market statistics, which is involved in the work with RAS.

### **4.3 Data completeness rate**

There is no regulation in the field. RAS is, in the extent possible with register-based data, following the international guidelines from ILO (International Labour Organization). ILO is an UN organization that among other things determines the international guidelines on how to specify the population main connection to the labour market. The ILO guidelines are primarily pointed towards survey-based inquiries (Labour Force Survey), where the person itself provides the information about the connection to the labour market. Since RAS is based on register-data the requirements from ILO is adjusted to use for RAS. The ILO guidelines consist among other things of a set of rules for prioritizing the main connection to the labour market. The guidelines dictate that employment has a higher priority than unemployment, while unemployment has higher priority than activities outside the labour force.

## **5 Accuracy and reliability**

RAS is a register based total count of the people resident in Denmark, and the statistic uses the Labour Market Account (LMA) as data source. In LMA a number of data sources are integrated in one joined system which improves the possibility to illustrate the labour market compared to the separated statistics. The statistic is therefore estimated highly usable despite some uncertainties, which are especially regarding information about working hours for self-employed and working spouses plus attachment of job to work place.

In connection with the publication of data from 2014 in April 2016 data from 2008-2013 was revised. No further revisions are planned.

### **5.1 Overall accuracy**

RAS is a register-based total count of the people resident in Denmark, and is used to throw light on the populations attachment to the labour market. Insufficient reports and missing information causes some uncertainties about the statistic.

The uncertainties particularly concerns information about self-employed because working hours are imputed. It's estimated that the information is accurate on an overall level, but has to be interpreted with caution on a more detailed level. In some cases information about employees is also imputed, but the imputed part has gone down from 14 pct. in 2008 to 4 pct. in 2013 for employees.

There are also uncertainties about which work place the specific jobs are connected to, due to insufficient reports from employers. Even though errors and missing information are corrected in the best possible way there are still uncertainties about part of the information regarding work places - specially on a detailed level.

### **5.2 Sampling error**

Not relevant for this statistic.

### **5.3 Non-sampling error**

Every employer must report information about workplace for every specific job. In cases, where these information are insufficient, errors or missing information are located and corrected as far as possible.

In RAS information concerning working hours are used to determine which job is the primary in case a person has more than one job. If that is the case, the job with most hours worked is considered as the primary job. Working hours for self-employed and assisting spouses are always imputed, why uncertainties regarding the primary attachment for people with both job as self-employed and employee are higher.

The primary attachment to the labour market are determined by the international guidelines from ILO which prioritizes employment over unemployment, and unemployment over conditions outside the labour market.

Selection of self-employed is done on defined requirements which divides into respectively 'strong', 'weak' and 'super weak' self-employed.

### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

### **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

## 5.6 Quality assessment

RAS is a total count of the people resident in Denmark and the data foundation is the Labour Market Account (LMA). In LMA various data sources are integrated, corrected and harmonized in one joined system. With RAS there are thus improved possibilities for studying the labour market compared to the solitary statistics. Since RAS is a total count of the population there is not the same uncertainties as with statistics based on surveys. There are however other uncertainties connected to the statistic:

From November 2008 monthly information from the eIncome-register is the data foundation for information about employment for employees. This means that the information concerning the employees' connection to the labour market at the end of November is of much higher quality than earlier. All employers are obliged to report data to the eIncome-register about at which workplace a job is been conducted. There are however uncertainties about the work place, because there are especially in the public sector problems with the quality of the information. The uncertainties are mainly related to the distribution of employees in the municipal sector by industry. Uncertainty is especially connected to whether a person is employed in public administration or not; whether a person is working in "primary and lower secondary school" or in "other education n.e.c."; or whether a person is working in "home help" or in "nursing homes". There is also some uncertainty linked to which municipality the employees work in for employees in Central and Regional government. These information are corrected in the best possible way, but there will continuously be uncertainties connected to work place and particularly on a detailed level.

If a person have more than one job at the reference time (e.g. if the person both work as an employee and also is self-employed) the job where it is considered most likely that the person has the longest working hours is chosen as the primary job (and therefore counted as employment). For employees, information about the exact working hours did not exist prior to November 2008. For self-employed person and assisting spouses the information is completely missing in all years. On the basis of the paid amount of wage earners' supplementary pension and the length of the job it was prior to 2008 possible to calculate a rough measure of the scope of work in the job. From 2008 there exists information about the working hours for employees, which means the scope of work is more precise for employees from 2008. The working hours for self-employed and working spouses are still imputed. In the light of the variables which the imputation is based on, it's estimated that data is accurate on an overall level, but the information should be interpreted with cautiousness on a detailed level.

The division of employees into level of skills (top managers, employees at upper levels, employees at medium levels, employees at basic levels, other employees and employees not further specified) is done by means of information about work function, which is reported to the wage statistic or otherwise imputed. That happens when the employees work in smaller firms in the private sector, which are not obliged to rapport to Statistic Denmark's wage statistic. In these cases the quality of information about the skill level are of lower quality.

RAS illustrates the primary attachment to the labour market at the end of November for the people resident in Denmark. The time of reference is chosen because the registers used are referring to the situation at the end of the year, and because December isn't typical and therefore unsuitable for analyzing the labour market. It means that RAS has got limitations regarding analysis at other times of the year, which among other thing can have an effect on specific industries.

## 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

## 5.8 Data revision practice

When RAS is published data is considered final. However data can be revised as a result of changes in methods or new information available.

In connection to the publication of data for November 2013 data from 2008-2012 was revised, because the data foundation for RAS changes to LMA. At the publication in April 2016 the data was again revised back to 2008, because more updated information about the population was available at the time. The revision reduces the number of persons outside the labour force with 12,000-14,000 (in 2013 the number is about 24,000). The reduction is partly due to knowledge about more emigrations, which reduces the population with 5.000-8.000. In addition to that au pairs are now considered employed, while foreign students are considered enrolled in education. Furthermore the group of people receiving early retirement pay is increased with 3.000-4.000 because of changes in the processing of data. Beside these changes smaller corrections of industries, work places and sector codes for employees are also made.

No further revisions are planned.

## 6 Timeliness and punctuality

The statistic is published approximately 16 months after the reference point in time. RAS is typically published at the scheduled date without delay, and is planned more than a year ahead.

### 6.1 Timeliness and time lag - final results

RAS is based on the Labour Market Account (LMA) for which a number of registers makes the data foundation. The latest data source which is available is information about ISCO-codes for employees in small private enterprises. This information is typically available approximately 14 months after the reference point in time.

### 6.2 Punctuality

RAS is typically published at the scheduled date without delay.

## 7 Comparability

The first version of the RAS statistics includes the population resident in Denmark as of the 1 January 1981 and its attachment to the labour market at the end of November 1980. The statistic has been compiled once every year since. New and better data foundations and changes in the labour market have however caused a number of data breaks over time, which have influence on the possibility of comparing data over time. Since RAS is based on administrative registers with national distinctive marks, it is very difficult to compare the statistic in an international level.

## 7.1 Comparability - geographical

RAS follows the international guidelines from the International Labour Organization (ILO) for estimating the population main attachment to the labour market. The ILO guidelines are however pointed towards survey-based statistics (the Labour Force Surveys), where the person itself provides the information about the connection to the labour market. Since RAS on the other hand is based on register data, the ILO guidelines are adjusted for use for RAS. It is therefore recommended that the Labour Force Surveys (LFS) are used for international comparisons, while RAS is mainly used to illustrate national structures.

## 7.2 Comparability over time

The statistic has been compiled once every year over the period November 1980 to November 2014. However, over the years there has been made changes in the statistic, which have influence on the possibility to compare the statistic over time.

### *Data break*

In 2003 (November 2002) there is a data break in the time series. Changes on the labour market had created a need for different alterations in the statistic. At the same time better data sources made the alterations possible. Therefore Statistics Denmark was able to publish an improved statistic. The alterations in the statistic caused among other things a change in the order of priority for persons in more than one condition. For example the priority for persons who receive early retirement pay and worked at the same time was changed.

Before 2008 the data source for employees was the Salary Information Register (COR). This register was based on reports from employers to the tax authorities. Here the employer had the possibility to report that the employee had been employed during the whole year. If that was not the case the employer should report the starting date and the ending date of the period in which the person had been employed. However, Statistics Denmark supposes that employers have reported that the person has been employed during the whole year in to many cases. For persons outside the labour force RAS from November 1980-November 2006 used information from a lot of different statistical registers. A part of these registers was in 2007 joint in statistic of persons receiving public benefits, and RAS hereafter gathered information from this. Within the frameworks of this statistical system a transverse data processing is done. That means that the quality of the information is better than earlier.

From November 2008 the eIncome-register replaced COR as the data source for employment for employees. The eIncome-register is based on monthly information from employers. That implied that the information concerning the period of employment got a higher quality. It also implied that the level of employment got lower due to the transition to the eIncome-register. When producing RAS November 2008 in 2010 Statistics Denmark's own version of the eIncome register was not yet ready. Therefore an early version of the eIncome-register based on the monthly reports made by the tax authorities was used for the statistic. When producing RAS November 2009 in 2011 Statistic Denmark's own monthly eIncome-register was ready. It was realized that there were relatively large differences between the yearly version from the tax authorities and the monthly register which made it necessary to revise the statistics for November 2008.

With the production of RAS concerning the population's attachment to the labour market November 2011 two changes was made in the statistic. The changes resulted in RAS being revised for the period November 2008 – November 2010. The changes implied that:

1) a number of persons, who are temporarily absent from the labour force and earlier had been classified as outside the labour force, became part of the labour force. The background for this was that a person should be classified as employed even though the person is temporarily absent from

work and the employer does not pay wages (if the absence is due to maternity leave or sickness leave with a duration of less than 3 months). Before the change to the eIncome-register, RAS was based on information from the Salary Information Register (COR). By using this data source a person on temporary leave would typically be classified as employed even though the person did not receive wages. This was because information about yearly salary was used and because the information concerning the period of employment had a lower quality. After the change to the eIncome-register the population is classified in accordance with information about whether any wages are paid in November or not, and therefore the person will not be classified as employed, unless supplementary information is used. Therefore Statistics Denmark developed an algorithm, which can decide whether the person is on leave from work or not. According to this 10,000 persons (primary persons on maternity leave) were reclassified from being outside the labour force to being employed.

2) gross unemployment was used instead of net unemployment. This meant that the labour force from there consisted of employed persons and gross unemployed persons. Net unemployment consists of persons receiving unemployment benefits or social assistance who are considered able to work. Gross unemployment consists of net unemployment and activated recipients of unemployment benefit or social assistance who are considered able to work. Taken together these two changes meant that the labour force was increased by roughly 50,000 persons compared to the old method.

#### *New data foundation for RAS in 2015*

In April 2015 the data foundation for RAS changed to be the Labour Market Account (LMA). In this context RAS was revised back to November 2008. In the same context the dating of the statistic changed, so that the time of reference from there is the end of November. That meant that the statistic now is called e.g. November 2013 whereas it would earlier have been called 2014. Learn more about LMA [here](#). When publishing RAS (end November 2014) in 2016 the time series November 2008-November 2013 was revised. Hereafter the plan is to do no further revisions of the historical time series.

#### *Changes in Danish Industrial Classifications*

In 1993 the classification changes from DSE77 to DB93. In 2003 it changes to DB03, and ind 2008 to DB07. Read more about the changes and the classification [here](#).

#### *Changes in sector code*

The statistic can be distributed on sector according to ESA (November 1994-November 2012) and ESA2010 (November 2008-November 2013).

#### *Changes in classification of occupation*

The level of skills for employees are determined by DISCO-08, which is reported to the wage statistic. From 2010 the classification is changed, which means that the level for 2008-2009 are based on DISCO-88, while it from 2010 is based on DISCO-08. The changes are due to changes in the international classification behind: [ISCO](#). The change causes the number of employees on highest level to increase with about 200,000 persons, while the number of employees on the middle level dropped proportional. The change had impact on among other large groups of employees all pedagogic work, some nursing work and some from the financial sector.

#### *Municipal reform*

RAS is published on municipal level in the StatBank. From November 2006 the statistic is published on the new municipals after the structural reform. In the period November 1980-November 2006 the statistic is made up on the municipals before the structural reform. November 2016 is therefore published with data from both before and after the reform.



### 7.3 Coherence - cross domain

The number of people employed and unemployed in RAS deviates from other statistics. You can read more about the differences below:

*Employment in Businesses (EiB)* The EiB and RAS have a common definition of the stock of employees at the end of November, but there are some jobs that are included in RAS and not in EiB and vice versa. First of all the person's primary connection to the labour market is calculated in RAS, while EiB includes both a person's most important job as well as other jobs the person may have at the end of November. Secondly persons, who are absent from employment (because of childcare leave, maternity leave or sickness benefit) at the end of November are considered to be employed in RAS, but not in EiB. Thirdly EiB only includes self-employed, who are liable to pay VAT or payroll tax or are employers, while RAS also includes employed who have the largest income during the year from self-employment. In the fourth place EiB only includes jobs in businesses with a certain minimum activity. Businesses with activities under a defined threshold are not included in the EiB.

*Labour Force Survey (LFS)* LFS is an interview study. LFS uses the same by ILO internationally defined concept of employment as RAS. Since the ILO guidelines is pointed at survey-based statistics as LFS, the guidelines is adjusted to use for RAS. For that reason there are considerable deviations between LFS and RAS. If the socioeconomic status of employed persons is considered, there are relatively more self-employed and assisting spouses in LFS. The reason for this is among other things that people, who are share- or stockholders in the company where they are employed, are classified as an employee in RAS, while they often will describe themselves as self-employed when asked in the LFS. The same goes for assisting spouses with wage agreement, who in RAS are classified as employees. The distribution of the employees by skills also differs significantly between the two statistics.

*Public Employment Statistic (PES)* The PES calculates the average number of jobs and the number of full-time employed persons each quarter within the public sector. The number of jobs includes all the jobs that the person has in the public sector at a given time. This means that the number of jobs is substantially higher than the number of persons employed in RAS.

*Employment Statistic for Employees (ESE)* The ESE calculates the full-time employment and the number of employees on a quarterly basis. The calculation of full-time employment means that the level of employment in ESE will be lower than the level of employment in RAS. On the other side the number of employees is higher than in RAS. The reason is that some of the employees are classified as self-employed in RAS. That is the case when a person has a job as employee and at the same time is self-employed and the person works the most hours as self-employed.

*Unemployment statistic* The average full-time unemployment in the unemployment statistic is generally higher than the unemployment in RAS. There are two reasons for this; firstly unemployment is calculated in full-time equivalents in the unemployment statistic. Secondly, a portion of the gross unemployed are calculated as employed in RAS. The reason for this is that they are activated in a measure, where they are receiving wages. In such cases, they are classified as employed according to the international guidelines for employment statistics. In addition, a portion of the gross unemployed are calculated as employed in RAS. The reason for this is that they are activated in a measure, where they are receiving wages. In such cases, they are classified as employed according to the international guidelines for employment statistics.

#### *Labour Market Account (LMA)*

Since April 2015 the LMA has been the data foundation for RAS. In that context RAS was revised back to November 2008.

## **7.4 Coherence - internal**

RAS is based on the Labour Market Account (LMA) which is compiled on a number of different sources. Since the same background information exists for the population in total in LMA, there is internal consistency in LMA and thus in RAS.

## **8 Accessibility and clarity**

The statistic is published in *Nyt fra Danmarks Statistik* (News from Statistics Denmark), [Statbank.dk](http://Statbank.dk) and Statistical Yearbook. Unfortunately "*Nyt fra Danmarks Statistik*" and the statistical yearbook are only in Danish.

More detailed data can be purchased in Statistics Denmark's Customer Centre.

### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

### **8.4 News release**

New statistics is published in a yearly article *Nyt fra Danmarks Statistik* (News from Statistics Denmark). Get the latest version in Danish [here](#).

### **8.5 Publications**

The data are published in [Statistical Yearbook](#).

### **8.6 On-line database**

A large number of data from RAS are published in Statbank Denmark in 'Labour force' and 'Employment' under the subject 'Labour, income and wealth'. More detailed data can be purchased in Statistics Denmark's Customer Centre.

### **8.7 Micro-data access**

RAS is an individual based register. RAS can be coupled with other individual based registers in order to make customized service tasks and RAS can also be accessed through Statistics Denmark's researcher arrangement (Forskningsservice) under consideration of the [general rules of anonymity in Statistics Denmark](#).

## **8.8 Other**

RAS is annually being delivered to Statistics Denmark's Customer Centre and Statistics Denmark's researcher arrangement (Forskningsservice).

## **8.9 Confidentiality - policy**

The making of RAS follows Statistics Denmark's [confidentiality policy](#).

## **8.10 Confidentiality - data treatment**

Discretion is made according to Statistics Denmark's confidentiality policy. This means among other things that data cells with less than 3 observations are not published.

## **8.11 Documentation on methodology**

N/A

## **8.12 Quality documentation**

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## **9 Contact**

The administrative placement of the statistic is in the Labour Market division. The responsible person is Kristine Mulvad Jensen, tel. +45 39 17 38 41, e-mail: [krj@dst.dk](mailto:krj@dst.dk).

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