#### SDG indicator metadata

#### (Harmonized metadata template - format version 1.1)

0. Indicator information (SDG\_INDICATOR\_INFO)

O.a. Goal (SDG GOAL)

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

0.b. Target (SDG TARGET)

Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

0.c. Indicator (SDG\_INDICATOR)

Indicator 8.9.2: Employed persons in the tourism industries

0.d. Series (SDG\_SERIES\_DESCR)

ST\_EMP\_TRSMN - Employed persons in the tourism industries (number) [8.9.2]

0.e. Metadata update (META\_LAST\_UPDATE)

2025-04-23

O.f. Related indicators (SDG\_RELATED\_INDICATORS)

Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

Indicator 8.9.1: Tourism direct GDP as a proportion of total GDP and in growth rate.

Target 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

Indicator 12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability.

Target 14.7: By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

O.g. International organisations(s) responsible for global monitoring (SDG CUSTODIAN AGENCIES)

World Tourism Organization (UN Tourism) with the collaboration of the International Labour Organization (ILO).

# 1. Data reporter (CONTACT)

1.a. Organisation (CONTACT ORGANISATION)

**UN Tourism** 

# 2. Definition, concepts, and classifications (IND\_DEF\_CON\_CLASS)

2.a. Definition and concepts (STAT\_CONC\_DEF)

**Definition:** 

Number of employed persons in the tourism industries

#### **Concepts:**

The number of "employed persons in the tourism industries" is an indicator identified in the "Statistical Framework for Measuring the Sustainability of Tourism" endorsed by the UN Statistical Commission at its fifty-fifth session held from 27 February to 1 March 2024.

The employed persons comprise "all persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit" (ILO, 2023). The indicator shows the number of persons employed in tourism industries in any of their jobs. The tourism industries comprise all establishments for which the principal activity is a tourism characteristic activity. This is an activity that typically produces tourism characteristic products, as defined in the International Recommendations for Tourism Statistics 2008 (IRTS 2008) (United Nations and World Tourism Organization, 2010). The internationally comparable tourism industries are grouped in ten main categories (IRTS 2008, para 5.29), as shown in table 1.

#### 2.b. Unit of measure (UNIT\_MEASURE)

Number of people

# 2.c. Classifications (CLASS\_SYSTEM)

"Employed persons in the tourism industries" has been identified in the Statistical Framework for Measuring the Sustainability of Tourism (SF-MST), endorsed by the UN Statistical Commission at its fifty-fifth session held from 27 February to 1 March 2024 (United Nations Statistical Commission, 2024). SF-MST builds on and is coherent with other well-established statistical frameworks and international classifications such as the IRTS 2008, the Tourism Satellite Account: Recommended Methodological Framework 2008 (United Nations et al., 2010), ILO statistical manuals, and the International Standard Industrial Classification of All Economic Activities (ISIC), revision 4 (United Nations, 2008).

The SF-MST adopts the tourism characteristic activities (i.e. tourism industries) defined in IRTS 2008, which provides a list of tourism industries for international comparability purposes based on ISIC (rev. 4), as follows:

Table 1. List of internationally comparable tourism characteristic activities (tourism industries) and grouping by main categories according to ISIC Rev. 4

Tourism Industries	ISIC Rev. 4	Description
Accommodation for visitors	5510 5520 5590 6810 6820	Short term accommodation activities Camping grounds, recreational vehicle parks and trailer parks Other accommodation Real estate activities with own or leased property* Real estate activities on a fee or contract basis*
2. Food and beverage serving activities	5610 5629 5630	Restaurants and mobile food service activities Other food service activities Beverage serving activities
3. Railway passenger transport	4911	Passenger rail transport, interurban

4. Road passenger transport	4922	Other passenger land transport
5. Water passenger transport	5011 5021	Sea and coastal passenger water transport Inland passenger water transport
6. Air passenger transport	5110	Passenger air transport
7. Transport equipment rental	7710	Renting and leasing of motor vehicles
8. Travel agencies and other reservation service activities	7911 7912 7990	Travel agency activities Tour operator activities Other reservation service and related activities
9. Cultural activities	9000 9102 9103	Creative, arts and entertainment activities  Museums activities and operation of historical sites and buildings  Botanical and zoological gardens and nature reserves activities
10. Sports and Recreational activities	7721 9200 9311 9319 9321 9329	Renting and leasing of recreational and sports goods Gambling and betting activities Operation of sports facilities Other sports activities Activities of amusement parks and theme parks Other amusement and recreation activities n.e.c.

<sup>\*</sup> Part related to second homes and timeshare properties

Source: International Recommendations for Tourism Statistics 2008, Annex 3 (United Nations and World Tourism Organization, 2010).

# 3. Data source type and data collection method (SRC\_TYPE\_COLL\_METHOD)

#### 3.a. Data sources (SOURCE TYPE)

The indicator is sourced from countries' household-based labour force surveys. In the absence of a labour force survey, a population census and/or another type of household survey or tourism survey with an appropriate employment module may also be used to obtain the required data. Where no household survey exists, establishment surveys or certain administrative records may be used to derive the required data. Proper account should be taken of the limitations of these sources in terms of their coverage, which may exclude, for instance, some types of establishments, establishments of certain sizes, some economic activities, or some geographical areas.

#### 3.b. Data collection method (COLL METHOD)

UN Tourism manages an international database based on official statistical data reported through a rolling questionnaire distributed to official data providers in countries. UN Tourism pre-fills the questionnaire, to the extent possible, with data publicly available in countries' official sources (publications and websites) and, in collaboration with ILO, with data from ILOSTAT obtained via its Labour Force Survey (LFS) Database, available at: <a href="https://ilostat.ilo.org/data/">https://ilostat.ilo.org/data/</a>.

The ILO Department of Statistics processes national household survey micro datasets in line with internationally agreed indicator concepts and definitions set forth by the International Conference of Labour Statisticians. For data that cannot be obtained through this processing or directly from government websites, ILO sends out an annual ILOSTAT questionnaire to all relevant agencies within each

country (e.g., National Statistical Office, Labour Ministry, etc.) requesting the latest annual data and any revisions.

The primary ILO dataset used to fill data gaps in this indicator on "employed persons in the tourism industries" is the dataset "Tourism sector employment by economic activity" dataset, comprising the number of employed persons in the following ISIC rev.4 classes (International Labour Organization, no date):

- <u>Accommodation for visitors</u>: 5510 Short term accommodation activities, 5520 Camping grounds, recreational vehicle parks and trailer parks, 5590 Other accommodation.
- <u>Food and beverage serving activities</u>: 5610 Restaurants and mobile food service activities, 5629 Other food service activities, 5630 Beverage serving activities.
- <u>Passenger transportation</u>: 4911 Passenger rail transport, interurban, 4921 Urban and suburban passenger land transport, 4922 Other passenger land transport, 5011 Sea and coastal passenger water transport, 5021 Inland passenger water transport, 5110 Passenger air transport, 5221 Service activities incidental to land transportation, 5222 Service activities incidental to water transportation, 5223 Service activities incidental to air transportation, 7710 Renting and leasing of motor vehicles.
- Recreation and entertainment: 7721 Renting and leasing of recreational and sports goods, 9000
   Creative, arts and entertainment activities, 9102 Museums activities and operation of historical
   sites and buildings, 9103 Botanical and zoological gardens and nature reserves activities, 9200
   Gambling and betting activities, 9311 Operation of sports facilities, 9319 Other sports activities,
   9321 Activities of amusement parks and theme parks, 9329 Other amusement and recreation
   activities
- <u>Travel services</u>: 7911 Travel agency activities, 7912 Tour operator activities, 7990 Other reservation service and related activities.

Should country-specific data not be available in the ILO "Tourism sector employment by economic activity" dataset, UN Tourism adjusts the country data obtained from the ILO "Employment by economic activity - ISIC level 2" dataset, using the following ISIC groups:

- 49 Land transport and transport via pipelines
- 50 Water transport
- 51 Air transport
- 55 Accommodation
- 56 Food & Beverages service activities
- 77 Rental and leasing activities
- 79 Travel agency, tour operator, reservation services and related activities
- 90 Creative, arts and entertainment activities
- 91 Libraries, archives, museums and other cultural activities
- 92 Gambling & betting activities
- 93 Sports activities, amusement and recreation activities

All data sourced from ILO and any adjustments to the country data obtained through ILO datasets are included in the pre-filled questionnaires sent by UN Tourism to countries, for their verification, confirmation and updating as necessary.

# 3.c. Data collection calendar (FREQ\_COLL)

UN Tourism dispatches its pre-filled statistical questionnaire on SDG-related data in September/October, to allow the most recent information to be included and ready for submission to the Global SDG Indicators Database in January/February, in line with the UN Statistics Division calendar. Since the 2024-2025 reporting cycle onwards, UN Tourism includes ILO data in its pre-filled questionnaires.

#### 3.d. Data release calendar (REL\_CAL\_POLICY)

This indicator will be released every year as part of an update in the UN Tourism Statistics Database (<a href="https://www.unwto.org/tourism-statistics/tourism-statistics-database">https://www.unwto.org/tourism-statistics/tourism-statistics-database</a>), in March at the latest, in line with UNSD reporting calendar.

#### 3.e. Data providers (DATA SOURCE)

Data providers are official country entities, mainly National Statistics Offices and, in some cases, ministries in charge of tourism or related official national entities. The data available in ILOSTAT, and incorporated in the UN Tourism questionnaire, are provided by National Statistical Offices and, in some cases, Ministries of Labour or other related agencies operating at the country-level.

#### 3.f. Data compilers (COMPILING ORG)

UN Tourism and ILO.

## 3.g. Institutional mandate (INST\_MANDATE)

As per Article 13.3 of the agreement between the United Nations and the World Tourism Organization (UN Tourism), whereby UN Tourism became a specialized agency, "the United Nations recognizes the World Tourism Organization as the appropriate organization to collect, to analyse, to publish, to standardize and to improve the statistics of tourism, and to promote the integration of these statistics within the sphere of the United Nations system" (United Nations, 2003). The UN Tourism Department of Statistics, Standards and Data is charged with upholding this mandated and its work focuses on the development of international standards for measuring tourism, on capacity development, and on compiling and disseminating tourism statistics from all countries in the world.

UN Tourism is the custodian agency for this SDG indicator 8.9.2.

The data collection process is supported by the partnership between UN Tourism and the International Labour Organization (ILO), which is the UN focal point for labour statistics. ILO sets international standards for labour statistics through the International Conference of Labour Statisticians, and compiles and produces labour statistics, with the goal of disseminating internationally comparable datasets. It also provides technical assistance and training to ILO Member States, to support their efforts to produce high-quality labour market data.

# 4. Other methodological considerations (OTHER\_METHOD)

# 4.a. Rationale (RATIONALE)

This indicator on "employed persons in the tourism industries" covers a crucial aspect currently not monitored of SDG target 8.9 ("by 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products"). The proposed indicator directly addresses the target's aim of promoting tourism that creates jobs, and aligns well with overall intent of Goal 8 on economic growth and decent work.

Also, "Employed persons in the tourism industries" addresses a critical policy issue that has become increasingly prominent since the COVID-19 pandemic. The pandemic increased the realization that tourism —and especially its income (indicator 8.9.1) and employment (this indicator, 8.9.2) components — sustains livelihoods, wellbeing and conservation efforts worldwide. It was acknowledged that tourism is be especially critical for sustainable development in remote, rural and natural places, and it offers employment opportunities for diverse groups of people.

In addition, this indicator responds to requests made by the United Nations Statistical Commission (UNSC) over the years. In 2017 the Statistical Commission "supported the development of the statistical framework for measuring sustainable tourism [...] which will include the development of indicators for sustainable tourism [...]" (United Nations Statistical Commission, 2017), and in 2022 it "requested the Group [IAEG-SDGs] to work in close coordination with the custodian agency [UN Tourism] on a proposal for indicators on sustainable tourism to better monitor target 8.9 [...]" (United Nations Statistical Commission, 2017). Therefore, this indicator builds on the work of the IAEG-SDG Task Team on sustainable tourism, and draws on three decades of tourism statistics expertise.

Finally, the indicator reflects extensive research and development through intergovernmental processes and in collaboration with ILO, to define an indicator that optimizes the criteria of: (i) agreed methodology and conceptual rigour (it is based on the UN-endorsed Statistical Framework for Measuring the Sustainability of Tourism), (ii) high policy relevance, responding to issues with respect to the related Target and Goal that are currently unmet in the indicator framework, and (iii) data availability in countries (with existing reporting mechanisms by ILO and UN Tourism), thus avoiding additional reporting burden for countries. Consequently, this indicator classifies as a Tier I indicator.

#### 4.b. Comment and limitations (REC USE LIM)

The following points aim to describe some limitations to be considered:

The characteristics of the data source may impact international comparability, especially when the coverage of the country source is not complete (notably in terms of the tourism industries included and the level of ISIC disaggregation available), as some countries do not measure employment in all the ten internationally-comparable tourism industries.

In the absence of labour force surveys, some countries may use an establishment survey to derive information for this indicator. However, such surveys usually have a minimum establishment size cut-off point, and small units are not officially registered and are therefore not included. Consequently, employment data in the tourism industries may be underestimated.

An important issue in tourism relates to the seasonality, stemming from variations in visitor flows over the year and therefore in the related demand for services and labour inputs (in particular, in the industries pertaining to accommodation for visitors and to food and beverage serving activities). Fluctuations over the year are smoothed over in yearly figures.

# 4.c. Method of computation (DATA\_COMP)

The indicator is the sum of employed persons in the tourism industries listed in the section above: "2.c. Classifications".

## **4.d. Validation** (DATA\_VALIDATION)

UN Tourism maintains close communication with the reporting countries. Countries are invited to report their official data and are requested to verify, confirm, and update any pre-filled data. In case of any inconsistencies in the reported data, follow-ups are conducted with the respective countries.

ILO holds annual consultations with its Member States through the ILOSTAT questionnaire and the related Statistics Reporting System (StaRS). National data providers receive a link to the portal where they can review the data available on ILOSTAT.

#### 4.e. Adjustments (ADJUSTMENT)

When the data are only available in the ILO "Employment by economic activity – ISIC level 2" dataset, these are adjusted using ISIC level 4 shares from countries with similar characteristics. Such adjusted data values are indicated with a note, as "country adjusted data". In the UN Tourism pre-filled questionnaires, countries are invited to verify and confirm their agreement with these values, and the note is adjusted accordingly.

# 4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

Country level employment data, if available for categories broader than those in scope, may be adjusted to estimate the part that is relevant for this indicator, as indicated in section 4.e above: "adjustments". Those country adjusted data are identified with the note for Nature "CA".

Gaps in the time series of country data may also be imputed with linear interpolation or carry forward/backward, for the calculation of regional and global aggregates. Multiple regression and cross-validation techniques may also be used. These imputed country values are used only as inputs to calculate the global and regional estimates and are not published as country data.

## 4.g. Regional aggregations (REG\_AGG)

Regional and global aggregates are obtained by a simple sum of the employed persons in the tourism industries. Each individual record may correspond to: (i) official statistics reported by countries to UN Tourism and to ILO, (ii) data adjusted by UN Tourism based on ILO available data at ISIC level 2, and (iii) imputed missing values calculated by UN Tourism specifically for regional aggregate purposes.

# 4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC\_METHOD)

The Statistical Framework for Measuring the Sustainability of Tourism (United Nations Statistical Commission, 2024) is the internationally agreed reference framework for measuring the economic, social and environmental aspects of tourism.

The International Recommendations for Tourism Statistics 2008 (United Nations and World Tourism Organization, 2010) provide a comprehensive methodological framework for the collection and compilation of tourism statistics in all countries.

The Guidelines on the implementation of the IRTS 2008 are provided in the Compilation Guide (United Nations, 2016).

The Resolution concerning statistics of work, employment and labour underutilization (including amendments) (International Labour Organization, 2023) provides the definition of employment.

The International Standard Industrial Classification of All Economic Activities 2008 (United Nations, 2008) provide a description of the activities identified as corresponding to each tourism industry.

#### 4.i. Quality management (QUALITY\_MGMNT)

UN Tourism follows the recommendations on quality management available in the International Recommendations for Tourism Statistics 2008 (United Nations and World Tourism Organization, 2010) and the Statistical Framework for Measuring the sustainability of Tourism (United Nations Statistical Commission, 2024), as based on international good practice.

The processes of compilation, production, and publication of ILO data, including its quality control, are carried out following the methodological framework and standards established by the ILO Department of Statistics, in compliance with the information technology and management standards of ILO.

#### 4.j Quality assurance (QUALITY ASSURE)

Data consistency and quality checks are regularly conducted for validation of the data before dissemination. Any discrepancies are addressed through written communication with countries.

## 4.k Quality assessment (QUALITY\_ASSMNT)

The data should comply with the recommendations on concepts, definitions, and classifications provided in the Statistical Framework for Measuring the Sustainability of Tourism (United Nations Statistical Commission, 2024) and the International Recommendations for Tourism Statistics 2008 (United Nations and World Tourism Organization, 2010).

The final assessment of the quality of the information is carried out by UN Tourism's Statistics, Standards and Data Department. In cases of doubt about the quality of specific data, values are reviewed by engaging with the official national agencies responsible for producing the data. If the issue cannot be entirely solved, the data may be either published with a note or removed.

#### 5. Data availability and disaggregation (COVERAGE)

**Data availability:** Data are currently included for 89 countries. These comprise countries in all regions. UN Tourism is working with ILO and with the countries to further harmonise the available data to expand this coverage.

Time series: Data for this indicator are available from 2008.

**Disaggregation:** The current edition of this indicator provides the total number of employed persons in tourism industries, by country and year. Notwithstanding, this indicator can potentially be disaggregated by tourism industry, sex, status in employment, age, education level, etc., depending on data availability in countries. UN Tourism is working with ILO to expand the availability of data disaggregated by tourism industry, sex and status in employment, to include those dimension in this indicator.

#### 6. Comparability / deviation from international standards (COMPARABILITY)

Discrepancies between categories may arise due to a) the national data sources used and their coverage (geographical, tourism industries covered, types of establishments covered, etc.), b) the ISIC revision used by a country, c) the inclusion or not of informal employment and e) the working-age population definition.

# 7. References and Documentation (OTHER\_DOC)

International Labour Organization (no date) Worker and sector profiles (PROFILES database). Available at: <a href="https://ilostat.ilo.org/methods/concepts-and-definitions/description-worker-and-sector-profiles/#elementor-toc\_heading-anchor-13">https://ilostat.ilo.org/methods/concepts-and-definitions/description-worker-and-sector-profiles/#elementor-toc\_heading-anchor-13</a>.

International Labour Organization (2018) Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators. Department of Statistics. Available at: <a href="https://www.ilo.org/publications/decent-work-and-sustainable-development-goals-guidebook-sdg-labour-market">https://www.ilo.org/publications/decent-work-and-sustainable-development-goals-guidebook-sdg-labour-market</a>.

International Labour Organization (2023) Resolution concerning statistics of work, employment and labour underutilization (including amendments). Adopted by the 21st International Conference of Labour Statisticians (October 2023). Available at: <a href="https://www.ilo.org/resource/resolution-concerning-statistics-work-employment-and-labour">https://www.ilo.org/resource/resolution-concerning-statistics-work-employment-and-labour</a>.

United Nations (2003) Agreement between the United Nations and the World Tourism Organization. Available at: https://digitallibrary.un.org/record/505135.

United Nations (2008) International Standard Industrial Classification of All Activities (ISIC). Revision 4. Available at: <a href="https://unstats.un.org/unsd/classifications/Econ/Download/">https://unstats.un.org/unsd/classifications/Econ/Download/</a> In%20Text/ISIC Rev 4 publication English.pdf.

United Nations and World Tourism Organization (2010), International Recommendations for Tourism Statistics 2008. Available at: <a href="https://www.unwto.org/tourism-statistics/on-basic-tourism-statistics-irts-2008">https://www.unwto.org/tourism-statistics/on-basic-tourism-statistics-irts-2008</a>.

United Nations, World Tourism Organization, Commission of the European Communities, and Organization for Economic Co-operation and Development (2010) Tourism Satellite Account: Recommended Methodological Framework 2008. Available at: https://unstats.un.org/unsd/publication/Seriesf/SeriesF 80rev1e.pdf

United Nations (2016), International Recommendations for Tourism Statistics 2008 Compilation Guide. Available at: <a href="https://unstats.un.org/unsd/tourism/publications/E-IRTS-Comp-Guide%202008%20For%20Web.pdf">https://unstats.un.org/unsd/tourism/publications/E-IRTS-Comp-Guide%202008%20For%20Web.pdf</a>.

United Nations Statistical Commission (2017) UNSC Decision 48/115, chapter: I, section: C. Available at: <a href="https://unstats.un.org/unsd/statcom/decisions-ref/?code=48/115">https://unstats.un.org/unsd/statcom/decisions-ref/?code=48/115</a>.

United Nations Statistical Commission (2022) UNSC Decision 53/101, chapter: I, section: C. Available at: <a href="https://unstats.un.org/unsd/statcom/decisions-ref/?code=53/101">https://unstats.un.org/unsd/statcom/decisions-ref/?code=53/101</a>.

United Nations Statistical Commission (2024) Statistical Framework for Measuring the Sustainability of Tourism (unedited version). Available at:

https://unstats.un.org/UNSDWebsite/statcom/session 55/documents/BG-4a-SF-MST-E.pdf

#### **Definitions of Metadata Concepts**

- **0.a. Goal**: SDG Goal number and name.
- **0.b. Target:** SDG Target number and name.
- **O.c. Indicator**: SDG Indicator number and name.
- **O.d. Series**: Codes and descriptions of all series to which the metadata set applies.
- O.e. Metadata update: The date when this metadata report was last updated.
- **O.f. Related indicators**: Linkages with any other Goals and Targets.
- **O.g.** International organisation(s) responsible for global monitoring: (also known as custodian agency(ies)) Global reporting: International organizations (departments/offices) responsible for monitoring this indicator at the global level. Country reporting: This concept has no national counterpart.
- 1.a. Organisation: Organisation unit information of the contact points for the data or metadata.
- 1.d. Contact person function: Functional title(s) of the contact points for the data or metadata.
- 1.e. Contact phone: Phone number(s) of the contact points for the data or metadata.
- 1.f. Contact mail: Mailing address(es) of the contact points for the data or metadata.
- 1.g. Contact emails: E-mail address(es) of the contact points for the data or metadata.
- **2.a. Definition and concepts**: Precise definition of the indicator preferably relying on internationally agreed definitions. The indicator definition should be unambiguous and be expressed in universally applicable terms. Precise definition of all different concepts and terms associated with the indicator, also including reference to any associated classifications.
- **2.b.** *Unit of measure:* Description of the unit of measurement (proportion, dollars, number of people, etc.)
- **2.c.** Classifications: Describe references to both national and international standards and classification being used. [Information to be provided where applicable.]
- **3.a. Data sources**: Description of all actual and recommended sources of data. This description should include, when applicable, any changes of the data source over time, details of denominator (if from a different source) and any other relevant information related to the origin of the source or indicator. Similar details should be given for administrative sources.
- **3.b.** Data collection method: Description of all methods used for data collection. This description should include, when applicable, the sample frame used, the questions used to collect the data, the type of interview, the dates/duration of fieldwork, the sample size and the response rate. Some additional information on questionnaire design and testing, interviewer training, methods used to monitor non-response etc. should be provided here. Questionnaires used should be annexed (if very long: via hyperlink).

- 3.c. Data collection calendar: Dates when source collection is next planned.
- **3.d.** Data release calendar: Expected dates of release of new data for this indicator, including the year (or, ideally, the quarter/month when the next data point associated with the indicator will become available).
- **3.e.** Data providers: Identification of national and/or international data provider(s), specifying the organization(s) responsible for producing the data.
- **3.f. Data compilers**: Organization(s) responsible for compilation of this indicator either at national or global level.
- **3.g.** Institutional mandate: Description of the set of rules or other formal set of instructions assigning responsibility as well as the authority to an organisation for the collection, processing, and dissemination of statistics for this indicator.
- **4.a.** Rationale: Description of the purpose and rationale behind the indicator, as well as examples and guidance on its correct interpretation and meaning.
- **4.b. Comment and limitations**: Comments on the feasibility, suitability, relevance and limitations of the indicator. Also includes data comparability issues, presence of wide confidence intervals (such as for maternal mortality ratios); provides further details on additional non-official indicators commonly used together with the indicator.
- **4.c. Method of computation**: Explanation of how the indicator is calculated, including mathematical formulas and descriptive information of computations made on the source data to produce the indicator (including adjustments and weighting). This explanation should also highlight cases in which mixed sources are used or where the calculation has changed over time (i.e., discontinuities in the series).
- **4.d. Validation:** Description of process of monitoring the results of data compilation and ensuring the quality of the statistical results, including consultation process with countries on the national data submitted to the SDGs Indicators Database. Descriptions and links to all relevant reference materials should be provided.
- **4.e. Adjustments**: Global reporting: Description of any adjustments with respect to use of standard classifications and harmonization of breakdowns for age group and other dimensions, or adjustments made for compliance with specific international or national definitions. National reporting: This concept is typically not applicable for national reporting.
- **4.f.** Treatment of missing values (i) at country level and (ii) at regional level: Global reporting: (National level) Description of the methodology employed for producing estimates for the indicator when country data are not available, including any mathematical formulas and description of additional variables used as input into the estimation process. (Regional level) Description of how missing values for individual countries or areas are imputed or otherwise estimated by international agencies to derive regional or global aggregates of the indicator. National reporting: This concept is not applicable for national reporting.

- **4.g. Regional aggregations**: Global reporting: Description of the methodology, including any mathematical formulas, used for the calculation of the regional/global aggregates from the country values. Description of the weighting structure used for aggregating country indicator values to regional and global levels. Additional methodological details on how the data from countries or areas is assembled by custodian international agencies to provide regional and global aggregates. This is distinct from the method of computation, which looks at how the indicator is compiled at a national level. National reporting: This concept is not applicable for national reporting.
- **4.h.** Methods and guidance available to countries for the compilation of the data at the national level: Global reporting: Description of methodology used by countries for the compilation of data at national level and the relevant international recommendations and guidelines available to countries. Descriptions and links to all relevant reference materials should be provided. National reporting: For national reporting a country may refer to the globally available metadata and explain how it is being used.
- **4.i. Quality management**: Description of systems and frameworks in place within an organisation to manage the quality of statistical products and processes.
- **4.j Quality assurance:** Description of practices and guidelines focusing on quality in general and dealing with quality of statistical programmes at your agency, including measures for ensuring the efficient use of resources.
- **4.k Quality assessment**: Description of overall evaluation of fulfilling quality requirements, based on standard quality criteria.
- **5. Data availability and disaggregation:** Global reporting: Indicate for how many countries the data for this indicator are already currently available on a regular basis. Data availability by regional breakdowns and time periods can also be described here. Describe the specification of the dimensions and levels used for disaggregation of the indicator (e.g., income, sex, age group, geographic location, disability status, etc.). National reporting: Data availability by sub-national breakdowns and time periods can be described here. Describe the specification of the dimensions and levels used for disaggregation of the indicator (e.g., income, sex, age group, geographic location, disability status, etc.).
- **6. Comparability / Deviation from international standards:** Explanation on the differences between country produced and internationally estimated data on this indicator, highlighting and summarising the main sources of differences.
- **7.** References and Documentation: Descriptions and links to all relevant reference materials related to this indicator.