

Wages of persons with disabilities

**Use of the Wage Structure
Survey and of the State
Database of Persons with
Disabilities**

Operation methodology and
general description

1. Background

The group of persons with disabilities has formed an axis for priority action in social policies carried out in recent years. One of the primary objectives of such policies is to achieve integration of these persons in the workforce.

In order to assess the various action plans adopted, it is necessary to have data available that make it possible to contrast effectiveness thereof, as well to obtain up-to-date information on the situation of the group of persons with disabilities.

Among the sources the INE has available on disability are the Disability, Independence and Dependency Situations Survey 2008 (EDAD 2008) and the 2002 and 2011 ad hoc modules for the Economically Active Population Survey (EAPS), regarding Persons with disabilities and their relationship with employment and regarding Health Problems and their relationship with employment, respectively. These surveys contribute a wealth of information on the group of persons with disabilities, but its periodicity means that they are unable to shed light on the short-term impact of social policies aimed at this population group.

For this reason, in 2009 the CERMI, the ONCE Foundation, the IMSERSO and the INE signed a partnership agreement and created a workgroup whose purpose was to obtain information regarding disabilities and the employment market through the integration of administrative records with existing surveys.

Thanks to this agreement, in 2010 the statistics "Employment of Persons with Disabilities (EPD)" were published for the first time with data relating to 2008, which provides up-to-date information that is comparable in time regarding the employment situation of persons with disabilities through the integration of data from the Economically Active Population Survey (EAPS) with that of the State Database of Persons with Disabilities (BEPD), supplied by the IMSERSO.

The BEPD is a data base, with national scope, including the proceedings for valuing persons with disabilities. It provides information regarding the features of citizens who have officially been recognised as persons with disabilities by the State administrative bodies with jurisdiction.

The EPD has been constituted as ongoing annual statistics, and in its latest edition it was completed with the introduction of data on protected employment, benefits and dependency, obtained via new crosses with administrative records from the Social Security General Treasury (TGSS), from the National Social Security Institute (INSS) and from the System for the Autonomy of and Support for Dependent Persons (SAAD) and from the IMSERSO.

Given the importance maintaining and broadening the carrying out of these studies regarding the group of persons with disabilities, such that efforts are compared, and work, knowledge and experience are shared on an ongoing basis, the four institutions, into which the Directorate General Directorate General for the Coordination of Sectoral Policy for Disabilities -belonging to the aforementioned Ministry of Health, Social Policy and Equality- has been incorporated, have renewed the partnership agreement annually and have broadened their analysis objectives, by proposing a new study in order to determine the feasibility of obtaining wage data relating to the group of persons with disabilities by

joint use of the BEPD and the 2010 Wage Structure Survey (WSS), conducted by the INE. The ONCE Foundation has part-financed this study.

Said work concluded with the carrying out of a new statistical operation called "Wages of Persons with Disabilities (SPD)" and whose methodology is outlined in subsequent chapters in this document.

2. Information sources

Three sources of information have been used:

1.- The **Wage Structure Survey (WSS)**, a four-yearly statistical operation (since 2002) carried out in the framework of the European Union with common methodology and content criteria (Council Regulation (EC) No. 530/1999, of 9 March 1999), for the purpose of obtaining comparable results regarding the structure and distribution of wages among Member States.

This survey has been conducted for reference years 1995, 2002, 2006 and 2010.

The WSS is completed with the "Annual Wage Structure Survey" (AWSS) which obtains wage information comparable with the WSS, albeit with a lower degree of detail.

The information from the AWSS is obtained through the combined processing of the Social Security General Affiliation File (SS) and Model 190 statements: Annual Summary of Withholdings and Advance Payments on Personal Income Taxes by the State Tax Administration Agency (AEAT) and the Treasury of Comunidad Foral de Navarra, along with the occupation and work time variables provided by the survey attached to the INE Quarterly Labour Cost Survey (QLCS).

2.- The **Employment of Persons with Disabilities State Database (BEPD)**, commencing in 1992 with data for persons whose disabilities had been recognised since the beginning of the 1970s.

It contains data for all persons resident in Spain who have applied to have their degree of disability assessed, with persons regarded as disabled when the degree thereof is equal to or greater than 33% (requirement for qualifying for certain benefits, tax breaks, discounts on social security contributions, parking cards and others)¹

3.- The **Social Security General Treasury (TGSS)**, which provides information regarding measures for promoting employment of workers with disabilities. Worth noting among these those intended to encourage ordinary employment through incentives such as subsidies, discounts and reductions in the contribution quotas.

¹ - Article 1 point 2 of Law 51/2003, of 2 December, LIONDAU establishes that those persons for whom a degree of disability greater than or equal to 33 percent has been recognised shall be considered persons with disabilities.

3. Project objectives

The characteristics under study are as follows:

The fundamental purpose of this project is to obtain data on the earnings of workers with disabilities and do so in comparative terms with workers without disabilities.

The aim is to provide the wage distribution for persons certified disabled, depending on:

The personal features of workers: sex, age or educational level.

The features of the job post and of the company: occupation, type of contract (permanent, temporary), type of working day, seniority, company size, activity sector, nature of the company (public/private).

Disability: type of disability, degree of disability, measures to encourage employment (discounts and specific disability contracts).

4. Features of the project

As already indicated, the investigation is derived from crossing of a register (Employment of Persons with Disabilities State Database) and a survey (EES 2010).

Disability is an atypical phenomenon that affects a small percentage of the population, and has a significant effect on the involvement in the employment market of persons affected.

Moreover, the information base on which the wage of persons with disabilities is based, the Wage Structure Survey, was designed for purposes other than the topic of disability.

In view of all of the above, the size of the sample obtained is limited, and prevents detailed use at certain breakdown levels. The main areas of these statistics are set out below.

4.1. Population scope

It comprises wage earners employed by others who pay Social Security contributions subject to the following conditions:

They belong to the Social Security General System, and their economic activity is included in Sections B to S of the CNAE-09

The belong to the Special System for Marine Workers and their economic activity is sea transport (division 50 of the CNAE-09).

They were registered with Social Security during at least 2 months in the reference year, one of them being the month of October.

It excludes Agriculture, Households which employ domestic staff, Extra-territorial organisations and civil servants attached to Mutual provident societies.

It excludes all chairpersons, members of administrative boards and, in general, all personnel whose remuneration is not mainly in the form of wages, but rather commissions or benefits.

4.2. Geographical scope

The whole of the national territory is investigated.

The fact that disability is an atypical phenomenon means that the size of the subsample of persons with disabilities is insufficient for providing independent data for each Autonomous Community. For this reason, information is provided by aggregating Autonomous Communities, this aggregation being carried out in accordance with the European standard, at NUTS1 level.

4.3 Reference period

There is a double reference period for information supplied by the SPD:

The first one is annual, with data referring to the year as a whole.

The second one is monthly, with data referring to the month of October in the year being studied.

The month of October has the advantage of being regarded as “normal” in all

EU countries, in the sense that it is hardly affected by seasonal variations or by payments with a due date later than one month, such as Christmas payments.

Monthly and annual earnings are obtained in this manner.

4.4. Units of analysis

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

The first stage units are the Social Security contribution accounts. EU countries, in the sense that it is hardly affected by seasonal

Second stage units are Workers associated with said Accounts.

Social Security Contribution Account is an administrative concept traditionally used wage and labour cost surveys. It comprises a group of workers employed by others, who carry out their employment activity in one or more workplaces at the same company, within the same province and in general, although not necessarily so, as part of the same main activity and with uniform features as regards Social Security contributions.

Among wage-earners investigated, interest is focused on persons with disabilities.

4.5. Target variables studied

4.5.1. WAGE VARIABLES

Wage data is obtained via microdata from the Wage Structure Survey (WSS), and therefore, terminology regarding wages corresponds fully with that used in the WSS.

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Main concepts considered:

- **Wage earnings or simply earnings:** this comprises the total wage payments in cash and remuneration in kind. This includes base wage, overtime payments, wage supplements, extraordinary payments (with a due date later than the current payment period), payments in kind. Delays corresponding to previous years are not included, nor are other, non-wage payments, such as allowances, compensation or travel expenses.
- **Gross earnings:** before making deductions from Social Security contributions by the worker or Income Tax withholdings
- **Net earnings:** after said deductions are applied.
- **Earnings per worker and year:** total payments received in the annual calculation per worker.
- **Earnings per hour and year:** total payments received in the annual calculation divided by agreed hours per year .
- **Earnings per worker and month (October):** payments received during the month of October (survey reference month) per worker.
- **Earnings per hour and month (October):** payments received during the month of October (survey reference month) divided by hours worked (normal and extraordinary) during this month.
- **Wage gap or ratio** (between two categories): this is defined as the quotient between earnings corresponding to the first category, and earning corresponding to the second.

When it takes value 1 there is wage equality for both categories. The further away from 1, the greater the wage inequality between them, earnings being greater for the first category when the value is greater than 1 and larger for the second when the gap is lower than 1.

4.5.2. DISABILITY VARIABLES

Disability terminology involves a complex phenomenon that reflects an interaction between the features of the human being and the features of the society in which he or she lives.

However, since the study is based on use of administrative records, the definition of disability used is limited to the legal concept.

Thus, the concepts related to the group of persons with disabilities that are used are:

- **Disabilities:** For the purposes of these statistics, disabled persons are regarded as being those with a degree of disability greater than or equal to 33%, according to the assessment procedure established by RD 1971/1999, modified by RD 1856/2009.

Consideration of persons with disabilities is set out in article 1 point 2 of Law 51/2003, of 2 December, LIONDAU. This article establishes that those persons for whom a degree of disability greater than or equal to 33% has been recognised shall be considered persons with disabilities.

The procedure for recognising the degree of disability is set out in RD 1971/1999 modified by RD 1856/2009.

- **Impairment:** any organic or functional disorder giving rise to a disability.
- **Measures for encouraging employment:** A way of offsetting negative trends for the group's activity situation are measures aimed at encouraging their inclusion in ordinary employment, favouring hiring, particularly as permanent staff, of persons with disabilities and their ongoing employment.

Among said measures, worth noting were reductions and discounts in contributions, both for wage-earning and for self-employed workers.

In the case of wage-earning workers, there is another measure that encourages ordinary employment: the modality specific contract for workers with disabilities in which, besides discounts in Social Security contributions, certain subsidies are considered.

4.6. Classification variables

- Sex
- Age groups
- Type of working day
- Type of contract
- Occupation groups
- Level of education
- Seniority
- Size of the unit
- Control of the company (public or private)
- Activity sector
- Groups of Autonomous Communities (NUTS1)
- Type of disability
- Degree of disability
- Discounts or reductions due to disability
- Specific disability contract

5. Data processing

The data used for the Wage Structure Survey(WSS) has already undergone a validation that guarantees completeness, correctness and consistency of information.

The Employment of Persons with Disabilities State Database(BEPD) is filtered in order to ensure correct identification of all its records and deletion of those of deceased persons and of residents in group establishments. Therefore the Municipal Register and Cause of Death Statistics files have been used as contrast files.

Next the WSS file is crossed with the BEPD, adding information taken from the administrative source to that of the survey.

On the other hand, thanks to the Social Security Registrations File sent out by the Social Security General System (TGSS), the available variables and those variables relating to measures for encouraging employment (disability contracts and reductions/discounts in Social Security contributions) are incorporated. Furthermore, the subsample of persons with disabilities within the WSS is completed with those persons whom it was not possible to identify in the WSS with disabilities via the BEPD but who, nevertheless, appear in the Social Security General Treasury (TGSS) with a degree of disability greater than or equal to 33%.

It should be borne in mind that the validity of all these crossings is checked by means of the conjunction of the following measures, whose joining provides criteria for accepting/rejecting the crossings made:

- a) Measurement of similarity of name and surnames (INE routine of comparing alphanumeric strings defined and implemented in the Employment Area of persons with disabilities)
- b) Measurement of comparison of date of birth
- c) Measurement of similarity of the Individual Identifier (IPF)

6. Estimators and sampling errors

6.1. Sample

The random unit selection procedure Wage Structure Survey corresponds to a stratified two-stage sampling, in which the first-stage units are Social Security contribution accounts, whereas second-stage units are workers.

The strata define each first-stage unit according to its Autonomous Community (18 in total, considering the group formed by Ceuta and Melilla), economic activity (in accordance with the current national classification) and size.

Eight size intervals are considered. These are as follows:

1. 1 to 4 workers
2. 5 to 9 workers
3. 10 to 19 workers
4. 20 to 49 workers
5. 50 to 99 workers
6. 100 to 199 workers
7. 200 to 499 workers
8. More than 500 workers

This last size group is researched in depth. Sample sizes per stratum are obtained by prefixing an admissible error of 5% in the scope of activity and Autonomous Community.

The list of units selected in the first stage is re-submitted to the Social Security General System (TGSS) which obtains the list of workers who were registered during the whole of the month of October in the reference year. Workers were selected from this list, the second-stage units.

Lastly, the subsample of persons with disabilities is identified within the sample of workers, via the crossing of the latter with the State Database of Persons with Disabilities and with records from the Social Security General System (TGSS).

6.2. Estimators

Separated ratio estimators are used, with the auxiliary variable being the number of workers in each establishment, according to the directory of Social Security Contribution Accounts.

For the economic data of worker j of establishment i , in activity r , of size h and Autonomous Community t , the first- and second-stage elevation factors are respectively:

$$F_{1j} = \frac{\sum_{i=1}^{N_{rth}} D_i}{\sum_{i=1}^{n_{rth}} D_i} \quad \text{and} \quad F_{2j} = \frac{B_i}{b_i}$$

Where, D_i is the number of workers in the directory in i , B_i is the number of workers in establishment i affiliated to Social Security during the entire month of October in the reference year and b_i is the number of workers according to the sample collected.

Then:

$$GH_c = \frac{\hat{X}_c}{\hat{Y}_c} \quad \text{and} \quad GT_c = \frac{\hat{X}_c}{\hat{Z}_c}$$

are the earnings per hour and the earnings per worker for any cell C of the table to be created (by activity, occupation, sex, Autonomous Community, etc.).

In which:

$$- \hat{X}_c = \sum_{j \in C} F_{1j} * F_{2j} * X_j \quad (\text{Annual earnings})$$

$$- \hat{Y}_c = \sum_{j \in C} F_{1j} * F_{2j} * Y_j \quad (\text{Hours})$$

$$- \hat{Z}_c = \sum_{j \in C} F_{1j} * F_{2j} \quad (\text{Workers})$$

j refers to the Registers that fulfil the conditions of cell C .

6.3 Sampling errors

Calling h the crossing of the Autonomous Community, activity and size variables, gives:

$$\varepsilon(\hat{X}_c) = \frac{\sqrt{\hat{V}(\hat{X}_c)}}{\hat{X}_c} * 100$$

where

$$\hat{V}(\hat{X}_c) = \sum \hat{V}(\hat{X}_{Ch}), \quad \hat{X}_{Ch} = \sum_{j \in h, C} F_{1j} * F_{2j} * X_j$$

$$\text{and} \quad \hat{V}(\hat{X}_{Ch}) = \frac{N_h(N_h - n_h)}{n_h} * \frac{\sum_{i=1}^{nh} (\hat{X}_{C1} - R_{Ch} * D_i)^2}{nh - 1} + \frac{N_h}{n_h} * \sum_{i=1}^{n_h} \frac{B_i(B_i - b_i)}{b_i} * S_{C1}^2$$

in which

$$- \hat{X}_{C_i} = \frac{B_i}{b_i} * \sum_{j=1}^{b_i} X_j \quad \text{where } X_j = 0 \text{ si } j \notin C$$

$$- R_{C_h} = \frac{\sum_{i=1}^{n_h} \hat{X}_{C_1}}{\sum_{i=1}^{n_h} D_i}$$

$$- S_{C_1}^2 = \frac{\sum_{j=1}^{b_i} \left(X_j - \frac{\sum_{j=1}^{b_i} X_j}{b_i} \right)^2}{b_i - 1}$$

The most relevant estimator variation coefficient tables are published, distinguishing between the total population, with and without disabilities.

7. Publication of results

Dissemination of the information on Wages of Persons with Disabilities is performed via a press release in which the main data is mentioned. At the same time the results tables are available in INEbase. Their index is reproduced below. This addresses the objectives of the project:

On the one hand, it aims to compare the wages of persons with disabilities with that of persons without disabilities

On the other hand, it provides detailed information regarding the wage distribution of persons with disabilities analysed depending on the main features of the disability.

In addition, it includes sampling errors for the main analysis variables, in order to have the reliability reference of the estimates.

It should be borne in mind that, due to the nature of the operation (one of the sources of which is company survey) and the discrete sample size, it is not anticipated that microdata will be provided, since its dissemination would compromise statistical secrecy.

Overall index of tables:

- 1 **Annual earnings:** for wage earners, depending on whether or not they have disabilities
- 2 **Monthly earnings:** for wage earners, depending on whether or not they have disabilities
- 3 **Wage distribution:** for wage earners, depending on whether or not they have disabilities
- 4 **Population percentages:** by wage brackets according to overall wage distribution
- 5 **Annual wage differences:** wage gap between persons with and without disabilities
- 6 **Monthly wage differences:** wage gap between persons with and without disabilities
- 7 **Sampling errors:** variation coefficient for the annual wage calculation per worker variable

For more details and a breakdown of these tables, please see annex III of this document.

8. Annexes

Annex I: Description of the Wage Structure Survey and of the State Database of Persons with Disabilities

Annex II: Analysis variables and their categories

Annex III: Obtaining of tables of results

Annex IV: Classifications used

Annex I

Description of the Wage Structure Survey of the State Database of Persons with Disabilities

Wage Structure Survey

The Wage Structure Survey (WSS), a four-yearly statistical operation (since 2002) carried out in the framework of the European Union with common methodology and content criteria (Council Regulation (EC) No. 530/1999, of 9 March 1999), for the purpose of obtaining comparable results regarding the structure and distribution of wages among Member States.

This survey has been conducted for reference years 1995, 2002, 2006 and 2010.

It makes it possible to establish relationships between wages and some variables that may contribute to determining their amount, including those such as educational level attained, seniority, type of contract or occupation.

In addition, the wage level is related to other variables collectively affecting workers of an establishment or a company: the market for which the company is producing, whether or not there is a collective agreement, and its scope where applicable, or whether it is publicly or privately owned.

Another contribution of the survey is that not only are average earnings values provided, but also wage distribution. Consequently, this provides measurement of wage inequality.

OBJETIVES

The principal objectives of the survey may be summarised as two-fold:

- Knowledge of wage levels, not only average levels but also their distribution.
- The determination of the wage structure, both from the point of view of composition and of the variables that have an influence on wages and to what extent.

SURVEY UNITS

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

- The first-stage units are the Social Security Contribution Accounts.
- Second-stage units are Workers associated with said Accounts.

Social Security Contribution Account is an administrative concept traditionally used wage and labour cost surveys. It comprises a group of workers employed by others, who carry out their employment activity in one or more workplaces at the same company, within the same province and in general, although not necessarily so, as part of the same main activity and with uniform features as regards Social Security contributions.

The sample contains 27,000 contribution accounts, within which information is requested from 232,000 workers.

GEOGRAPHICAL SCOPE

The geographical scope is the whole national territory.

POPULATION SCOPE

The population scope is formed by all workers employed by others, who provide services in contribution centres, regardless of their size, and who have been registered with Social Security for at least 2 months during the reference year of the information, one of which is the month of October. It excludes all chairpersons, members of administrative boards and, in general, all personnel whose remuneration is not mainly in the form of wages but rather commissions or benefits.

As per sectorial coverage, the survey studies contribution centres whose economic activity is included in the three large sectors: Industry, Construction and Services. The survey excludes agricultural, livestock and fishing activities; in part, Public Administration, Defence and Compulsory Social Security (this includes public employees belonging to the General Social Security System, and it excludes civil servants attached to Mutual provident societies); domestic staff and extra-territorial organisations.

REFERENCE PERIOD

The survey distinguishes between two reference periods. Most of the questions refer to October during the reference year. This month has the advantage of being considered "normal" in all EU countries, in the sense that this is not affected much by seasonal variations or by payments which fall due in more than one month's time, such as Christmas bonuses. Other data refers to the whole of 2006. Monthly and annual earnings are obtained in this manner.

MAIN DEFINITIONS

The main concept analysed in the WSS is wage earnings, including total salary received in cash and remunerations in kind. The gross accrued income is used, that is, before making deductions from Social Security contributions by the worker or Income Tax withholdings.

A more detailed specification of survey wage concepts appears in annex II of this document.

CLASSIFICATIONS

The main classifications used in the Survey may be consulted in annex IV of this document.

State Database of Persons with Disabilities

The State Database of Persons with Disabilities began in 1992 with the data on those persons whose disabilities had been recognised as of the beginning of the 70s.

It contains data for all persons resident in Spain who have applied to have their degree of disability assessed, with persons regarded as disabled when the degree thereof is equal to or greater than 33% (requirement for qualifying for certain benefits, tax breaks, discounts on social security contributions, parking cards etc.)²

The information collected in the Base is a result of the evaluations performed by the Base Centres of the Territorial Directorates of the IMSERSO in Ceuta and Melilla, and by the bodies with jurisdiction regarding evaluation in the Autonomous Communities, pursuant to the procedure established in Royal Decree 1971/1999, of 23 December (amended by RD 1856/2009, of 4 December).

The purpose of the Royal Decree is to regulate recognition of the degree of disability, establishment of new applicable scales, determining the organisations with jurisdiction for performing said recognition, and the procedure to follow, all with the purpose of the assessment and classification of the degree of disability affecting the person being uniform throughout the State, thereby guaranteeing equal conditions for access by citizens to benefits, economic rights and services granted by public bodies.

The assessment of disabilities is carried out in accordance with the scale established in Annex 1.A of the aforementioned RD 1971/1999. The said annex establishes the guidelines for determining the Limitations of an activity caused by permanent impairments, associated with a given health condition. The assessment considers all impairments suffered, including the three most important impairments in the Base.

In their ruling, experts collect medical, psychological or social reports necessary for determining the degree of disability, which may be subject to review in the two years following its recognition, so long as a reasonable improvement is validated, an diagnosis mistake is accredited or "substantial" changes occur in the circumstances that gave rise to recognition of the disability.

Assessment rules are not so much focused on the extent of the impairment, as on its effect on ability to carry out everyday tasks. In this sense, illnesses that occur as outbreaks and interfere with the daily lives of persons suffering them are also subject to assessment. In order to apply for certification, it is necessary to visit the corresponding Department of Social Affairs, collect an application

²Exemption from taxes on acquiring a vehicle, help with purchasing a dwelling, mobility and transport subsidy for transport costs, health and pharmaceutical care, etc.

In turn, the Autonomous Community or local institutions may consider other individual aid for adapting the home or acquiring technical help, as well as reserved parking or priority accessing employment.

form and undergo a medical examination, under the legally established terms. Subsequently, the interested party awaits the outcome.

For the purposes set out in the Royal Decree, disability situations are qualified in degrees, according to the scope of the limitations of activities and/or restrictions of participation.

The degree of disability is obtained by applying the pre-established scales, and it is corrected with an assessment of the complementary social factors (family situation, economic resources, employment situation, cultural level, and social environment).

FILE STRUCTURE: CONTENT OF THE DATABASE

The main variables covered in the BEPD are:

Variable	Observations
Numerical identifier	The foreign population is identified with the NIE (identification number for foreign nationals), passport number or residence card. The letters D or R that precede the ID number indicate the existence of a "legal representative". When the person acting as representative has one or two assessed representees with no ID, 1 or 2 is added.
Sex	"M/F" (male/female)
Name	(available as of 2011 for BEPD2009, 2010, etc.)
Surname(s)	(available as of 2011 for BEPD2009, 2010, etc.)
Residence	(available as of 2011 for BEPD2009, 2010, etc.)
Municipality	(available as of 2011 for BEPD2009, 2010, etc.)
Date of birth	"DDMMYYYY"
Date of evaluation	"DDMMYYYY"
Impairment	According to Table of Impairments
Degree of disability	Greater than or equal to 33%, and less than or equal to 100%

UPDATING OF THE DATABASE

The degree of disability is subject to revision whenever a reasonable improvement in the circumstances causing its recognition is expected, and the deadline by which said revision should be carried out must be established.

In all other cases, revision of the degree due to worsening or improvement may not be commenced, until at least a minimum period of two years has elapsed since the date on which the resolution was handed down, except in cases in which there is sufficient evidence of a misdiagnosis or substantial changes have occurred, giving rise to recognition of degree, whereby it will not be necessary to wait until a minimum period of time has elapsed.

The updated Base includes those persons who have requested an evaluation for the first time, and will likewise include the revisions of the degree of disability of those individuals already evaluated, so long as they are in the circumstances described in the paragraphs above.

Similarly, changes in residence, personal situation of the individual, etc., will be up-to-date so long as the interested party notifies them to the body with jurisdiction in this respect.

The Base is updated annually.

DISABILITY CLASSIFICATION

The BEPD has its own system for classifying the typology of impairments and their causes. Although the concept of impairment is the same as with which the Classification of Impairments, Disabilities, and Handicaps of the WHO defines for first-level consequences of illness (“any loss of or abnormality in a psychological, physiological or anatomical function”), it has been necessary to adapt the structure of the WHO to the data contained in the decisions to reliably collect information recorded in proceedings for recognising the condition of persons with disabilities. Therefore classification has been simplified, categories have been grouped and they have also been adjusted to incoming applications information at the IMSERSO.

Thus, the BEPD has 3 codes with which it is endeavoured to sort pathological situations that may be suffered by those applying for recognition of the disability condition:

Impairment Code:

This records alterations, both structural and functional, which have given rise to the disability. It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function in accordance with the following classification:

- a) Physical and other:
 - Osteoarticular system
 - Neuromuscular system
 - 1.4. Cardiovascular, immunological and respiratory systems
 - Digestive, metabolic and endocrine systems
 - Other
- b) Intellectual
- c) Mental
- d) Sensory:

- Visual system
- Auditory system

2 Diagnosis Code:

This describes the pathologies giving rise to the anomaly in the organism structure or in its functions. It contains 684 diagnoses, encoded with 3 digits, which may be organised into 13 groups.

3 Aetiology Code:

It covers the large aetiological groups, for the purpose of having access to data regarding the origin (congenital, traumatic, etc.) of assessed disabilities. It covers 14 groups (2-digit encoded).

Annex II

Analysis variables and their categories

This annex presents the categories considered for the study and classification variables, derived from those with such variables in the sources used to construct the statistics "Wages of Persons with Disabilities" (SPD).

The following table features the complete list of SPD analysis variables, together with their categories.

Variable	Values
Workers	Total Persons without disabilities Persons with disabilities
Sex	Both sexes Men Women
Age Groups	All ages Between 16 and 29 years old Between 30 and 44 years old 45 years old and over
Occupation Groups	All occupations Delisting Average Registration
Type of Working Day	Total Full-time Part-time
Type of contract:	Total Permanent Temporary
Educational Level:	Total Uneducated and with primary education Secondary and employment training and insertion programmes Higher education, including doctorates
Seniority:	Total Less than 1 year Between 1 and 3 years Between 4 and 10 years Between 11 and 20 years Over 20 years

Variable	Values
Size of the unit:	Total 1 to 49 workers 50 to 199 workers 200 and more workers
Control of the company (public or private))	Total Public control of the company Private control of the company
Groups of Autonomous Communities	National total Northwest Northeast Comunidad de Madrid Centre East South Canarias
Activity sector	All activity sectors Industry and construction Market
Type of disability	Total Physical and other Intellectual Mental Sensory
Degree of disability	Total 33% to 44% 45% to 64% 65% to 74% 75% and over
Discounts or reductions due to disability	Total Wage earners, without discounts or reductions in the contribu- tion quotas Wage earners with discounts or reductions in the contribution quotas
Specific disability con- tract	Total Specific disability contract Other contracts

Annex III

Breakdown of tables of results

Index of broken down SPD results tables

1 ANNUAL EARNINGS:

For wage earners, depending on whether or not they have disabilities

- 1.1 Sex and age groups
- 1.2 Sex and type of working day
- 1.3 Sex and type of contract
- 1.4 Sex and occupation groups
- 1.5 Sex and educational level
- 1.6 Sex and seniority
- 1.7 Sex and size of the unit
- 1.8 Sex and control of the company (public or private)
- 1.9 Sex and activity sector
- 1.10 Annual earnings by groups of Autonomous Communities (NUTS1)
- 1.11 Sex and type of disability
- 1.12 Sex and degree of disability
- 1.13 Sex and discounts or reductions due to disability
- 1.14 Sex and specific disability contract

2 MONTHLY EARNINGS:

for wage earners, depending on whether or not they have disabilities

- 2.1 Sex and age groups
- 2.2 Sex and Type of working day
- 2.3 Sex and type of contract
- 2.4 Sex and occupation groups
- 2.5 Sex and educational level
- 2.6 Sex and seniority
- 2.7 Sex and size of the unit
- 2.8 Sex and control of the company (public or private)
- 2.9 Sex and activity sector
- 2.10 Groups of Autonomous Communities (NUTS1)
- 2.11 Sex and type of disability
- 2.12 Sex and degree of disability
- 2.13 Sex and discounts or reductions due to disability
- 2.14 Sex and specific disability contract

3 WAGE DISTRIBUTION:

For wage earners, depending on whether or not they have disabilities

- 3.1 Sex
- 3.2 Age groups
- 3.3 Type of working day
- 3.4 Type of contract
- 3.5 Occupation groups
- 3.6 Educational level
- 3.7 Seniority
- 3.8 Type of disability
- 3. Degree of disability

4 POPULATION PERCENTAGES:

By wage brackets according to overall wage distribution

- 4.1 Population percentage of persons with wages below the percentiles by sex
- 4.2 Population percentage of persons with wages below the percentiles by age group
- 4.3 Population percentage of persons with wages below the percentiles by working day group
- 4.4 Population percentage of persons with wages below the percentiles by contract group
- 4.5 Population percentage of persons with wages below the percentiles by occupation group
- 4.6 Population percentage of persons with wages below the percentiles by educational level
- 4.7 Population percentage of persons with wages below the percentiles by seniority
- 4.8 Population percentage of persons with wages below the percentiles by disability group
- 4.9 Population percentage of persons with wages below the percentiles by disability group

5 ANNUAL WAGE DIFFERENCES:

Wage gap between persons with and without disabilities

- 5.1 Sex
- 5.2 Age groups

- 5.3 Type of working day
- 5.4 Type of contract
- 5.5 Occupation groups
- 5.6 Level of studies
- 5.7 Seniority

6 MONTHLY WAGE DIFFERENCES:

Wage gap between persons with and without disabilities

- 6.1 Sex
- 6.2 Age groups
- 6.3 Type of working day
- 6.4 Type of contract
- 6.5 Occupation groups
- 6.6 Educational level
- 6.7 Seniority

7 SAMPLING ERRORS

Variation coefficient for the annual wage calculation per worker variable

- 7.1 Sex
- 7.2 Age groups
- 7.3 Type of working day
- 7.4 Type of contract
- 7.5 Activity sector
- 7.6 Groups of Autonomous Communities (NUTS1)
- 7.7 Type of disability
- 7.8 Degree of disability

Annex IV

Classifications used

Type of disability associated with the impairment

In the year 1991, the IMSERSO implemented a new way of classifying impairments, adapting to the required information and to the content of assessment decisions. The objective is to register in the BEPD alterations which have given rise to the disability (impairment codes).

It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function in accordance with the following classification:

- a) Physical and others:
 - Osteoarticular system
 - Neuromuscular system
 - Cardiovascular, immunological and respiratory systems
 - Digestive, metabolic and endocrine systems
 - Others
- b) Intellectual
- c) Mental
- d) Sensory:
 - Visual system
 - Auditory system

Impairment table(4 digits)

Group	Impairment group	Code	Name
1	Osteoarticular	1101	alteration in alineation, spinal column, without functional limitations
		1102	alteration in alineation, spinal column, with functional limitation
		1103	functional limitation of the spinal column
		1104	absence of fingers or phalanges
		1105	absence of msd or its essential parts
		1106	absence of msi or its essential parts
		1107	absence of mmi or its essential parts
		1108	functional limitation of the right hand
		1109	functional limitation of the left hand
		1110	bimanual functional limitation
		1111	functional limitation of msd
		1112	functional limitation of msi
		1113	functional limitation of both ms (upper limbs)

Group	Impairment group	Code	Name
		1114	functional limitation of a foot
		1115	bipodal functional limitation
		1116	functional limitation of a lower limb
		1117	functional limitation of both mi (lower limbs)
		1118	functional limitation of an upper limb and a lower limb
		1119	functional limitation of both upper limbs and one lower limb
		1120	functional limitation of both lower limbs and one upper limb
		1121	functional limitation of four extremities
		1122	functional limitation of extremities and cv
		1123	short stature
		1124	morph-thoracic anomaly
		1125	disability of the osteoarticular system
2	Neuromuscular	1201	paralysis of the peripheral nerve
		1202	paresis of the peripheral nerve
		1203	paralysis of the cranial nerve
		1204	paresis of the cranial nerve
		1205	monoplegia of the right upper limb
		1206	monoparesis of the right upper limb
		1207	monoplegia of the left upper limb
		1208	monoparesis of the left upper limb
		1209	monoplegia of a lower limb
		1210	monoparesis of a lower limb
		1211	diparesis
		1212	diplegia
		1213	paraplegia
		1214	paraparesis
		1215	right hemiplegia
		1216	left hemiplegia
		1217	right hemiparesis
		1218	left hemiparesis
		1219	tetraplegia
		1220	tetraparesis
		1221	generalised seizures
		1222	generalised non-seizure crises
		1223	partial crises
		1224	coordination disorder

Group	Impairment group	Code	Name
		1225	balance disorder
		1226	coordination and balance disorder
		1227	vasomotor disorder
		1228	neurovegetative disfunction
		1229	disability of the neuromuscular system
3	chronic illness	6001	disease of the respiratory system
		6002	disease of the circulatory system
		6003	disease of the digestive system
		6004	disease of the endocrine-metabolic system
		6005	disease of the blood and haematopoietic organs
		6006	disease of the genito-urinary system
		6007	skin disease
		6008	immune system disorder
		6009	transplant patient
		6010	terminal patient
		6011	chronic illness
		8002	total surgical loss of an organ
		8003	partial surgical loss of an organ
4	mental retardation	2100	profound mental retardation
		2101	severe mental retardation
		2102	moderate mental retardation
		2103	slight mental retardation
		2104	limited intelligence
		2105	developmental delay
5	mental disorder	2106	developmental disorder
		2107	cognitive disorder
		2108	affection disorder
		2109	behavioural alteration
		2300	mental disorder
6	Visual	3101	slight loss of binocular visual acuity
		3102	moderate loss of binocular visual acuity
		3103	severe loss of binocular visual acuity
		3104	serious loss of binocular visual acuity
		3105	blindness
		3106	loss of sight in one eye
		3107	decrease in visual efficiency

Impairment table(4 digits)		(Conclusión)	
Group	Impairment group	Code	Name
7	auditory disability	3201	slight hearing loss
		3202	moderate hearing loss
		3203	severe hearing loss
		3204	profound hearing loss
		3205	deafness
		3206	deaf-muteness
		3207	total loss of hearing in one ear
		3208	tinnitus
		3209	disability of the auditory system
		8	expression
4102	dysarthria		
4103	dysphemia		
4104	dysphonia		
4105	muteness		
4106	laryngectomy		
4107	disability in expression		
9	Mixed	5200	poly-malformative syndrome
		8001	multiple disabilities
10	Other	7000	unknown impairment
		8000	without disabilities
		9000	non-assessable acute process

Degree of disability

The population is divided into two categories, according to the percentage of the degree of disability:

- Less than 33%
- 33% and more

For SPD only records for persons with a degree equal to or above 33% have been considered.

45% and 65% are the degrees of disability that establish limits regarding the receipt of pensions or the granting of pre-retirement.

For tabulation purposes, the following classification for the degree of disability variable shall be considered:

- from 33% to 49%
- from 50% to 64%
- from 65% to 74%

75% and over

Employment

The following groups based on classification CNO-11 are considered:

- High (groups 1-3 of NCO-11)
- Media (groups 4-7 of NCO-11)
- Delisting (groups 8-9 of NCO-11)

CNO-11 National classification of occupations 2011¹

Code	Description
1	Directors and managers
<i>A</i>	<i>Directors and managers</i>
2	Scientific and intellectual technicians and professionals
<i>B</i>	<i>Scientific technicians and professionals and intellectuals in health and education</i>
<i>C</i>	<i>Other scientific and intellectual professionals</i>
3	Technicians; support professionals
<i>D</i>	<i>Technicians; support professionals</i>
4	Accountancy, administrative and other office employees
<i>E</i>	<i>Office employees who do not deal with the public</i>
<i>F</i>	<i>Office employees who do not deal with the public</i>
5	Workers in catering, personal, and protection services and salespersons
<i>G</i>	<i>Catering and trade services workers</i>
<i>H</i>	<i>Health service and care workers</i>
<i>I</i>	<i>Protection and security services workers</i>
6	Skilled agricultural, livestock, forestry and fishing sector workers
<i>J</i>	<i>Skilled agricultural, livestock, forestry and fishing sector workers</i>
7	Craftspersons and skilled workers in manufacturing and construction (except installation and machinery operators)
<i>K</i>	<i>Skilled construction workers, except machines operators</i>
<i>L</i>	<i>Skilled workers in manufacturing, except installation and machines operators</i>
8	Installation and machinery operators and assemblers
<i>M</i>	<i>Installation and fixed machinery operators and assemblers</i>
<i>N</i>	<i>Mobile machinery drivers and operators</i>
9	Elementary occupations
<i>O</i>	<i>Unskilled services workers (except transport)</i>
<i>P</i>	<i>Unskilled agricultural, fishing, construction, manufacturing and transport industry labourers</i>
0	Military occupations
<i>Q</i>	<i>Military occupations</i>

¹ The complete classification may be viewed in www.ine.es/en

Economic Activity

The following activity sectors based on the CNAE-09 are considered:

- Industry and construction (sections C-F of the CNAE-09)
- Services (sections G-O of the CNAE-09)

CNAE - 09: National Classification of Economic Activities³

Code	Description
A	Agriculture, livestock breeding, forestry and fishing
B	Mining and quarrying industries
C	Manufacturing industry
D	Supply of electrical energy, gas, steam and air conditioning
E	Water supply, waste management and decontamination activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transport and storage
I	Accommodation
J	Information and communications
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support services activities
O	Public administration and defence; compulsory social security
P	Formal
Q	Health and social services activities
R	Arts, recreation and entertainment activities
S	Other services
T	Private households with employed housekeeping staff; activities of households as producers of goods and services for their own use
U	Activities of extraterritorial organisations and bodies

³ The complete classification may be viewed in www.ine.es/en

Education (educational level attained)

The following categories are considered:

- Uneducated (code 80 CNED-2000) and with primary education or lower (codes 11-12 CNED-2000)
- Secondary education and employment training and labour market insertion (codes 21-24 CNED-2000)
- Higher education and doctorates (codes 51-56 CNED-2000)

Structure of the educational level attained (CNED-2000)

Z	Illiterate persons
80	Illiterate persons
B	Primary education
11	Incomplete primary education
12	Complete primary education
C	Programmes for training and labour integration that do NOT require first stage secondary education qualification (over 300 hours)
21	Programmes for training and labour integration that do not require first stage secondary education qualification (over 300 hours)
D	First Stage of Secondary Education
22	First stage of secondary education without the primary education certificate or equivalent
23	First stage of secondary education with the primary education certificate or equivalent
E	Programmes for training and labour integration that require first stage secondary education academic qualifications (over 300 hours)
31	Programmes for training and labour integration that require first stage secondary education academic qualifications (over 300 hours)
F	Second stage of secondary education
32	Post-secondary education
33	Intermediate vocational training courses, specific and equivalent, plastic arts and design, and sports.
34	Intermediate level music and dance education
G	Programmes for training and labour integration that require second stage secondary education academic qualifications (over 300 hours)
41	Programmes for training and labour integration that require second stage secondary education qualifications (over 300 hours)
H	Advanced specific vocational training studies and equivalent, plastic arts and design, and sport studies
51	Advanced specific vocational training studies and equivalent, plastic arts and design, and sport studies
I	Other education lasting 2 or more years requiring a post-secondary qualification
52	University qualifications and other education that requires a post-secondary education qualification (2 years and over)
53	Programmes for training and labour integration that require advanced vocational training (over 300 hours)
J	First and second cycle university education
54	First cycle university education and equivalent studies or 3 complete academic years or credits of a degree, passed, equivalent to a degree
55	First and second cycle university education, solely of the second cycle and equivalent
K	Official professional specialisation studies
56	Official professional specialisation studies
L	Third-cycle University Education
61	Third-cycle University Education

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