

# SDG indicator metadata

(Harmonized metadata template - format version 1.1)

## 0. Indicator information (SDG\_INDICATOR\_INFO)

### 0.a. Goal (SDG\_GOAL)

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

### 0.b. Target (SDG\_TARGET)

Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

### 0.c. Indicator (SDG\_INDICATOR)

Indicator 11.5.3: (a) Damage to critical infrastructure and (b) number of disruptions to basic services, attributed to disasters

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

VC\_DSR\_CDAN - Number of damaged critical infrastructure attributed to disasters [11.5.3]

VC\_DSR\_HFDN - Number of destroyed or damaged health facilities attributed to disasters [11.5.3]

VC\_DSR\_EFDN - Number of destroyed or damaged educational facilities attributed to disasters [11.5.3]

VC\_DSR\_CDYN - Number of other destroyed or damaged critical infrastructure units and facilities attributed to disasters [11.5.3]

VC\_DSR\_BSDN - Number of disruptions to basic services attributed to disasters [11.5.3]

VC\_DSR\_ESDN - Number of disruptions to educational services attributed to disasters [11.5.3]

VC\_DSR\_HSDN - Number of disruptions to health services attributed to disasters [11.5.3]

VC\_DSR\_OBDN - Number of disruptions to other basic services attributed to disasters [11.5.3]

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

2024-12-20

### 0.f. Related indicators (SDG\_RELATED\_INDICATORS)

1.5.1, 1.5.2, 11.5.1, 11.5.2, 13.1.1

### 0.g. International organisations(s) responsible for global monitoring

(SDG\_CUSTODIAN\_AGENCIES)

United Nations Office for Disaster Reduction (UNDRR)

## 1. Data reporter (CONTACT)

### 1.a. Organisation (CONTACT\_ORGANISATION)

United Nations Office for Disaster Reduction (UNDRR)

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

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

**Definition:**

This indicator measures the number of damaged or destroyed critical infrastructure attributed to disasters, including health and education facilities, as well as the number of disruptions to basic services.

**Concepts:**

**Disasters:** A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts (UNDRR, 2017, <https://www.preventionweb.net/terminology/disaster>).

**Critical infrastructure:** The physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society.

**Basic services:** Services that are needed for all of society to function effectively or appropriately.

Examples of basic services include water supply, sanitation, health care, and education. They also include services provided by critical infrastructure such as electricity, telecommunications, transport, and waste management that are needed for all of society to function. For this indicator, disruption, interruption or lower quality of basic services is proposed to be measured for the following public services:

- Educational facilities: play schools, kindergartens, primary, secondary or middle schools, technical-vocational schools, colleges, universities, training centres, adult education, military schools and prison schools
- Healthcare facilities: health centres, clinics, local, regional and tertiary hospitals, outpatient centres, health laboratories and in general facilities used by primary health providers
- Power/energy system: generation facilities, transmission and distribution system and dispatch centres and other works
- Sewerage system: sanitation and sanitary sewage systems and collection and treatment of solid waste.
- Solid waste management: collection and treatment of solid waste.
- Transport system: road networks, railways (including stations), airports and ports
- Water supply: drinking water supply system (water outlets, water treatment plants, aqueducts and canals which carry drinking water, storage tanks.)
- Information and Communication Technology (ICT) system: plants and telephone networks (telecommunication network), radio and television stations, post offices and public information offices, internet services, radio telephones and mobile phones.
- Emergency Response: disaster management office, fire management service, police, army and emergency operation centres.

An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.

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

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Number

## 2.c. Classifications (CLASS\_SYSTEM)

Not applicable

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

### 3.a. Data sources (SOURCE\_TYPE)

Data provider at national level is appointed Sendai Framework Focal Points. In most countries disaster data are collected by line ministries and national disaster loss databases are established and managed by special purpose agencies including national disaster management agencies, civil protection agencies, and meteorological agencies. The Sendai Framework Focal Points in each country are responsible of data reporting through the Sendai Framework Monitoring System.

### 3.b. Data collection method (COLL\_METHOD)

Data are reported by national Sendai Framework focal points in the Sendai Framework Monitor (SFM) and national disaster loss database: DesInventar-Sendai.

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

Data are reported in Sendai Framework Monitor (SFM) on an ongoing basis, and snapshotted once every year.

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

Data are released once a year.

### 3.e. Data providers (DATA\_SOURCE)

United Nations Office for Disaster Reduction (UNDRR)

### 3.f. Data compilers (COMPILING\_ORG)

United Nations Office for Disaster Reduction (UNDRR)

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

The Open-ended Intergovernmental Expert Working Group on Indicators and Terminology Related to Disaster Risk Reduction (OIEWG) report, endorsed by the United Nations General Assembly in Resolution A/RES/71/276, requested the UNDRR to undertake technical work and provide technical guidance to develop minimum standards and metadata, the methodologies, and the global monitoring and measurements of the SFM global indicators.

This indicator is recommended by the OIEWG for the measurement of global Target D of the Sendai Framework, which were endorsed by the UN General Assembly in its Resolution A/RES/71/276, *Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk*.

## 4. Other methodological considerations (OTHER\_METHOD)

### 4.a. Rationale (RATIONALE)

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States in March 2015 as a global policy of disaster risk reduction.

The Open-ended Intergovernmental Expert Working Group on Indicators and Terminology relating to disaster risk reduction (OIEWG) established by the United Nations General Assembly (UNGA) (resolution 69/284) has developed a set of indicators to measure global progress in the implementation of the Sendai Framework, which was endorsed by the UNGA (OIEWG [report A/71/644](#)). The relevant global indicators for the Sendai Framework will be used to report for this indicator.

The disaster related infrastructure loss and basic service disruptions are significantly influenced by both large-scale catastrophic events, as well as a high number of small-scale hazardous events. UNDRR recommends Member States to report the data by event in DesInventar-Sendai, and per the minimum reporting requirement of the Sendai Framework Monitor (SFM) using the Technical Guidance (see Reference and Documentation section), so complementary analysis can be done on the regional and global scale.

#### 4.b. Comment and limitations (REC\_USE\_LIM)

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The Sendai Framework Monitoring (SFM) System has been developed to measure the progress in the implementation of the Sendai Framework by UNGA endorsed indicators. Member States report through the system since March 2018. The data for SDG indicators are compiled and reported by UNDRR.

Not every country has a national disaster loss database that is consistent with these guidelines (although current coverage exceeds 113 countries). It is expected that all countries will build/adjust national disaster loss databases according to the recommendations and guidelines by the OEIWG.

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

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$$D_1 = D_2 + D_3 + D_4$$

Where:

D<sub>1</sub>: Number of damaged to critical infrastructure attributed to disasters; corresponding to Sendai Framework Indicator D-1.

D<sub>2</sub>: Number of destroyed or damaged health facilities attributed to disasters; corresponding to Sendai Framework Indicator D-2.

D<sub>3</sub>: Number of destroyed or damaged educational facilities attributed to disasters; corresponding to Sendai Framework Indicator D-3.

D<sub>4</sub>: Number of other destroyed or damaged critical infrastructure units and facilities attributed to disasters; corresponding to Sendai Framework Indicator D-4. The decision regarding those elements of critical infrastructure to be included in the calculation will be left to the Member States. Protective infrastructure and green infrastructure should be included where relevant.

$$D_5 = D_6 + D_7 + D_8$$

Where:

D<sub>5</sub>: Number of disruptions to basic services attributed to disasters; corresponding to Sendai Framework Indicator D-5.

D<sub>6</sub>: Number of disruptions to educational services attributed to disasters; corresponding to Sendai Framework Indicator D-6.

D<sub>7</sub>: Number of disruptions to health services attributed to disasters; corresponding to Sendai Framework Indicator D-7.

D<sub>8</sub>: Number of disruptions to other basic services attributed to disasters; corresponding to Sendai Framework Indicator D-8. The decision regarding those elements of basic services to be included in the calculation will be left to the Member States.

The full methodologies can be obtained at the Technical guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction (UNDRR 2017).

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

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Data are validation by UNDRR and national focal points.

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

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Not applicable

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

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- **At country level**

Not applicable

- **At regional and global levels**

Not applicable

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

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Not applicable

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

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- Technical guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction
- ADPC Disaster and Climate Resilience e-Learning: An orientation to using the online Sendai Framework Monitor, <https://courses.adpc.net/courses/course-v1:UNISDR+SFM001+2019Y1/about>

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

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Not applicable

#### 4.j Quality assurance (QUALITY\_ASSURE)

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Not applicable

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

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Not applicable

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

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**Data availability:**

**Data availability:**

2005-2023

**Time series:**

Annual

**Disaggregation:**

- By hazard types
- By geography (administrative unit)

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

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Not applicable

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### 7. References and Documentation (OTHER\_DOC)

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**Internationally agreed methodology and guideline URL:**

- Technical guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction (UNDRR 2017)  
[https://www.preventionweb.net/files/54970\\_collectionoftechnicalguidancenoteso.pdf](https://www.preventionweb.net/files/54970_collectionoftechnicalguidancenoteso.pdf)

Sendai Framework Monitor

<https://sendaimonitor.undrr.org/>

DesInventar-Sendai

<https://www.desinventar.net/>

**References:**

- The OEIWG was given the responsibility by the UNGA for the development of a set of indicators to measure global progress in the implementation of the Sendai Framework, against the seven global targets. The work of the OEIWG shall be completed by December 2016 and its report submitted to the General Assembly for consideration. The IAEG-SDGs and the UN Statistical Commission formally recognizes the role of the OEIWG, and has deferred the responsibility for the further refinement and development of the methodology for disaster-related SDGs indicators to this working group.  
<http://www.preventionweb.net/drr-framework/open-ended-working-group/>

- The latest version of documents are located at:  
<http://www.preventionweb.net/drr-framework/open-ended-working-group/sessional-intersessional-documents>