

Consolidated Quality Report on ESSPROS Core System

"Edition 2023 on 2020 data"

pursuant to Regulation (EC) No 1322/2007

of 12 November 2007

implementing Regulation (EC) No 458/2007 of the European Parliament and of the Council on the European system of integrated social protection statistics (ESSPROS) as regards the appropriate formats for transmission, results to be transmitted and criteria for measuring quality for the ESSPROS Core System and the module on pension beneficiaries

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Introduction

Annex II, point 3.1 of Commission Regulation (EC) No 1322/2007 of 12 November 2007 requires Member States to transmit annually to Eurostat quality reports on the Core System of the European System of Integrated Social Protection Statistics (ESSPROS).

On the basis of national quality reports, Eurostat is required to produce a consolidated version summarising the results for all countries and an overall quality assessment of the ESSPROS Core System collection.

This Quality Report concerns the 2020 data on Social protection expenditures and receipts in Europe (EU27 + IS, NO, CH, ME, RS, TR and BA). Accordingly, most of the information contained in this report refers to 2020 data and only some chapters deal with information on the years 1990–2020 (i.e. in the time series analysis).

The European System of Integrated Social Protection Statistics

The European System of Integrated Social Protection Statistics (ESSPROS) was developed in the late 1970s by Eurostat, jointly with representatives of EC Member States, in response to the need for a specific instrument for the statistical observation of social protection.

ESSPROS is a common framework which enables international comparison of national data on social protection. It provides a coherent comparison between European countries of social benefits to households and the financing of those benefits.

ESSPROS comprises Core System and two modules (Pension beneficiaries and net benefits).

1. The Core System contains annual data collected by Eurostat:

- Quantitative data (QD): social protection receipts and expenditure by scheme
- Qualitative information (QI): metadata by scheme and detailed benefit.

The receipts of social protection schemes are classified by type and origin. 'Type' indicates the nature of, or reason for, a payment:

- Social contributions;
- General government contributions;
- Transfers from other schemes;
- Other receipts.

'Origin' specifies the institutional sector from which the payment is received, namely all resident institutional units (corporations, general government, households, non-profit institutions serving households) and the rest of the world.

Social protection **expenditure** is classified by type, indicating the nature of, or the reason for, the expenditure:

- Social protection benefits;
- Administration costs;
- Transfers to other schemes;
- Other expenditure.

Social protection benefits are transfers to households, in cash or in kind, intended to relieve them of the financial burden of a number of risks or needs. The social protection risks or needs included in ESSPROS are: **disability, sickness/health care, old age, survivors, family/children, unemployment, housing and social exclusion not classified elsewhere.**

Social protection benefits are classified by function. Each function corresponds to one of the risks or needs within the scope of ESSPROS.

2. The modules contain additional statistical information on particular aspects of social protection, i.e. they relate to pension beneficiaries (PB) and to net social benefits.

The ESSPROS statistical unit is ‘a scheme’ defined in the art. 2 of the Regulation (EC) No 458/2007 of the European Parliament and of the Council of 25 April 2007 as: ‘a distinct body of rules, supported by one or more institutional units, governing the provision of social protection benefits and their financing’.

Social protection systems are organised differently in different countries and schemes vary considerably in number and size from one country to another.

This Consolidated Quality Report on the ESSPROS Core System is designed to measure the quality of the 2022 data collection, which refers to the year 2020. The Report summarises the practices used in compiling the ESSPROS Core System data by all the countries belonging to EU⁽¹⁾ plus Iceland (IS), Norway (NO), Switzerland (CH), Montenegro (ME), Republic of Serbia (RS), Türkiye (TR) and Bosnia and Herzegovina (BA) .

There is a total of 1126 ESSPROS schemes; out of them, 876 are active meaning that in 2020 some expenditure and receipts were recorded under those schemes.

Due to the complexity of national systems, the number of active schemes can be quite different among countries. For example IE, EE and NO have a limited number of active

(1) The EU countries participating in ESSPROS data collection are: Belgium (BE), Bulgaria (BG), Czechia (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE).

schemes (less than 10) while in other countries like BE, FR, DK there are 67, 65 and 49 active schemes respectively.

The ESSPROS Regulations

Prior to the 2007, countries sent statistics on the ESSPROS Core System to Eurostat on the basis of a gentlemen's agreement. During that period the reference manual was the 'ESSPROS Manual 1996'.

In 2007 and 2008, three new pieces of legislation were introduced in the field of social protection statistics:

- Regulation (EC) No 458/2007 of the European Parliament and of the Council;
- Commission Regulation No 1322/2007;
- Commission Regulation No 10/2008.

Regulation (EC) No 458/2007 provides for:

- A methodological framework (based on common standards, definitions, classifications and accounting rules), intended to be used for compiling ESSPROS statistics on a comparable basis;
- Time limits for the transmission of statistics compiled according to ESSPROS.

Commission Regulation No 1322/2007 supplements Regulation No 458/2007 and specifies:

- The results to be transmitted and the appropriate formats for transmission;
- The criteria to be followed in order to measure quality;
- Time limits for the transmission of national quality reports.

Commission Regulation No 10/2008, for the Core System of ESSPROS and for the module on Pension Beneficiaries, focuses on:

- Definitions;
- Detailed classifications;
- Updating of the rules for dissemination.

Since these Regulations came into force, the reference manual for data collection has become the 'ESSPROS manual', produced by the European Commission in collaboration with Member States.

As from the 2008 data collection (2006 ESSPROS data) the Regulation requires Member States to send to Eurostat:

- Their data on the Core System relating to year N-2, by the end of June of year N;

- Their quality report on the Core System describing collection for year N-2, by the end of September of year N.

As Decision No 92/2008 of the EEA Joint Committee regarding Regulation No 10/2008, amending Annex XXI (Statistics) to the EEA Agreement entered into force in July 2008, EEA/EFTA (non-EU) countries have been required to submit ESSPROS data by the deadlines laid down in the ESSPROS Regulations as from the 2009 data collection.

Structure of the Quality Report

The aim of a quality report is to bring together the multiple components of the quality of statistical data, respecting the criteria commonly used in assessing the quality of statistics.

The European Statistical System (ESS) has defined a number of quality criteria to be applied to statistical data, namely: Relevance, Accessibility and Clarity, Timeliness and Punctuality, Coherence, Comparability and Accuracy.

- **Relevance** refers to the extent to which the *statistical data* satisfies the needs of the users.
- **Accessibility** refers to the physical conditions under which users can obtain the *statistical data*.
- **Clarity** refers to the availability of appropriate documentation linked to the *statistical data* and the additional assistance which producers provide to users.
- **Timeliness** of *statistical data* is the length of time between their availability and the moment at which the phenomena they describe occurred.
- **Punctuality** refers to any time lag between the release and the target date by which the data should have been delivered, for instance, in the case of the ESSPROS Core System, with reference to the deadlines set by Regulation No 458.
- **Coherence** aims to measure the reliability of the *statistical data* if combined with other statistics in various ways and for other uses.
- **Comparability** seeks to measure the effect of the differences in the statistical concepts and measurement procedures applied when the *statistical data* is compared between geographic areas, over time or between different domains.
- **Accuracy** in a statistical sense refers to the closeness of the *statistical data* to the (generally) unknown true or exact value of the phenomena measured. Usually, this closeness can be measured by using statistical indicators such as bias and variability of the *statistical data*.

As the data used for ESSPROS statistics are based on multiple data sources (administrative, accounts, surveys, censuses, etc.), the standard measures of accuracy are not directly applicable. In this case, therefore, accuracy is assessed instead by reporting non-sampling errors in data sources, such as limitations in coverage and measurement problems, and by evaluating the methods of estimation used and by evaluating the revisions. In addition, Eurostat carried out a validation process on ESSPROS Core System data. This process involved the use of special IT tools to evaluate the reliability of the data.

1. Relevance

Relevance specifies the extent to which the statistical data satisfies the needs of users. As the ESSPROS Core System is a common framework which enables the international comparison of national data on social protection, it is used by various international institutions to analyse and compare the social situations of different countries.

At the Lisbon European Council in March 2000, the Member States undertook to improve and modernise their social protection systems. As a result, the Open Method of Coordination ⁽²⁾ highlighted the need for comparable, timely and reliable statistics in the area of social policy. The Commission Communication of May 2003 entitled 'Streamlining open coordination in the field of social protection' thus includes a statement on the need for indicators, and mentions ESSPROS as a key instrument.

The following publications include statistics using ESSPROS data:

- [The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States \(2019-2070\)](#);
- [The 2021 Ageing Report: Underlying Assumptions and Projection Methodologies](#);
- The [2018 Ageing Report: Economic and Budgetary Projections for the EU Member States \(2016-2070\)](#);
- The [2018 Ageing Report: Underlying Assumptions and Projection Methodologies](#);
- The [2015 Ageing Report: Economic and Budgetary Projections for the 28 EU Member States \(2013-2060\)](#);
- The [EPC-EC Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability \(2016\), Vol. 1, Institutional paper 37](#);
- The [EPC-EC Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability \(2016\), Vol. 2 Country Documents, Institutional paper 37](#);
- The Statistical pocketbook "[European social statistics -2013 edition](#)";
- The Social Protection Committee report "[Social Europe. Current challenges and the way forward](#)". The *Social Protection Committee* is a Treaty-based Committee (Article 160 of the [Treaty on the Functioning of the EU](#)) which was formally created through [Council Decisions](#) in 2000 and 2004. The SPC serves as a vehicle for cooperative exchange between Member States and the European Commission in the framework of the Open Method of Co-ordination on social inclusion, health care and long-term care as well as pensions ("[Social](#)" OMC");
- The publication "[Pension Adequacy in the European Union 2010-2050](#)" produced jointly by the Social Protection Committee and the European Commission;

(2) The Open Method of Coordination or OMC is an intergovernmental means of governance in the European Union, based on the voluntary cooperation of its Member States.

- The Social Protection Committee advisory report to the European Commission on "[Tackling and preventing child poverty, promoting child well-being](#)";
- The publication [Employment and Social Developments in Europe 2012 Effectiveness and efficiency of welfare systems - Chapter 3, Social protection systems confronting the crisis](#) produced by the Commission's Directorate-General for Employment, Social Affairs and Equal Opportunities (DG EMPL);
- The publication [Employment and Social Developments in Europe 2013 - Chapter 6 Efficiency and effectiveness of social expenditure in the crisis](#) produced by the Commission's Directorate-General for Employment, Social Affairs and Equal Opportunities (DG EMPL);
- The working paper 01/2013 [Social protection budgets in the crisis in the EU](#) produced by the European Commission;
- The [EU Employment and Social Situation quarterly review](#) – special supplement March 2014;
- The publication [Employment and Social Developments in Europe 2014 - Chapter 1, the legacy of the crisis: resilience and challenges](#) produced by the Commission's Directorate-General for Employment, Social Affairs and Equal Opportunities (DG EMPL);
- The annual report 2014 [Social Europe - Aiming for inclusive growth](#) of the Social Protection Committee on the social situation in the European Union;
- The report [Social protection systems in the EU: financing arrangements and the effectiveness and efficiency of resource allocation](#) (2015) jointly prepared by the Social Protection Committee and the European Commission Services;
- The Social Protection Committee report "[The social impact of the economic crisis and on-going fiscal consolidation](#)";
- The publication [Employment and Social Developments in Europe 2015 – Chapter 7, Social protection systems in the EU](#);
- The publication [Employment and Social Development in Europe 2016 - Main Employment and Social Developments](#);
- The publication [Employment and Social Developments in Europe 2017](#);
- The publication [Employment and Social Developments in Europe 2018](#);
- The publication [Employment and Social Developments in Europe 2019](#);
- The publication [Employment and Social Developments in Europe 2020](#);
- The publication [Employment and social developments in Europe 2021](#);
- The working paper 01/2013 [Social protection budgets in the crisis in the EU](#);
- The [Analytical Web Note 5/2015: Latest trends in social protection expenditure](#);
- The [Pension Adequacy report 2018 – Current and future income adequacy in old age in the EU \(Volume 1\)](#);
- The [Pension Adequacy report 2018 – Current and future income adequacy in old age in the EU \(Volume 2\)](#);
- The [Social Protection Committee background report on sick leave and sick pay/sickness benefit schemes in the EU](#) (2016).

ESSPROS data is also transmitted to the OECD and integrated into its 'Social Expenditure database' (SOCX), which is used to provide an accounting system for social expenditure in OECD member countries.

As well as including the ESSPROS classification in its manual for 'ILO Social Security Inquiry', the International Labour Office (ILO) classifies ESSPROS data in the list of 'Indicators identified to monitor progress towards decent work'.

The Nordic Social-Statistical Committee (NOSOSCO), set up to coordinate social statistics from the Nordic countries, has decided to adopt the specifications and definitions used in ESSPROS.

The members of ESPAnet (Network for European Social Policy Analysis) use ESSPROS data to analyse social policy in Europe.

2. Accessibility and clarity

The accessibility and clarity of the statistical data refer to actual availability for users in terms of both the figures themselves and appropriate documentation.

ESSPROS data and metadata are available in the dedicated section on ‘Social protection’, which can be found at the following address on the Eurostat website:

<http://ec.europa.eu/eurostat/web/social-protection/overview>

In this dedicated section, users can find links to the legal basis (the ESSPROS Regulations), the methodology (the ESSPROS Manual) and data and information relating to the Core System and the modules on pension beneficiaries and on net social benefits.

2.1 Eurostat dissemination policy

European Parliament and Council Regulation No 458/2007 laid down the deadline for the dissemination of ESSPROS data (Annex I, points 1.3 and 2.3): by 31 October of year N+2, the Commission will publish:

- Data on social protection expenditure at all schemes level for year N;
- Qualitative information at scheme level updated for year N.

Commission Regulation No 10/2008 updated the dissemination rule for the ESSPROS Core System (Annex 3), allowing data to be published by scheme (or group of schemes for those countries which, for confidentiality reasons, had not given their explicit assent to full dissemination).

ESSPROS expenditure and receipts data at all schemes level were disseminated for all countries within October 2022 (except BA), via the Eurostat database at the following address:

<http://ec.europa.eu/eurostat/web/social-protection/data/database>

2.2 Metadata


2.2.1 Qualitative information

Under the terms of Regulation No 458/2007 of the European Parliament and of the Council (Article 3 and Annex I, point 2.2), each transmission of ESSPROS quantitative data has to be accompanied by an annual updating of the qualitative information, which acts as a complete set of metadata (for ESSPROS data), providing a general description of the schemes, a detailed description of the benefits and information on recent changes and reforms concerning the social protection system of each country.

The updated qualitative information at scheme level has been disseminated by Eurostat in the ESSPROS dedicated section on the Eurostat web site:

<http://ec.europa.eu/eurostat/web/social-protection/data/qualitative-information>

2.2.2 Metadata other than qualitative information

Useful metadata information is contained in the ESMS file attached to ESSPROS tables in the Eurostat database. It can be accessed by clicking the  icon associated to the Social protection data tree at the following address:

<http://ec.europa.eu/eurostat/web/social-protection/data/database>

3. Timeliness and punctuality

Timeliness of statistical data means the length of the time between availability of data and the point in time at which the phenomena they describe occurred. Punctuality refers to any time lag between the release and the target date for delivery of the data; for instance, in the case of the ESSPROS Core System, with reference to the deadlines laid down by Regulation No 458/2007 of the European Parliament and of the Council.

3.1 Timeliness

Quantitative data by scheme for the year 2020 was transmitted to Eurostat by all EU Member States, plus IS, NO, CH, ME, RS, TR and BA.

The Regulation requires that ESSPROS quantitative data (QD) should be made available to the general public within 22 months of the reference period.

The timetable set by Regulation No 458/2007 for data transmission, namely the end of June 2022 – which corresponds to a time lag of 18 months – was met by all countries.

The same deadline was set for qualitative information (QI). In the data collection with 2020 as reference year, all countries transmitted their QI to Eurostat by (or even ahead of) the deadline, with the only exception of Iceland (8 days delay) .

It should be noted that the Regulation allows countries a period of three months between the transmission of quantitative data and the transmission of the quality report on the core system. Eurostat encourages countries to send this information as soon as possible so that a proper validation can take place.

Several countries sent the quality reports on the core system at the same time as the other two files or shortly afterwards. All countries sent their quality report within the deadline.

3.2 Punctuality

In the case of the ESSPROS Core System, the target date for release is fixed by Regulation N° 458/2007 of the European Parliament and of the Council (Annex 1, points 1.3 and 2.3). The Regulation stipulates that quantitative data at 'all schemes level' and qualitative information for year N must be disseminated by Eurostat by 31 October of year N+2. As stated in Commission Regulation N° 10/2008, data by scheme can also be published, without a fixed deadline.

With regard to the 2020 data collection, quantitative data at 'all-schemes level' were disseminated within the end of October 2022 for all countries, except for BA (11th November).

4. Coherence

The coherence of two or more statistical outputs refers to the manner in which data can be reliably combined in different ways and for various uses, i.e. the degree to which the underlying statistical processes use the same concepts (classification, definition and target population) and harmonised methods.

4.1 Coherence between quantitative data and qualitative information

As far as possible, there is a need to be coherent between the two parts of the Core System (CS), quantitative data (QD) and qualitative information (QI). Where benefits are classified under a certain scheme, the description of these benefits should be found in the qualitative information and vice versa, unless the scheme described in the QI has not yet entered into force (i.e. no benefits are supplied in the reference year) or has expired (i.e. the scheme is split into two different schemes, merged with another scheme or definitively abolished).

Since this Quality Report refers to the data collection with 2020 as reference year, coherence between the two parts of the Core System was examined only for data corresponding to the year 2020.

For all the participating countries the level of coherence between QD and QI is very good for 2020 data, providing at least a brief description of all the benefits involved in the expenditure.

4.2 Coherence between Core System (CS) and Pension Beneficiaries (PB) data

This section reports the coherence analysis carried out during the validation process of the questionnaires for both PB and QD. In most cases, logical coherence is analysed, expressed in terms of incoherencies between the contents of the two databases and to a lesser extent in terms of numerical indicators.

Coherence between the Core System and the module on Pension Beneficiaries for the years 2006 — 2020 has to be ensured as far as possible.

If there are benefits classified under a particular pension item for a scheme, the number of beneficiaries should be found in the corresponding item in the pension beneficiaries' module, and vice versa.

If benefits are reported without beneficiaries (Type I) or if there are beneficiaries and no benefits (Type II), both of these types of reports are incoherent.

Table 1 below summarises the number and size of incoherencies type I, for 2020. The 'Expenditure' column lists the amount of money spent on benefits under the pension items in 2020 without a corresponding number of pensioners.

The number of incoherencies depends on the complexity of the social protection systems; the most complex systems tend to have more incoherencies that are due to lack of available information, either on beneficiaries or on benefits, as for the French case.

Table 1 — Number and importance of incoherencies type I between PB and QD

Country	Number of incoherencies type 1 between QD and PB	Expenditure without corresponding beneficiaries (MIO NAC*)
Belgium	3	54.4
Denmark	1	654.4
Germany	1	900.0
Ireland	3	0.6
Spain	14	4422.8
France	73	97802.4
Luxembourg	3	226.9
Portugal	2	366.2
Slovenia	1	15.1
Finland	6	191.2
Iceland	1	635.1
Norway	1	1638.0

(*): MIO NAC is millions of national currency

Table 2 below lists the number of incoherencies type II, by country.

Table 2 — Number and importance of type II incoherencies between PB and QD

Country	Total number of incoherencies type 2 between QD and PB	Number of beneficiaries concerned
Belgium	1	155842
France	14	998809
Lithuania	1	7
Luxembourg	2	1488
Slovakia	2	1135505
Finland	4	12668
Iceland	3	3204

5. Comparability

Comparability is a particular aspect of coherence and refers to the measurement of the impact of differences in the statistical concepts, measurement tools and procedures applied, where statistics are compared between geographic areas (over countries), between domains or over time.

In this chapter, since Regulation 458/2007 is restricted to 2006 — 2020 data, only comparability between geographical areas is applied.

Further details about ESSPROS core system data comparability are available in the National Quality Reports (NQRs) in annex to this document.

5.1 Comparability over countries

In order to analyse geographical comparability, this Quality Report (QR) will explore:

1. Coverage of the final figures by country;
2. Whether some countries failed to apply the methodology described in the manual. The Regulation specifies that the definitions set out in the 'ESSPROS manual' must be the same for all countries.

Problems arose when evaluating coverage of the ESSPROS Core System by country, both at scheme level (a scheme or a relevant part of a scheme is missing in the figures) and in terms of expenditure, receipts or benefits (a certain type of expenditure, receipt or benefit is not covered by final data).

If a benefit provided by a given scheme is not fully covered by the final estimates, the figures supplied for the scheme are incomplete.

This section lists separately the problems linked to partial coverage of schemes, missing receipts or benefits and cases for which ESSPROS methodology could not be applied.

5.1.1. Coverage in terms of schemes

The following countries report missing schemes or incomplete coverage of some schemes. Either the data sources did not provide complete data or some specific schemes were not covered by a reliable data source.

- BG — social services provided by non-profit organisations are not included as a scheme;
- EE — coverage of scheme 6 is 35%. The Local governments accounting does not enable to divide according to ESSPROS methodology;
- IE — no data for schemes 12 and 18;
- DK — a few schemes are only partially covered;
- AT — social benefits and services provided by non-profit organisations and not funded by state or local governments are not included as a scheme;
- RO — reports scheme 35 as missing (no expenditures, no receipts, just the legal basis);
- SI — scheme 32 for private pension insurance is missing and scheme 33 for means of municipal budget is partly missing;
- CH — scheme 97 “Vested benefits accounts / policies [Freizügigkeitsleistungen]”, scheme 98 “Redundancy compensations [Entlassungsabfindungen]” and scheme 99 Life Insurances financed by employers / [Vom Arbeitgeber finanzierte Lebensversicherungen] are not covered.
- ME — data for scheme 17 are part of scheme 2 (Health insurance) and cannot be extracted.
- TR — the unfunded employers’ schemes (run by private and by government sectors) are not included in the data.
- RS reports missing expenditures and receipts for scheme 16.

5.1.2. Coverage in terms of receipts, expenditure and detailed benefits

In some cases the data sources provide incomplete information so that some schemes are not fully covered. Some receipts or expenditures or benefits are not covered, and no other information is available to estimate the missing figures. The problems of coverage are listed below:

- For BG, scheme 17 does not include expenditures for transport cards granted to students and pensioners;
- CZ — some receipts are missing for schemes 16 and 17 until 2009. Only receipts from state budget had been available. Other types of receipts were mostly missing (due to this fact there had been significant deficit of the schemes);
- DK — schemes 3 and 21, item 1111111 (Paid sick leave): the salary paid by the employer in the event of sickness is not available and an estimate is used covering a part of the expenditure;

- EE reports that the degree of coverage in terms of receipts is 97% and the degree of coverage in terms of expenditure is 97%;
- IE — private occupational pensions (scheme 24): likely double-count with scheme 15, which should be retired from 2001 onwards;
- HR – for scheme 4, data on expenditures and receipts from additional health insurance provided by entities other than Croatian Institute for Health Insurance are not available (items 1111211, 1111221 and 1111222). For scheme 10 administration costs are missing;
- IT – for item 1172211 social housing no data is available;
- AT – further fee exemptions for central government institutions, as well as fee exemptions in respect of Laender and municipalities, are not included in scheme 25;
- RO reports the following problems:
 - for scheme 2, no data for item 1111230, just the legal basis; starting with 2008, part of the sum corresponding to item 1121113 was included under scheme 8 item 1151113;
 - for scheme 5 item 1131115 no expenditure identified for 2020;
 - for scheme 10, items 1151123 and 1151204 no expenditures or receipts identified for 2020, just the legal basis;
 - for scheme 12, items 1132203, 1141202 no expenditure identified for 2020;
 - for schemes 13, item 1131203 no expenditure identified for 2020;
 - for scheme 14, items 1152204 and 1151113 – data not available, just the legal basis;
 - for scheme 15, expenditures - child day care (1151201) and receipts - (2000000) were estimated;
 - for scheme 16, item 1121203 – expenditures estimated according to previous year data; item 1151201 – no data just the legal basis;
 - for scheme 21, item 1141201 – no data for 2020;
 - for scheme 28, item 1172220 – expenditures estimated according to previous year data;
 - for scheme 34, item 1182111 - no expenditure data available for 2020;
- NO reports missing data for items 2110101 and 2121005 scheme 8 from 2002 to 2006;
- ME reports the following issues:
 - administration costs (1200000) are missing for schemes 10,11,12,13,14,15,16,19,20,21,22;
 - other expenditure (1400000) is not available or included in the administration costs;
 - for scheme 18, data for social housing are missing;
 - partial coverage for items 1131121, 1161123 and 1181121 for scheme 19 as amounts under tax obligation aren't reported in the database of the Tax Authority.
- RS reports the following issues:

- for administration costs (1200000) expenditures are missing for schemes 7, 9, 10, 11, 14 and 15; these are schemes where the administration costs are part of an inseparable account;
- for all available schemes, other expenditure (1400000) is either included in the administration costs or not available.
- BA reports the following incomplete coverage:
 - Scheme 3 – Expenditure side is bigger than the receipt side because of the lack of insured means for the pension payment;
 - Scheme 3 - Anticipated pensions are included in old age pensions.

5.1.3. Cases of non-application of the ESSPROS methodology

Five countries report some problems in applying ESSPROS methodology:

- EE included expenditure on pensions in item 1131115. These benefits are national pension granted to persons who do not have the right to receive an old-age pension, pension for incapacity for work or survivor's pension because they have not completed a sufficient number of years of pensionable service or their accumulation period is insufficient;
- IE – Scheme 16 has been removed because it does not constitute social protection;
- HR reports the following issues:
 - Scheme 2: part of the amount of employers' social contributions recorded in item 2110102 (central government) belongs to items corporations (2110101).
 - Scheme 2: part of the amounts recorded in items 1121113 and 1121115 in Disability function, that refers to beneficiaries that have reached retirement age, belongs to same items in Old-age function.
 - Scheme 2: part of the amount recorded in item 1131112, that relates to beneficiaries who have acquired anticipated old-age pension but have reached legal retirement age, is still recorded in item anticipated old age pension.
 - Scheme 3: part of the amount of employers' social contributions recorded in item 2110101 (corporations) belongs to items central government (2110102) and local government (2110103).
 - Scheme 6: Assistance and care supplement (item 1122113) – part of the amount is granted as a non-means tested benefit and belongs to the item 1121113. For the time being, there is no data on the number of beneficiaries that receive the non means-tested benefit and therefore an estimation cannot be made. Part of the amounts recorded in items 1122113 and 1122115 in Disability function, that refers to beneficiaries that have reached retirement

age, belongs to same items in Old-age function. Foster parent benefit (included in accommodation, item 1151202). Amount presented in Family/Children function, refers to children and elder people accommodated in foster families, so a part of the amount belongs to accommodation in Old-age function (item 1131201). For the time being, there is no data on the number of beneficiaries and therefore an estimation of the amount that should be presented in Old-age function cannot be made.

- Scheme 9: part of the amount recorded in item 1122113 in Disability function, that refers to beneficiaries that have reached retirement age, belongs to the same item in Old-age function. Amount recorded in item 1132115 (financial assistance for pension beneficiaries) refers to all pension beneficiaries but the data on separate amounts that should be recorded in Disability and Survivors' function or data on number of beneficiaries by functions is not available. Amount recorded in item 1131203 (free annual pass) refers to all pension beneficiaries but the data on separate amounts that should be recorded in Disability and Survivors' function or data on number of beneficiaries by functions is not available. Item 1182203 also includes administration costs because there is no available data on separate amount of such costs.
- Scheme 10: part of the amount of employers' imputed social contributions recorded in item 2110201 (corporations) belongs to items central government (2110202) and local government (2110203).
- Scheme 11: Part of the amount of social contributions recorded in item 2121005 (employees) belongs to item 2122005 (self-employed). For the time being, there is no available breakdown of data.
- Schemes 12, 14 and 15: Part of the amounts recorded in items 1121113, 1121115, 1121202 and 1122113 in Disability function, that refers to beneficiaries that have reached retirement age, belongs to same items in Old-age function.
- Scheme 13: In case of some benefits, reporting unit cannot make a breakdown according to ESSPROS classification. In scheme 13, items 1111212 and 1141201 are included in item 1111111. Also items 1111221 and 1111222 are included in item 1111211;
- NO – for schemes 1, 3, 4 and 8 Norway is not able to distinguish between means tested and non means tested survivors' pensions.
- CH reports the following issues:
 - Many pension funds in scheme 3 also include an over-mandatory part which does not come under the PP law of 1982. The insured persons are not free to

decide on the participation of the over-mandatory part of this scheme that is why these benefits are entirely included. Less than 1‰ of the insured people are affiliated to a pensions funds which exclusively provides an over-mandatory insurance. This kind of pension's funds is probably out of the scope of ESSPROS.

- For scheme 10 disability pensions above the legal/standard retirement age are not recorded under the item old age pension. This revision is on the pipeline, but because of the small amounts at stake, it has a low priority degree.
- For scheme 16 Item 1112230 includes various other items of the sickness/health care function. A breakdown of the items has so far not been possible.
- For scheme 17 Item 1182202 includes all measures concerning drug abuse policy. This might include a share of expenses for prevention campaign which can be seen as a public service and are therefore not in the scope of ESSPROS.
- BA reports that there is no balance between transfers to/from other schemes (1300000 and 2300000). The amount under item 2310007 - Transfers from other schemes – Rest of the world represents the health insurance paid by employers on behalf of their employees working abroad.

6. Accuracy

Accuracy is a very important criterion for measuring the quality of a data collection. The closeness between the figures in the data collection and the true data is very important. The remainder of this quality report deals mainly with this issue. The accuracy of the data in the ESSPROS data publication is linked to, and depends on, the accuracy of the data received from Member States.

Most of the figures in the collection are obtained using administrative data, with only a small percentage of the figures coming from surveys or other means.

Accordingly, the discussion about accuracy focuses on problems of coverage as the most likely sources of error.

National Quality Reports in the annex of this document provide more detailed information about ESSPROS core system data accuracy.

6.1 Coverage, timeliness, frequency of data sources

All the quality reports received deal with relevant items, such as types of data sources, frequency of data provided by sources, time lag, coverage in terms of schemes, geographic coverage, cross-source data used, methodologies and assumptions used in estimates and revisions of statistics.

The reports provided information with a high level of detail, describing all relevant aspects required by the Regulations.

In some cases the quality reports contained very complex descriptions of the data estimation process where information was lacking. This information was essential in order to group together the most important clusters of issues across the national quality reports.

6.1.1. Data sources

This section deals with aspects linked to types of data sources used, frequency and the time lag of data sources. All the data sources used by all the countries are included.

6.1.1. A — Types of data sources

Most of the countries reported administrative data and register-based data as their main data sources.

Because of the wide range of names used by the various countries to identify types of data sources, they were grouped into three main categories: Administrative data, National Accounts and other estimates, Surveys/census:

- Administrative data = Administrative data, register-based data, public bodies accounts;
- National Accounts and other estimates = National Accounts, other estimates or statistics at national level (not surveys or census), COFOG; ⁽³⁾
- Surveys, census = Classical definitions.

This is not intended to be an exhaustive classification, but rather a method for grouping together in clusters those countries which have more or less similar types of data sources.

For 2020 data, 561 data sources were used in total by countries, and 413 were administrative data.

Out of a total of 34 quality reports:

- Four countries report only administrative data for all schemes as data sources (EE, IS, ME and TR);
- Twenty countries —DK, DE, IE, EL, ES, FR, IT, LV, LT, LU, HU, MT, NL, AT, PL, PT, RO, SE, FI, and NO — report that, in addition to administrative data sources, they used the National Accounts or other estimates;
- Twenty-three countries —BG, CZ, DE, EL, ES, FR, HR, IT, CY, LV, LT, HU, MT, PT, RO, SK, FI, SI, SE, CH, RS, TR and BA— used estimates based on surveys for some schemes;
- IT, CY and CH used a census as well.

6.1.1. B — Frequency of data provided by the data sources

Eighteen countries report only yearly data sources (DK, EE, ES, FR, IT, CY, LV, LT, HU, PL, PT, SI, SE, IS, NO, ME, TR and BA). Twelve countries used also some data sources with a frequency of less than one year (BG, CZ, HR, IE, LU, MT, NL, AT, RO, SK, CH, RS). Seven countries (BE, DE, EL, MT, FI, CH and RS) used also some data sources with a frequency longer than a year.

6.1.1. C — Time lag of data sources

Most of the data sources provide information within one year from the end of the reference year. In particular, around 200 data sources have a time lag of not more than 6 months whereas about 450 have a time lag of not more than one year.

About half of the countries (15 on 34) report that all of their data sources have a time lag of not more than one year.

⁽³⁾ COFOG is a functional classification within SNA2008 (System of National Accounts 1993), the full name being Classification of the Functions of Government, according to ESA95 definition.

6.1.2. Issues leading to estimation of data

Some estimates had to be carried out by using alternative data sources such as surveys or censuses, public accounts or other administrative data. The following 14 countries were concerned with a total of 31 data sources: BE, BG, CZ, DE, IE, EL, HR, IT, MT, SK, CH, RS, TR and BA.

The problems reported by different countries are extremely diverse, as an examination of the NQRs for each country reveals.

For most of the countries which report problems, these are linked to administrative data sources that usually affect one or two schemes.

Lack of information in one data source does not automatically mean missing figures, because alternative data sources are used to complete the information.

6.1.3 Geographical coverage

Almost all countries report data sources that cover the whole country geographically. Some exceptions are reported by the following countries:

- BE — In Belgium a number of schemes are competent in or for only a part of the country, due to the institutional settings. Ten data sources cover only 'Brussels-Capital Region'. Another ten cover only 'Flemish Region – Flemish community' and four cover 'German speaking community'. A further thirteen data sources cover 'Walloon Region' and 'French speaking community'.
- HR – one data source covers only the City of Zagreb (data are used for the verification of the scheme 9 expenditures delivered by the reporting unit); another data source covers a certain number of regional and local self-government units.
- LV — one data source covers only Riga City municipality (scheme 18).
- AT — Two data sources cover only the region of 'Vienna', another source only 'Styria'.
- PT — One data source covers only the region called "Mainland".
- SK – One source (CPBT) has only partial coverage.
- RS – Two data sources cover only the City of Belgrade.
- BA – One source cover only Brcko district, three cover only Federation of BiH and five cover only Republica Srpska. One source covers Federation BiH and Brcko district.

6.2. Methodologies and assumptions used in the estimation of statistics

6.2.1. Estimates for schemes for which no data are available

Nine countries – CZ, DE, LT, AT, RO, SI, CH, RS and BA– report on estimates concerning entire schemes. In all cases, this was because there were no available data sources for receipts and expenditures under these schemes.

The total number of estimated schemes is 15 out of a total number of 876 active schemes. A summary of the methodologies used by the countries in these cases is given below:

- For some schemes, some rates of change were applied which took into account other distributions (AT schemes 8, 9 and 10, DE for scheme 23);
- For other schemes, the estimation is made by taking into account the number of beneficiaries and information on average expenditure per beneficiary or other information on the amount of benefits (AT for scheme 25);
- Estimates based on other distributions or on other data sources were used by CZ for scheme 26, DE for schemes 14 and 17, LT for scheme 28, AT for scheme 28, RO for schemes 15, SI for scheme 28 (2020 data only), CH for schemes 03, RS for schemes 14 and 15, BA for scheme 8.

6.2.2. Estimates for missing receipts, expenditure and detailed benefits

When only information concerning a receipt or a benefit is missing and estimation is possible, the estimate is provided and the methodology should be included into the quality report. This section is divided in two parts, dedicated to methodologies used by the countries for estimation when:

- A — There are no data at all;
- B — The total amount has to be broken down in order to estimate two or more figures.

6.2.2. A — Where data are completely lacking

A separate description will be given of the methodologies used when providing estimates for:

- A1 — Receipts;
- A2 — Benefits;
- A3 — Administration costs (itemised separately).

6.2.2. A1 — Estimate of receipts

Nine Member States – BE, BG, EL, ES, HR, LV, LT, HU, PT – plus NO, CH and ME sent estimates of some receipts in some schemes. The most frequent method is to equate the receipts with expenditure. The list of countries using this type of estimate by scheme and item is shown in table 3 below.

Table 3 — Methodologies used in producing estimates for receipts

Country	Scheme	Item	Estimation method
BE	26, 27	2110203	receipts = expenditures
BE	39, 53, 81	2220002	receipts = expenditures
BE	54, 62, 74, 75, 76, 77, 78, 91	2220003	receipts = expenditures
BE	66	2410001	receipts = expenditures
BE	80, 82	2110201	receipts = expenditures
BE	63, 72	receipts	receipts = expenditures
BG	10	receipts	based on expenditures
EL	19	2220002	receipts = expenditures
EL	23	2220003	receipts = expenditures
EL	29	receipts	receipts = expenditures
ES	17,18,19,23,25,27,28,29,30,31,32	receipts	receipts = expenditures
HR	10	receipts	receipts = imputed social contributions (including amount paid by employers for sick leave)
HR	16	2220002 2220003	receipts = shares of EU and central government financing
HR	16	2420007	receipts = foreign financing less capital expenditure
LV	1, 2, 4, 5, 7, 8, 9, 13, 16, 17, 18, 19, 20, 21, 22, 26, 27	receipts	receipts = expenditures
LV	3, 6, 15, 23, 24, 25	2220004	expenditure – social contributions
LT	1, 2, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 28, 29	receipts	receipts = expenditures
HU	1-7,9,11,14-15, 17-18, 20-22	receipts	receipts = expenditures
PT	7, 9, 15, 17, 43, 59	receipts	receipts = expenditures
NO	1, 2, 3, 5, 7, 8	2220002	receipts = expenditures
NO	9	2220003	receipts = expenditures
CH	35	receipts	receipts = expenditures
ME	5	2110101	receipts = expenditures

6.2.2. A2 — Estimates for benefits

Eighteen countries – BE, BG, CZ, EL, ES, HR, CY, LV, LT, LU, MT, SE, FI, IS, NO, CH, ME and TR – report that a certain number of benefits had to be estimated owing to the lack of information provided by the data sources.

In the majority of cases the estimates are obtained using other data sources or other related distributions.

6.2.2. A3 — Estimating administration costs

Eight countries – BG, ES, HR, CY, LV, MT, CH and TR – estimate administration costs for some schemes. Some of the administration costs are also calculated using breakdowns.

- BG provides estimates for administration costs in schemes 1 to 6 and 11 – 17.
 - For schemes 1 to 6 the administrative costs are recorded in scheme 1
 - For schemes 11 and 14, administrative costs are defined as the value of the labour cost of the staff managing the expenditure in the ESSPROS scope
 - For schemes 12, 13 and 15 the distribution of total administrative expenditure is used.
 - For scheme 16 administrative costs are defined as the value of the labour cost for the staff in regional structures of the Ministry of Education administering grants.
 - For schemes 17 an estimation was made taking as administrative cost the so called “small maintenance” for the different social services.
- ES uses a pre-established ratio used in previous years to estimate administration costs for schemes 12, 19, 23, 25, 28.
- In HR administration costs for scheme 1 have been estimated on the basis of information on expenditure (mostly compensation of employees and intermediate consumption) of the unit that administers the scheme. For scheme 16 administration costs were estimated using information available from SONAL database.
- CY provides estimates for administration costs in schemes 2, 3, 4, 10 and 11. Estimations were made for the Governmental Departments in which administration costs for Social Protection were difficult to be extracted, due to the wide range of services that public units offer. They are based on examinations of administration costs from departments offering Social Protection in full.
- In LV all data on administration costs by scheme are the result of estimations. Administrative data on the total expenditure are used, dividing these expenditures proportionally by schemes. For example, administrative data on expenditures of municipal social services are proportionally divided into schemes 2, 4, 5, 7, 8, 9, 19 and 22.
- MT divides administration costs between schemes 1 and 2 according to the expenditure of these two schemes, while uses a pre-established ratio used in previous years to estimate administration costs from total expenditures for schemes 10, 11 and 12.

- CH estimates administration costs for various schemes. For schemes 01, 02, 09, 13 and 14 the administrative costs are known at an aggregate level; this amount has therefore been divided among schemes according to their relative weights. For scheme 04 administration costs are estimated on the basis of the official data and on the basis of the estimated ratio of benefits included in ESSPROS. For scheme 05 administration costs are adapted to take into account that benefits paid to self-employed (except health-care) are in large measure out of the scope of ESSPROS. For scheme 8 administration costs are here roughly estimated on the basis of administration costs related to optional daily benefits insurance (KVG) in scheme 04. For scheme 16 there's an assumption: 8% of total public expenses for this scheme are administrative costs.
- In TR for schemes 27 and 30 the administration costs are estimated as a fixed share of total expenditures.

6.2.2. B — Where there is no breakdown for one receipt/expenditure/benefit or a group of receipts/expenditures/benefits

This section is divided into five parts:

- B1 — breakdown of a total between different categories of receipts;
- B2 — breakdown of a total between different benefits;
- B3 — breakdown of administration costs between schemes;
- B4 — breakdown for receipts and/or transfers between schemes;
- B5 — breakdown for benefits between schemes;

6.2.2. B1 — Breakdown of a total between different categories of receipts

Nine EU Member States – BE, BG, CZ, ES, HR, LT, LV, HU and AT – plus IS, CH and BA – report a few breakdowns of a total between the different categories of receipts for some schemes.

The summary of methods used is listed in table 4 below.

Table 4 — Summary of methodologies used by the countries for breakdown a total between different categories of receipts

Country	Items	Scheme	Estimation method
BE	2121005, 2122005, 2123005	85	The distribution of personal contributions by status is based on the population of Flanders on 1 January and also on the Labor Force Survey

BG	2110101 to 2110107	1, 3, 4, 5, 6, 9	Contributions by institutional sector (21101xx) are distributed by sectors on the basis of the declared in Personal Register of Insured Persons and institutional sector from Statistical Business Register
CZ	2420001 – 2420005	1	Estimation for breakdown of receipts within the scheme: it is not possible to distinguish the origin for fines and penalties additionally paid in case of none or delayed premiums — corporations (item 2420001) or households (item 2420005). Only the total for fines and penalties is available. The split of this receipt is made in the same portion as these two groups contribute to the system within regular premiums.
ES	2110101 to 2110107	12,13,21,22,34	Actual employer's social contributions by sector of origin are estimated based on the structure of employer's social contributions by sector in National Accounts.
HR	2220002, 2220003, 2410001, 2420001, 2420005, 2420006, 2420007	17	Financial reports of non-profit institutions, which are the main data source for this scheme, just partially correspond to ESSPROS classification of receipts. It was also noticed that NPISH do not record certain types of receipts in the same item of the report as required. Therefore, an estimation of receipts by type had to be made. After some adjustments, ESSPROS receipts were calculated proportionally to cover the scheme expenditure.
LT	2110101 to 2110106	3, 5, 10, 23, 24, 26	The distribution of employers' social contributions is the estimation based on the structure of employers' social contributions by sector in National accounts (Gross domestic product by income approach).
LV	2110101 to 2110107	3, 6, 10, 11, 15, 23, 24, 25	The division by institutional sector for the Employers' social contributions are gained as a result of calculations using the available data from the National accounts statistics.
HU	2110101 to 2110107	8, 12, 13, 20 (partially)	The breakdown of receipts by sectors is estimated using proportions from the National Accounts (scheme 20 only for government subsectors).
AT	2110201, 2110202, 2110203, 2110204, 2110206	19	Employers' social contributions by sector of origin are estimated with the share of compensation of employees by sector of origin according to National Accounts (ESA 2010).
IS	2110101 to 2110107	7, 8, 10, 12, 17, 19, 21, 22, 24	Receipts paid by employer social security contributions are social security taxes on total income from work. Breakdown between different kinds of employers is based on pay as you earn tax register on income paid by legal type of enterprise and by kind of industrial activity.

CH	2121005, 2122005, 2123005	4	The breakdown of the health insurance premiums between 'Employees', 'Self-employed' and 'Pensioners and other' is estimated according to the Swiss Population and Households Survey (SAKE).
CH	2410001	5	A part of the capital gain belongs to an insurance [freiwillige Unternehmensversicherung (FUV)], which is outside of the scope of ESSPROS. The breakdown is estimated according to the distribution of the capital.
CH	2110201, 2110202, 2110203, 2110204, 2110205, 2110206, 2110207	35	Imputed employers' social contributions are broken down by sectors according to the wage sum for the entire economy (national accounts).
CH	2110101, 2121000, 2122000	36	The breakdown of the total amount of social contributions (Annual report of the maternity insurance Geneva, Canton of Geneva) is based on data Federal Statistical Office - Swiss Labour Force Survey (SLFS)
BA	2110101, 2121005	1, 2, 3	Items 2110101 (Corporations) and 2121005 (Households) are estimated for the Federation of BiH, according to the proportion of the contribution rates on behalf of the employer and on behalf of the employee.

6.2.2. B2 — Breakdown of the total between different benefits

Twenty countries applied this type of breakdown to split the total between items within a scheme. The number of schemes/items for which this split was necessary is large and only a brief review is provided below.

Most of the estimates are provided using one of the following methodologies: breakdown of the total using another known distribution, using the distribution of beneficiaries or other information about them, application of a predefined ratio, using other data sources, such as administrative or surveys, expert opinion.

- A different distribution is used by BE, IT, AT, NO and CH;
- The distribution of beneficiaries or other information about beneficiaries is used by ES, HR, LT, HU, AT, RO, SE, FI;
- Other data sources are used by: BE, BG, CZ, EL, ES, HU, IT, MT, AT and RS;
- A ratio based on proportionality is applied by BE, ES, LV, HU, MT, AT, CH, RS, TR and BA;
- A ratio based on previous years data is applied by MT and RO;

6.2.2. B3 — Breakdown of administrative costs between schemes

For nine countries – BG, EL, LV, LT, HU, MT, FI, CH and TR – there are cases of information available on administrative costs as a total over a certain number of schemes, but detailed information by scheme is not available. The costs are split and an estimate is provided in these cases.

Table 5 below describes the methodology used, by country.

Table 5 — Summary of methodologies used for breakdown of administrative costs by scheme

Country	Scheme	Methodology
BG	Schemes 1-6	All administrative costs (1200000) of State Social Security (Schemes 1,2,3,4,5,6) are registered to the Pension Fund (Scheme 1).
EL	Scheme 13	There is no breakdown of the administration cost data regarding welfare separately. Thus the respective amount is included in code 1200000 of scheme 12.
LV	Schemes 1-27	All data used on Administrative costs by scheme are the result of estimations. In case when certain data on administrative expenditure by scheme are not available- the total administrative expenditure are used, dividing these expenditures proportionally by schemes. LV divides these costs between respective schemes. For example administrative expenditures on social services and social assistance paid from the municipal state budget are proportionally divided into schemes 2; 4; 5; 7; 8; 9; 19 and 22.
LT	Schemes 2, 7	The total amount of the administration costs for the group of schemes 2 and 7 is available. The distribution by schemes is made proportionately to the expenditure of the schemes.
LT	Schemes 21,22	The total amount of the administration costs for the schemes 21 and 22 is available. The distribution by schemes is made proportionately to the expenditure of the schemes.
HU	Schemes 1, 2, 3, 4, 5, 6, 9, 11, 17, 18, 21, 22	Expert estimation: the aggregated input data is distributed along the schemes in proportion of benefit expenditures of the schemes.
MT	Schemes 1, 2	Scheme 1 and 2 are managed by the social security department and thus the administrative costs of this department are charged to schemes 1 and 2. Since the costs are not divided between scheme 1 and 2 we apportion these costs according to the expenditure of these two schemes.
MT	Schemes 11, 12	Expenditure on schemes 11 and 12 is apportioned between administrative costs and the expenditure on functions. This expenditure is apportioned using a pre-established ratio used in previous years.
FI	Schemes 37-38, 49-50	Administration costs are calculated on the basis of the benefits paid for different schemes.
CH	Schemes 1, 2, 9, 13 and 14	Specific cantonal and local offices are in charge of the administration of these schemes (AHV/IV/EO offices). The administrative costs of these offices are known only in overall. This amount has been divided between Scheme 01, 02, 09, 13 and 14 according to their relative weights. These estimations are available only since 2008.
CH	Schemes 13 and 14	In order to estimate the amount of administration costs for scheme 13 and 14 separately, it was divided in proportion of the benefits' amounts of the two schemes.
TR	Schemes 33-36	The administration costs and other expenditure are estimated between schemes using the share of social benefits of each scheme to the total social benefits of these schemes.

6.2.2. B4 — Breakdown for receipts and/or transfers between schemes

Some cases of data sources providing insufficient details of receipts by scheme are reported, making a breakdown necessary.

- BG assigns all 'Other receipts' of schemes 1-6 to scheme 1;
- CZ has two cases of such a split: namely between schemes 6 and 7 and between schemes 11 and 12. The breakdown of receipts between schemes is (for each receipt item) in the same proportion as on the total expenditure side in both schemes;
- LV reports two cases for transfers between schemes:
 - Transfers to State special budgets (Item 1320000 Other transfers to other resident schemes) for schemes financed from state special budgets are divided between the relevant schemes based on the proportion of expenditures on benefits (Schemes 3, 6, 10, 11, 15, 24 and 25);
 - Transfers from State special budgets for schemes financed from special State budgets which are divided between the relevant schemes based on the proportion of benefits/expenditures. (Item 2320000 Other transfers from other resident schemes, schemes concerned: 10, 11, 23, 24 and 25).
- LT distributes 'Other receipts' (2420000) among schemes 3, 10 and 24 proportionally to the expenditure for the schemes' benefits;
- MT divides 'Social Contributions' (210000) between schemes 1, 4, 7 according to the expenditure of these schemes.
- FI assigns to scheme 18 receipt figures summed up from schemes 17 and 18 "financing of other voluntary pensions".

6.2.2. B5 — Breakdown for benefits between schemes

There is also one case when a benefit is not provided by data sources broken down by scheme, but only as a total over several schemes. This has made it necessary to use a breakdown between schemes.

- In CH 'Health care' expenses are known for schemes 13 and 14 together. First they are divided in proportion to the size of the two schemes and then they are split into in-patient (1112212) and out-patient care (1112222).

7. Revision of statistics

The collection of ESSPROS 2020 statistics contains some data, mainly for 2006-2019, which have been revised as compared to figures published during the previous collection. MT and CH revised figures for the whole time series.

Generally speaking, 25 countries out of 34 revised some figures for various reasons. There were five types of revision:

1. Changes in the data sources used;
2. Changes in the methods used for estimating data;
3. Revisions of data due to conceptual adjustments;
4. Revisions of data due to availability of final statistics;
5. Other revisions of data (e.g. due to quality review actions).

Most of the countries revised data because of reasons 4 and 5.

Further information about data revisions is available in the National Quality Reports in annex to this document.

8. Conclusions and recommendations

Significant advances have been achieved in the ESSPROS field since the approval and initial implementation of the three Regulations introduced in 2007-2008.

There has been a significant increase in the information available to users of social protection data. Data for all countries are in general of good quality and useful for analytical purposes.

Eurostat encourages Member States to keep on improving the qualitative information which, for some schemes and for some items, does not always contain the amount of information required by the Regulation.

9. Annex to the Consolidated Quality Report on Core System

All the available National Quality Reports for the Core System data collection with 2020 as reference year are accessible at the following links:

Member States

 [Belgium](#)

 [Bulgaria](#)

 [Czechia](#)

 [Denmark](#)

 [Germany](#)

 [Estonia](#)

 [Ireland](#)

 [Greece](#)

 [Spain](#)

 [France](#)

 [Croatia](#)

 [Italy](#)

 [Cyprus](#)

 [Latvia](#)

 [Lithuania](#)

 [Luxembourg](#)

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 [Malta](#)

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 [Romania](#)

 [Slovenia](#)

 [Slovakia](#)

 [Finland](#)

 [Sweden](#)

EFTA countries

 [Iceland](#)

 [Norway](#)

 [Switzerland](#)

Candidate countries

 [Montenegro](#)

 [Serbia](#)

 [Türkiye](#)

 [Bosnia and Herzegovina](#)

Below the **list of abbreviations** used in the document:

- NQR = National Quality Report
- PB = Pension beneficiaries
- QI = Qualitative information
- QD = Quantitative data
- QR = Quality Report
- CS = Core System
- TSPB = Total social protection benefits
- MIO NAC = millions of national currency

Countries abbreviation

- BE = Belgium
- BG = Bulgaria
- CZ = Czechia
- DK = Denmark
- DE = Germany
- EE = Estonia
- IE = Ireland
- EL= Greece
- ES = Spain
- FR = France
- HR = Croatia
- IT = Italy
- CY = Cyprus
- LV = Latvia
- LT = Lithuania
- LU = Luxembourg
- HU = Hungary
- MT = Malta
- NL = Netherlands
- AT = Austria
- PL = Poland
- PT = Portugal
- RO = Romania
- SI = Slovenia
- SK = Slovakia
- FI = Finland
- SE = Sweden
- IS= Iceland
- NO = Norway
- CH = Switzerland
- ME = Montenegro
- RS = Serbia
- TR = Türkiye
- BA = Bosnia and Herzegovina

10. Bibliography

Carson, C. S. and L. Laliberté (2002): [Assessing Accuracy and Reliability: A Note Based on Approaches Used in National Accounts and Balance of Payments Statistics](#). IMF 2002.

[Commission Regulation No 1322/2007](#)

[Commission Regulation No 10/2008](#)

[European Parliament and Council Regulation No 458/2007](#)

Eurostat (2003): [Quality assessment of administrative data for statistical purposes. Working Group 'Assessment of quality in statistics'](#), Luxembourg, 2-3 October 2003

Eurostat (2007): [Handbook on Data Quality Assessment Methods and Tools](#)

Eurostat (2017): [Quality declaration of the European statistical system](#)

Eurostat (2017): [European Statistics Code of Practice — revised edition 2017](#)

Eurostat (2019): [Quality Assurance Framework of the European Statistical System](#), Luxembourg, edition 2019

Eurostat (2021): [ESS handbook for quality and metadata reports \(re-edition 2021\)](#)

Eurostat (2021): [Inventory of regulations in the field of statistics containing provisions on quality and quality reporting \(2021\)](#)