BNPB Badan Pusat Statistik

DISASTER OCCURRENCE DATA COLLECTION

A Joint Presentation of

The Disaster Management Authority

The Statistics Indonesia

April 2022

BNPB Badan Pusat Statistik

BNPB’s Perspectives

BNPB ADHERES TO THE REGULATION NUMBER 7 / 2012
Indonesian Disaster Data and Information Management Guidelines

FUNCTIONS:

- Affirming the definition of disaster as per the Disaster Management Act 24/2007
- And Provide definitions of various threats and disaster hazards / as stipulated in Regulation 8 / 2011 Concerning Standardization Of Disaster Data

POLICY

- Stating a A ONE STOP SHOP DATA policy to ensure accuracy and consistency:
- Data and information is to be issued by BNPB or BPBD following verification and validation for a certain period of time
- In order to to mitigate duplication and confusion for decision making

MECHANISMS

- Local BPBDs collect data using standard data formats.
- BNPB nad Provincial BPBD verify and validate the data in coordination with relevant ministries/ agencies and local sectoral offices

DYNAMIC DATA:

- Data on disaster events that are still temporary
- Data comes from various sources
- The data collection is carried out by Pusdalops PB or the Emergency Response Post

STATIC DATA:

- Data on disaster events that are permanent or do not change
- Is the final data
- Data collection is carried out by the BNPB Pusdatinmas, Provincial BPBDs, and Regency/City BPBDs.
- Used for advanced analysis, such as loss calculation, development planning, Disaster risk reduction

VERIFICATION AND VALIDATION

BNPB Centre conducts , verification and validation , at least, once a year
to synchronise the data between BNPB and BPBDs
to produce final / definitive data
to refer to the Concept And Definition Of Disaster Event Recording (Regulation No. 8 / 2011 Concerning Standardization Of Disaster Data)

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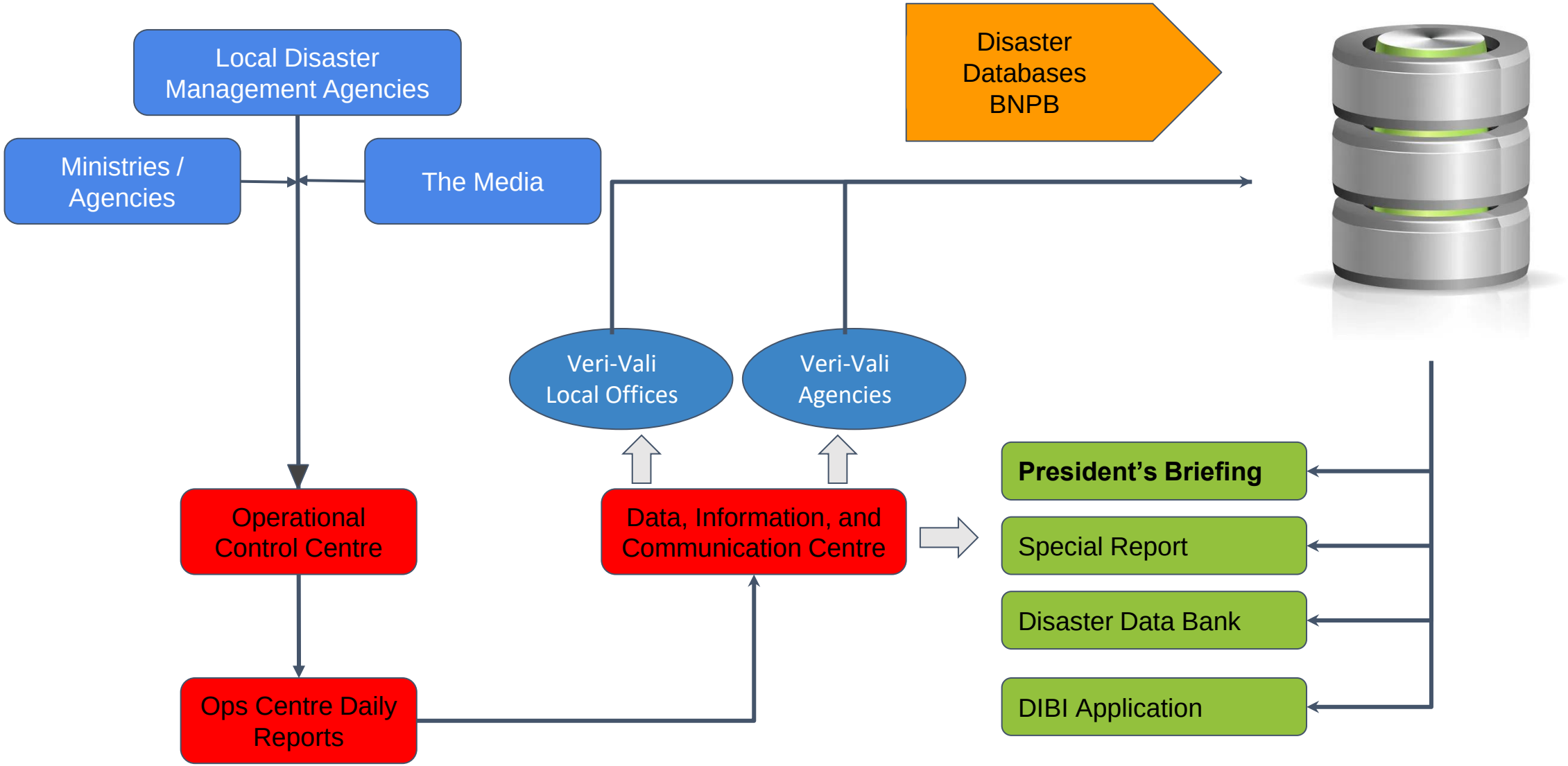
BNPB IMPLEMENTS DISASTER DATA MANAGEMENT MECHANISM



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BNPB CONTINUES DEVELOPING STANDARDS FOR OCCURRENCE

TYPES OF RECORDED HAZARDS:

- Events that typically induce casualties and/or damage

- floods, cyclones, landslides, floods and landslides, earthquakes, volcanic eruptions, tidal waves, abrasion, drought, forest and land fires, tsunamis, earthquakes and tsunamis.

THRESHOLD:

- To record only severe events that have adverse consequences
- Example:
  - Landslide: causes road damage to 1 km or more
  - Forest and land fire of 1 hectare or more

LINKS TO THE CALCULATION OF IMPACTS:

- Death + missing: accumulated number of reported cases
- Injured : all reported injured persons during the emergency phase
- Affected: the highest reported number of people affected
- Displaced: the highest reported number of people displaced
- Damaged houses and other buildings (heavy, moderate, light):
  - the highest reported number of damaged structure
  - submerged houses are calculated differently: the number of submerged during the emergency response period.

YET TO BE RECORDED:

- Vehicles and means of transport
- Livestock losses

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BNPB PROMOTES DISASTER OCCURRENCE CONNECTIVITY

Data, Info, Com Centre, BNPB

Administrator, Operator
Editor, validation, finalisation

Operations Control Centre, BNPB

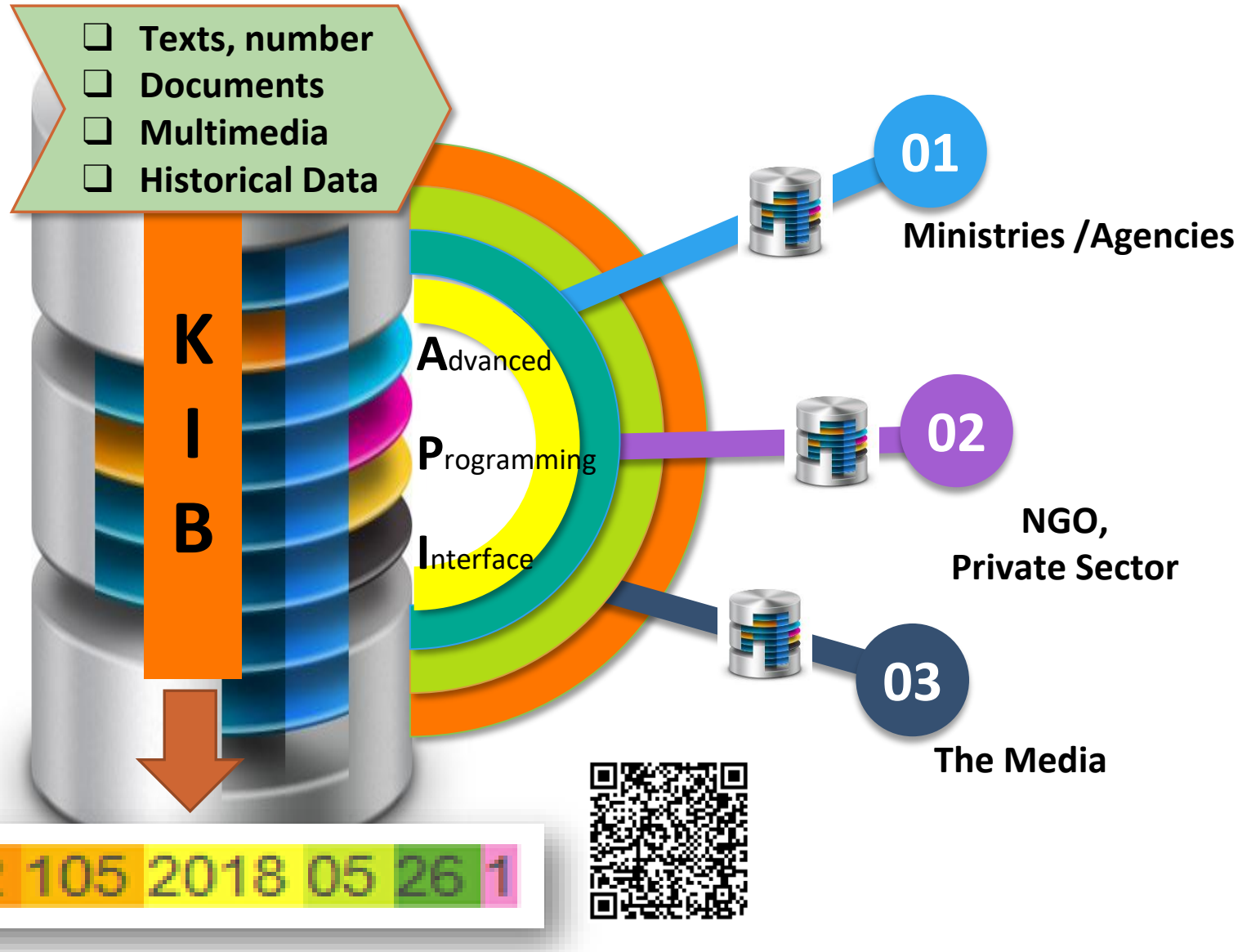
Administrator, Operator
Editor, validation,

Provincial (BPBD)

Administrator, Operator
Editor, validation,

Municipal/City (BPBD)

Administrator, Operator
Disaster Occurrence Data Entry



Codes: Province + Municipal/City + Disaster Occurrence Categories + Year of Occurrence + Month of Occurrence + Date of Occurrence + Index

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Georeferenced Disaster Occurrence Dashboard
https://gis.bnpb.go.id/

GEOPORTAL DATA BENCANA INDONESIA

Beranda | Data Bencana | Pantauan Bencana | Buletin | Infografis | Tanggal Penting | BPBD | ATLAS | Tentang

Disaster Occurrences by Province in 2022

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Disaster Occurrence Registry at the Operation Centre's Website
https://gis.bnpb.go.id/

GEOPORTAL DATA BENCANA INDONESIA

Beranda | Data Bencana | Pantauan Bencana | Buletin | Infografis | Tanggal Penting | BPBD | ATLAS | Tentang

SEARCHABLE DISASTER OCCURRENCES

Types of hazard: Occurrence

Date Begins: Enter event starting date

Date Ends: Enter event ending date

Cari

Show 10 entries

Search:

No	Municipal ID	Date	Hazard	Location	Municipal	Province	Description	Causes	Casualties			Houses Damaged		
									Died	Missing	Injured	Severe	Moderate	Light
1	3204	2022-04-25	PUTING BELIUNG	Kec. Ciparay Ds. Mekarlaksana Kec. Pasirjambu Ds. Cibodas	BANDUNG	JAWA BARAT		Dipicu oleh intensitas curah hujan yang cukup tinggi disertai angin kencang	0	0	28	0	9	16
2	1406	2022-04-25	BANJIR	Kec. Tapung Ds. Karya Indah	KAMPAR	RIAU		Dipicu oleh intensitas curah hujan	0	0	4	0	6	20

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BPS' Perspectives

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BPS HAS THE SUPPORTIVE ROLES IN THE COLLECTION OF DISASTER OCCURRENCE DATA

GENERAL ROLES (UNECE)

CORE ROLES

- *Provide basic data*
- *Support the production and delivery of information*
- *International comparability*
- *Quality standard*
- *Dissemination to decision makers*

ADDITIONAL ROLES

- *Measurement of direct & indirect impacts*
- *Information mapping*
- *Measurement methodology*
- *Dissemination of stats information*

ROLES AS STATISTICS ADVISOR

- *Statistics policy*
- *Coordination of statistical activities*
- *Technical & methodological standards*
- *Basic population data*
- *Collection of related data in*
  - *Socioecon national surveys*
  - *VIllage potential data*
  - *Other surveys*
- *Data standards & Metadata*
- *Data interoperability*
- *Reference code from the Indonesia One Data Forum*

SPECIFIC TO DISASTER OCCURRENCE DATA

Help setting

- *Metadata*
- *Data Standards (HIP)*

Conducting data collection training

Provide recommendations for ministries/agencies planning for occurrence data

Help data checking

Displaying event data in Satcana of Indonesia Data Hub

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BPS PROVIDES THE EASIER ACCESS TO THE DISASTER OCCURRENCE-RELATED BASIC DATA

POPULATION CENSUS
- *Total of population*

SOCIOECONOMIC CENSUS
- *Total of populationinformation*
- *International comparability*
- *Quality standard*
- *Dissemination to decision makers*

VILLAGE POTENTIAL DATABASES
- *Total households*
- *Percentage households under poverty*
- *Percentage with access to clean water*
- *Percentage with access to sanitation*

NATIONAL ACCOUNT
- *National GDP actual*
- *National DGP constant price*
- *Regional GDP actual price*
- *Regional GDP at constant price*

BPS HELPS ESTABLISH AND REINFORCE QUALITY STANDARDS

> *WHAT IS QUALITY DATA: data that is furnished with attributes such as metadata and data standards, which supportive tasks are within the purview of the roles of BPS as the national statistics data adviser*

BPS' ROLES IN DISASTER DATA QUALITY ASSURANCE

- ***Provide input*** *to BNPB related to the standard of measurement and calculation of disaster data*
- ***Encourage*** *each Data Producers to submit and establish Statistical Data Standards (SDS) for each disaster data that will be used across agencies*
- ***Monitor*** *the submission of statistical data standards and metadata sufficiency for each disaster data.*

BPS provide repository for cross-agency disaster data and media in a Disaster Statistics Portal (Statcana) as part of the Indonesia Data Hub (INDAH)

EXAMPLE OF METADATA IN THE PORTAL

Kepadatan Penduduk

Kode	-
Definisi	Kepadatan Penduduk menunjukkan banyaknya jumlah penduduk untuk setiap kilometer persegi luas wilayah
Konsep	**Kepadatan Penduduk:** Banyaknya penduduk per satuan luas. Kegunaan Sebagai dasar kebijakan pemerataan penduduk dalam program transmigrasi. Keterangan : Kepadatan penduduk kasar atau crude population density (CPD) menunjukkan jumlah penduduk untuk setiap kilometer persegi luas wilayah. Luas wilayah yang dimaksud adalah luas seluruh daratan pada suatu wilayah administrasi.
Ukuran	Proporsi
Satuan	Penduduk per km persegi
Subyek	kependudukan dan migrasi
Manfaat	a.Untuk mengetahui konsentrasi penduduk di suatu wilayah. b.Digunakan sebagai acuan dalam rangka mewujudkan pemerataan dan persebaran penduduk (program transmigrasi).
Interpretasi	Angka kepadatan penduduk menunjukan rata-rata jumlah penduduk tiap 1 kilometer persegi. Semakin besar angka kepadatan penduduk menunjukan bahwa semakin padat penduduk yang mendiami wilayah tersebut. Misalnya kepadatan penduduk Indonesia tahun 2009 sebesar 124 artinya bahwa secara rata-rata tiap 1 kilometer persegi wilayah di Indonesia didiami oleh 124 penduduk.
Rumus	$KP = \frac{P}{A}$

EXAMPLE OF DATA STANDARDS

IDSDSN	Konsep SDSN	Definisi SDSN	Klasifikasi SDSN	Ukuran SDSN	Satuan SDSN
(1)	(2)	(3)	(4)	(5)	(6)
	lokasi terhadap kawasan hutan		3. Di luar kawasan hutan		
SP00184 .00.02	Jumlah desa/kelurahan berdasarkan lokasi terhadap kawasan hutan	Banyaknya desa/kelurahan berdasarkan lokasi terhadap kawasan hutan	1. Perkotaan 2. Perdesaan	Jumlah	desa/kel
SP00186 .00.00	Jumlah desa/kelurahan berdasarkan tipologinya	Banyaknya desa/kelurahan menurut tipologinya	1. Perkotaan 2. Perdesaan	Jumlah	desa/kel
SP00187 .00.00	Jumlah desa/kelurahan menurut akses jalan darat antar desa/kelurahan	Banyaknya desa/kelurahan menurut akses jalan datar antar desa/kelurahan	1. Perkotaan 2. Perdesaan	Jumlah	desa/kel
SP00189 .00.00	Jumlah desa/kelurahan menurut jenis Permukaan jalan darat antar desa/kelurahan	Banyaknya desa/kelurahan menurut permukaan jalan darat antar desa/kelurahan	1. Perkotaan 2. Perdesaan	Jumlah	desa/kel
SP00191 .00.00	Jumlah desa/kelurahan yang berbatasan langsung dengan laut	Banyaknya desa/kelurahan yang berbatasan langsung dengan laut	1. Perkotaan 2. Perdesaan	Jumlah	desa/kel
SP00192 .00.00	Jumlah Desa/Kelurahan	Banyaknya desa/kelurahan yang dilalui sungai	1. Perkotaan 2. Perdesaan	Jumlah	desa

BPS FACILITATES BNPB, MINISTRIES AND AGENCIES DEVELOP DISASTER DATA STANDARDS

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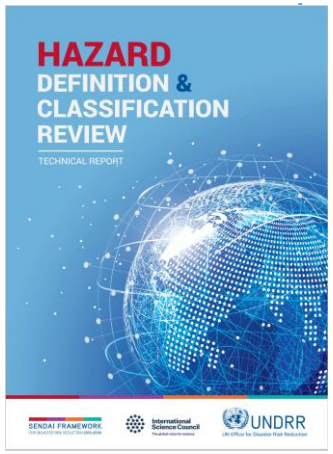
ISSUES

There are disaster occurrence databases - some are actually rather sophisticated such as the IRBI. There is now a momentum to quickly establish data standards, including:.

- *Definition, types and classification of events*
- *Threshold of disaster events*
- *Unique identification of events*



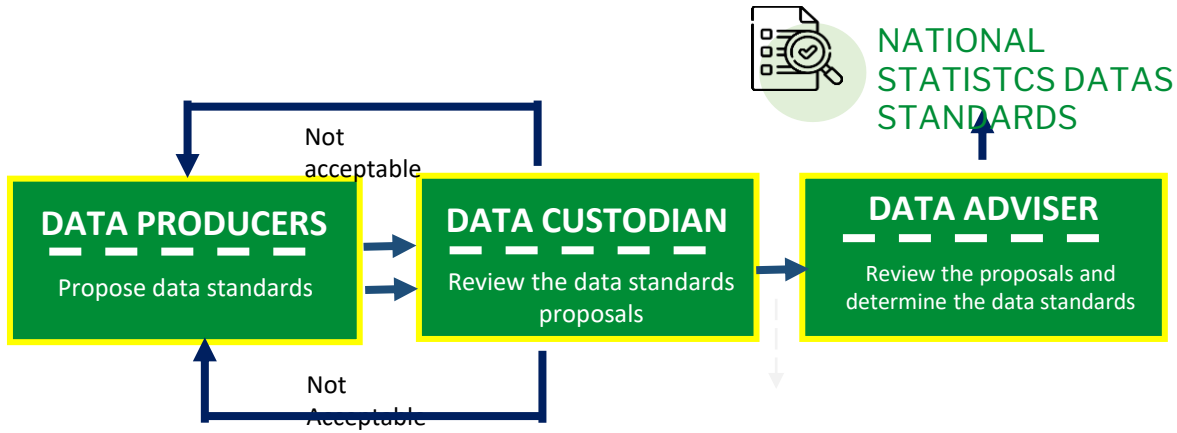
More than 300 well defined hazards, classified into 8 categories
Come with concept, definitions, classifications, formula and references

This UNDRR - ISC products has the great potential to be adapted into Indonesian context to serve as the basis for adopting a nationally-agreed data standards for disaster-related statistcs

SECTORAL AND MULTISECTORAL DATA STANDARDS

	Cross-Sectoral	Particular Ministry/Sector
Regulation	Statistics Data Adviser	Particular Ministry / Agency
Format	Regulation of the Head of BPS	Regulation of Minister or head of Agency
Applied to	All Ministries/ Agencies	Particular ministry / agency

DEVELOPMENT OF MULTISECTORAL DATA STANDARDS



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BPS PLANS TO ENHANCE DISASTER OCCURRENCE DATA

* ***To promote data quality:***
  * ***by developing the disaster data standards (adapting the HAZARD INFO PROFILE)***
  * ***by providing the basic data references from the Indonesian One Data Forum***
  * ***by making them easily accessible to users through the DISASTER STATISTICS PORTAL as part of the Indonesian Data Hu***
* ***To support develop capacity***
  * ***by helping ministries/agencies develop metadata and data standards***
  * ***by providing capacity development in data planning, production and communication***
* ***To support with data accessibility***
  * ***by establishing a disaster statistics portal (Statcana) as part of Indonesia Data Hub***
    * ***easier access to the disaster relevant basic data***
    * ***repository of data standards including metadata and references***
* ***To help communicate disaster occurrence data to policy makers***
  * ***by including disaster occurrence data in the BPS'statistics policy briefs, etc.***

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Thank you