METHODOLOGY GUIDE

INTRODUCTION

This guide describes the methodology and research process of the Open Data Inventory (ODIN) 2022/23. The purpose of ODIN is to provide an objective and reproducible measure of the public availability of official statistics, and their adherence to open data standards. ODIN assesses the coverage and openness of statistics produced by national statistical systems as published on the official website of the national statistical office (NSO) and any official government website that is accessible from the NSO site.Coverage refers to the availability of important statistical indicators in 22 categories of social, economic, and environmental statistics. Openness refers to adherence to the Open Definition. Each data category is assessed on five elements of coverage and five elements of openness. Aggregate scores are computed across categories and elements. The overall ODIN score is an index of how complete and open an NSO's data offerings are.

This guide provides information about:

- The ODIN schedule and data collection process
- How coverage and openness are defined and measured
- The 22 ODIN data categories and 65 statistical indicators included in the assessment
- The scoring process

Note: Throughout this guide, the terms "data," "statistics," and "indicators" are used interchangeably in this document. They all refer to numerical measures of some characteristic of people, the economy, or the natural or built environment. These are aggregate measures, usually constructed from raw data obtained from censuses, surveys, or administrative records. The agencies that produce these indicators under governmental authority are described collectively as the "national statistical system" or "NSS," and the lead agency is referred to as the "national statistical office" or "NSO."

FREQUENTLY ASKED QUESTIONS

What is the Open Data Inventory (ODIN)?

The Open Data Inventory (ODIN) is an evaluation of the coverage and openness of data provided on the websites maintained by national statistical offices (NSOs) and any official government website that is accessible from the NSO site. The overall ODIN score is an indicator of how complete and open an NSO's data offerings are. The summary scores for social, economic, and environmental statistics and summary scores for coverage and openness provide a picture of the national statistical systems' strengths and weaknesses.

What is ODIN's purpose?

ODIN identifies critical gaps in the coverage of official statistics, promotes open data policies, and encourages dialogue between NSOs and data users. NSOs and their development partners can use ODIN as part of a strategic planning process and as a measure of the development of the statistical system.

ODIN provides valuable information to data users across the government, the private sector, and the public about the availability of important statistical series. In addition to the ratings of coverage and openness in 22 categories, ODIN assessments record the online location of key indicators in each category, permitting quick access to 65 indicators.

Why does ODIN assess national statistical offices?

ODIN assessments begin with the websites maintained by national statistical offices because, in most countries, the NSO is the lead agency of the national statistical system, coordinating its work with other governmental bodies that produce official statistics. If an official national data source can be accessed from the NSO's website, it is included in the ODIN assessment.

NSOs, as producers and caretakers of official statistics, have a special obligation to maximize their public benefit. There is an increasing recognition of NSOs as data stewards for the national statistical system. NSOs can and should be the leading advocates for and providers of high quality, official statistics to the government, public, private sector, and international community.

What does ODIN not assess?

ODIN does not assess data published for countries on international organizations' websites or private organizations' websites because ODIN is an assessment of the national government's capacity to produce open data. In addition, data portals or national government websites that are not clearly linked from the national statistic's office (NSO) website are not assessed. This requirement that data sources are linked from the NSO website is rooted in the principle of accessibility and supports the idea that NSOs should lead their country's national statistical system, including coordinating the dissemination of statistics- those that they produce and providing direction to users for those they don't. This also provides assurance that the data

users find are really the country's official statistics and not from an out-of-date, manipulated, or unofficial source. There are also other important aspects of open data, such as interoperability, data use, and data governance issues that are not measured in ODIN, though some concepts overlap with the ODIN elements for coverage and openness.

How are open data defined in ODIN?

There is general agreement on the core meaning of open data. As summarized in the Open Definition, version 2.1, "Knowledge is open if anyone is free to access, use, modify, and share it — subject, at most, to measures that preserve provenance and openness." This definition has been operationalized in the International Open Data Charter. In practical terms, open data should be machine readable in non-proprietary formats, accompanied by descriptive metadata and export options that allow customization and bulk download, and free to be used and reused for any purpose without limitations other than acknowledgement of the original source. These requirements have been incorporated in the five elements of the ODIN openness assessment.

What type of indicators are assessed in ODIN?

ODIN indicators are meant to be representative of the types of data a national statistical system produces. Most indicators do not have strict definitions, and closely related indicators can act as substitutes. The selection of indicators has been informed by recommendations from international agencies and by country practices and the Sustainable Development Goals. To see a list of each indicator, their definition, and accepted substitute indicators, please see Annex I and Annex II. In each category, representative indicators have been selected because they are frequently needed for public policies or private initiatives, and because they provide evidence of underlying statistical processes for which statistical offices are responsible.

What data categories are included in ODIN?

ODIN assessments review published statistics in 22 topical categories, grouped as social statistics, economic and financial statistics, and environmental statistics. The default ODIN overall score weighs the three groups equally. The data categories in ODIN 2022/23 are:

Social Statistics
1. Population and Vital Statistics
2. Education Facilities
3. Education Outcomes
4. Health Facilities
5. Health Outcomes
6. Reproductive Health
7. Food Security and Nutrition
8. Gender Statistics
9. Crime and Justice Statistics
10. Poverty and Income Statistics

Economic and Financial Statistics
11. National Accounts
12. Labor Statistics
13. Price Indexes
14. Government Finance
15. Money and Banking
16. International Trade
17. Balance of Payments

Environmental Statistics
18. Agriculture and Land Use
19. Resource Use
20. Energy
21. Pollution
22. Built Environment

More information about the indicators in each data category and how data categories arescored can be found on the category pages.

How does ODIN measure coverage?

Coverage of data are measured by five elements that measure how complete the country's data offerings are. Information on all elements are collected for each dataset assessed in ODIN, except for elements 4 and 5 that are not included for some data categories or for small countries.

The five coverage elements are:

1. Availability of indicators and disaggregations
2. Availability of data in the last five years
3. Availability of data in the last ten years
4. Availability of data at the first administrative geographic level
5. Availability of data at the second administrative geographic level

How does ODIN measure openness?

Openness of data is measured by five elements that assess how well a country's data offerings meet international standards of openness, as defined by the Open Definition.

The five openness elements are:

- Availability of data in machine readable format
- Availability of data in non-proprietary format
- Availability of reference metadata
- Availability of download options that make the data more accessible: bulk downloads, APIs, customizable data export options
- Availability of an open data license or open data terms of use

How many countries does ODIN 2021/22 cover?

ODIN 2015 assessed 125 countries; ODIN 2016 assessed 173; ODIN 2017 assessed 180 countries; ODIN 2018/19 assessed 178 countries; ODIN 2020/21 assessed 187 countries; and ODIN 2022/23 will assess 195 countries.

Are there any special considerations for small countries?

Yes, in ODIN countries with a surface area of 1,500 sq. km. or less are not scored for data disaggregation at the second administrative level for any indicator. And they are not scored for data disaggregation at the first administrative geographic level for the following categories: National Accounts, Price Indexes, and Government Finance, and many individual indicators (see more about these indicators in this section).

When was ODIN 2022/23 conducted?

The ODIN 2022/23 assessments were carried out between June and August 2022. Only data published before the end of August 2022 are considered. ODIN 2022/23 assesses datasets with data points from the 2012-2021.More details about the ODIN schedule and data collection process can be found here.

Are there any methodology changes in ODIN 2022/23?

In ODIN 2022/23, there have been the following minor methodology changes:
- Full credit cannot be awarded to any category for coverage element 1: indicators and disaggregation without sex disaggregated data (when required).
- Sex disaggregation has been added to indicators (2.2) Number of teaching staff, (3.3) Competency exam results, (7.1) Prevalence of undernourishment, and (7.2) Prevalence of moderate or severe food insecurity.
- The disaggregation, violence type, has been added to indicator (8.1) Proportion of women who are victims of physical, sexual, or psychological violence.
- Indicator (8.3) Data on child marriages has been renamed Data on child marriages for girls.

How comparable are ODIN scores over time?

ODW considers the ODIN assessments of 2016 and later to be comparable. In every ODIN assessment there are some minor methodology changes. Below is a brief description of what changed each year compared to the previous year. Users can create custom scores on the

that exclude data categories that were introduced in later years if they wish to increase the compatibility between years. (For custom scoring, click the gear icon next to most tables or on the download page.)

ODIN 2017
- The category, Crime and Justice, was introduced.
- Four new indicators were introduced in the following categories: Gender statistics (data on child marriages), Health outcomes (stunting, wasting, and obesity rates), Land Use (data on protected lands), Resource Use (data on timber harvests or deforestation)
- Education data that were required to be disaggregated by school stage are now given credit only if at least three school stages are present (two must be beyond the primary stage).
- The openness criteria for download options changed to give full credit for bulk downloads and API or user-select download options. Before, credit could be given for user-select download options and bulk download or API.
- The inclusion of a clause banning commercial use in any terms of use or data license downgrades the score to 0 points instead of partial credit.
- More specific criteria for metadata scoring were introduced to increase the objectivity of this openness element.
- Countries with a surface area 1,500 sq. km. or less are no longer scored for data at the second administrative level in any category.

ODIN 2018/19
- The categories, Pollution, Energy Use, Price Indexes, and Resource Use are no longer scored for data at the second administrative level.
- Some individual indicators are also no longer scored for data at the second administrative level: education and health expenditure data, maternal mortality ratio, infant mortality rate, proportion of women in government, persons in prison, distribution of income, and data on land use.
- Many SDG indicators are identified as substitute indicators for ODIN indicators.

ODIN 2020/21
- The category, Food Security and Nutrition, was introduced.
- Two new indicators were introduced in the Food Security and Nutrition category: prevalence of undernourishment and prevalence of moderate or severe food insecurity.
- The category Land Use was renamed Agriculture and Land Use. One new indicator was added to the category, commodity production.
- The category Energy Use was renamed Energy. One new indicator was added to the category, energy supply.
- One new indicator was added to National Accounts, gross domestic product (income approach).
- The data category, Energy, is no longer scored for data at the first administrative level.
- ODIN bulk download credit is now given full credit, even if they do not include subnational datasets.

- The "date of compilation" is no longer included as part of the ODIN metadata element. Countries now only have the option of publishing the date of upload or date of last update to receive credit.
- More strict metadata guidelines are implemented. Credit for metadata are only given if the metadata are in the same location as the data or are clearly labeled from the website's menu.

ODIN 2022/23
See previous question.

Do NSOs participate in the ODIN research process?

Open Data Watch invites all countries' NSOs to provide feedback on the datasets recorded in ODIN. This feedback can include information on datasets they believe should be considered. Each NSO is contacted at least 3 times between March and May 2022 by email. If NSOs agree to participate, they are provided a spreadsheet identifying the datasets evaluated by the ODIN team and given a month to provide any comments. Their feedback is reviewed and incorporated into the final assessment, if in line with ODIN methodology. If you are an NSO that would like to participate in the review process, please email us ODIN-input@opendatawatch.com.

ODIN 2022/23 SCHEDULE

The following is an outline of the data collection and review process for ODIN 2022/23.

Stage One: Initial Assessment

Time Frame: June 1- August 31, 2022

Assessors evaluate the NSO website (and any official government sites or portals that are one click away from the NSO website) for data on the 65 ODIN indicators.

Stage Two: First Round Internal Review

Time Frame: July 1- October 14, 2022

During this stage, internal reviewers meticulously review all the information provided by assessors. They download and view all recorded datasets to confirm the information provided by the assessor and make adjustments, as necessary.

Stage Three: NSO Review (Second Round)

Time Frame: July 1- November 11, 2022

Between March and May 2022, NSOs are contacted at least three times by email inviting them to participate in the NSO Review process. If they accept, they are sent the results from their assessment (excluding scores). NSOs are then given one month to provide feedback on their assessment, including comments on datasets used. They are able to suggest new datasets, sources, or provide other information relevant to the assessment. During this stage, any adjustments to the assessment that result from the feedback received are completed.

Stage Four: Third Round Internal Review

Time Frame: August 1- November 30, 2022

During this stage, a final review is conducted that primarily focuses on scores. Each country's scores are reviewed for accuracy and adherence to the ODIN methodology.

Stage Five: Analysis and Release of Results

Time Frame: Late February 2023

During this stage, results are analyzed, scores are published on the ODIN website, and the ODIN annual report is released.

MEASURING COVERAGE & OPENNESS

ODIN measures the completeness of a countries' statistical offerings (called, "coverage") and how well those datasets meet international standards of data openness (called, "openness"). To determine the coverage and openness of datasets assessed in ODIN, ten elements are used. The criteria used to assess each element are discussed below.

Coverage

Coverage of data are measured by five elements that measure how complete the country's data offerings are. Information on all elements are collected for each dataset assessed in ODIN, except for elements 4 and 5 that are not included for some data categories or for small countries.

The five coverage elements are:

- Availability of indicators and disaggregations
- Availability of data in the last five years
- Availability of data in the last ten years
- Availability of data at the first administrative geographic level
- Availability of data at the second administrative geographic level

For coverage elements 1-3, only national-level data are considered. Subnational level data are assessed in coverage elements 4 and 5.

Below is a description of the criteria used to assess each element and what is required for full or partial credit Scores are assigned for each element of each data category, not indicator. In addition, each data category cannot score higher on coverage elements 2-5 than coverage element 1. This prevents coverage scores from being inflated by comprehensive data published on only one or a limited number of indicators. More information about scoring each element can be found below.

Criteria of Coverage Elements

Availability of indicators & disaggregations (coverage element 1)

This element measures how many indicators are available in each data category and what disaggregations are available.

Because there are a unique number of indicators in each data category, the number of indicators and disaggregations required to receive credit differ for data category. See the

section, Data Categories & Indicators, for the criteria required in each category for full or partial credit on this element.

Availability of data in the last 5 years (coverage element 2)

This element measures whether the data identified in coverage element 1 are available over the last five years. ODIN 2022/23 includes the years 2017-2021 (or 2016/2017- 2020/2021 for non-calendar years).

If data are presented on a quarterly or monthly basis, a majority of quarters or months for a given year must have data available to receive credit for that year. For example, at least 3 out of 4 quarters or 7 out of 12 months for a particular year must be present to award credit for that year.

The following table shows how each data category is scored for this element. Full credit only requires publication of data for 3 of the last 5 years, since not all indicators have enough variability from year to year to warrant more frequent data collection in many countries.

Coverage Element 2: How to receive credit	
Score	**Minimum Criteria**
1 point	All indicators available in the category must have national data for at least 3 of the last 5 years for all available disaggregations.
.5 point	One indicator in the category has national data for at least 1 year of the last 5 years for any number of disaggregations.
0 points	No indicators in the category have any national data for any of the last 5 years.
Note: Coverage element 2 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Availability of data in the last 10 years (coverage element 3)

This element measures whether the data identified in coverage element 1 are available over the last ten years. For ODIN 2022/23, this includes the years 2012-2021 (or 2011/2012- 2020/2021 for non-calendar years)

If data are presented on a quarterly or monthly basis, a majority of quarters or months for a given year must have data available to receive credit for that year. For example, at least 3 out of 4 quarters or 7 out of 12 months for a particular year must be present to award credit for that year.

The following table shows how each data category is scored for this element. Full credit only requires publication of data for 6 of the last 10 years, since not all indicators have enough variability from year to year to warrant more frequent data collection in many countries.

Coverage Element 3: How to receive credit	
Score	**Minimum Criteria**
1 point	All indicators available in the category must have national data for at least 6 of the last 10 years for all available disaggregations.
.5 point	One indicator in the category has national data for at least 3 years of the last 10 years for any number of disaggregations.
0 points	No indicators in the category have any national data for at least 2 of the last 10 years.
Note: Coverage element 3 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Availability of data at the first administrative geographic level (coverage element 4)

This element records whether the data identified in coverage element 1 are also available at the subnational level defined as the first administrative geographic level. To identify the first administrative levels, ODIN largely draws on the ISO 3166-2 standard. For a full list of first administrative levels used in ODIN, see this file.

If data are presented at the first administrative level, the majority of first administrative level divisions must have data available to receive credit for that year. Credit will only be given for less than a majority of first administrative divisions if there are methodological reasons for them not to exist (sample size is too small, indicator not relevant to those divisions, or other reasons) and this is stated in the metadata of the dataset.

In certain data categories, all indicators in the category are not scored for data at the first administrative level because how these indicators are calculated often do now allow for geographic disaggregation in most countries. These categories are Money & Banking, International Trade, Balance of Payments, and Energy.

The following table shows how each data category is scored for this element.

Coverage Element 4: How to receive credit	
Score	**Minimum Criteria**

1 point	All indicators available in the category must have first administrative level data for all available disaggregations and years.
.5 point	One indicator in the category has first administrative data for any number of disaggregations or years.
0 points	No indicators in the category have any data available at the first administrative level.

Note: Coverage element 4 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators. In addition, ODIN designates certain countries as "Small Countries" which are not scored for publishing data at the first administrative level for the indicators 2.3, 4.3, 6.1, 6.2, 7.3, 7.4, 7.5, 8.2, 9.3, 10.2, and 18.2.

Availability of data at the second administrative geographic level (coverage element 5)

This element measures whether the data identified in coverage element 1 are also available at the subnational level defined as the second administrative geographic level. Second administrative levels are defined by the country but must be a further division of their first administrative levels. For a full list of the possible second administrative levels used in ODIN, see this file.

If data are presented at the second administrative level, the majority of second administrative level divisions must have data available to award credit for that year. Credit will only be given for less than a majority of second administrative divisions if there are methodological reasons for them not to exist (sample size is too small, indicator not relevant to those divisions, or other reasons) and this is stated in the metadata of the dataset.

In certain data categories, all indicators in the category are not scored at the second administrative level because how these indicators are calculated often do now allow for geographic disaggregation in most countries.These categories are Money & Banking, International Trade, Balance of Payments, National Accounts, Government Finance, Pollution, Energy, Price Indexes, and Resource Use.

In addition, the following indicators in other categories are not scored at the second administrative level for the same reason. These include:

(2.3) Education expenditures
(4.3) Health expenditures
(6.1) Maternal mortality rate
(6.2) Infant mortality rate or neonatal mortality rate
(7.3) Prevalence of obesity
(7.4) Prevalence of stunting

(7.5) Prevalence of wasting
(8.2) Proportion of women in government
(9.3) Data on prison population
(10.2) Distribution of income by deciles or Gini coefficient
(18.2) Data on protected lands

The following table shows how each data category is scored for this element.

Coverage Element 5: How to receive credit	
Score	**Minimum Criteria**
1 point	All indicators available in the category must have second administrative level data for all available disaggregations and years.
.5 point	One indicator in the category has second administrative data for any number of disaggregations or years.
0 points	No indicators in the category have any data available at the second administrative level.
Note: Coverage element 5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators. In addition, ODIN designates certain countries as "Small Countries" which are not scored for publishing data at the second administrative level for any category.	

Openness

Openness of data are measured by five elements that measure how well a country's data offerings meet international standards of openness, as defined by the Open Definition.

The five openness elements are:

1. Availability of data in machine readable format
2. Availability of data in non-proprietary format
3. Availability of reference metadata
4. Availability of download options that make the data more accessible: bulk downloads, APIs, customizable data export options
5. Availability of an open data license or open data terms of use

Below is a description of each openness element and the criteria for full and partial credit. Scores are given for each openness element for each data category, not indicator. More information about scoring can be found below.

Criteria of Openness Elements

Availability of data in machine readable formats (openness element 1)

This element records whether datasets are available in machine readable formats in each data category.

XLS, XLSX, CSV, Stata, SAS, SPSS, JSON, CDF, RDF, XML, and TXT files are classified as machine readable. PDFs, HTML, DOC, DOCX, PPT, PPTX are common formats that are not machine readable.

Machine readable file formats allow users to easily process data using a computer. When data are made available in formats that are not machine readable, users cannot easily access and modify the data, which severely restricts the scope of the data's use. In many cases PDF versions of datasets within reports can be useful to users, as the text in conjunction with the tables gives context and explanation to the figures that helps less technical users understand the data. Because of this, ODIN assessments do not penalize countries' scores for this element for making datasets available in PDF or other non-machine-readable formats, unless these formats are the only option for exporting data.

The following table shows how each data category is scored for this element.

Openness Element 1: How to receive credit	
Score	**Minimum Criteria**
1 point	Publish all available data in this category are published in machine readable format.
.5 point	Some available data in this category are published in machine readable format.
0 points	No data in this category are published in machine readable format.

Availability of data in non-proprietary formats (openness element 2)

This element measures whether datasets are available in non-proprietary formats in each data category.

PDF, HTML, XLSX, DOCX, CSV, JSON, XML, and TXT files are classified as nonproprietary. XLS, Stata, SAS, SPSS, DOC and PPT files are common proprietary files.

Nonproprietary formats are important because they allow users to access data without requiring the use of a costly and exclusive software that may prevent some users from accessing the data. ODIN assessments do not penalize countries' scores for this element for making datasets available in proprietary formats, unless these formats are the only option for exporting data.

If data are compressed in RAR format (which is proprietary), any data within the RAR files will be considered proprietary, despite the actual file format of the dataset.

The following table shows how each data category is scored for this element.

| Openness Element 2: How to receive credit ||
Score	Minimum Criteria
1 point	All available data in this category are published in non-proprietary format.
.5 point	Some available data in this category are published in non-proprietary format.
0 points	No data in this category are published in non-proprietary format.

Availability of download options: bulk downloads, API, user-select downloads (openness element 3)

This element measures whether download options are available to export the datasets in each data category. ODIN looks for the presence of three different download options: bulk download, API, and user-select download options.

Bulk downloads are a key component of the Open Definition, which requires data to be "provided as a whole…and downloadable via the internet." In ODIN, a bulk download is defined as: The ability to download all data for a particular indicator at the national level (all years and disaggregations) in one file, or multiple files that can be downloaded simultaneously. Because subnational data often substantially increase the size of the file, ODIN only requires bulk downloads for national data.

API stands for Application Programming Interface. An API is a tool that allows external applications, such as analytical software or website plugins to directly access data. Ideally, an API option should be clearly displayed on the website with directions on how to use it. ODIN assumes APIs are available for the website's entire data collection, unless stated otherwise.For more information on APIs, see this guide.

User-select download options are defined as: Users are able to select an indicator and at least one other dimension to create a custom table. These dimensions could include time periods, geographic disaggregations, or other types of disaggregations. Simply allowing users an option to choose the file export format is not sufficient.

The following table shows how each data category is scored for this element.

Openness Element 3: How to receive credit	
Score	Minimum Criteria
1 point	All available data in this category have a bulk download option and an API or user-select download option.
.5 point	Some available data in this category have at least one download option.
0 points	No data in this category have any download options.

Availability of reference metadata (openness element 4)

This element measures whether reference metadata are available for the datasets in each data category.

ODIN does not follow any specific metadata standard, but looks for three components of reference metadata that are common in all metadata standards:

● Definition of the indicator, or definition of key terms used in the indicator description (as applicable), or how the indicator was calculated.
● Specific date the dataset was uploaded to a website or when a dataset was last updated. The date must include the day, month, and year.
● Name of responsible agency for the dataset.

Metadata are considered only if they 1) are included in the same file as the data, 2) are linked from the page where the dataset is found, or 3) are provided in a designated section of the website that is clearly labeled, such as a glossary page.

The following table shows how each data category is scored for this element (see next page).

Openness Element 4: How to receive credit	
Score	**Minimum Criteria**
1 point	All available data in this category are published with all 3 components of reference metadata.
.5 point	Some available data in this category are published with at least 1 component of reference metadata.
0 points	No data in this category are published with any of the 3 components of reference metadata.

Availability of an open data license or open terms of use (openness element 5)

This element records whether data are available with an open terms of use (TOU) or open data license. "Terms of use" and "data license" are both used to describe different policies of data producers that describe how their users can reuse their data.

The license or terms of use must be clearly visible on the website where the data are located, either as part of the dataset itself, linked from the footer of the website, or located on a webpage easily accessed from the website's main menu. If the terms of use or license does not say anything about how data can be used, then it is not considered in ODIN.

A license or terms of use is considered open if it explicitly allows the reuse of data for any purpose, including commercial and noncommercial use. The only obligations of the user that can be required are the attribution of the data to the original source or requiring users to relicense the data under the same or another open license (called a "sharealike" requirement). Other requests can be made of the user, but must be suggestions and not enforceable under the license or terms of use.

Terms of use are classified the following ways:

(1) **Not Available:** No TOU or data license that refers to how users can or cannot use data is published on or linked from the website where data are published.

(2) **Not Open:** A TOU or data license is published, but it either explicitly prohibits commercial use, requires prior permission for commercial use, or it has 2 or more requirements of users not considered acceptable under the Open Definition (see below).

(3) **Some Restrictions:** A TOU or data license is published, but has one requirement of users not considered acceptable under the Open Definition (see below) or is too vague to be considered open.

(4) **Open:** A TOU or data license is published that states that data may be used, reused, and adapted for commercial and noncommercial use with, at most, an obligation to attribute data to the original source.

Common requirements not considered acceptable under the Open Definition

- Requiring permission before any kind of use.
- Forbids the use of data that may be misleading, inaccurate, or other attempts to penalize broad categorizations of misuse (Data producers should not use their data license to penalize data misuse, nor illegal activities already outlawed under law. In addition, general provisions forbidding misuse are often vague and can be enforced arbitrarily to discriminate against certain users).
- Requiring users to publish metadata with any dataset they reuse, beyond information regarding any changes the user made to the dataset or a link to the original dataset.

Openness Element 5: How to receive credit	
Score	**Minimum Criteria**
1 point	All available data in this category are published under an open terms of use or license.
.5 point	Some available data in this category are published under an open terms of use or license or a terms of use or license categorized as having "some restrictions" (see above).
0 points	All available data in this category are published under a terms of use or license categorized as "Not Open," or no terms of use or license could be found.

Examples

Malta: Their terms of use are clear and easy to understand. They also clearly identify which types of information the terms of use apply to.

St. Lucia: This license format is used by many countries in the Caribbean and is easy to follow. It addresses many legal issues and provides examples of how users should cite their data.

Australia: ABS Stat uses a Creative Commons BY 4.0 license, clearly lists the exceptions, and also links to the full legal code of the license, as well as the country's Copyright Law.

Norway: Though this license is not fully open because they include a clause forbidding the broadly defined "misleading use," their website is an excellent example of how to present legal information in a way that is easy for non-technical users to understand. Each section of their license is complimented with a "comments" section to provide further explanation and examples.

Slovakia: The portal uses a Creative Commons BY 4.0 license and also links back to the NSO website's terms of use for further explanation. Creating links between the licenses used on both the NSO website and data portal is good practice since often the data will appear on both websites.

Korea: They provide a clear description of the various access levels of data in their portal, as well as contact information in case users have questions about the public use of certain datasets.

DATA CATEGORIES & INDICATORS

The following section describes the 22 data categories and 65 indicators included in the ODIN 2022/23 assessment. Each data category contains a number of representative indicators (henceforth referred to as "indicators"), ranging from two to six per data category.

ODIN indicators are meant to be representative of the types of data a national statistical system produces. The selection of indicators has been informed by consultations with many international agencies and statistical offices and by the Sustainable Development Goals monitoring framework. Most ODIN indicators do not have strict definitions and there are a number of related indicators and SDG indicators that can act as a substitute for ODIN indicators.

The data categories in ODIN 2022/23 are:

Social Statistics

1. Population and Vital Statistics
2. Education Facilities
3. Education Outcomes
4. Health Facilities
5. Health Outcomes
6. Reproductive Health
7. Food Security and Nutrition
8. Gender Statistics
9. Crime and Justice Statistics
10. Poverty and Income Statistics

Economic and Financial Statistics

11. National Accounts
12. Labor Statistics
13. Price Indexes
14. Government Finance
15. Money and Banking
16. International Trade
17. Balance of Payments

Environmental Statistics

18. Agriculture and Land Use
19. Resource Use
20. Energy
21. Pollution
22. Built Environment

In the next sections, the indicators in each data category will be discussed in more detail, including what are the representative indicators in each category, what categorical and geographic disaggregations are assessed, and what combination of indicators and disaggregations are required for full credit.

For a full list of indicators, their definition, examples, and accepted substitute indicators, please see ANNEX I. Definitions of each disaggregation can be found in ANNEX II.

Population and Vital Statistics

Population and Vital Statistics is one of the social statistics categories. The three indicators in this category are discussed in the table below.

Population and Vital Statistics Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation**
(1.1) Population data	sex; marital status; 5-year age groups	National level, First administrative level, Second administrative level
(1.2) Birth rate	sex; marital status	National level, First administrative level, Second administrative level
(1.3) Death rate	sex	National level, First administrative level, Second administrative level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Population and Vital Statistics	
Score	**Minimum Criteria**
1 point	Publish all indicators disaggregated by sex. Indicator (1.1) must also be disaggregated by 5-year age groups.
.5 point	Publish indicator (1.1) with two categorical disaggregations or indicators (1.2) and (1.3) with one categorical disaggregation each.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Education Facilities

Education Facilities is one of the social statistics categories. The three indicators in this category are discussed in the table below.

Education Facilities Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(2.1) Number of schools or classrooms	school stage; school type	National level, First administrative level, Second administrative level
(2.2) Number of teaching staff	school stage; school type; sex	National level, First administrative level, Second administrative level
(2.3) Education expenditures	school stage; expenditure categories	National level, First administrative level*

 *First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Education Facilities	
Score	**Minimum Criteria**
1 point	Publish indicators (2.1) and (2.2) with two categorical disaggregations each and (2.3) with one categorical disaggregation. Indicator (2.2) must be disaggregated by sex.
.5 point	Publish one indicator with two categorical disaggregations or two indicators with one categorical disaggregation each.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Education Outcomes

Education Outcomes is one of the social statistics categories. The three indicators in this category are discussed in the table below

Education Outcomes Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(3.1) Enrollment rate	sex; age; school stage; school type	National level, First administrative level, Second administrative level
(3.2) Completion or graduation rate	sex; age; school stage; school type	National level, First administrative level, Second administrative level
(3.3) Competency exam results	sex; age; school stage	National level, First administrative level, Second administrative level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Education Outcomes	
Score	**Minimum Criteria**
1 point	Publish all indicators by sex. Indicators (3.1) and (3.2) must both also be disaggregated by one other categorical disaggregation.
.5 point	Publish one indicator with two categorical disaggregations or two indicators with one categorical disaggregation each.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Health Facilities

Health Facilities is one of the social statistics categories. The three indicators in this category are discussed in the table below.

Health Facilities Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(4.1) Number of health facilities	facility type	National level, First administrative level, Second administrative level
(4.2) Number of beds or data on health care staff	facility type; department type; staff type	National level, First administrative level, Second administrative level
(4.3) Health expenditures	expenditure categories	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Health Facilities	
Score	**Minimum Criteria**
1 point	Publish all indicators with one categorical disaggregation each.
.5 point	Publish one indicator with one categorical disaggregation each.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Health Outcomes

Health Outcomes is one of the social statistics categories. The two indicators in this category are discussed in the table below

Health Outcomes Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(5.1) Immunization rate	sex; age	National level, First administrative level, Second administrative level
(5.2) Disease prevalence	sex; age; disease type	National level, First administrative level, Second administrative level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Health Outcomes	
Score	**Minimum Criteria**
1 point	Publish all indicators indicators disaggregated by sex and (5.2) disaggregated by disease type.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Reproductive Health

Reproductive Health is one of the social statistics categories. The six indicators in this category are discussed in the table below.

Reproductive Health Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(6.1) Maternal mortality rate	none	National level, First administrative level*
(6.2) Infant mortality rate or neonatal mortality rate	sex	National level, First administrative level*
(6.3) Under-5 mortality rate	sex	National level, First administrative level, Second administrative level
(6.4) Fertility rate	none	National level, First administrative level, Second administrative level
(6.5) Contraceptive prevalence rate	none	National level, First administrative level, Second administrative level
(6.6) Adolescent birth rate	none	National level, First administrative level, Second administrative level

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Reproductive Health	
Score	**Minimum Criteria**
1 point	Publish five indicators with one categorical disaggregation each (unless "none" is the only option).
.5 point	Publish two indicators with one categorical disaggregation each (unless "none" is the only option). One of the indicators must be 6.1, 6.2, or 6.3..
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Food Security and Nutrition

Food Security and Nutrition is one of the social statistics categories. The five indicators in this category are discussed in the table below.

Food Security and Nutrition Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(7.1) Prevalence of undernourishment	sex	National level
(7.2) Prevalence of moderate or severe food insecurity	sex	National level
(7.3) Prevalence of obesity	sex; age	National level, First administrative level*
(7.4) Prevalence of stunting	sex; age	National level, First administrative level*
(7.5) Prevalence of wasting	sex; age	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Food Security and Nutrition	
Score	**Minimum Criteria**
1 point	Publish three indicators with sex disaggregation.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Gender

Gender is one of the social statistics categories. The three indicators in this category are discussed in the table below.

Gender Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(8.1) Proportion of women who are victims of physical, sexual, or psychological violence	age; disability status; relationship to perpetrator; type of violence	National level, First administrative level, Second administrative level
(8.2) Proportion of women in government	none	National level, First administrative level*
(8.3) Data on child marriages for girls	none	National level, First administrative level, Second administrative level

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Gender	
Score	**Minimum Criteria**
1 point	Publish indicator (8.1) by type of violence and one other categorical disaggregation and (8.2) and (8.3).
.5 point	Publish one indicator with one categorical disaggregation (unless "none" is the only option).
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Crime and Justice

Crime and Justice is one of the social statistics categories. The three indicators in this category are discussed in the table below.

Crime and Justice Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(9.1) Homicide rate	sex of victim; age of victim; sex of perpetrator; age of perpetrator; victim/perpetrator relationship	National level, First administrative level, Second administrative level
(9.2) Crime rate	crime type; sex of victim; age of victim; sex of perpetrator; age of perpetrator; victim/perpetrator relationship	National level, First administrative level, Second administrative level
(9.3) Data on prison population	age; sex; sentencing status	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Crime and Justice	
Score	**Minimum Criteria**
1 point	Publish all indicators by sex (sex of victim or perpetrator is acceptable for indicators 9.1 and 9.2) and 9.2 by crime type. Or publish two indicators by sex and one other disaggregation (If 9.2 is included, it must also be disaggregated by crime type).
.5 point	Publish one indicator with two categorical disaggregations or two indicators with one categorical disaggregation each.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Poverty and Income

Poverty and Income is one of the social statistics categories. The two indicators in this category are discussed in the table below.

Poverty and Income Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(10.1) Poverty rate	none	National level, First administrative level, Second administrative level
(10.2) Distribution of income by deciles or Gini coefficient	none	National level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Poverty and Income	
Score	**Minimum Criteria**
1 point	Publish all indicators.
.5 point	Publish one indicator.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

National Accounts

National Accounts is one of the economic and financial categories. The three indicators in this category are discussed in the table below.

National Accounts Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(11.1) Gross domestic product (production approach)	industry	National level, First administrative level*
(11.2) Gross domestic product (expenditure approach)	Expenditure categories	National level, First administrative level*
(11.3) Gross domestic product (income approach)	Income components	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: National Accounts	
Score	**Minimum Criteria**
1 point	Publish two indicators with one categorical disaggregation each. Any data in the most recent 5 years (since 2017) must be presented on a monthly or quarterly basis
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Labor

Labor is one of the economic and financial categories. The three indicators in this category are discussed in the table below.

Labor Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(12.1) Employment rate	sex; age	National level, First administrative level, Second administrative level
(12.2) Employment distribution	industry; occupation; sex	National level, First administrative level, Second administrative level
(12.3) Unemployment rate	sex; age	National level, First administrative level, Second administrative level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Labor	
Score	**Minimum Criteria**
1 point	Publish indicators (12.1) and 12.3) by sex or publish indicators (12.3) by sex and (12.2) by sex and one other categorical disaggregation.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Price Indexes

Price Indexes is one of the economic and financial categories. The two indicators in this category are discussed in the table below.

Price Indexes Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(13.1) Consumer price index	none	National level, First administrative level*
(13.2) Producers price index	none	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Price Indexes	
Score	**Minimum Criteria**
1 point	Publish all indicators. Any data in the most recent 5 years (since 2017) must be presented on a monthly or quarterly basis
.5 point	Publish one indicator.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Government Finance

Government Finance is one of the economic and financial categories. The two indicators in this category are discussed in the table below.

Government Finance Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(14.1) Actual revenues	revenue source	National level, First administrative level*
(14.2) Actual expenditures	administrative classification; economic classification; functional classification	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Government Finance	
Score	**Minimum Criteria**
1 point	Publish all indicators with one categorical disaggregation each.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Money and Banking

Money and Banking is one of the economic and financial categories. The two indicators in this category are discussed in the table below.

Money and Banking Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(15.1) Money supply	money aggregates	National level
(15.2) Interest rates	rate type	National level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Money and Banking	
Score	**Minimum Criteria**
1 point	Publish all indicators with one categorical disaggregation each. At least three types of interest rates must be present.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

International Trade

International Trade is one of the economic and financial categories. The two indicators in this category are discussed in the table below.

International Trade Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(16.1) Merchandise exports	product categories	National level
(16.2) Merchandise imports	product categories	National level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: International Trade	
Score	**Minimum Criteria**
1 point	Publish all indicators with one categorical disaggregation each. Any data in the most recent 5 years (since 2017) must be presented on a monthly or quarterly basis.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Balance of Payments

Balance of Payments is one of the economic and financial categories. The two indicators in this category are discussed in the table below.

Balance of Payments Indicators		
Representative Indicators	Categorical Disaggregation	Geographic Disaggregation Required
(17.1) Current account	account components	National level
(17.2) Capital and financial account	account components	National level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Balance of Payments	
Score	Minimum Criteria
1 point	Publish all indicators with one categorical disaggregation each.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Agriculture and Land Use

Agriculture and Land Use is one of the environmental categories. The three indicators in this category are discussed in the table below.

Agriculture and Land Use Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(18.1) Data on land use or land cover	crop type; environmental zones; irrigation status	National level, First administrative level, Second administrative level
(18.2) Data on protected lands	none	National level, First administrative level*
(18.3) Commodity production	commodity type	National level, First administrative level, Second administrative level

 *First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Agriculture and Land Use	
Score	**Minimum Criteria**
1 point	Publish all indicators with one categorical disaggregation each (unless "none" is the only option). Indicator (18.1) must have two categorical disaggregations.
.5 point	Publish one indicator with one categorical disaggregation (unless "none" is the only option).
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Resource Use

Resource Use is one of the environmental categories. The four indicators in this category are discussed in the table below.

Resource Use Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(19.1) Data on fishery harvests	none	National level, First administrative level*
(19.2) Data on timber harvests or deforestation	none	National level, First administrative level*
(19.3) Data on mining or extractive activities	raw material type	National level, First administrative level*
(19.4) Water consumption	sector	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Resource Use	
Score	**Minimum Criteria**
1 point	Publish three indicators with one categorical disaggregation each (unless "none" is the only option).
.5 point	Publish one indicator with one categorical disaggregation (unless "none" is the only option).
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Energy

Energy is one of the environmental categories. The two indicators in this category are discussed in the table below.

Energy Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(20.1) Energy consumption	energy commodity; sector	National level
(20.2) Energy supply	energy commodity	National level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Energy	
Score	**Minimum Criteria**
1 point	Publish all indicators with all categorical disaggregations.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Pollution

Pollution is one of the environmental categories. The two indicators in this category are discussed in the table below.

Pollution Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(21.1) Greenhouse gas emissions	Greenhouse gas type	National level, First administrative level*
(21.2) Emissions of air or water pollutants	pollutant type	National level, First administrative level*

*First administrative levels are not strictly defined for this indicator and credit is given for any subnational classifications, such as including urban/rural or similar . Also, this indicator does not count towards the first administrative level score for small countries.

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Pollution	
Score	**Minimum Criteria**
1 point	Publish all indicators with all categorical disaggregations. For indicator (21.1) a distinct value for CO2 must be present.
.5 point	Publish one indicator with one categorical disaggregation.
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

Built Environment

Built Environment is one of the environmental categories. The five indicators in this category are discussed in the table below.

Built Environment Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation Required**
(22.1) Proportion of households with access to water	water supply type	National level, First administrative level, Second administrative level
(22.2) Proportion of households with access to sanitation	sanitation facility type	National level, First administrative level, Second administrative level
(22.3) Number of rooms or bedrooms	none	National level, First administrative level, Second administrative level
(22.4) Access to electricity	none	National level, First administrative level, Second administrative level
(22.5) Data on housing construction materials	material type	National level, First administrative level, Second administrative level

To receive credit in this category for coverage element 1 (indicator availability and disaggregation), countries must meet the criteria shown in the table below.

Coverage Element 1: Built Environment	
Score	**Minimum Criteria**
1 point	Publish three indicators, including (22.1) and (22.2) with one categorical disaggregation each (unless "none" is the only option).
.5 point	Publish two indicators with one categorical disaggregation each (unless "none" is the only option).
0 points	Not enough data are published to meet the .5 point criteria.
Note: Coverage elements 2-5 cannot score higher than coverage element 1. This is to prevent inflated coverage scores based on the publication of just a few indicators.	

SCORING

In ODIN, each of the 22 categories receives a score for the five coverage and five openness elements, except for categories where the first or second administrative levels are excluded. . A category's overall score is an average of its coverage and openness element scores. A country's overall ODIN score is calculated by averaging all social, economic and financial, and environmental categories separately, then averaging the scores of the three groups.

A more detailed discussion of scores is below.

Score Types

Overall Score: This score is used in global and regional rankings. To calculate the overall score, the individual 22 categories scores are weighted so that social, economic and financial, and environmental categories are weighted equally. Each of these three category groups account for ⅓ of the overall score.

Category Score: Each category receives a score which is an average of each category's' individual coverage and openness element scores. In some cases this will not be a simple average of all ten openness and coverage elements, because some categories are not scored at the first or second administrative level.

Coverage Score: Coverage scores are the average scores across the five coverage elements. Each element receives a score of 0, .5 or 1. Some category coverage scores will be based on 3 or 4 elements, if first or second administrative level data are not required. You can read more about the coverage elements and how to score them here.

Coverage elements 2-5 cannot score higher than coverage element 1 within any given category. This is to prevent inflated coverage scores based on the publication of very few, but comprehensive datasets.

Openness Score: Openness scores are the average scores across the five openness elements. Each element receives a score of 0, .5 or 1. You can read more about the openness elements and how to score them here.

Scoring Example

The following is an example about how scores are calculated for the category Population and Vital Statistics.

In the category Population and Vital Statistics, there are three indicators and each indicator has a number of categorical and geographic disaggregations that are assessed, as shown in the table below.

Population and Vital Statistics Indicators		
Representative Indicators	**Categorical Disaggregation**	**Geographic Disaggregation**
(1.1) Population data	sex; marital status; 5-year age groups	National level, First administrative level, Second administrative level
(1.2) Birth rate	sex; marital status	National level, First administrative level, Second administrative level
(1.3) Death rate	sex	National level, First administrative level, Second administrative level

In our example, the following datasets were found for each indicator:

Representative Indicators	**Datasets Found**
(1.1) Population data	**Dataset 1**: Population data disaggregated by 5 year age groups and sex, national level data only, 2010-2018 **Dataset 2:** Population data disaggregated by 5 year age groups and sex, first adminstrative level data only, 2015 **Dataset 3:** Population data disaggregated by 5 year age groups, national level data only, 2018-2021
(1.2) Birth rate	**Dataset 4:** Birth rate by sex, national level data only, 2015-2019
(1.3) Death rate	**No datasets found**

Here is how coverage scores for this category would be assigned:

Coverage Scores

1. **Coverage element 1 (indicators and disaggregation):** This element is scored differently for each category. According to the Population and Vital Statistics section, to receive 1 point (full credit), a country must "Publish all indicators disaggregated by sex. Indicator (1.1) must also be disaggregated by 5-year age groups." In this example, one indicator is not published at all, so full credit cannot given. In order to receive partial

credit, countries must "Publish indicator (1.1) with two categorical disaggregations or indicators (1.2) and (1.3) with one categorical disaggregation each."

Score result: According to the table above, this category meets the criteria for **.5 point.** 1 point cannot be given because data on 1.3 is missing.

2. **Coverage element 2 (data available for the last 5 years)**: According to the criteria for data available for the last 5 years, to receive 1 point, 3 of the last 5 years must be available for all recorded indicators and their disaggregations at the national level. To receive a .5 point, only 1 of the last 5 years are needed. Otherwise a 0 given. For this example, the 5 year range in ODIN 2022/23 is used, 2017-2021.

   Score result: According to the table above, national level data are available for Population by 5 year age groups for 2010 -2021 (all 5 most recent years). Population data disaggreged by sex are available for years 2010-2018 (2 of the most recent years). And birth rate data by sex are available for 2015-2019 (3 of the most recent years). Because population data disaggregated by sex are only available for 2 of the most recent years, a score of .5 is given.

   Note: This score could only be as high as coverage element 1's score. Because coverage element 1 scored .5 point, even if all datasets had the most recent five years, this score would be downgraded to .5 from 1.

3. **Coverage element 3 (Data available for the last 10 years):** According to the criteria for data available for the last 10 years, to receive 1 point, 6 of the last 10 years must be available for all recorded indicators and their disaggregations at the national level. To receive a .5 point, only 3 of the last 10 years are needed. Otherwise a 0 is given. For this example, the 10 year range in ODIN 2022/23 is used, 2012-2021.

   Score result: According to the table above, national level data are available for Population by 5 year ages for 2010-2021 (10 years of the last 10 years). Population data disaggreged by sex is available for years 2010-2018 (7 of the last 10 years). And birth rate data by sex is available for 2015-2019 (8 of the last 10 years). Since all indicators and their categorical disaggregations have at least 6 of the last 10 years, normally 1 point would be given. However, since the first coverage element only received a score of .5, the score for this element is downgraded to .5 as well.

4. **Coverage element 4 (first administrative level)**: According to First Administrative Level, to receive 1 point, every indicator in the category must have data available at the first administrative geographic level for every year and categorical disaggregation recorded for credit for coverage element 1. To receive a .5 point, only one dataset needs to have first administrative data. Otherwise a 0 given.

   Score result: According to the table above, first level administrative data are not available for birth rates or the population data disaggregated by 5-year age groups and sex for any year other than 2015. Therefore, since only some datasets have first administrative data, a score of .5 is given.

5. **Coverage element 5 (second administrative level):** According to Second Administrative Level, to receive 1 point, every indicator in the category must have data available at the second administrative geographic level for every year and categorical

disaggregation recorded for credit for coverage element 1. To receive a .5 point, only one dataset needs to have second administrative data. Otherwise a 0 is given.

Score result: According to the table above, no indicators have second administrative data. Therefore, this category meets the element for **0 points.**

Now, here is how openness scores for this category would be assigned:

Openness Scores

To assign openness scores, we'll have to look at additional information about each dataset. The table below summarizes this:

Representative Indicators	File Format	Download Options	Metadata Availability	Data License/Terms of Use
Dataset 1: Population data disaggregated by 5 year age groups and sex, national level data only	PDF, XLS	No download options	All 3 metadata element met	Open data license present
Dataset 2: Population data disaggregated by 5 year age groups and sex, first adminstrative level data only	XLSX	No download options	All 3 metadata element met	Open data license present
Dataset 3: Population data disaggregated by 5 year age groups, national level data only	XLS	No download options	All 3 metadata element met	Open data license present
Dataset 4: Birth rate by sex, national level data only, 2015-2019	PDF	Bulk download	Two metadata element met	Open data license present

1. **Openness element 1 (machine readable formats):** According to Machine Readability, to receive 1 point, a country must publish "All available data in this category are published in machine readable format." To receive a .5 point, only some recorded data must be made available in a machine readable format. Otherwise a 0 given.

   Score results: According to the table above, data on indicator 1.1 is made available in three different datasets, all which can be downloaded in a machine readable format (XLS or XLSX). However, the one dataset on indicator 1.2 is only made available in a PDF file. Therefore, since only some data are made available in a machine readable format, this category meets the element for .5 point.

2. **Openness element 2 (non-proprietary formats):** According to the criteria for non-proprietary formats, to receive 1 point, a country must "publish all data in each category in at least one non-proprietary format." To receive a .5 point, only some recorded data must be made available in a non-proprietary format. Otherwise a 0 given.

   Score results: According to the table above, data on indicator 1.1 are made available in three different datasets, two which are nonproprietary (PDF and XLSX) and one that is not (XLS). Indicator 1.2 is made available in a nonproprietary format (PDF). Therefore, because only some data are made available in a nonproprietary format, this category meets the element for .5 point.

3. **Openness element 3 (download options)**: According to the criteria for download options, to receive 1 point all data in the category must have at least two download options and one option must be bulk download.To receive .5 point, at least one dataset must have at least one download option. Otherwise a 0 given.

   Score results: According to the table above, three datasets have no download options and one dataset is available as a bulk download. Because only some data have one of the download options, this category meets the criteria for .5 point.

4. **Openness element 4 (metadata availability)**: According to criteria for metadata availability, to receive 1 point, all data in the category must have all three components of reference metadata. To receive a .5 point, only some data must have at least one component of metadata. Otherwise a 0 given.

   Score results: According to the table above, three datasets have all 3 components of metadata and one dataset only has two. Therefore, since only some data have all three components of metadata, this category meets the element for .5 point.

5. **Openness element 5 (Data license/terms of use):** According to the criteria for data license/terms of use, to receive 1 point all data in the category must be published under an open data license or open terms of use. Partial credit is given for any license or terms of use that contains no more than one requirement of users not considered acceptable under the Open Definition or is too vague to be considered open. If a license or terms of use does not allow commercial use, requires permission for commercial use, includes more than one requirement of users not considered acceptable under the Open Definition, or does not exist, a score of 0 is given.

   Score results: According to the table above, all four datasets have an open data license. Therefore, this category meets the element for 1 point.

Summary Scores

In summary, in our example the category Population and Vital Statistics received the following ten scores for each coverage and openness element.

Coverage elements					Openness elements elements				
Coverage & Disagg.	Last 5 Years	Last 10 Years	First Admin	Second Admin	Machine Readable	Nonprop Format	Download Options	Metadata Available	Terms of Use
.5	.5	.5	.5	0	.5	.5	.5	.5	1 point

Therefore, the category score would be the average of all 10 element scores or in this case= .5 or as a percentage, 50%

Note: If the category is not scored for the first or second administrative scores, you would only average the scores for those 8 or 9 elements.

Calculating the Overall Score

In order to calculate a country's overall score, first calculate the category score for each of the 22 categories as explained in the previous section.

Once you have each of the category scores, now calculate the subscore for all social categories (population and vital statistics- poverty and income). To do this, take the average of all 10 social category scores. Repeat this for all of the economic and financial categories and all the environmental categories. You should then have 3 scores, one for each of the three groupings (social, economic and financial, and environmental).

 FInally, take the average of those three figures to calculate the overall ODIN score.

To see the weighting calculations and to calculate your own scores, see the following weighting matrices:

- [Default Weighting Matrix](#)

- [Small Country Weighting Matrix](#)
  Small countries include: Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahrain, Barbados, Dominica, Grenada, Hong Kong, Kiribati, Liechtenstein, Macao, Maldives, Malta, Marshall Islands, Micronesia, Monaco, Nauru, Palau, Sao Tome and Principe, San Marino, Seychelles, Singapore, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Tonga, and Tuvalu.

You can calculate your own scores using the weighting matrices by modifying the "Raw ODIN Scores" tab. You can view the generated scores under the tab "Final Scores."

ANNEX I: INDICATOR GLOSSARY

Indicator	Definition	Accepted Substitute Indicators	Examples
(1.1) Population data	The number of people living in a given area at a certain time.	● Population projections ● Population structure ● Population estimates	● Revised Estimated Mid-Year Population by Sex and Five-Year Age Groups (St. Lucia)
(1.2) Birth rate	The number of babies born every year per inhabitant.	● Number of babies born per any number of inhabitants ● Crude birth rate ● Absolute number of live births ● Absolute number of births (live and stillbirths) ● Absolute number of registered births ● Number of births registered and possession of birth certificate	● Births by sex (St. Lucia)
(1.3) Death rate	The number of people who died every year per inhabitant.	● Number of people who died per any number of inhabitants ● Crude death rate ● Number of deaths ● Number of registered deaths ● Record of deceased obituaries in the year ● Deaths by department of residence of the deceased ● Death occurrence	● Deaths by sex (St. Lucia)

(2.1) Number of schools or classrooms	Schools: The number of educational institutions in a country. Classrooms: The number of rooms where classes are held in educational institutions in a country.	- Number of schools or classrooms in the public school system - Number of schools or classrooms in the private school system (if a country's school system is predominantly private) - Number of educational providers/Institutions - Number of school units	[Number of schools by school stage (Pakistan)](#)
(2.2) Number of teaching staff	The number of professional personnel directly involved in teaching students	- Number of licensed or certified teachers - Number of teachers in governmental general education - Number of teaching personnel - SDG indicator 4.c.1	[Number of teaching staff by school stage (Pakistan)](#)
(2.3) Education expenditures	The amount of money spent on education in a country in any currency.	- Total expenditure on education - Public expenditure on education - Education expenditures as a percentage of total expenditures (as long as the total expenditure amount is specified) - Government expenditure per student - The amount of money allocated to the Ministry of Education (or agency responsible for education)	[Education expenditures by school stage (Pakistan)](#)

(3.1) Enrollment rate	The number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.	- Gross enrollment rate - Net enrollment rate - Number of students - Number of students enrolled in public school - Number of students enrolled in private school (if a country's school system is predominantly private)	Enrollment rate, by age, sex, school stage (Denmark)
(3.2) Completion or graduation rate	Completion rate: Percentage of a cohort of children or young people aged 3-5 years above the intended age for the last grade of each level of education who have completed that grade. Graduation rate: Proportion of students from a cohort enrolled in a given grade at a given school year who study in the next grade in the following school year.	- Gross graduation ratio - Promotion rate - Transition rate - Number of graduates - Number of students that have completed different education levels - SDG indicator 4.1.2	Completion or graduation rate by sex and age (Canada)
(3.3) Competency exam results	The results for any standardized test administered in a country for math, science, or reading subjects or a combination of them.	- Pass/fail results for any standardized exam - Average scores for any standardized exam - Matriculation exam results for grade promotion - Number of examinees and distribution of passers - Number of students who passed any standardized exams - Success rates of any	Competency exam results, by sex (Canada)

		standardized exams ● SDG indicator 4.1.1 ● SDG indicator 4.6.1	
(4.1) Number of health facilities	The number of hospitals, primary care centers, and health clinics in a country.	● The number of public and private hospitals ● The number of public and private health clinics ● Number of Comprehensive Health Centers ● Number of Health Care Institutions ● SDG indicator 3.b.3 proportion of health facilities that have a core set of relevant essential medicines available ● SDG 3.c.1	● [Number of health facilities, by facility type (Hong Kong)](#)
(4.2) Number of beds or data on health care staff	Beds: The number of hospital beds are all hospital beds which are regularly maintained and staffed and immediately available for the care of admitted patients. Staff: The number of employed people whose primary intent is to enhance health.	● Hospital bed to population ratio ● Number of doctors and nurses ● Health worker density ● Health worker distribution	● [Number of beds or data on health care staff, by facility type and staff type (Hong Kong)](#)
(4.3) Health expenditures	The amount of money spent on health in a country in any currency.	● Total expenditure on health ● Public expenditure on health ● Health expenditures as a percentage of total expenditures (as long as the total expenditure amount is specified) ● The amount of money allocated to the Ministry of Health (or agency	● [Health expenditures, by expenditure categories (Hong Kong)](#)

		responsible for health)	
(5.1) Immunization rate	The number of people who have been immunized against certain disease per any number of inhabitants.	- Percentage of fully immunized children - Immunization coverage for infants - Proportion of people under a certain age immunized against certain diseases - Vaccination rate - Percentage of children not vaccinated by age - Percentage of population not vaccinated - SDG indicator 3.b.1	Immunization rate, by age and sex (Vanuatu)
(5.2) Disease prevalence	The number of existing cases (new and old) from certain diseases at the end of a specific year.	- Disease incidence - Number of reported infections - Notification of specific notifiable diseases - Number of in-patients according to cause of disease - Notifiable diseases - Morbidity prevalence/incidence - SDG indicator 3.3.1	Diseases prevalence, by age, sex, and disease type (Vanuatu)
(6.1) Maternal mortality rate	The number of maternal deaths during a given time period per live births during the same time period.	- Maternal mortality ratio (per 100,000 live births) - Direct estimates of maternal mortality rates for the 7 years before the survey (credit for one year for this indicator, the year the data was collected according to the survey's methodology) - SDG indicator 3.1.1	Maternal mortality rate (Tanzania)

(6.2) Infant mortality rate or neonatal mortality rate	Infant: The probability of a child born in a specific year or period dying before reaching the age of one, if subject to age-specific mortality rates of that period. Neonatal: The number of deaths during the first 28 completed days of life per live births in a given year or another period.	● Early childhood mortality rates ● SDG indicator 3.2.2	● Infant mortality rate or neonatal mortality rate, by sex (Tanzania)
(6.3) Under-5 mortality rate	The quotient between the number of deaths in children under 5 year of age in a given year and the number of live births in that year.	● Early childhood mortality rates ● SDG indicator 3.2.1	● Under-5 mortality rate, by sex (Tanzania)
(6.4) Fertility rate	The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.	● Age-specific fertility rate ● Total fertility rate	● Fertility rate (Tanzania)

(6.5) Contraceptive prevalence rate	The percentage of women in an age group who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.	● The percentage of women aged 15–49 years, married or in-union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used. ● The percentage of women aged 15–49 years, married or in-union, who are currently using, or whose sexual partner is using, at least one modern method of contraception. ● Contraceptive use by method ● SDG indicator 3.7.1	● Contraceptive prevalence rate (Tanzania)
(6.6) Adolescent birth rate	The annual number of births to women aged 15-19 years per women in that age group.	● The age-specific fertility rate for women aged 15-19 ● The annual number of births to women aged 15-19 years per any number of women in that age group. ● SDG indicator 3.7.2	● Adolescent birth rate (Tanzania)
(7.1) Prevalence of undernourishment	A percentage estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life.	● Percentage of population consuming food with less than a certain amount of calories (ie 2100 kilocalories) daily ● Prevalence of minimum acceptable diet ● Percentage of malnourished or severely malnourished children ● SDG indicator 2.1.1	● Prevalence of undernourishment (Costa Rica)

(7.2) Prevalence of moderate or severe food insecurity	The prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale.	- Percentage of households experiencing food inadequacy - Percentage distribution of food insecure households - SDG indicator 2.1.2	Prevalence of moderate or severe food insecurity (Rwanda)
(7.3) Prevalence of obesity	Percentage of defined population with a body mass index (BMI) of 30 kg/m2 or higher.	- Overweight rate for the general population or children - Malnutrition rate for the general population or children - Percentage of overnutrition for the general population or children - Percentage of defined population with a body mass index (BMI) of 27 kg/m2, 30 kg/m2 or higher - BMI by category (specifically overweight or obese) - SDG indicator 2.2.2	Prevalence of obesity, by sex and age (Vanuatu)
(7.4) Prevalence of stunting	The percentage of stunting (defined as more than two standard deviations below the median height-for-age) among the general population or children.	- Undernutrition rate for the general population or children - Malnutrition rate for the general population or children - SDG indicator 2.2.1	Prevalence of stunting, by sex and age (Vanuatu)
(7.5) Prevalence of wasting	The percentage of wasting (defined as more than two standard deviations below the median weight-for-height) among the general population or children.	- Underweight rate for the general population or children - Undernutrition rate for the general population or children - Malnutrition rate for the general population or children	Prevalence of wasting, by sex and age (Vanuatu)

		● BMI by category (specifically underweight) ● SDG indicator 2.2.2	
(8.1) Proportion of women who are victims of physical, sexual, or psychological violence	The proportion of women subject to any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life.	● Victimization rates for both men and women ● Rates of sexual assault, domestic violence, rape, etc. if disaggregated by gender ● Experience of intimate partner domestic violence ● Victims of domestic violence ● Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced violence during the 12 months preceding the survey ● Prevalence of physical, sexual, and physical and/or sexual partner violence among ever-partnered women ● SDG indicator 5.2.1 ● SDG indicator 5.2.2 ● SDG indicator 16.2.2 ● SDG indicator 11.7.2	● [Proportion of women who are victims of physical, sexual, or psychological violence, by age (Uganda)](#)
(8.2) Proportion of women in government	The proportion of seats held by women in national or local governments, or in managerial or senior business positions.	● Proportion of women in public office Proportion of seats held by women in the lower house/upper house (this could be referred differently on a country by country basis) ● Candidates elected in lower house/upper house by sex	● [Proportion of women in government, management or senior positions (Uganda)](#)

		● Court judges by sex ● Sex distribution of parliamentary elections ● SDG indicator 5.5.1 ● SDG indicator 5.5.2	
(8.3) Data on child marriages for girls	Percentage of girls 15 to 19 years of age currently married or in union.	● Percentage of marriages with a girl below 20 disaggregated by sex ● Number of early marriages ● Proportion of women aged 20-24 years who are married or living status together before age 18 years ● Marriages by age of groom and bride ● SDG indicator 5.3.1	● Child marriages, by age (Uganda)
(9.1) Homicide rate	The total count of unlawful death inflicted upon a person with the intent to cause death or serious injury per unit of population.	● Number of homicides ● Intentional homicide rate ● Number of intentional homicides ● Murder rate ● Number of murders ● SDG indicator 16.1.1	● Homicide rate, by sex of victim (Norway)
(9.2) Crime rate	The ratio of crimes in an area to the population of that area.	● Number of crimes committed ● Number of acts against person or property ● Number of crimes reported ● Victimization rate ● SDG indicator 11.7.2, 16.1.3, 16.2.2, 16.10.1	● Crime rate, by sex of victime (Norway)
(9.3) Data on prison population	Persons held in prison per unit of population.	● Total persons held in prison ● Number of imprisoned persons ● SDG indicator 16.3.2	● Data on prison population, by age, sex, and sentencing status (Norway)

(10.1) Poverty rate	The share of population living in households with income or consumption expenditure below a stated national or international poverty line.	- Low-income rate - At-risk-of-poverty rates - Incidence of extreme poverty - Intensity of poverty - SDG indicator 1.1.1, 1.2.1, 1.2.2	Poverty rate (Rwanda)
(10.2) Distribution of income by deciles or Gini coefficient	Distribution of Income: The number or percentage of households divided into 10 income groups. Gini coefficient: The index is computed as the ratio of the area between the two curves (Lorenz curve and 45-degree line) to the area beneath the 45-degree line.	- Distribution of income by more than 10 groups - Gini Index - Gini ratio	Gini coefficient (Rwanda)
(11.1) Gross domestic product (production approach)	Output-based gross domestic product is the sum of the gross values added of all resident producers at basic prices, plus all taxes less subsidies on products.	Gross value added (GVA)	Gross domestic product (production approach), by industry (Botswana)
(11.2) Gross domestic product (expenditure approach)	Expenditure-based gross domestic product is total final expenditures at purchasers' prices (including the f.o.b. value of exports of goods and services), less the f.o.b. value of imports of goods and services.	Gross national product (GNP)	Gross domestic product (expenditure approach), by expenditure categories (Botswana)

(11.3) Gross domestic product (income approach)	Income-based gross domestic product is compensation of employees, plus taxes less subsidies on production and imports, plus gross mixed income, plus gross operating surplus.	● Gross domestic income ● Gross national income ● Gross national disposable income	● Gross domestic product (income approach), income components (Botswana)
(12.1) Employment rate	Persons in employment as a percentage of the population of working age.	● Number of employed persons ● Employment to population ratio	● Employment rate, by sex and age (Montenegro)
(12.2) Employment distribution	The percentage distribution of those employed by their industry or occupation.	● Number of employed persons in each industry or occupation	● Employment distribution, by industry and sex (Montenegro)
(12.3) Unemployment rate	The percentage of persons in the labour force who are unemployed.	● Number of unemployed persons ● SDG indicator 8.5.2 ●	● Unemployment rate, by sex and age (Botswana)
(13.1) Consumer price index	A measure of the average change overtime in the prices paid by urban consumers for a market basket of consumer goods and services.	● CPI for the country's capital city ● Retail price index ● HCPI	● Consumer price index (Tanzania)
(13.2) Producers price index	A measure of the rate of change in the prices of goods and services bought and sold by producers.	● Industrial producer price index (IPPI) ● Output price index	● Producer price index (Tanzania)
(14.1) Actual revenues	Government revenue reported at the end of the fiscal year.	● Budgeted revenue (for most recent year)	● Actual revenues, by revenue source (Anguilla)

(14.2) Actual expenditures	Government expenditures reported at the end of the fiscal year.	• Budgeted expenditure (for most recent year) • SDG indicator 16.6.1	• Actual expenditures, by administrative classification (Anguilla)
(15.1) Money supply	The money supply is the total amount of money in circulation in a country.	• None	• Money Supply, by money aggregates (Japan)
(15.2) Interest rates	The interest rates that are available for various lending instruments.	• Short- or long-term government security interest rates • Central Bank policy rate • Money market rates • Interbank interest rates	• Interest Rates, by rate type (Myanmar)
(16.1) Merchandise exports	Exports of goods and services – merchandise trade comprise goods leaving the statistical territory of a country.	• Trade balance with itemized merchandise (products and services)	• Merchandise exports, by product categories (Lesotho)
(16.2) Merchandise imports	Imports of goods and services (merchandise trade) are goods which add to the stock of material resources of a country by entering its economic territory.	• Trade balance with itemized merchandise (products and services)	• Merchandise imports, by product categories (Republic of South Korea)
(17.1) Current account	The current account includes all the transactions (other than those in financial items) that involve economic values and occur between resident and non-residents entities. Also covered are offsets to current economic values provided or acquired without a	• None	• Current account, by account components (Rwanda)

	quid pro quo. Specifically, the major classifications are: - goods and services; - income; - current transfers."		
(17.2) Capital and financial account	Capital transfers consist of those involving transfers of ownership of fixed assets; transfers of funds linked to, or conditional upon, acquisition of disposal of fixed assets; or cancellation, without any counterparts being received in return, of liabilities by creditors. This item does not cover land in a specific economic territory. In the financial account, all components are classified according to type of investment or by functional breakdown (direct investment, portfolio investment, other investment, reserve assets).	● None	● [Capital and financial account, by account components (Rwanda)](#)
(18.1) Data on land use or land cover	Land Use: The socioeconomic use of land, presented in physical units. Land Cover: The observed (bio)physical cover on the earth's	● Amount or percentage of area cropped ● Amount or percentage or distribution of land by various environmental zones ● Amount or percentage of area equipped for	● [Data on land use by crop type and data on land cover by environmental zones (Tanzania)](#)

	surface, presented in physical units.	- irrigation or irrigated - SDG indicator 2.4.1 - SDG indicator 15.4.2	
(18.2) Data on protected lands	Legally established land area under either public or private ownership that is regulated and managed to achieve specific conservation objectives, presented in physical units.	- Amount or percentage of area designated for national parks, nature reserves, national monuments, or resource management areas - SDG indicator 15.1.2 - SDG indicator 15.4.1	- Data on protected lands (Belarus)
(18.3) Commodity production	The quantity of agricultural commodities produced by a country, presented in a unit of mass.	- Value or quantity of production for main agricultural commodities (must include crop and livestock products) - SDG indicator 2.3.1	- Commodity production, by commodity type (Norway)
(19.1) Data on fishery harvests	The volume of fish brought ashore.	- Fishery landings - Fishery catches - SDG indicator 14.4.1 - SDG indicator 14.7.1	- Data on fishery harvests (Rwanda)
(19.2) Data on timber harvests or deforestation	Timber Harvests: The amount of forest area or trees cut in physical units or value. Deforestation: The amount of forest converted to other land use independently whether human-induced or not in physical units.	- Logging data - Amount or value of forest area cut or harvested - Amount or value of planted forest area	- Data on timber harvests or deforestation (Rwanda)
(19.3) Data on mining or extractive activities	The amount or value of raw materials extracted from the earth presented in physical units or value.	- Quantity or value of minerals extracted - Quantity or value of crude oil or natural gas extracted	- Data on mining or extractive activities (Rwanda)

(19.4) Water consumption	Freshwater taken from ground or surface water sources, either permanently or temporarily, and conveyed to the sector of use, presented in physical units or value.	● Quantity of water used ● Quantity of water sold	● [Water consumption, by sector (Denmark)](#)
(20.1) Energy consumption	Total energy consumed by end users, such as households, industry and agriculture.	● Total final energy consumption ● Final energy consumption ● SDG indicator 7.2.1	● [Energy consumption, by sector and energy commodity (Estonia)](#)
(20.2) Energy supply	Total primary energy domestic supply (sometimes referred to as energy use) is calculated by the International Energy Agency as production of fuels + inputs from other sources + imports - exports - international marine bunkers + stock changes. It includes coal, crude oil, natural gas liquids, refinery feedstocks, additives, petroleum products, gases, combustible renewables and waste, electricity and heat.	● Energy production	● [Energy supply, by energy commodity (Estonia)](#)
(21.1) Greenhouse gas emissions	The amount of carbon dioxide, nitrous oxide, methane, ozone and chloro-fluorocarbons occurring naturally and resulting from human (production and consumption) activities and contributing to the	● Data on ozone depleting substances ● CO2 emissions ● SDG indicator 9.4.1 ● SDG indicator 13.2.2	● [Greenhouse gas emissions, by gas type (Israel)](#)

	greenhouse effect (global warming).		
(21.2) Emissions of air or water pollutants	Air pollutants: The amount of pollutant substances in the air that do not disperse properly and that interfere with human health or welfare, or produce other harmful environmental effects, presented in physical units. Water pollutants: The amount of harmful and objectionable material —obtained from sewers, industrial wastes and rainwater run—off — in water that make it unfit for use.	● Annual average density of major air pollutants ● SDG indicator 11.6.2 ● SDG indicator 14.1.1	● [Emissions of air or water pollutants, by pollutant type (Israel)](#)
(22.1) Proportion of households with access to water	Percentage of the population having access to and using improved drinking water sources.	● Percentage of population with access to improved water sources ● Percentage of population with access to clean drinking water ● Amenities of household dwellings, percent (water) ● Percentage of households with main source of drinking water (improved, not improved) ● Percentage of households with access to safe drinking water ● Percentage of population with supplied water ● SDG indicator 6.1.1	● [Proportion of households with access to water, by water supply type (Uganda)](#)

(22.2) Proportion of households with access to sanitation	Percentage of the population having access to and using improved sanitation facilities.	● Percentage of population with access to improved Sanitation facilities ● Percentage of households with main source of toilet facilities (improved, not improved) ● Percent distribution of households by type of toilet/latrine facilities ● Percentage of households with type of toilet used ● SDG indicator 6.2.1	● Proportion of households with access to sanitation, by sanitation facility type (Uganda)
(22.3) Number of rooms or bedrooms	The number or percentage of households by total number of rooms or bedrooms.	● Average number of rooms in a dwelling ● Households by structure & number of room ● Percentage distribution of rooms used for sleeping ● Distribution of houses by number of room	● Number of rooms or bedrooms, by housing type (Uganda)
(22.4) Access to electricity	The number or percentage of a households that have access to electricity.	● Percentage of households by main lighting source (includes electricity) ● Percentage of households by main source of energy for cooking (includes electricity) ● Amenities of household dwellings percent (electricity) ● Distribution of household by electricity connection ● Percentage of households with electricity ● SDG indicator 7.1.1	● Access to electricity by access type (Uganda)

(22.5) Data on housing construction materials	The number or percentage of households by construction material type for roofs, floors, walls, etc.	● Percentage distribution of households with type/material of flooring, wall, roof ● Construction materials used in outer walls, floors, roofs of housing ● SDG indicator 11.1.1	● [Data on housing construction materials, by material type (Uganda)](#)

ANNEX II: DISAGGREGATION GLOSSARY

Categorical Disaggregation	Definition
5-year age groups	0-4 years old, 5-9 years old, 10-14 years old and so on (Five year periods may also start at 1 years old. A group for 65 years and up is also common).
Access type (Electricity)	Manner in which electricity is connected to the household, may include cooking and lighting source. Or may simply specify access to/without access.
Account components (Balance of Payments)	Goods and services, income, and current transfers (or secondary income) and capital and financial account components include direct investment or international investment position.

Activity type (Extractives)	Types of extractive undertaking, may include gas, petroleum, coal, raw minerals, etc.
Administrative classification	Divisions of government divisions, such as specific ministries or departments.
Age	Individual ages or age groups
Age of perpetrator	See "age"
Age of victim	See "age"
Commodity type	Variety of agriculture and animal products such as wheat, milk, vegetables, fruits, poultry, oils, maize, etc.
Crime type	Type of illegal act against person or property, punishable by law, such as robbery, assault, burglary/trespassing, rape, assault, sexual assault, motor-vehicle theft, theft, etc.
Crop type	Variety of plant or plant product such as cocoa, maize, rice, etc.
Department type (Health)	Any department found generally found in a health facility, such as surgery, ophthalmology, internal medicine, pediatric care, dentistry, etc.
Disability status	With disability, without disability, or list of specific disabilities
Disease type	Any type of ailment such as AIDS/HIV, cholera, diarrhea, tuberculosis, cancer, sexually transmitted diseases, etc.
Economic classification	Type of economic categories, such as expense, compensation of employees, use of goods and services, consumption of fixed capital, interest, subsidies, grant, social benefits, etc.
Energy commodity	May include, coal, shale oil, peat, wood, natural gas, diesel, biofuels, electricity, etc.

Environmental zones	Ecologically and geographically defined area, for land use may include: agriculture, forestry, aquaculture, etc. Environmental zones for land cover may include: crops, trees, mangroves, grassland, etc.
Expenditure categories (Education)	Education affairs and services, salaries, benefits, training, supplies, subsidiary services to education. These are examples. Categories can be any subset of expenditure related to education.
Expenditure categories (Health)	Hospital care, clinical services, prescription drugs, nursing care facilities, salaries. These are examples. Categories can be any subset of expenditure related to health.
Expenditure categories (National Accounts)	Spending of funds of GDP including final consumption expenditure, government expenditure on goods and services, gross fixed capital formation, etc.
Facility type (Health)	Any place that provides health care, such as a public hospital, private hospital, health clinic, pharmacy, dental clinic, etc.
Functional classification	Division by functions of public sectors, such as general public services, defense, public order and safety, environmental protection, health, education, etc.
Greenhouse gas type (Pollution)	Variety of gas that contributes to the greenhouse effect such as carbon dioxide, methane (CH_4), nitrous oxide (N_2O), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and hydrofluorocarbons (HFCs). A more complete list of greenhouse gasses includes: CO_2, CH_4, N_2O, SF_6, CHF_3, CH_2F_2, CF_4, C_2F_6, C_3F_8, C_4F_{10}, c-C_4F_8, C_5F_{12}, and C_6F_{14}.
Income components (National Accounts)	Income generated by the production of all economic goods and services, including compensation of employees, gross operating surplus, taxes on products, etc.
Industry	Group of producing entities that use the same kind of production processes to produce goods and services, such as agriculture, mining, manufacturing, etc.
Industry (Labor)	Category or field of work such as agriculture, mining, manufacturing, etc.
Irrigation status	Irrigated, not irrigated
Marital status	Single, married, separated, divorced, or widowed.

Material type (Housing construction)	Material used in the construction, such as concrete, clay, wood, steel, cement etc.
Money aggregates	Measures of money, including M1 such as cash (banknotes and coins), plus overnight deposits. M2 (also called quasi money), includes M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months. M3 is M2, plus repurchase agreements, money market fund shares/units and debt securities up to two years.
None	No categorical disaggregation is needed
Occupation	Job or profession type, such as teacher, nurse, farmer, etc.
Pollutant type (Air)	Common air pollutants include: PM10, PM2.5, O3, NO2, CO, and SO2.
Pollutant type (Water)	Common water pollutants include: Various nutrients, pesticides, pathogens, metals, salts, etc.
Product categories (Trade)	Commodity groups, most often using the Standard International Trade Classification system (SITC).
Rate type	Short or long term government security rates (treasury bills, bond yields), policy orientated interest rates (central bank lending or discount rates), money market, or interbank rates.
Revenue source	Sources of income, such as from taxation, excise duties, customs, or other sources appropriated to the payment of public expenses
Sanitation facility type	Specified service for the safe disposal of human urine and feces and maintenance of hygienic conditions, may include, indoor, outdoor, protected, pits, etc.
School stage	Primary, secondary, post-secondary/tertiary. At least 3 stages must be present and two must be after primary. Stages may be referred to as another name.
School type	Technical schools, public school, private school, Religious schools, and other similar types
Sector (Energy)	May include construction, agriculture, transport, industry, residential, etc.
Sector (Water consumption)	May include household, industrial, agriculture, etc.

Sentencing status	Result of a court proceeding/punishment decided, such as sentenced, unsentenced, fined, incarceration, probation, suspended sentence, restitution, community service, participation in rehabilitation program etc.
Sex	Male, Female (may include other genders).
Sex of perpetrator	See "sex"
Sex of victim	See "sex"
Staff type	Classification of healthcare professionals such as nurse, doctor, etc.
Type of violence	Forms of violence may include broad categories such as domestic violence or types of intimate partner violence or include more specific types of psychological, sexual, or physical types of violence.
Victim/perpetrator relationship	Victim's affiliation with perpetrator such as spouse, parent, guardian, intimate partner, etc.
Water supply type	Classified source of water, may include pipe, well, open streams, etc.

ANNEX III: SMALL COUNTRIES

Small countries are defined as having a surface area of 1,500 sq km. or less. These countries are not scored for the coverage element 5 (second administrative level data) in any category. Additionally, these countries are not scored for coverage element 4 (first administrative level data) for many indicators and categories.

In ODIN 2022/23, this includes the countries: Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahrain, Barbados, Dominica, Grenada, Hong Kong, Kiribati, Liechtenstein, Macao, Maldives, Malta, Marshall Islands, Micronesia, Monaco, Nauru, Palau, Sao Tome and Principe, San Marino, Seychelles, Singapore, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Tonga, and Tuvalu.

First and Second Administrative Level Data Requirements for Small Countries

Category	First Administrative Level	Second Administrative Level
Population and Vital Statistics	Required for all indicators	Not required
Education Facilities	Required for all indicators except (2.3)	Not required
Education Outcomes	Required for all indicators	Not required
Health Facilities	Required for all indicators except (4.3)	Not required
Health Outcomes	Required for all indicators	Not required
Reproductive Health	Required for all indicators except (6.1) and (6.2)	Not required
Food Security and Nutrition	Required for all indicators except (7.3), (7.4), and (7.5)	Not required
Gender	Required for all indicators except (8.2)	Not required
Crime and Justice	Required for all indicators except (9.3)	Not required
Poverty and Income	Required for all indicators except (10.2)	Not required
National Accounts	Not required	Not required
Labor	Required for all indicators	Not required
Price Indexes	Not required	Not required
Government Finance	Not required	Not required
Money and Banking	Not required	Not required
International Trade	Not required	Not required
Balance of Payments	Not required	Not required
Agriculture and Land use	Required for all indicators except (18.2)	Not required
Resource Use	Not required	Not required
Energy	Not required	Not required
Pollution	Not required	Not required
Built Environment	Required for all indicators	Not required