(11 September 2023)

Instruction for World Reports on Landslides

Invitation: Landslide experts of ICL and colleagues are invited to contribute landslide cases over the world to "World Reports on Landslides" in WEB https://www.landslides.org/projects/world-report-on-landslides/.

The reports may be used for research and capacity development in landslide risk reduction activities with the United Nations International Strategy for Disaster Reduction (UNISDR).

This instruction provide explanation of items in "**Data Sheet for World Report on Landslides"**.

1. Landslide Case Identifier (LCI):

   Each registered landslide case has its own Identifier number.

   Number consists of three letter country code (ISO 3166-1 alpha-3) and year/date/time of submission.

   Example: JPN1512101230

   WEB of country code: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-3

2. Location of landslides

   Unit of latitude and longitude is degree/minute/second.
   The unit may be changed from degree to degree/minute/second by tool.
   Please find the latitude and longitude of your reporting landslide by the google earth.
   Please submit the google earth kmz file as an attachment.

3. Authors:
   Office and Address are necessary to identify the authors. e-mail is not always necessary.

4. Landslide Types:
   Types of materials and movements are illustrated in **the Landslide Handbook – A Guide to Understanding Landslides** (USGS Circular 1325) sponsored by the International Consortium on Landslides (ICL) as an activity of International Programme on Landslides (IPL M106).
   The major content is compiled as ICL Landslide Teaching Tools: PDF-tool 5.001-1.1 uploaded in this IPL WEB.

   1) Type of material: rock, debris, earth, complex, unknown
      Please select one involved material.
      If two or more materials are involved, please select complex in addition to involved types of

materials, such as complex (rock and debris)

2) Type of movement : fall, topple, slide, spread, flow, complex, unknown
   Please select one type of movement.
   If two or more different type of movements are involved, please select complex in addition to involved types of movements, such as complex (slide and flow)
3) Velocity: extremely rapid, very rapid, rapid, moderate, slow, very slow and extremely slow, unknown
   Please select one velocity range which you estimate or guess as the maximum speed of reporting landslide.

Class	Velocity (mm/sec)	Other velocity units	Description
7	5×10^{3} or more	5 m /sec or greater	Extremely rapid
6	5×10^{1} ~ 5×10^{3}	3 m/min ~5 m/sec	Very rapid
5	5×10^{-1} ~ 5×10^{1}	1.8 m/hr ~ 3m/min	Rapid
4	5×10^{-3} ~ 5×10^{-1}	13 m/month ~1.8 m/hr	Moderate
3	5×10^{-5} ~ 5×10^{-3}	1.6m/year ~13 m/month	Slow
2	5×10^{-7} ~ 5×10^{-5}	16 mm/year ~1.6 m/year	Very slow
1	5×10^{-7} or less	1.6 mm/year or less	Extremely slow

Note: Type of movements are classified as fall, topple, slide, spread, flow. The International Geotechnical Societies's UNESCO Working Party for Landslide Inventory succeeded by IUGS Working group on Landslides has established the landslide classification during the United Nations Internationl Decade for Nautral Disaster Reduction (IDNDR:1990-1999). It was published below.

Cruden D.M., VARNES D. J. (1996) - Landslide types and processes. In: Turner A.K.; Shuster R.L. (eds) Landslides: Investigation and Mitigation. Transp Res Board, Spec Rep 247, pp 36–75.

It was introduced in many media and publication. You may refer the WIKIPEDIA as one of source. http://en.wikipedia.org/wiki/Landslide_classification

The Landslide Handbook – A Guide to Understanding Landslides (ICL Landslide Teaching Tools: PDF-tool 5.001-1.1) includes the terminology of avalanche. The type of Avalanche is not included in this reporting form following the agreed classification during IDNDR. Avalanche will be classified as flow or slide. Please write the precise explanation of the landslide in the part of description with photo and figures.. This classification is for the aim of search.

4) Slope: Extremely steep, very steep, steep, moderate, gentle, very gentle and almost flat, unknown.
Please select one range of slope which you measured or guessed for the case.

Class	Slope Angle (degree)	Description
7	50 or more	Extremely steep
6	40 — 50	Very steep
5	30 — 40	Steep
4	20 — 30	Moderate
3	10 — 20	Gentle
2	5 — 10	Very gentle
1	5 or less	Almost flat

5) Depth: extremely deep, very deep, deep, moderate, shallow, very shallow, extremely shallow, unknown
Please select one depth range which you measured, estimated or guessed for the reporting landslide.

Class	Depth (m)	Description
7	500 or more	Extremely deep
6	100 – 500	Very deep
5	50 – 100	Deep
4	20 — 50	Deep- Moderate
3	5 – 20	Moderate-shallow
2	1.0 – 5	Shallow
1	1.0 or less	Surficial

6) Volume: extremely large, very large, large, large- moderate, moderate-small, small, very small, unknown

Please select one volume ranges which you estimated or guessed for the reporting landslide.

Class	Volume (m^3)	Description
7	10^8 or more	Extremely large
6	10^7 — 10^8	Very Large
5	10^6 — 10^7	Large
4	10^5 — 10^6	Large- Moderate
3	10^4 — 10^5	Moderate-Small
2	10^3 — 10^4	Small
1	10^3 or less	Very Small

5. Activities

1) Date of occurrence: Day ( ) Month ( ) Year ( )

2) Others : currently active, active in the past, unknown

If, the landslide is moving slowly or repeatedly move, it can be classified, currently active.

The date is not identified, but if the landslide is sure to have moved in the past from the topography etc, it is active in the past. Please write the state of activity in the following box.

6. Triggering factors: rainfall, earthquake, snow melting, erosion, human activities, rainfall & earthquake, human activities & rainfall, human activities & earthquake, others, unknown
   Please select one or more triggers.

7. Damage
   1) Death(s) & missing
   2) Houses and other topical damages
   3) Economical loss if the economical loss is estimated.

8. Land use:

Source Area: Forest, Farming, Pasture, Wildland, Urban area, Human settlement, Industrial use, Road, Railways, Sea/lake, River, Cultural heritage site

Run-out/deposition area: Forest, Farming, Pasture, Wildland, Urban area, Human settlement, Industrial use, Road, Railways, Sea/lake, River, Cultural heritage site

9. Keywords:
   Please write any key words which characterize the landslide (Max 6)

10. Description
    Please describe this landslide (less than 30 lines)

11. Source documents (Reference)
    Please write the source of this information (papers, reports or web) of this landslide case (less than 5)

12. Attached information.
    Please attach the important information/document such as photo, map, plan and cross section, figures or other information which are not included as a reference.
    Notice: A report including data file should include attachments of Figures or Simulation Video or others to present the content of digital data of testing/monitoring/simulation/analysis/others.