



International
Labour
Organization

► **Guidelines on statistics of international labour mobility, international remote work and authorizations to work**

21st International Conference of Labour Statisticians
(Geneva, 11–20 October 2023)



Department of Statistics

► Guidelines on statistics of international labour mobility, international remote work and authorizations to work ¹

Preamble

The 21st International Conference of Labour Statisticians (ICLS),

Recalling the implications of the ILO Constitution (1919), the Forced Labour Convention, 1930 (No. 29), the Migration for Employment Convention (Revised), 1949 (No. 97) and the accompanying Migration for Employment Recommendation (Revised), 1949 (No. 86), the Convention Relating to the Status of Refugees (1951) and its Protocol relating to the Status of Refugees (1967), the Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143) and the accompanying Migrant Workers Recommendation, 1975 (No. 151), the Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205), the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990), the United Nations Convention against Transnational Organized Crime and the Protocols thereto (2003), the Maritime Labour Convention, 2006, as amended, the General principles and operational guidelines for fair recruitment (2019), the Guidelines on fair labour market services for migrant fishers (2025), and relevant international and regional instruments, in particular the General Agreement on Trade in Services (1995), mode 4,

In follow-up to the Resolution concerning fair and effective labour migration governance adopted by the 106th session of the International Labour Conference (2017), the Global Compact for Safe, Orderly and Regular Migration (2018), the Global Compact on Refugees (2018), the 2030 Agenda for Sustainable Development (2015) adopted by the United Nations General Assembly, and the Report of the Director-General entitled Fair migration: Setting an ILO agenda (2014),

Having reviewed the relevant texts of the United Nations Recommendations on statistics of international migration and temporary mobility (2025), the System of National Accounts 2025, the International recommendations on statelessness statistics (2023), and the International recommendations on refugee statistics (2018), adopted by the United Nations Statistical Commission at its 56th, 54th and 49th sessions; the Resolution concerning statistics of work, employment and labour underutilization (2013), as amended in 2023, the Resolution concerning statistics on work relationships (2018), the Guidelines concerning the measurement of forced labour (2018), and the Resolution concerning statistics on the informal economy (2023), adopted by the ICLS at its 19th, 20th and 21st sessions,

Recognizing that emerging trends in international migration, temporary mobility, and remote work are reshaping national and transnational labour markets; that these developments create new governance and measurement challenges and require the expansion of statistical frameworks to better capture the labour characteristics of mobile populations and the diversity of work arrangements and employment relationships taking place across international borders; that the lack of comprehensive, reliable, and comparable data hinders their effective integration into national development strategies and evidence-based policymaking; and that improved understanding is essential to safeguard workers' rights, support employers, and promote fair and well-regulated international labour mobility and remote work,

Recognizing that legal authorities in countries may have a mandate to regulate the different forms of international labour mobility and international remote work to and from their territories, and that the registration conducted to administer and enforce such regulations may serve as a basis for statistics,

Acknowledging the ILO rights-based approach to international labour migration and mobility, and recognizing that the methods used for its measurement in a given country will depend on national context,

¹ Unedited version.

policy priorities, and specific user needs, and that their implementation will therefore, to a certain extent, be determined by national circumstances,

Endorses, on this 20th day of October of 2023 the following revised guidelines, for publication in 2025, in substitution for the guidelines of 2018.

Objectives

1. The purpose of these guidelines is to set standards to assist countries in developing their national programmes on statistics relating to international labour mobility, international remote work and authorizations to work, taking into account national needs, priorities and circumstances. Such programmes should be designed to achieve several objectives, in particular to:
 - a. monitor the size, characteristics, labour market access, conditions of work, and equitable treatment of different groups of international migrants, temporary mobile workers, and international remote workers, to inform workforce planning, skills development, and inclusive labour market policies,
 - b. evaluate the contributions of different forms of international labour mobility and remote work to employment and the economy, including their role in trade in services and in transnational labour market integration,
 - c. track the impacts of managed migration and mobility policies, including labour migration schemes, cross-border mobility arrangements, and remote work visas and mobility programs, on labour market outcomes,
 - d. inform policies on diaspora engagement, social security coordination, skills recognition, and reintegration support for returning migrants, as well as measures to facilitate migrant's contributions to origin communities, and
 - e. assess the relative status of disadvantaged groups that are of specific policy concern; including their labour market integration, in order to ensure fair treatment and strengthen social inclusion.
2. To achieve these objectives, such programmes should be developed in consultation with the various users of the statistics and, to the extent possible, in harmony with the collection of other labour, migration, population, economic, and social statistics. Choices regarding the groups and topics covered and their different frequencies of measurement and reporting will depend on their national relevance and the resources available. Each country should establish an appropriate strategy for data collection and statistical reporting that ensures progress and sustainability.
3. In developing their statistics on international labour mobility and remote work, countries should endeavour to apply and continue to test the guidelines recommended below.

Background concepts

4. Statistics of *international labour mobility*, *international remote work*, and *authorizations to work* are concerned with the participation of persons in work and labour markets across international borders. This includes diverse situations in which persons establish a labour attachment in a country different from their country of birth, citizenship, residence, or temporary stay. Persons may establish such labour attachment either by physically crossing international borders—in the context of international migration or temporary mobility, irrespective of the initial reason for the move—or by performing work remotely for a producer unit located in another country.
5. To support their development, these guidelines provide concepts and measurement guidance on three interrelated areas: (a) *international labour mobility*, covering *international labour migration* and *international temporary labour mobility*; (b) *international remote work*; and (c) *permits and authorizations to work*. Producing statistics in these areas requires information on the residence, mobility, and labour characteristics of the population; the characteristics of their jobs and of the producer unit(s) for which work is performed, including geographic location and remote work arrangements; and the characteristics of permits and authorizations that regulate the employment rights of foreign nationals and the departure of nationals for employment abroad.

6. The concepts and definitions in these guidelines are specified from the perspective of the country compiling the statistics (i.e. country of measurement). They build on concepts defined in related international statistical standards, where:²

In line with the *UN Recommendations on Statistics of International Migration and Temporary Mobility* (2025),

- a. *Resident population* refers to all persons with place of residence in the country within a particular year, provided they meet the minimum duration of residence requirement (actual or intended) in the country, regardless of their legal status or the purpose of this residence (e.g. education, family unification, work or self-employment, international protection and other humanitarian reasons).
- b. *Non-resident (temporary) population* refers to all persons who stayed or intend to stay in the country for less than the minimum required for residency in a particular year.
- c. *International mobility* refers to all movements of persons that cross international borders within a particular year. It comprises *international migration* and *international temporary mobility*, where:
 - i. *International migration* refers to all movements of persons that cross international borders within a particular year, that result in a change in the country of residence of the person.
 - ii. *International temporary mobility* refers to all movements of persons that cross international borders within a particular year, that do not result in a change in the country of residence of the person.
- d. *International migrant population* refers to persons who have changed their country of residence. It includes:
 - i. *Immigrants*³ —persons resident in the country of measurement, who were born in another country (or do not hold national citizenship),
 - ii. *Emigrants* —persons born in the country of measurement (or national citizens) who are resident in another country, and
 - iii. *Returned migrants* —persons born in the country of measurement (or national citizens) who emigrated and subsequently came back to reside in the country.
- e. *International temporary mobile population* refers to persons who have crossed an international border but who have not changed their country of residence. It comprises:
 - i. *Residents (temporarily) abroad* —persons resident in the country of measurement (regardless of country of birth or citizenship status), who at a given point in time, were temporarily absent from the country, and
 - ii. *Non-residents (temporarily) in the country* —persons not resident in the country of measurement (regardless of country of birth or citizenship status), who at a given point in time, were temporarily present in the country.

In line with the 19th *ICLS Resolution I concerning statistics of work, employment and labour underutilization* (2013, as amended in 2023),

- f. *Work* comprises any activity performed by persons of any sex and age to produce goods or provide services for use by others or for own use. It comprises:
 - i. *Employment* —work performed for others in exchange for pay or profit, and
 - ii. Unpaid forms of work including *own-use production work, volunteer work, unpaid trainee work and other work activities*

² For detailed operational definitions and measurement guidance, countries are encouraged to consult the most recent version of the relevant international statistical instruments covering these concepts.

³ For the purposes of these Guidelines the term “resident international migrant” is henceforth used to refer to the category of “immigrants.”

- g. *Labour force status* refers to the classification of the resident population of working age by their relation to the production of goods and services in exchange for pay or profit. It comprises:
- i. *Persons in employment* –i.e. engaged in any activity to produce goods or provide services for pay or profit,
 - ii. *Persons in unemployment* –i.e. not employed, looking for work and available to work, and
 - iii. *Persons outside the labour force* –i.e. neither in employment nor in unemployment.
- h. *Labour underutilization* refers to mismatches between labour supply and demand, which translate into an unmet need for employment among the population. It comprises
- i. *Persons in time related underemployment* –i.e. employed, working less than a specified hours' threshold, wanting and available to work more hours,
 - ii. *Persons in unemployment* –i.e. not employed, looking for work and available to work, and
 - iii. *Persons in the potential labour force* –i.e. not employed, looking for work but not available, or not looking for work but wanting to work and available to work.

In line with the *System of National Accounts 2025*,

- i. *Producer unit* refers to an economic unit whose principal function is the production of goods and services, where:
 - i. *Resident producer unit* refers to units whose centre of predominant economic interest is within the economic territory of the country.
 - ii. *Non-resident producer unit* refers to units whose centre of predominant economic interest is outside the economic territory of the country.
- j. *Centre of predominant economic interest* refers to the location within a country's economic territory where a producer unit engages in economic activities on a significant scale for a sustained period, generally one year or more.
- k. *Economic territory of the country* refers to the area under the effective economic control of a single government including land area, airspace, territorial waters⁴, islands that belong to the territory, free trade zones, and territorial enclaves abroad (e.g. national embassies, consulates, military bases, scientific stations, immigration offices, aid agencies, and offices with diplomatic immunity stationed abroad). It excludes extra-territorial enclaves located within a country's borders, under economic control of a different government (e.g. foreign embassies, consulates, military bases, scientific stations, immigration offices, aid agencies, and foreign offices with diplomatic immunity stationed in the country).

Scope and reference statistical concepts

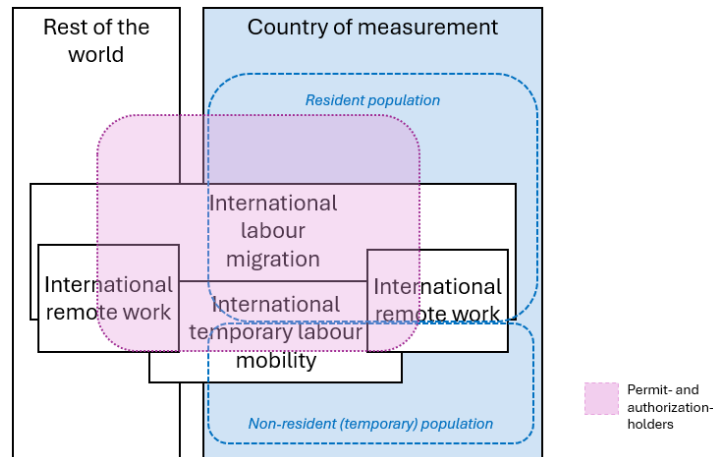
7. Building on the above concepts, the areas covered in these guidelines serve to produce statistics on different aspects of the participation of persons in work and labour markets across international borders. In particular,
- a. *International labour mobility* covers statistics on the labour attachment of persons involved in international mobility. It comprises two forms:
 - i. *International labour migration* covering statistics on the labour attachment of persons involved in international migration. That is, persons who cross international borders and change their country of residence, including those who migrate for work or employment purposes and those who establish a labour attachment after migration.

⁴ including jurisdiction over fishing rights and rights to fuels or minerals.

- ii. *International temporary labour mobility* covering statistics on the labour attachment of persons involved in international temporary mobility. That is, persons who cross international borders without changing their country of residence.
 - b. *International remote work* covers statistics on the labour attachment of persons involved in international remote work. That is, persons who work from a country different from the one in which the producer unit they perform work for is located⁵. It includes persons who do not cross international borders as well as those who do, regardless of the reason for their move.
 - c. *Permits and authorizations to work* cover statistics on permits and authorizations issued by national authorities that regulate the work and employment rights of foreign nationals, and authorizations granted to nationals departing for work and employment abroad.
- 8. The concept of *labour attachment* is used to refer to the relation that persons in different forms of international labour mobility and international remote work have to the production of goods and services in exchange for pay or profit in a country other than their country of birth, citizenship, residence or temporary stay. Accordingly, the concept of labour attachment,
 - a. can be described with reference to participation in employment, labour force status, and/or type of labour underutilization, as pertinent, in line with the current statistical standards on these topics.
 - b. may be further extended to refer to unpaid forms of work, such as own-use production work, volunteer work, unpaid trainee work, and other work activities, to generate separate statistics on special topics such as time-spent in unpaid domestic and care work by resident international migrants, or on special populations such as international volunteer workers or international unpaid trainee workers, as per their national relevance to inform different policy needs.
- 9. *Permits and authorizations* refer to official documents issued by a recognized authority that grant permission to undertake specific actions. A *permit- or authorization-holder* is a person to whom an official document or authorization has been issued by a recognized authority, granting the right to carry out a specific activity or action. The types of permits and authorizations that regulate rights to work and employment of persons depend on the national context. They may include visas, work permits, residence permits, work permit exemptions, authorizations to work, authorizations to depart for employment abroad, and similar official authorizations.
- 10. The different forms of international labour mobility and international remote work are not mutually exclusive. Depending on the individuals' characteristics, the characteristics of their jobs or work activities, and the producer units for which they perform work, persons may fall into one or more forms of international labour mobility and international remote work (e.g. employed resident international migrants engaged in international remote work).
- 11. Likewise, the scope of statistics on permits and authorizations to work does not fully overlap with that of statistics on the different forms of international labour mobility and remote work. Persons in international labour migration, temporary labour mobility or international remote work may, or may not, hold a permit or authorization to work. Conversely, permit- or authorization holders may, or may not, establish a labour attachment in a country other than their country of birth, citizenship, residence or temporary stay. The conceptual relation between the different statistical areas covered in these guidelines is shown in diagram 1.
- 12. Separate compilation of statistics for each area will serve to meet the specific data needs of each domain (e.g. labour force participation of resident international migrants, new work authorizations issued to foreign nationals). At the same time, joint identification of the overlapping characteristics among population groups (e.g. resident international migrants in employment by permit type) can enhance the analytical value and policy relevance of the data.

⁵ The "location" of the producer unit is used henceforth in these Guidelines to refer to the country where the specified unit has its centre of predominant economic interest —aligned with the System of National Accounts 2025.

Diagram 1. Conceptual relation between the different forms of international labour mobility, international remote work, and work permit and authorization holders.



13. With reference to employment, the term *international worker in employment* is used as an umbrella concept to refer to the different population groups engaged in employment in the context of different forms of international labour mobility and remote work. Depending on focus and country perspective, this includes:
- International migrant workers in employment* –that is, international migrants engaged (or previously engaged) in employment in a country other than their country of birth (or citizenship). It comprises *resident international migrants in employment, returned international migrants with employment experience abroad, and emigrants with employment experience abroad*.
 - International mobile workers in employment* –that is, temporary mobile persons, regardless of their country of birth or citizenship, engaged in employment in a country other than their country of residence. It comprises *residents in employment abroad and non-residents in employment in the country*.
 - International remote workers in employment* –that is, persons, regardless of their country of birth or citizenship, engaged in employment, who work from a country different from the one where the employer producer unit is located. It comprises *residents in international remote employment and non-residents in international remote employment*.
14. *International workers in employment* may have either a direct or an indirect work relationship with the producer unit for which they perform work. Accordingly, the producer unit to which they contribute their labour may be the *employer unit* or a *service recipient unit*, where:
- The *employer unit* refers to the entity with which the worker has a direct employment relationship, as a dependent worker or independent worker (i.e. owner operator of its own producer unit).
 - The *service recipient unit* refers to the entity with which the worker has an indirect employment relationship and that benefits from their labour. An indirect employment relationship refers to multi-party work relationships where the employment contract is held with one unit (the employer unit) while the work is performed for or under the direction or control of another unit (the service recipient unit). This includes international agency workers and workers providing outsourced services across international borders. In such cases, the service recipient unit may be located in a country other than that of the employer unit.

Reference populations

15. In principle, and in line with a rights-based approach, the scope of national programmes of statistics on the different forms of international labour mobility and international remote work should aim to cover all persons who meet the criteria to be counted as part of the *resident population* and/or *non-resident population* in the country compiling the statistics, as relevant, regardless of sex, age, type of living quarters, place of birth, citizenship status, status as refugee, asylum seeker or other category of persons in need of international protection, the regular or irregular status of their arrival, stay or departure, or the formal or informal nature of their employment. Specifically, statistics on:
- a. international labour migration have as reference the resident population of the country,
 - b. international temporary labour mobility have as reference the:
 - i. resident population in the case of residents in employment abroad,
 - ii. non-resident population in the case of non-residents in employment in the country.
 - c. international remote work, have as reference the:
 - i. resident population in the case of:
 1. residents present and working remotely from the country for a producer unit located abroad (e.g. residents on digital nomad visas), and
 2. residents temporarily absent and working remotely from abroad for a producer unit located in the country or in a third country (e.g. employed residents with hybrid remote work arrangements).
 - ii. non-resident population, in the case of non-residents temporarily present and working remotely from the country for a producer unit located abroad (e.g. non-residents on remote worker visas).
16. In compiling statistics on these interrelated areas, countries should endeavour to use multiple and complementary data sources to achieve the widest possible population coverage, as relevant, and to clearly specify population coverage limitations in the accompanying metadata, as outlined in para. 120h.

Statistical and analytical units

17. Different units may be relevant to produce statistics relating to the three areas covered in these guidelines. For compiling and reporting statistics, two priority units are persons and permits or authorizations:
- a. *Persons* are the relevant unit for statistics on the number and characteristics of individuals engaged in various forms of international labour mobility, remote work, and for statistics on permit-holders.
 - b. *Permits or authorizations* are relevant statistical units for monitoring managed migration and mobility and serve as an input for generating statistics on both permit- or authorization-holders and persons.
18. Additional relevant units include jobs and full-time equivalents.
- a. *Jobs* can be a useful unit to produce statistics on the number of jobs held by persons engaged in the different forms of international labour mobility and remote work, and in particular, to shed light on the contributions of international temporary labour mobility and remote work to multiple-job holding among international workers.
 - b. *Full-time equivalents* (FTEs) are particularly valuable to support comparisons of the relative contribution to domestic employment of workers involved in international temporary labour mobility such as seasonal workers and cross-border service providers, by accounting for differences in the duration of employment and working time over a particular period such as a calendar year.

Stock and flow measures

19. Two types of measures are relevant when producing statistics on the areas covered in these guidelines:
- a. *Stock* measures reflect the size of the specified population group at a single point in time (i.e. the reference date or period). They are the main type of measure to produce statistics on the number of persons involved in different forms of international labour mobility and remote work, and their characteristics, at a specified reference period. Stock measures are also relevant to generate statistics on the total number of valid permits or authorizations to work or depart for employment at a particular reference date or period (e.g. end of the calendar year), by selected characteristics as relevant.
 - b. *Flow* measures reflect the size of a population acquiring or losing a specific characteristic of interest over a particular time period. They are directional measures, indicating movements into (i.e. inflows) or out of (i.e. outflows) a particular reference geography, status or group. Flow measures are especially relevant to generate data on first issued permits or authorizations granting (or restricting) employment rights by type, first issued work permit exemptions, or new authorizations granted to depart for employment abroad, over a given period such as a calendar month or year.
20. Stocks and flow measures related to populations engaged in various forms of international labour mobility and remote work do not exhibit a simple one-to-one relationship. For example, the stock of employed resident international migrants is influenced by multiple flows, including those associated with international migration (i.e. new arrivals and departures), by demographic flows particularly deaths among the employed resident international migrant population, by changes in residence status (e.g., from non-resident to resident), and by transitions between different labour force statuses (i.e. employed, unemployed, or outside the labour force). Measures of stocks and flows can also be impacted by differences related to the scope, reference period and other methodological aspects of the data sources used.
21. Additionally, stock measures based on permits or authorizations that grant employment rights are not equivalent to stock measures of employed resident international migrants, mobile or remote workers. Persons issued permits or authorizations to work may or may not decide to cross international borders, and they may or may not ultimately take up employment. International migrant, mobile and remote workers may also work without a permit or authorization for various reasons, including permit exemptions and waivers, visa overstays, irregular entries, or informal employment.

Operational definitions

International labour migration

22. Statistics on international labour migration comprise statistics on the labour attachment (i.e. labour characteristics) of persons involved in international migration, that is, resident international migrants, emigrants and returned international migrants.

Statistics on the labour attachment of resident international migrants

23. Statistics on the labour attachment of resident international migrants cover statistics on their labour force status, category of labour underutilization, and, for those employed, characteristics of their employment and working conditions, including recruitment, and other priority topics as outlined in paras. 94b-f, in line with the current statistical standards on these topics.

Resident international migrants in employment

24. From a country of destination perspective, statistics on the stock of resident international migrants in employment are intended to provide information on the size of the employed international migrant population resident in the country of measurement at a given point in time, irrespective of their date of arrival or reason for moving to the country.

25. For statistical purposes, the stock of *resident international migrants in employment* is defined as all resident international migrants of working age who, at a specified point in time, were counted as employed in the country of measurement. Where the term:
- “resident international migrants” refers to foreign-born persons (or foreign citizens) resident in the country of measurement, and
 - “employed” refers to being engaged in the production of goods and services in exchange for pay or profit.
26. Place of birth (i.e. foreign-born) is the primary criterion to capture persons who have crossed international borders, while the citizenship criterion identifies those with legal citizenship in a country other than the country compiling the statistics (i.e. foreign citizens). To support comparability, countries should aim for consistent application of these criteria within the national statistical system to identify the resident international migrant population. Compiling data using both criteria is encouraged to meet diverse policy needs.
27. The concept of employment, in line with the current statistical standards on the topic, covers persons with a job, regardless of the location of the employer producer unit (including units owned and operated by independent workers) or the service recipient unit, in the context of multi-party work relationships. It includes persons employed and contributing their labour to a producer unit located in the country, as well as persons employed and contributing their labour to a producer unit located in another country.
28. Where relevant, the lower age limit may be extended to separately measure the employment of resident international migrant children below the working age, in accordance with the latest international recommendations on child labour statistics.
29. The following special categories are included when they meet the criteria to be counted as part of the resident population in the country. Foreign-born (or foreign citizen) residents who are employed,
- regardless of the initial reason for migration, including students, refugees, asylum seekers, and other persons in need of international protection⁶, persons trafficked across international borders for forced labour or exploitation,
 - as independent workers regardless of the formal or informal nature of their independent activity,
 - as domestic workers by private households resident in the country,
 - as international mobile workers by (or for) a non-resident producer unit located in another country,
 - as international remote workers by (or for) a non-resident producer unit located in another country.
30. Depending on the duration threshold used to determine residence status, certain special groups, listed in para. 95, may also be counted as resident international migrants in employment. These include foreign-born persons (or foreign citizens) who are:
- seasonal workers, posted workers, project-tied workers, specified employment workers, temporary agency workers, as well as
 - seafarers, fishers, and offshore installation workers contributing their labour in resident producer units (i.e. under the jurisdiction of the country of measurement).
31. In such cases, the aim should be to enable consistent classification of common categories of international workers whose duration of stay is 12 months or more. When this is not feasible, due to comparability constraints with population statistics, countries should nevertheless aim to produce statistics on the selected categories of these special groups who are classified as *resident international migrants in employment*, in a manner that supports comparison with those classified as *non-residents in employment* in the country compiling the statistics.

⁶ In line with the International Recommendations on Refugee Statistics (IRRS, 2018) “persons in need of international protection” includes prospective asylum seekers, asylum seekers, persons with determined protection status (refugees, those admitted for complementary and subsidiary forms of protection, those admitted for temporary protection), and others in refugee-like situations.

32. Excluded from the category of resident international migrants in employment are:
- a. foreign military and diplomatic personnel stationed in the country,
 - b. foreign-born (or foreign citizen) workers present in the country in the context of international temporary labour mobility,
 - c. workers providing services to resident producer units from a foreign location without crossing international borders (e.g. international remote workers resident in another country),
 - d. workers who are stateless or with undetermined citizenship status born in the country of measurement, in line with the current recommendations on the topic (*IROSS, 2023*). These workers should be counted as part of the native-born employed population. When applying the citizenship criterion, the category of stateless persons should be reported separately from foreign citizens, as relevant and feasible, considering data quality considerations.
33. To support assessments of the employment relationship of resident international migrant workers and identification of those engaged in international temporary labour mobility and in international remote work, as feasible, information on the geographic location of the person's de facto place of work, and on the residence status of the employer producer unit, with respect to a specified job (e.g. main, second), may be used to separately identify the following sub-categories of resident international migrants in employment:
- a. Foreign-born (foreign citizen) residents, working in the country
 - i. Employed by resident producer units
 - ii. Employed by non-resident producer units (e.g. long-term posted, agency workers)
 - b. Foreign-born (foreign citizen) residents, working from the country
 - i. Employed by non-resident producer units (e.g. on a fully remote work arrangement)
 - c. Foreign-born (foreign citizen) residents, working abroad
 - i. Employed by resident producer units (e.g. cross-border service providers)
 - ii. Employed by non-resident producer units (e.g. frontier workers)
 - d. Foreign-born (foreign citizen) residents, working from abroad
 - i. Employed by resident producer units (e.g. on a hybrid remote work arrangement)

Other related population groups of interest

34. Other related population groups of interest, for which countries may wish to generate statistics on their essential socio-demographic, education, skills, and labour attachment—including labour force status, category of labour underutilization, employment and working conditions—depending on policy priorities and their relevance in the national context, include usual residents who are:
- a. *Foreign-born national citizens*: Residents born outside the country of measurement who have citizenship of the country acquired through paternal or maternal descent, or other means.
 - b. *Naturalized foreign-born persons*: Residents born outside the country of measurement who have acquired the citizenship of the country through the legal process of naturalization.
 - c. *Native-born persons with foreign background*: Residents born in the country of measurement who have at least one parent born in another country.
 - d. *Persons with a refugee background*: Residents, regardless of country of birth or citizenship status, who previously held refugee status but have been naturalised and acquired citizen status; those born in the host country of refugee parents or grandparents with the citizenship of the family's host country; those permitted to join refugee family members and be in the country under family reunification schemes; and others with a refugee background, in line with the current recommendations on the topic (*IRRS, 2018*).

35. From an origin country perspective, statistics on the labour characteristics of returned international migrants and emigrants cover statistics on their employment experience abroad and other priority topics as outlined in para. 94f-g.

Returned international migrants with employment experience abroad

36. Statistics on returned international migrants with employment experience abroad can serve to provide information on the size of the native-born population currently living in the country of measurement, with previous experience residing and working abroad.
37. For statistical purposes, the stock of *returned international migrants with employment experience abroad* refers to all persons of working age who, at a specified point in time, were counted as returned international migrants and who had been previously employed while residing in a country other than the country of measurement. Where the term:
- a. "returned international migrant" refers to native-born persons currently resident in the country, who had ever resided in another country,
 - b. "previously employed" refers to having been engaged in the production of goods and services for pay or profit, while residing in a country other than the country of measurement.
38. For purposes of monitoring changes over time and to furnish up-to-date information for policy formulation, countries may decide to restrict measurement to *recent returned international migrants with employment experience abroad*, covering those who returned within a recent past period, such as the previous 5 years.
39. In line with the current recommendations on the topic (*IRRS, 2018*), return migrants with employment experience abroad also include native-born persons returned from abroad after seeking international protection⁷, who had been previously employed while residing abroad. Countries where these groups are particularly relevant should aim to identify them in order to produce statistics that support targeted reintegration policies.
40. The identification of returned international migrants with employment experience abroad does not depend on the current labour force status of persons in the country of measurement. Returned international migrants with employment experience abroad may include persons currently employed, unemployed, or outside the labour force in the country of measurement.
41. Excluded from the category of return international migrants with employment experience abroad are:
- a. Persons currently residing abroad, on visit in the country, regardless of whether or not they have ended their employment abroad,
 - b. Residents with current or previous employment experience abroad exclusively in the context of international temporary labour mobility (e.g., frontier workers, seasonal migrant workers, etc.),
 - c. Residents with previous employment experience abroad exclusively in the context of international remote work for a producer unit located in the country of measurement.

Current labour attachment of returned international migrants

42. To support reintegration policies, statistics are also needed on the current labour force status, education, skills, employment, working conditions, job search, barriers to employment, category of labour underutilization, and main activity status of all returned international migrants, regardless of whether or not they had previous employment experience abroad.

⁷ This includes repatriating refugees, repatriating asylum seekers, persons returning after having received international protection other than refugee status abroad, and others returning from seeking international protection abroad.

43. For this purpose, countries may decide to restrict measurement to all *recent returned international migrants* comprising those who returned within a recent past period, such as the previous 5 or 10 years, and to support disaggregation by previous employment experience abroad.

Emigrants with employment experience abroad

44. Statistics on emigrants with employment experience abroad can serve to provide a basis for assessing the size of the native-born population who left the country of measurement, is residing in another country and has employment experience abroad.
45. For statistical purposes, the stock of *emigrants with employment experience abroad* is defined as all emigrants of working age who, at a specified point in time, were residents in a country other than the country of measurement and were counted as employed in their country of residence at, or over, a specified period. Where the term:
- a. “emigrants” refers to native-born persons who left the country and are currently residents in another country,
 - b. “employed” refers to being engaged in the production of goods and services in exchange for pay or profit.
 - c. “at, or over, a specified period” may be measured with respect to a current short reference period, such as a reference week, or over a specified long period of observation, such as the previous five or ten years, depending on the data source.
46. Included are:
- a. emigrants in any type of employment, including self-employment, informal employment, part-time or casual employment,
 - b. emigrants residing abroad and employed in the country of origin or in a third country in the context of international temporary labour mobility, and
 - c. emigrants residing abroad and employed in the country of origin or in a third country in the context of international remote work.
47. Excluded are residents working abroad in the context of international temporary labour mobility.
48. Statistics on emigrants with employment experience abroad are particularly difficult to compile from an origin country perspective. An alternative measure may be generated covering:
- a. *Former household members with employment experience abroad* covering former members reported by households remaining in the country of measurement, who departed within a recent past period, such as the previous five or ten years, who were employed in another country at any point since their departure.

Other related population groups of interest

49. From an origin country perspective, other related population groups of interest, for which countries may wish to compile statistics on their essential socio-demographic, education, skills, reasons for migration, and labour attachment abroad—including labour force status and selected employment characteristics as relevant and feasible, include:
- a. *National citizens resident abroad in main destination countries*: that is, persons who hold legal citizenship of the country of measurement who are resident in another country, regardless of country of birth or mode of citizenship acquisition.
 - b. *Former household members who emigrated in the recent past period*, such as the previous 5 or 10 years, regardless of their employment experience abroad.

International temporary labour mobility

50. Statistics on international temporary labour mobility cover statistics on the labour attachment (i.e. labour characteristics) of persons in international temporary mobility. It comprises statistics on two broad groups: (a) residents in employment abroad and (b) non-residents in employment in the country.

Residents in employment abroad

51. From an origin country perspective, statistics on residents in employment abroad are intended to provide information on the size of the population resident in the country who leave the country one or more times within a year, and work in another country.

52. For statistical purposes, the *stock of residents in employment abroad* is defined as all persons of working age, regardless of their country of birth or citizenship status, who at/during a specified period were counted as part of the resident population in the country, who were temporarily absent, in employment, and working in or from another country. Where the terms:

- a. “resident” population refers to persons who stayed or intended to stay in the country for more than the minimum duration required for residency in a particular year,
- b. “temporarily absent” refers to having travelled outside the country for a total duration of absence that is shorter than the minimum required to lose residence status in the country within a given year,
- c. “in employment” refers to being engaged in the production of goods and services in exchange for pay or profit;
- d. “working in or from another country” refers to performing the tasks and duties of their job (main, second, or other job) in or from a country other than the country of measurement. That is, the geographic location of the person’s de facto place of work is a foreign country.

53. Statistics on the stock of *residents in employment abroad* may be compiled and reported separately for different categories of workers, such as resident frontier workers, cross-border service providers, and other special groups, as relevant and feasible in the national context. Where, resident

- a. *frontier workers* are persons in employment who reside in the country and regularly cross an international border to work in another country, typically returning to their country of residence on a daily or weekly basis;
- b. *cross-border service providers* are persons in employment who cross international borders to deliver services in another country on a temporary basis for which they receive remuneration. This includes independent and dependent workers who enter the destination country solely for the purpose of fulfilling a specific service contract or assignment. Their stay abroad is limited to the duration of the service provision, after which they return to their country of residence;
- c. other *special groups* can include seasonal workers, posted workers, project-tied workers, specified employment workers, temporary agency workers, as well as seafarers, fishers, and offshore installation workers employed in non-resident producer units (i.e. under the jurisdiction of another country), as defined in para. 95.

54. When applying a duration threshold to determine the continued residence status of workers to be classified as *residents in employment abroad*, countries are encouraged to consider the typical cumulative durations of absence over a calendar year for the main categories of workers relevant in the national context, particularly in the case of *special groups* such as seasonal workers, project-tied workers, specified-employment workers, posted workers, temporary agency workers, seafarers, fishers, offshore installation workers, and others.

- a. To the extent possible, the aim should be to ensure consistent classification of common categories of workers whose cumulative duration of absence from the country while employed abroad within a calendar year is below 12 months.
- b. When such an approach is not feasible due to comparability constraints with population statistics, countries should nevertheless aim to produce statistics on *residents in employment abroad* in the

specified categories in a manner that supports comparison with those classified as *emigrants with employment experience abroad*.

55. Excluded from residents in employment abroad are:
- a. Residents working on a fully remote basis, without crossing national borders, for a non-resident economic unit located abroad (i.e. resident international remote workers with a fully remote work arrangement).
 - b. Residents who cross international borders exclusively to acquire inputs for their independent activity.
56. To support assessments of the migration background characteristics and employment relationship of international mobile workers, and to distinguish between *residents working in another country* and *residents working from abroad* as international remote workers, as feasible, information on the place of birth (or citizenship status) of the person, the geographic location of the person's de facto place of work, and on the residence status of the employer producer unit, with reference to a specified job (e.g. main, second), may be used to distinguish between the following sub-categories of residents working abroad:
- a. Residents working in another country
 - i. Native-born (national citizen) employed by resident producer units
 - ii. Foreign-born (foreign citizen) employed by resident producer units
 - iii. Native-born (national citizen) employed by non-resident producer units
 - iv. Foreign-born (foreign citizen) employed by non-resident producer units
 - b. Residents working from abroad (as international remote workers)
 - i. Native-born (national citizen) employed by resident producer units
 - ii. Foreign-born (foreign citizen) employed by resident producer units
57. Stock measures of selected groups of residents in employment abroad may be complemented with measures based on registrations of persons granted authorizations to depart for employment abroad for a duration of stay below the threshold specified to change residence status in the country of measurement, in line with para. 116.

Non-residents in employment in the country

58. From a country of destination perspective, statistics on non-residents in employment in the country aim to provide information on the size and characteristics of the temporary population who enters the country one or more times within a year, and works in or from the country.
59. For statistical purposes, the *stock of non-residents in employment in the country*, is defined as all persons of working age, regardless of their place of birth or citizenship status, who at/during a specified reference period, were considered as part of the non-resident (temporary) population in the country, and who were in employment and working in or from the country . Where,
- a. "Non-resident" population refers to persons who stayed or intended to stay in the country for less than the minimum duration required for residency in a particular year,
 - b. "in employment" refers to being engaged in the production of goods and services in exchange for pay or profit,
 - c. "working in or from the country" refers to performing the tasks and duties of their job (main, second, or other job) in or from the country of measurement. That is, the geographic location of the person's de facto place of work is the country of measurement.
60. Statistics on the stock of non-residents in employment in the country may be compiled and reported separately for different categories, such as non-resident frontier workers, cross-border service providers, and other special groups, as relevant and feasible in the national context. Where, non-resident

- a. *frontier workers* are persons in employment who reside in another country and regularly cross an international border to work in the country of measurement, typically returning to their country of residence on a daily or weekly basis;
 - b. *cross-border service providers* are persons in employment who cross international borders to deliver services in the country of measurement on a temporary basis for which they receive remuneration. This includes independent and dependent workers who enter the country solely for the purpose of fulfilling a specific service contract or assignment. Their stay in the country is limited to the duration of the service provision, after which they return to their country of residence;
 - c. other *special groups* can include seasonal workers, posted workers, project-tied workers, specified employment workers, temporary agency workers, as well as seafarers, fishers, and off-shore installation workers employed in resident producer units (i.e. under the jurisdiction of the country), as defined in para. 95.
61. When applying a duration threshold to determine the residence status of workers to be classified as *non-residents in employment in the country*, countries are encouraged to take into account the typical cumulative durations of presence in the economic territory of the country of measurement over a calendar year for the main categories of workers relevant in the national context, particularly *special groups* such as seasonal workers, project-tied workers, specified-employment workers, posted workers, temporary agency workers, seafarers, fishers, offshore installation workers, and others.
- a. To the extent possible, the aim should be to enable consistent classification of common categories of workers whose cumulative duration of presence while employed within a calendar year is below 12 months.
 - b. When such an approach is not feasible due to comparability constraints with population statistics, countries should nevertheless aim to produce statistics on *non-resident workers* in the specified categories in a manner that supports comparison with those classified as *resident international migrant workers*.
62. Depending on national relevance, countries may include in the stock of non-residents in employment in the country, persons while in transit to another country, who were present and employed in the country of measurement at a specified point in time. Such persons, when the elapsed duration of stay meets the minimum threshold to be considered resident in the country of measurement should instead be counted in the stock of resident international migrants in employment, defined in para. 25.
63. Excluded from non-residents in employment in the country are:
- a. Persons resident in another country, working remotely for a resident producer unit on a fully remote basis, without crossing national borders (i.e., non-resident international remote workers with a fully-remote work arrangement ;
 - b. Persons who enter the country exclusively to acquire inputs for their independent activity abroad;
64. To support assessments of the migration background characteristics and employment relationship of international mobile workers, and to distinguish between non-residents working in the country and non-residents working from the country as international remote workers, as feasible, information on the place of birth (or citizenship status) of the person, the geographic location of the person's de facto place of work, and on the residence status of the employer producer unit, with reference to a specified job (e.g. main, second), may be used to distinguish between the following sub-categories of non-resident workers:
- a. Non-residents working in the country
 - i. Native-born (national citizen) employed by resident producer units
 - ii. Foreign-born (foreign citizen) employed by resident producer units
 - iii. Native-born (national citizen) employed by non-resident producer units
 - iv. Foreign-born (foreign citizen) employed by non-resident producer units
 - b. Non-residents working from the country (as international remote workers)

- i. Native-born (national citizen) employed by non-resident producer units
 - ii. Foreign-born (foreign citizen) employed by non-resident producer units
65. Stock measures of selected groups of non-residents working in/from the country may be complemented with measures based on permits or authorizations with a granted duration of stay below the threshold specified to become resident in the country of measurement, in line with para. 116.

International remote work

66. Statistics on international remote work cover statistics on the labour attachment (i.e. labour characteristics) of persons involved in international remote employment.
67. *International remote employment* refers to a work arrangement in which persons in employment perform some or all of the tasks and duties of their job from a country different from the one where the employer producer unit is located. International remote employment utilizes digital communication and collaboration tools to facilitate work across international borders.
68. International remote employment comprises different work arrangements, including:
- a. *Fully remote work arrangements* in which persons in employment perform all of their job tasks and duties from a country different from that of the employer unit, with no requirement for in-country presence. All work is carried out remotely using digital tools.
 - b. *Hybrid remote work arrangements* in which persons in employment perform part of their job duties from a country different from that of the employer unit, and part from within that country, on a planned and recurring basis. These arrangements involve regular cycles of remote work abroad and in-country presence.
69. For practical purposes, other situations involving work performed remotely across international borders, but that do not fall under the fully remote or hybrid remote categories are excluded from the scope of international remote work. These include short-term or intermittent remote work performed from abroad, ad hoc remote work during other international travel, or time-bound arrangements shaped by specific operational, legal, or personal circumstances (e.g. while waiting for visa or permit approvals).
70. *International remote workers* comprise persons of working age, who in their main, second, or other jobs, were employed by and working on a fully remote or hybrid remote basis for a producer unit located in a country other than their country of residence or temporary stay. Two main groups include: (a) *residents in international remote employment*, and (b) *non-residents in international remote employment*.

Residents in international remote employment

71. For statistical purposes, the stock of *residents in international remote employment* is defined as all persons of working age, regardless of their country of birth or citizenship status who, at/during a specified period, were counted as part of the resident population in the country, were employed by a non-resident producer unit located abroad, and working on a fully or hybrid remote basis from the country of measurement. Where the terms:
- a. “resident” population refers to persons who stayed or intended to stay in the country for more than the minimum duration required for residency in a particular year,
 - b. “employed” refers to being engaged in the production of goods and services in exchange for pay or profit,
 - c. “by a non-resident producer unit located abroad” refers to having an employment relationship with a non-resident producer unit located in another country,
 - d. “working from the country” refers to performing the tasks and duties of their job from the country of measurement. That is, the geographic location of the person’s de facto place of work is the country compiling the statistics,

- e. “fully or hybrid remote basis” refers to the nature of the international remote work arrangement as specified in para. 68.

Non-residents in international remote employment

72. For statistical purposes, the stock of *non-residents in international remote employment* is defined as all persons of working age, regardless of their country of birth or citizenship status who, at/during a specified period, were counted as part of the non-resident population in the country, were employed by a non-resident producer unit located abroad, and working on a fully or hybrid remote basis from the country of measurement. Where the terms:
- a. “non-resident” population refers to persons who stayed or intended to stay in the country for less than the minimum duration required for residency in a particular year,
 - b. “employed” refers to being engaged in the production of goods and services in exchange for pay or profit,
 - c. “by a non-resident producer unit located abroad” refers to having an employment relationship with a non-resident producer unit located in another country,
 - d. “working from the country” refers to performing the tasks and duties of their job from the country of measurement. That is, the geographic location of the person’s de facto place of work is the country compiling the statistics,
 - e. “fully or hybrid remote basis” refers to the nature of the international remote work arrangement as specified in para. 68.
73. Included as part of residents and non-residents in international remote employment, as pertinent, are:
- a. Dependent workers who have an employment relationship with a producer unit located in a country other than their country of residence or temporary stay, regardless of the formal or informal nature of their job.
 - b. Independent workers who work remotely from a country different from the location of their business registration, or a country different from their country of residence in the case of independent workers with an informal sector unit.
74. Excluded from residents and non-residents in international remote employment are independent workers and dependent contractors whose country of residence is the same as their country of de facto place of work, even if they have foreign clients.
75. To support assessments of the migration background characteristics and employment relationship of persons in international remote employment, as feasible, information on the place of birth (or citizenship status) of the person, the geographic location of the person’s de facto place of work, and on the residence status of the employer producer unit, with reference to a specified job (e.g. main, second), may be used to distinguish between the following categories:
- a. Residents in international remote employment, working from the country
 - i. Native-born (national citizen) employed by non-resident producer units
 - ii. Foreign-born (foreign citizen) employed by non-resident producer units
 - b. Non-residents in international remote employment, working from the country
 - i. Native-born (national citizen) employed by non-resident producer units
 - ii. Foreign-born (foreign citizen) employed by non-resident producer units
76. As relevant, countries may wish to further distinguish between persons in international remote employment with fully remote and hybrid remote work arrangements. Identification of persons in international remote employment with hybrid remote work arrangements in particular can serve to identify those who are also involved in international temporary labour mobility.

77. Stock measures of selected groups of persons in international remote employment may be complemented with measures based on permits or authorizations (and permit-holders) issued that grant rights for international remote employment, such as digital nomad visas, in line with para. 115.

Other related population groups of interest

78. Other related population groups of interest for which countries may wish to compile statistics on their essential socio-demographic and employment characteristics, as relevant, include:
- a. Residents in employment with access to remote work arrangements in their main job, by type of remote work arrangement, cumulative duration limit, and geographic location restrictions.
 - b. Residents in employment who, over a specified long reference period such as a calendar year, worked remotely from abroad for a resident producer unit located in the country, as part of a hybrid remote work arrangement (in a main, second or other job).
 - c. Residents in employment who, over a specified long reference period such as a calendar year, worked as independent workers or dependent contractors only with clients resident in another country.

Relation with labour force statistics and the SNA 2025

79. For purposes of integrating a mobility perspective in labour force and employment statistics, the categories of international workers in employment specified in these guidelines may be arranged as shown in Box 1.

Box 1. Classification of international workers in employment with respect to a specified job (main, second) –for integration in labour force and employment statistics

I. Resident population in employment

I.1 Native-born (national citizen) residents

I.1.1 Working in the country

I.1.1.1 Employed by resident producer units (i.e. non-migrants)

I.1.1.2 Employed by non-resident producer units in extraterritorial enclaves (i.e. non-migrants)

I.1.2 Working from the country –in international remote employment

I.1.2.1 Employed by non-resident producer units as international remote workers (fully remote)

I.1.3 Working abroad —in international temporary labour mobility

I.1.3.1 Employed by resident producer units (e.g. posted worker, cross-border service provider)

I.1.3.2 Employed by non-resident producer units (e.g. frontier worker)

I.1.4 Working from abroad –in international remote employment

I.1.3.1 Employed by resident producer units (e.g. hybrid remote work)

I.2 Foreign-born (foreign citizen) residents (i.e. resident international migrant workers)

I.2.1 Working in the country

I.2.1.1 Employed by resident producer units

I.2.1.2 Employed by non-resident producer units (e.g. long term posted workers)

I.2.2 Working from the country –in international remote employment

I.2.1.3 Employed by non-resident producer units as international remote workers (fully remote)

I.2.3 Working abroad —in international temporary labour mobility

I.2.2.1 Employed by resident producer units (e.g. posted worker)

I.2.2.2 Employed by non-resident producer units (e.g. frontier worker)

I.2.4 Working from abroad –in international remote employment

I.1.2.1 Employed by resident producer units (e.g. hybrid remote work)

II. Non-resident (temporary) population in employment

II.1 Native-born (national citizen)

II.1.1 Working in the country –in international temporary labour mobility

II.1.1.1 Employed by resident producer units (e.g. frontier worker)

II.1.1.2 Employed by non-resident producer units (e.g. cross-border service provider)

II.1.2 Working from the country –in international remote employment

II.1.2.1 Employed by non-resident producer units

II.2 Foreign-born (foreign citizens)

II.2.1 Working in the country —in international temporary labour mobility

II.2.1.1 Employed by resident producer units (e.g. frontier worker)

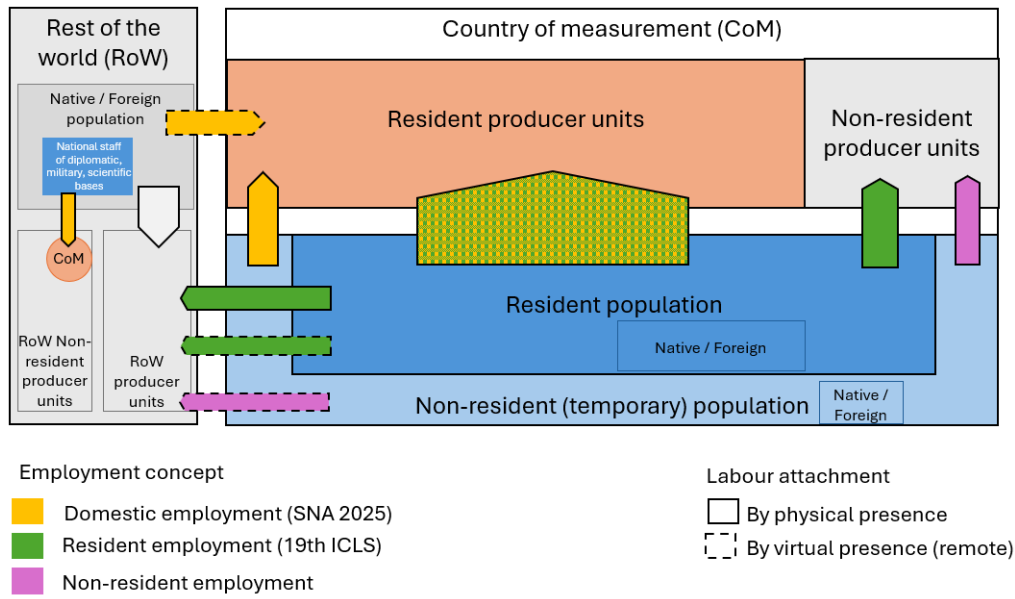
II.2.1.2 Employed by non-resident producer units (e.g. cross-border service provider)

II.2.2 Working from the country –in international remote employment

II.2.2.1 Employed by non-resident producer units (e.g. digital nomad)

80. International migrant, mobile and remote workers in employment who are part of the resident population of the country should be counted as contributing to *resident employment*, in line with the current standards concerning statistics of work, employment and labour underutilization, regardless of the geographic location of the employer producer unit, or the location of the service recipient unit, in the case of workers in multi-party work relationships.
81. For purposes of compiling national accounts, international migrant, mobile and remote workers in employment who contribute their labour to the production of resident producer units should be counted as contributing to *domestic employment*, regardless of their residence status in the country, in line with current System of National Accounts 2025 (see diagram 2). This includes:
- a. foreign-born (foreign citizen) residents providing labour input to resident producer units,
 - b. native and foreign-born (national and foreign national) non-residents providing labour input to resident producer units by physical presence in the country,
 - c. native and foreign-born (national and foreign national) non-residents providing labour input to resident producer units remotely without physical presence in the country,
 - d. foreign-born (foreign citizen) persons providing labour input to fishing boats, other ships, aircraft and floating platforms operated by resident producer units,
 - e. native-born (national) diplomatic, military, naval, scientific personnel stationed in territorial enclaves abroad.

Diagram 2. International workers in employment and the System of National Accounts 2025.



82. Excluded from *domestic employment* are:

- native and foreign-born (national and foreign national) residents providing labour input to non-resident producer units located in the country or abroad,
- native and foreign-born (national and foreign national) non-residents temporarily present in the country who provide labour input to non-resident producer units located in the country or abroad (i.e. non-resident employment).

Permits and authorizations to work

- Statistics on *permits and authorizations to work* cover statistics on work, visa, residence permits, authorizations to work, permit exemptions and waivers, issued by national authorities that regulate the employment rights of foreign citizens, and as well as authorizations and/or the registration of national citizens departing for employment abroad.
- From a country of destination perspective, statistics on permits, authorizations to work and permit- or authorization-holders complement data on the employment of foreign citizens by providing insights into the regulatory framework of migration and labour mobility. While statistics on the employment of different groups of international migrant, mobile and remote workers capture de facto participation in the production of goods and services for pay or profit (i.e. employment work), permit statistics track trends in the regulation of employment rights associated with different permit or authorization types—including authorized employment, entrepreneurship, and job search, and residence rights, including duration of stay limits, for different categories of foreign citizens.
- First-time permits or authorizations* refer to the initial legal authorization, including visas and permits granted to a foreign citizen to enter, reside, and / or work in a country. First-time permits also cover cases where a foreign citizen may be granted entry or work rights through special exemptions or waivers, which allow entry without the usual permit requirements. Statistics on first-time permits and authorizations should be restricted to foreign citizens who did not previously hold a permit, visa, or legal authorization for the country. That is, it should exclude renewals, extensions, or transfers.
- Status changes* refer to the reclassification of a foreign citizen's legal status within a country, resulting in a new type of permit or authorization with different rights or conditions (e.g., from student to worker). These exclude

renewals or extensions of the same permit type. Statistics on permit or authorization status changes are important for monitoring transitions that affect employment rights, residence conditions, and long-term migration outcomes.

87. *Valid permits and authorizations to work* at the end of the year refer to the stock of permits, visas, or equivalent authorizations issued to foreign citizens that remain legally in force on a specified reference date. This includes all permits and authorizations granted to foreign citizens that have not expired, been revoked, or otherwise terminated, regardless of the date of issuance. Statistics on valid permits and authorizations to work capture the number of individuals legally authorized to reside and/or work in the country at that point in time.
88. From an origin country perspective, statistics on *permits and authorizations to work* may be derived from authorizations and the registration of nationals departing for employment abroad.
89. *New authorizations or registrations to depart for employment abroad* refer to the number of national citizens who, within a given reference period, have officially registered with, and/or received authorization by, a competent authority or agency in their country of origin to take up employment in another country. These authorizations may be required for administrative, regulatory, or protective purposes and can include persons departing through government-facilitated, private recruitment or other channels.
90. *Valid authorizations or registrations to depart for employment abroad* refer to the number of national citizens with official approval for employment abroad that remain valid on a specified reference date. These authorizations are issued for administrative, regulatory, or protective purposes and can include persons departing both through government-facilitated, private recruitment or other channels.

Data items for identification

91. A diverse set of data items is needed to identify the various population groups engaged in the different forms of international labour mobility and remote work.
92. For identification purposes, core minimum data items include:
 - a. *International migration and mobility characteristics*
 - i. country of birth,
 - ii. country(ies) of citizenship,
 - iii. citizenship status,
 - iv. residence status in the country of measurement,
 - v. residence abroad (ever / in a specified period in the past),
 - vi. country of (last/current/next) residence,
 - vii. date of (most recent) arrival and/or departure,
 - viii. duration of stay.
 - b. *labour attachment characteristics*
 - i. labour force status in the country,
 - ii. employment experience abroad,
 - iii. geographic location of the employer producer unit,
 - iv. geographic location of the service recipient unit, if different from the employer unit,
 - v. geographic location of the person's de facto place of work.
93. Where:
 - a. "country of birth" refers to the country of birth of the person—more specifically the country where the mother of the person resided at the time of the birth,

- b. "country(ies) of citizenship" refers to the country or countries a person is a citizen of and with which the person enjoys a particular legal bond, acquired by birth, naturalization, marriage, or some other manner,
- c. "citizenship status" refers to the classification of a person, based on their country or countries of citizenship, according to whether they hold the citizenship of the country of measurement at a given time, distinguishing citizens from foreign citizens. Where relevant, a separate category should further be used for stateless persons or those with undetermined citizenship.
- d. "residence status in the country of measurement" refers to whether the person is considered a resident or a non-resident (temporarily present) in the country during a specified period. It is specified with reference to the minimum duration of residence requirement (actual or intended) in the country, typically more than 6 months or 12 months or more, excluding temporary absences such as for holidays, regardless of their legal status or the purpose of this residence (e.g. education, family unification, work or self-employment, international protection and other humanitarian reasons),
- e. "residence abroad (ever / in a specified period in the past)" refers to whether a person has resided in a country other than the country of measurement, either at any time in the past or during a defined reference period. Residence abroad is determined with reference to the minimum duration of stay requirement (actual or intended) in the foreign country. It applies regardless of the person's legal status in the foreign country or the purpose of the stay (e.g. education, family reunification, employment or self-employment, international protection, or other humanitarian reasons),
- f. "country of (last/current/next) residence" refers to the country in which a person last resided, currently resides, or intends next to reside, as applicable. Residence is determined with reference to the minimum duration of stay requirement (actual or intended). It applies regardless of the person's legal status in that country or the purpose of residence (e.g. education, family reunification, employment or self-employment, international protection, or other humanitarian reasons),
- g. "date of (most recent) arrival and/or departure" refers to the calendar date (typically month and year) on which a person most recently entered or left the country of measurement,
- h. "duration of stay" is determined with reference to the (last/current/next) country of destination (i.e. country of residence or temporary stay) and may be measured as elapsed, completed, intended, or granted duration of stay depending on the data source,
- i. "labour force status in the country" refers to the classification of persons of working age, as employed, unemployed or outside the labour force, in line with the current statistical standards on the topic.
- j. "employment experience abroad" refers to having (ever / in a specified reference period), been in employment in a country other than the person's country of birth, citizenship, residence or temporary stay, as relevant, as defined in para. 6(f),
- k. "geographic location of the employer producer unit" refers to the country in which the specified unit is considered a resident producer unit, in accordance with the System of National Accounts (SNA),
- l. "geographic location of the service (recipient) unit" refers to the country where the specified unit is considered a resident producer unit, in accordance with the System of National Accounts (SNA),
- m. "geographic location of the person's de facto place of work" refers to the country from (or in) which the person physically carries out the work during a specified observation period. This may be the country of the employer producer unit, the service recipient unit, or a third country in the case of international remote workers. The concept is different from that of *usual workplace*, as it refers to the de facto location from (or in) which the person carries out their work. For this reason and for purposes of identifying international remote workers, it is recommended to measure the de facto workplace based on the country from which the person performs their work over a clearly defined observation period, such as a month, quarter, or year.

Data items and topics for characterization

94. In addition to the above, to support assessments of the labour market participation, education, skills, employment characteristics, and working conditions of different groups of international workers, data items on the following topics are needed. Not all data items are required with the same frequency, nor can all be produced from a single data source. Countries will need to draw on multiple data sources and establish appropriate reporting periodicities to compile the various data items in a manner that reflects national priorities:
- a. To support cross-cutting disaggregation by main socio-demographic and housing characteristics of the different groups:
 - i. sex, date of birth or age, marital status,
 - ii. type of living quarters.
 - b. To complement the headline indicators of labour force participation among the resident international migrant population, in line with the current international statistical standards on these topics:
 - i. measures of labour underutilization,
 - ii. informal sector employment and informal employment.
 - c. To support assessments of the contributions to employment and working conditions of the different groups of international migrant, mobile and remote workers:
 - i. occupation, status in employment, and branch of economic activity,
 - ii. hours actually worked, hours usually worked, contractual hours of work, working time arrangements including rest periods, characteristics of the employment agreement, including type, language, and duration, existence of multi-party work relationships, and duration of employment with the employer producer unit or service recipient unit, if any,
 - iii. characteristics of recruitment including channel, recruitment costs incurred (types and amounts), employment-related income, job-related social security benefits, occupational safety and health, and social dialogue.
 - d. For assessments of educational qualifications, skills utilization and mismatches:
 - i. level of education attained, vocational training completed, field of study, country of highest educational qualification, recognition of educational qualifications,
 - ii. proficiency (speaking, reading, writing) in a language of the country of residence or temporary stay, length of work experience, skills possessed.
 - e. To support separate identification of refugees, asylum seekers and other persons in need of international protection, data items to be compiled, where feasible and relevant in the national context, and in accordance with the latest recommendations on the topic, include:
 - i. reason for move, including categories capturing causes commonly associated with forced displacement (e.g. conflict, violence or persecution), to support the identification of refugees, asylum seekers and other persons in need of international protection).
 - ii. previous experience of forced displacement captured through dedicated questions, irrespective of the main reason for move. This refers to situations of involuntary movement, where a person is forced or obliged to flee as a result of, or in order to avoid events such as armed conflict, generalized violence, human rights violations, natural or human-made disasters, other forced evictions or displacement.
 - iii. legal international protection status, covering the recognized legal status in the country, status of application for international protection, intent to apply for international protection, outcome of application for international protection, as applicable to the national context.

- f. For resident international migrants, emigrants and returned international migrants, to shed light on the reasons and employment context of their migration, and contribute to assessments of the determinants of migration, as relevant:
 - i. Reason(s) for arrival, employment situation before arrival, job search before arrival, and migration channel,
 - ii. Reason(s) for departure, employment situation before departure, job search abroad before departure, and migration channel,
 - iii. Reason(s) for return and employment situation before return.
- g. For returned international migrants, to support assessments of their labour market re-integration and skills utilization upon return to the country of measurement:
 - i. international employment experience, characteristics of previous/last employment abroad, including occupation, and length of experience in occupation,
 - ii. labour force status in the country of measurement, category of labour underutilization, occupation of current employment, main activity among returnees not in employment.
- h. To support monitoring the contributions of managed migration and labour mobility to employment, priority data items to be compiled as part of statistics on permits and authorizations to work, include:
 - i. type of visa, residence, work permit, authorization to work, work permit exemption, or authorization to depart for employment abroad
 - ii. granted duration of stay,
 - iii. duration of permit, authorization, or permit exemption validity, and
 - iv. place of application (in country of measurement or another country).
- i. The items of data collection should adhere to, or be convertible to the latest international statistical standards where they exist, such as the International Standard Classification of Education (ISCED), the International Standard Industrial Classification of All Economic Activities (ISIC), the International Standard Classification of Occupations (ISCO), the 20th ICLS Resolution concerning statistics on work relationships, including the International Classification of Status in Employment (ICSE).
- j. Where the scope of statistics has been extended to capture the participation of international migrants, temporary mobile populations and/or international remote workers in forms of unpaid work, the list of items of data collection should be extended to support identification of participation and time spent in the relevant forms of unpaid work and their characteristics, as appropriate.
- k. Similarly, where the age limit of the working age population is lowered in data collection to cover international child migrant workers, the list of items should be extended to obtain relevant information on the child's living and working conditions, including school attendance, engagement in unpaid domestic services, exposure to hazardous working conditions and risk of other worst forms of child labour, in line with the current international standards on statistics of child labour.
- l. Depending on policy concerns, additional data items to be collected or generated at longer intervals include special topics such as past migration and employment history, family relationships and characteristics of family members, labour exploitation and forced labour, as relevant, in line with the latest statistical standards on the respective topics.

Special groups

95. Depending on the operational definition of usual residence applied at the national level, certain special groups of workers may be classified either as *international migrant workers in employment* or as *international mobile workers in employment*. These groups often have distinctive mobility patterns or employment arrangements that require careful consideration to ensure consistent treatment and classification:

- a. *posted workers* are persons in employment who are sent by their employer (i.e. posted) to perform services in another country for a fixed period while maintaining their employment relationship and contract in the origin country. The work performed abroad is carried out on behalf of the sending employer—such as fulfilling a service contract, being assigned within the same enterprise or group, or being placed through a temporary employment agency, and their stay abroad is limited to the duration of the posting,
- b. *project-tied workers* are persons in employment who move to another country for a limited period to work on a specific project or assignment—such as construction, infrastructure development, installation, or other time-bound activities—and who return to their country of residence upon completion of the project. Their stay and employment abroad are directly linked to the duration and scope of the designated project,
- c. *seasonal workers* are persons in employment who reside in one country and travel to another country for a limited and pre-determined period to perform work that is dependent on seasonal conditions or cycles and performed during part of the year—such as agriculture, tourism, or other industries with recurring seasonal peaks—and, who return to their country of residence once the seasonal employment period ends. Their stay and employment abroad are temporary and linked to the duration of the seasonal activity;
- d. *specified-employment workers* are persons in employment who move to another country for a limited and pre-determined period to perform work under a specific employment contract—often within bilateral labour agreements or other regulated schemes—regardless of whether it is linked to a single project, and who return to their country of residence once the contract ends. Their stay and employment abroad are defined by the terms and duration of the specified employment arrangement;
- e. *temporary agency workers* are persons in employment who are recruited by a temporary employment agency in their country of residence and assigned to perform work in another country for a service recipient unit, under the supervision of the service recipient unit. Their employment contract is with the agency, not the service recipient unit, and their stay abroad is linked to the duration of the assignment;
- f. *international seafarers* are persons employed or engaged in the operation or service of a seagoing vessel, as covered under the Maritime Labour Convention (MLC, 2006), whose country of birth or citizenship differs from the country in which the vessel is registered (flag State),
- g. *international fishers* are persons engaged in fishing occupations on board a vessel, whose country of birth or citizenship differs from the country in which the fishing vessel is registered (flag State),
- h. *international offshore-installation workers* are persons employed on offshore structures—such as oil, gas, or renewable-energy installations—whose country of birth or citizenship differs from the country with jurisdiction over the offshore installation.

Indicators and tabulations

96. Each country should select a set of indicators that serves the principal needs of the various users of statistics on the different forms of international labour mobility, international remote work, and permits and authorizations to work, considering the national context and priorities.
97. The recommended indicators and tabulations provided in these guidelines are structured to meet diverse user needs taking into consideration the country perspective and the different forms of international labour mobility. They include:
 - a. Headline stock labour market indicators for resident international migrants
 - b. Stock indicators on the different groups of international workers in employment
 - c. Stock indicators on the structure of employment of different groups of international workers
 - d. Stock indicators on the working conditions of different groups of international workers

- e. Stock and flow indicators on permits or authorizations that regulate the employment of foreign nationals, and authorizations of nationals to depart for employment abroad.
98. The selected indicators should be computed for the specified priority group or sub-group disaggregated by sex, specified broad age groups (including separate categories for youth), and as feasible by broad level of educational attainment, and other relevant characteristics as specified below, taking account of the quality of the estimates.
99. For international comparisons, countries that use country of birth as the criterion for identifying resident international migrants should endeavor to tabulate relevant populations by country of citizenship. Similarly, countries that use country of citizenship as the criterion should endeavor to produce separate tabulations by country of birth.

Headline stock labour market indicators for resident international migrants

100. From a destination perspective, countries where international migrants constitute a sizeable share of the resident population of working age, for example 5 percent or more, are encouraged to produce at regular intervals, such as quarterly or annually, the following headline stock indicators to support short-term monitoring of migrants' participation in the labour market: labour force participation rate, employment-to-population ratio, unemployment rate (LU1), and other measures of labour underutilization (LU2, LU3, LU4), rate of informal sector employment, rate of informal employment, and distribution by main activity status of international migrants outside the labour force, computed as shown in box 2.
101. The above indicators should be disaggregated by essential socio-demographic characteristics as outlined in para. 98. In contexts where refugees, asylum seekers and other persons in need of international protection are prevalent, these indicators should be produced separately for these groups.
102. To enable comparisons between international migrants and non-migrants, countries with a sizeable resident international migrant population—including refugees, asylum seekers, and other persons in need of international protection—should, to the extent possible, produce the above indicators in a way that allows comparability with key labour market indicators for the native-born (or national-citizen) population. This may be achieved through the use of a common data source, such as the national labour force survey, or through multiple data sources specifically designed to capture different groups of resident international migrants, using harmonized concepts, definitions, reference periods, and classifications, to the extent possible.
103. Countries where international migrants represent a relatively small share of the resident population of working age (i.e. less than 5 percent) may produce the above indicators on a less frequent regular basis, such as every 5 or 10 years, to support structural assessments of the labour force participation of international migrants in the country at a particular point in time and to monitor long-term trends.

Box 2. Headline stock indicators on the labour market participation of resident international migrants.

$$\text{Labour force participation rate}_{RIM} = \frac{\text{Resident international migrants in the labour force}}{\text{Resident international migrants of working age}} \times 100$$

$$\text{Employment – to – population ratio}_{RIM} = \frac{\text{Resident international migrants in employment}}{\text{Resident international migrants of working age}} \times 100$$

$$LU1_{RIM} = \frac{\text{Resident international migrants in unemployment}}{\text{Resident international migrants in the labour force}} \times 100$$

⁸ The subscript *RIM* refers to resident international migrants.

$$LU2_{RIM} = \frac{\text{Resident international migrants in time related underemployment (TRU) + in unemployment}}{\text{Resident international migrants in the labour force}} \times 100$$

$$LU3_{RIM} = \frac{\text{Resident international migrants in unemployment + in the potential labour force}}{\text{Resident international migrants in the labour force + in the potential labour force}} \times 100$$

$$LU4_{RIM} = \frac{\text{Resident international migrants in TRU + in unemployment + in the potential labour force}}{\text{Resident international migrants in the labour force + in the potential labour force}} \times 100$$

$$\text{Informal employment rate}_{RIM} = \frac{\text{Resident international migrants in informal employment}}{\text{Resident international migrants in employment}} \times 100$$

$$\text{Informal sector employment rate}_{RIM} = \frac{\text{Resident international migrants in informal sector employment}}{\text{Resident international migrants in employment}} \times 100$$

Where, J = {studying or training, household or family care, retired, other reasons}

$$D_{j,RIM}^{Main\ activity} = \frac{N_j^{\text{Resident international migrants outside the labour force}}}{\text{Resident international migrants outside the labour force}} \times 100$$

Stock indicators on the different groups of international workers

104. Countries are encouraged to produce stock indicators for benchmarking purposes on the number and shares of *resident international migrants in employment, returned international migrants with employment experience abroad, emigrants with employment experience abroad*, and special sub-populations (e.g., refugees in employment) as pertinent, every 5 to 10 years. These indicators, comprising lifetime and/or period measures as pertinent and feasible, should be accompanied by stock measures of the relevant reference population(s) to support the computation of shares, as indicated below:

- a. Number (stock) of resident international migrants in employment and percentage in relation to resident international migrants of working age at a specified point in time, total, by period of arrival, type of living quarters, as pertinent,
- b. Number (stock) of native-born (recent) returned international migrants with employment experience abroad and percentage in relation to all native-born (recent) returned international migrants, total, by period of return,
- c. Number (stock) of native-born (recent) emigrants with employment experience abroad (or former household members who departed within a specified reference period, such as the previous 5 or 10 years), total, by period of departure.

105. In addition to stock indicators for benchmarking purposes, countries may need to produce more frequent estimates of the number and shares of the above groups to monitor trends and to meet various user needs. In such cases, interim estimates may be produced using available sources, and revisions introduced as needed once updated benchmarks are generated.

106. Where *international temporary labour mobility* constitutes an important component of national or regional labour markets, countries should strive to produce the following stock indicators for selected categories of international mobile workers disaggregated by place of birth (or citizenship status) on a regular basis such as annually or biennially, as relevant:

- a. Number (stock) of residents in employment abroad, total for selected categories of worker (e.g. frontier worker, cross-border service provider, seasonal worker, posted worker) as relevant in the national context, percentage in relation to the working age population, and share in resident employment, at/during a specified period,
- b. Number (stock) of non-residents in employment in the country, total for selected categories of worker (e.g. frontier worker, cross-border service provider, seasonal worker, posted worker), as relevant in the national context, and share in domestic employment, at/during a specified period.

107. To improve knowledge and monitoring of *international remote work*, countries may consider producing the following indicators, disaggregated by place of birth (citizenship status), as relevant:

- a. Number of residents, present in the country, employed by and working remotely (main or other jobs) for a non-resident producer unit located abroad, and percentage in relation to resident employment, at/during a specified period,
- b. Number of non-residents, present in the country, employed by and working remotely (main or other jobs) for a non-resident producer unit located abroad, at/during a specified period.

Indicators on the structure of employment of different international workers

108. To monitor the contribution of different forms of international labour mobility to employment and transnational labour markets—and to support integration with national accounts, trade in services, and other economic statistics—countries are encouraged to produce indicators and tabulations describing the employment structure of the various groups of international workers relevant in the country, as detailed below. These may be compiled with the same periodicity as the core stock indicators in paras. 104-106.

- a. Distribution of resident international migrants in employment by characteristics of the main job, including by branch of economic activity, occupation, status in employment, country of residence of employer producer unit, country of residence of service recipient unit (if different from employer), country of de facto place of work, and by hours worked.
- b. Distribution of residents in employment abroad (selected priority groups) by citizenship status, country (or group of countries) of de facto place of work, residence status of the employer producer unit, branch of economic activity, occupation, status in employment, hours worked, and duration of employment.
- c. Distribution of non-residents in employment in the country (selected priority groups) by citizenship status, country (or group of countries) of residence of the worker, residence status of the employer producer unit, branch of economic activity, occupation, status in employment, hours worked, and duration of employment.
- d. Distribution of residents working from the country —i.e. remotely (main or other jobs) for a non-resident producer unit located abroad, by citizenship status, country (or group of countries) of employer producer unit, branch of economic activity, occupation, and status in employment.

109. In countries where groups of international workers in employment are concentrated in specific industries—such as agriculture, fishing, tourism, mining, or construction—where group accommodation is common, countries should aim to produce annual sectoral employment statistics disaggregated by place of birth (and/or citizenship), ensuring adequate coverage of workers living in collective quarters or employer-provided housing, regardless of contract duration, residence status of the worker or the formal or informal nature of the job. More detailed, sector-specific reports on their working and living conditions may be produced less frequently, covering the topics outlined in paras. 94b(ii) and 94c.

110. In countries where measurement is extended to cover child migrant workers, separate indicators on migrant children in employment can be computed, in line with the latest statistical standards on child labour.

111. When the scope of labour attachment is extended to cover different forms of unpaid work, separate indicators of participation and time spent in different forms of unpaid work for the international migrant population can be computed, in line with the latest statistical standards on the topic, as appropriate.

112. From an origin country perspective, to inform policies on human resource planning, diaspora engagement, and the reintegration of nationals, countries are encouraged to produce essential tabulations on the employment experience abroad of returned international migrants and emigrants, including:

- a. Distribution of native-born (recent) returned international migrants with employment experience abroad by characteristics of the last main job abroad, including by country (or group of countries) of last residence, branch of economic activity, and by occupation.
- b. Distribution of native-born (recent) emigrants with employment experience abroad by characteristics of the last (or current) main job abroad, including by country (or group of countries) of current residence, branch of economic activity and by occupation.

Indicators on the working conditions of different international workers in employment

113. To shed light on the working conditions of different groups of international workers in employment, countries are encouraged to produce, at regular intervals—at a minimum every five years—as feasible, indicators and tabulations describing the topics listed below. Regular monitoring is especially important where international migrant or mobile workers form a substantial share of employment or are concentrated in particular sectors:

- a. Contract characteristics, covering aspects such as type of employment agreement, language, duration of work agreement, and duration of employment in the economic unit.
- b. Employment-related income, covering measures of monthly and hourly employment income.
- c. Job-related social security benefits, including indicators to assess the level of protection among different groups of international workers.
- d. Recruitment characteristics, including, including measures on the share of different groups of international workers by channel of recruitment, by whether the worker incurred any recruitment fees and related costs, by types of costs incurred, amount of recruitment costs incurred, total, average, and by costs component (broker fees, pre-travel arrangements, travel costs, other).
- e. Occupational safety and health, including measures of fatal and non-fatal injuries, exposure to occupational hazards, and work-related violence and harassment.
- f. Social dialogue, including measures of affiliation to a union, a professional organization, a workers' association or a member-based organization of workers.

Stock and flow indicators on permits and authorizations to work

114. To support monitoring trends in managed migration and labour mobility, its contribution to employment and labour market outcomes, priority indicators to produce from a destination country perspective, disaggregated by type of permit, authorization or reason, granted duration of stay, place of application (within the country / from another country), by essential characteristics of the permit- or authorization-holder including sex, country (or group of countries) of citizenship, level of education attained, and as relevant, by essential characteristics of the job such as branch of economic activity and occupation, include:

- a. Number (flow) of first-time permits and authorizations issued during a specified reference period (e.g. quarter, year)
- b. Number (flow) of status changes granted during a specified reference period (e.g. quarter, year)
- c. Number (stock) of valid permits and authorizations at the end of a specified reference period (e.g. 31 December)

115. The disaggregation by type of permit or reason will depend on the national context and may include broad reasons such as: reasons related to employment, education and study, family formation and reunification, international protection status, and other reasons. To further contribute to statistics on the different forms of international labour mobility and international remote work, the different categories may be rearranged

and/or further disaggregated to enable the distinction between permits (including permit exemptions) or authorizations issued for the following purposes:

- a. Paid employment (with separate sub-categories as relevant in the country)
- b. Self-employment
- c. Job search within the country
- d. Cross-border provision of services for remuneration,
- e. Other purposes that also confer the right to employment (including under certain conditions or restrictions),
- f. Other purposes that require proof of employment abroad and restrict the right to employment in the country,
- g. Other purposes which restrict the right to employment in the country.

116. The disaggregation by granted duration of stay should reflect the national context. To monitor the contribution of different work permits and authorizations to international labour migration and international temporary labour mobility, disaggregation by granted duration of stay should allow a distinction between permits exceeding and falling below the threshold for inclusion in the country's resident population (e.g. 12 months or more, or more than 6 months). Additional disaggregation based on the residence rights conferred can further support analysis by distinguishing between permits granting temporary and permanent residence rights

117. From an origin country perspective, priority indicators to produce based on authorizations and the registration of nationals departing for employment abroad, disaggregated by type of authorization, if any, granted duration of stay abroad, country (or group of countries) of destination, by essential characteristics of the person including sex, age group, level of education attained, and by essential characteristics of the job such as branch of economic activity and occupation, include:

- a. Number (flow) of first-time authorizations issued to (or registration of) national citizens to depart for employment abroad during a specified reference period (e.g. quarter, year)
- b. Number (stock) of valid authorizations issued to (or registration of) national citizens who departed for employment abroad during a specified reference period (e.g. quarter, year).

Data sources

118. Given the complex and evolving nature of international labour mobility and remote work, producing statistics on the various aspects covered in these guidelines requires the use of multiple, diverse data sources. National statistical programmes on the topic should draw on all relevant sources and treat them as complementary, using them in combination, to generate the priority statistics and indicators identified in these guidelines, as relevant in the national context, while considering the relevance and strengths of each source. In particular,

- a. *Population censuses, including register-based censuses*, are especially well suited to generate benchmark estimates of the stock of the resident international migrant population and their core labour force characteristics, including those living in private households and in collective living quarters, and at a low level of geography. They can also be used to produce stock estimates of residents in employment abroad in the census reference period, of the native-born population that ever resided abroad (i.e. returned international migrants), and of households with former members who emigrated within a specified period. These data can also be used for preparing sampling frames for surveys, such as specialized migration surveys and labour force surveys, to improve the coverage of different migrant populations and the efficiency of survey samples, as well as for calibration of survey results.
- b. *Population registers, registers of foreigners, registers of refugees and asylum seekers, registers of foreign workers, registers of nationals abroad*, where established, can serve to provide stock and flow data on an annual basis regarding the registered resident international migrant population and/or the migration of nationals, including emigration and return migration. *Registers of foreign workers*, including for particular groups such as seasonal workers, migrant fishers, domestic workers, can be an important data source for special categories of workers recruited through managed labour

migration and mobility programmes. Population registers can also serve as sampling frames to improve or complement the coverage of surveys targeting different groups of international migrant and mobile populations.

- c. *National household and individual surveys*, when conducted on a regular basis, can serve to monitor the labour attachment of different groups of international migrant and mobile populations. Depending on their design and frequency, household and individual surveys are well suited to support structural assessments as well as more frequent monitoring of the labour force participation, employment characteristics and working conditions of different groups of international migrants and mobile populations, including on special priority topics such as recruitment costs, informal employment, social protection, occupational safety and health, reintegration of return migrant workers, emigration of former household members, and remittances, among others. In particular,
- i. *Specialized migration surveys* are specifically designed to target migrant and mobile populations, capturing detailed information on their migration history and living conditions. These surveys typically include sections on labour topics, enabling them to produce estimates on migrants' labour market participation, employment characteristics, and related socio-economic conditions. Owing to their multi-thematic scope, these surveys also allow for joint analysis of migration histories and employment outcomes, supporting a better understanding of how migration experiences shape labour market outcomes.
 - ii. *Forced displacement surveys*, managed and implemented by UNHCR, specifically target refugees, asylum seekers, and other populations in need of international protection to produce nationally representative statistics for these groups and comparable data on host populations living in proximity. They gather household- and individual-level information on socio-economic and living conditions—including demographics, legal protection status, and socio-cultural, economic, and civil-political areas—making them well suited to generate statistics on labour force participation, skills, employment, working conditions, and employment barriers faced by forcibly displaced populations.
 - iii. *Labour force surveys* are a crucial source for generating comparable statistics on the labour force participation of migrant populations, particularly in countries with a sizeable share of resident international migrants or where residents in employment abroad are commonplace. When designed to adequately capture these groups, labour force surveys are the best source to produce reliable headline labour market indicators as well as structural indicators of employment and working conditions, supporting regular comparisons between migrant and non-migrant populations, and to shed light on the employment of residents working abroad. Considering international migrants, including populations in need of international protection, in the design of labour force surveys also improves overall labour force statistics, as they often display different labour market dynamics and concentrate in selected industries compared with the general population. Through the inclusion of selected questions or add-on modules, labour force surveys together with dedicated surveys on working conditions can also be a source for statistics to monitor international remote work arrangements and patterns among the resident population.
 - iv. *Sector-specific individual surveys*, such as surveys of employment and decent work in fishing, agriculture, tourism, mining, construction or domestic work, are an important source for generating sector-specific estimates of employment, living, and working conditions in sectors characterized by seasonal or other non-standard work and living arrangements where international migrant and mobile workers concentrate. These surveys emphasize labour topics, covering working conditions such as contract characteristics, recruitment channels and costs, hours worked, working time arrangements including rest periods, earnings, social protection, occupational safety and health, collective bargaining, living conditions, and freedom of movement. Owing to their targeted sectoral design, they help fill data gaps on hard-to-reach groups and can support the generation of estimates on forced labour and trafficking.

- d. *Establishment censuses and surveys* can be a valuable source for statistics on employment, earnings, hours worked, time paid for, labour costs and characteristics of the establishment. When establishment data is disaggregated by place of birth (or citizenship status), they can be an important source for statistics on the employment and selected aspects of working conditions of resident international migrants and of non-residents in employment in the country, including employment by branch of economic activity, establishment size, gross earnings, etc. Over time, statistics derived from establishment censuses and surveys can also enable analysis of trends in the employment of different groups of international workers and on wage dynamics affecting migrant and non-resident workers.
- e. *Visa, work and residence permits and authorizations* are a key source of information for compiling permit and authorization to work statistics that support the monitoring of managed international mobility, including labour mobility. They enable the production of data on categories of policy interest, such as frontier, seasonal, highly skilled foreign workers or digital nomads. When combined with population registers, permit data provide insights into employment rights of foreign nationals. They can also support the design of survey samples to ensure adequate coverage of international workers with different types of permits. These statistics complement employment data by capturing regulatory aspects of labour mobility, including work and residence rights, authorized employment and duration of stay. Linked over time and with other sources such as population censuses, migration and labour force surveys, they can support longitudinal analysis of migration pathways and labour market outcomes.
- f. *Other administrative records* can play an important role in national programmes of statistics of international labour migration. These include registers from tax authorities, social security systems, labour inspection and health systems, and education, which can serve to generate statistics on particular aspects of migrant working conditions, including wages, social security coverage, occupational safety and health, participation in formal education, etc. These sources can also contribute to confirm the employment status of international migrants and provide additional relevant information on their situation, especially when linked or combined with population registers or surveys.
- g. *Country data sharing* can serve as a valuable source for international labour migration and mobility statistics by enabling the direct exchange of relevant data and statistics between countries of origin and destination. This strategy can be particularly important to improve data on emigrants, nationals residing abroad, residents in employment abroad, and/or selected groups of international remote workers and their labour characteristics. Countries of origin are encouraged to collaborate with destination countries through regular data sharing and coordination. Destination countries, in particular, are encouraged to share with main origin countries, at regular intervals, aggregate statistics and/or tabulations on the employment and other essential characteristics of different categories of origin country native-born persons (national citizens) as well as on permits and authorizations to work, to help close information gaps and support evidence-based policies on emigration and international labour mobility.

Measurement issues

119. The quality of data on international labour migration, mobility, remote work, and permits and authorizations to work generated through the different data sources can be impacted by a variety of factors, including methodological choices. To maximize the potential use of these sources for statistics on international labour migration and mobility, countries are encouraged to consider the following issues, as relevant in the national context.

- a. *Population census* data on international labour migration can be impacted by quality issues due to under-coverage, non-response, as well as sampling and measurement errors. To minimize these, census planning should consider and include measures to minimize the potential for non-participation due to language barriers, deliberate avoidance or misreporting through sensitization campaigns, migrant communities' outreach and multi-language capabilities. Additionally, core questions necessary to identify international migrants, including refugees, asylum seekers and other persons in need of international protection, and their economic characteristics should be asked at the individual-

level or compiled for all persons enumerated, regardless of type of living quarters, including collective living quarters such as worker camps, refugee and IDP camps, hostels, group dormitories, and atypical living quarters such as places of work. Care should be taken when considering the use of sampling for these topics in the population census, as this may impact its use to generate labour migration statistics with adequate coverage and/or levels of precision.

- b. *Household and individual survey data* on international labour migration can be affected by coverage bias and limited precision of estimates. To minimize these issues, household and individual surveys addressing international labour migration should use sample designs that take into consideration the distribution and size of the migrant population(s) of interest within the territory. In the case of labour force surveys, countries with a sizeable share of resident international migrants of working age should ensure that survey designs provide adequate representation of the resident international migrant population and allow for the disaggregation of key labour force statistics by international migrant status and, where relevant and feasible, persons in international protection status (e.g. refugee, asylum seeker). Weighting adjustments and calibration by international migrant status, sex and age group using external sources may also be needed to improve survey estimates. Where a significant proportion of international migrant and mobile populations reside in collective living quarters, such as reception centres, refugee or worker camps, other employer provided accommodation, household surveys should be complemented with comparable data collection covering migrants in these settings. Comprehensive coverage of the population in collective living quarters can also serve to improve the use of continuous surveys to generate short-term statistics on the labour market situation of recent migrants in a country. Sector-specific surveys in particular, should be designed taking account of the particular employment and living arrangements of workers in the sector, and support comparisons by migration or mobility status, regardless of the residence status of the workers, or their employment contract type and duration.
- c. *Population register data*—whether derived from general population registers, or from migrant, refugee and asylum seeker registers, foreign worker registers (including those covering specific groups such as seasonal workers, migrant fishers and domestic workers), registers of migrants departing for employment abroad, or other administrative population databases—may be affected by errors of over- or under-coverage and often lack information on the labour characteristics of the covered population. In addition, general population registers typically rely on legal definitions of residence that differ from the statistical concept of usual residence. To address these limitations, countries should introduce incentives that promote registration, develop methods to ensure regular updating of registers, and establish consistent rules to approximate statistical concepts. Regular updating can be supported through linkage with other key administrative sources, in particular civil registration systems to identify deaths, and border management or entry–exit systems to capture arrivals, departures and changes in residence status. Where feasible, countries are encouraged to establish a unified identification system covering the foreign population to enable consistent linkage across administrative sources such as social security, tax, employment, education, and visa or permit registers, which may contain information relevant for labour migration statistics. When multiple administrative datasets are available, “signs-of-life” methods—using evidence of recent interactions with public services or administrative systems—can also be applied to verify active records and improve the quality and completeness of estimates derived from population registers.
- d. *Permit and authorizations data* can be affected overtime by changes in definitions, classifications, associated employment and/or residency rights, as well as by limited integration with other administrative sources, which can reduce their accuracy and comparability. As with other administrative data sources, permits and authorizations also rely on legal definitions that may be different from statistical concepts. Records maintained also often refer to the number of administrative decisions or acts, instead of persons. To produce permits and authorizations statistics that support monitoring the contributions of managed migration and mobility to employment, countries should ensure that these sources support linking of records at the person level; clearly distinguish between first-time issuances, renewals, status changes, and valid permits or authorizations; and include all relevant categories of permits and authorizations, including exemptions and waivers. Additionally, countries should endeavour to establish consistent rules to approximate

statistical concepts as relevant and maintain statistical classifications that support consistent analysis over time, while taking account of changes introduced due to legislative decisions.

- e. *Statistics on emigrants with employment experience abroad* are particularly challenging to produce from an origin country perspective. Measurement through survey-based sources, including population censuses and household surveys, will generally only capture those emigrants who continue to have ties to a household in the country. Emigrants departing from unipersonal households will be omitted as well as those where the full household has emigrated. Additionally, data quality can be impacted due to the reliance on proxy responses from household members. Measurement through administrative records such as population registers, registers of nationals resident abroad, or registers of nationals issued permits to work abroad, will only capture those who reported their emigration, a primary source of error in population registers, or those emigrating through formal or managed labour migration channels. For these reasons, statistics of emigrant workers should be restricted to the population departing in a recent past period, and be accompanied by clear metadata describing the source coverage and limitations. Inclusion of techniques to enable remote contact of emigrants, via collection of mobile phones from household members can also serve to reduce non-response and mitigate measurement error due to proxy responses. As an alternative, exchange of data or tabulations on resident international migrants by country of birth or citizenship, as compiled by major destination countries should be considered.

Data governance, quality and metadata

120. Recognizing the multiple data sources needed and the associated measurement challenges, countries are encouraged as part of the progressive establishment and strengthening of national programmes for statistics on international labour mobility, remote work, and authorizations to work to:

- a. Rely on user–producer consultations in determining national data needs, priorities, and appropriate frequencies for the different indicators and statistics. Such consultations should aim to clarify information requirements, identify gaps in existing data systems, and promote a shared understanding of the statistical outputs necessary for evidence-based decision-making related to international labour mobility and international remote work.
- b. Undertake regular assessments to determine the quality, comparability, and potential for complementary use of the various available data sources. These assessments should include evaluations of coverage, accuracy, timeliness, and coherence; identification of methodological differences across sources; and analysis of the feasibility of combining datasets in ways that enhance the robustness and reliability of the resulting statistics.
- c. Within the national statistics office, establish multi-thematic coordination groups—at both management and technical levels—with participation from units responsible for labour, population, migration, and economic statistics.
- d. Establish and/or maintain national mechanisms—such as inter-institutional committees, working groups, or coordination frameworks—to promote sustained cooperation among ministries, agencies, and administrative bodies responsible for generating or managing the different data sources. These mechanisms should facilitate the harmonization of concepts, definitions, and other relevant data methodological aspects; support the exchange of information and expertise; and strengthen institutional capacities on the topic.
- e. Expand access to and use of relevant administrative data—particularly those related to visa, work and residence permits, foreign population registers including foreign worker registers covering particular sectors, employment registers, labour inspection records, social security records, taxation records — for statistical purposes. Such efforts should be undertaken in full compliance with applicable legal frameworks and international standards on data protection, ensuring the safeguarding of confidentiality, privacy, and the ethical use of personal information while maximizing the statistical value of administrative records.
- f. Promote the integration of data from different sources through the establishment and use of common unique identifiers, ensuring that all integration efforts comply fully with data-protection legislation and

international standards, and are supported by robust safeguards to protect privacy, confidentiality, and the ethical use of personal information.

- g. Clearly document the rules, procedures, and methods for combining—and, where applicable, integrating—different data sources to produce statistics on priority groups related to international labour migration and mobility. This documentation should include descriptions of data processing steps, linkage or matching techniques, estimation methods, and quality assurance procedures.
- h. Publish statistics and indicators on international labour migration, temporary labour mobility, remote work, and permits and authorizations to work accompanied by clear metadata. Such metadata should describe the concepts, definitions and classifications applied; data sources and methods of compilation; coverage and reference populations; reference periods; and any limitations affecting interpretation. Countries are also encouraged to consider disseminating newly developed or evolving indicators under clearly identified designations, such as “experimental statistics,” where methodologies, data sources or compilation practices are still under development or subject to further evaluation.

121. In undertaking these activities, countries are encouraged to ensure coherence and integration between statistics on international labour migration and mobility and the broader national labour market information and international migration data systems. Such efforts should promote the use of common concepts, definitions and classifications; facilitate interoperability across statistical domains; and support the development of consistent, comprehensive indicators that draw on shared data sources and contribute to a more integrated national statistical and information systems.

International coordination

122. Beyond coordination at national level, improving the availability and quality of statistics on international labour mobility and remote work calls for strengthened international statistical cooperation. Such efforts may include bilateral or multilateral data-exchange arrangements and other collaboration mechanisms to enhance the coherence, completeness and comparability of statistics.

123. Closer cooperation between countries of origin and destination can help reconcile data produced under different national frameworks, address data gaps particularly from the perspective of origin countries and promote increased development of interoperable statistical systems for international labour migration and mobility statistics. In this regard, major countries of destination and origin are encouraged to take the lead in establishing and sustaining such cooperation mechanisms.

International reporting

124. To improve the global availability of statistics of international labour migration and labour mobility, countries should aim to routinely report statistics, in particular on

- a. stock indicators for the working age population, labour force, employment, unemployment by international migrant status, based on a place of birth and/or citizenship status criterion, sex, and, to the extent possible, by broad levels of educational attainment and by main age ranges,
- b. stock indicators of employment by international migrant status, based on a place of birth and/or citizenship status criterion, sex, status in employment, and by broad categories of economic activity and occupation,
- c. stock indicators of the working age international migrant population and of employed international migrants by sex and by the top five countries of origin (i.e., country of birth or citizenship),
- d. New permits and authorizations issued for employment during a year by type, duration of stay or permit validity, sex, country of citizenship,
- e. Total valid permits and authorizations for employment at the end of a year by type, duration of stay or permit validity, sex, country of citizenship,

- f. New authorizations issued to (or registrations of) nationals to depart for employment abroad during a year by type, sex, country of destination, broad levels of educational attainment, and broad categories of economic activity and/or occupation,
- g. Total valid authorizations issued to (or registration of) national citizens who departed for employment abroad at the end of a year by type, sex, country of destination, broad levels of educational attainment, and broad categories of economic activity and/or occupation.

125. The classifications applied should adhere to, or be convertible to, the most recent version of international standard classifications, such as the International Standard Classification of Education (ISCED), the International Standard Classification of Occupations (ISCO), the International Standard Industrial Classification of All Economic Activities (ISIC), and the International Classification of Status in Employment (ICSE).

126. To enhance and promote the transparency and comparability of statistics reported internationally, countries are urged to report these data with adequate metadata information on the source, coverage and methodologies used, including national concepts, definitions, and reference periods, noting any departures from the relevant international statistical standards.

ILO work

127. The ILO, in collaboration with interested countries, international and regional organizations, and workers' and employers' representatives, should continue work relating to these guidelines. The ILO should report the progress of its work to future sessions of the International Conference of Labour Statisticians, as appropriate.

128. To promote the implementation of these guidelines, the ILO should carry out its work through a collaborative mechanism, focused on:

- a. wide dissemination and communication of these guidelines,
- b. further conceptual and methodological work including testing as relevant,
- c. identification and sharing of good practice among countries,
- d. timely development of practical guidance and model data collection or compilation instruments,
- e. advocacy for better coordination and data sharing among different producers and users of labour migration and mobility data, involving social partners when determining national and international data needs,
- f. technical assistance through advisory services, training and capacity-building, especially for national statistical agencies and relevant statistical services in line ministries,
- g. continued annual compilation and dissemination of priority statistics and accompanying metadata on the topic through the ILO ILMS database,
- h. regular updating of global and regional estimates on international migrants in the labour force and other priority groups based on accumulated country data for high level advocacy and research,
- i. analysis and presentation of statistics on international labour mobility, supported by appropriate technical notes.