



**GUIDELINES ON THE EXCHANGE AND DISSEMINATION
OF HYDRO-METEOROLOGICAL DATA AND
INFORMATION**

**NATIONAL CENTER FOR HYDROLOGY AND METEOROLOGY
ROYAL GOVERNMENT OF BHUTAN**

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1 Background

The National Center for Hydrology and Meteorology (NCHM) is an autonomous scientific and technical organization of the Royal Government of Bhutan. It is the nodal agency responsible for the generation of information and delivery of products and services on weather, climate, cryosphere and water resources in Bhutan.

NCHM hosts the national database on meteorology, cryosphere, hydrology, and related information and data. The Second Governing Board (GB) meeting of the National Center for Hydrology and Meteorology (NCHM) held on April 2, 2018 directed the Center to formulate the “Guidelines on the Exchange and Dissemination of Hydro-meteorological Data and Information” until replaced by a new Hydro met Policy of Bhutan.

2 Definitions

2.1 In these Guidelines, unless otherwise stated, all terms are in accordance with the WMO/Meteoterm and WMO/UNESCO International Glossary of Hydrology (WMO, No. 385, 3rd Edition, 2012).

2.2 The terms below shall have the following meaning:

Hydrometeorology	Includes meteorology, hydrology and cryosphere.
Data	Output resulting from the measurement or observation of variables
Information	Result of analyzing or integrating data
Data Provider	NCHM which provides data or information for exchange under this guideline
Data Receiver	Any organizations/individuals, which receives data or information, exchanged under this guideline from NCHM.
Redistribution	Dissemination by a Data Receiver of data or information exchanged under this guideline to a third party. Including the sale and free dissemination, either physically or electronically, of data and information.

3 Context

- 3.1 Exchange of hydro-meteorological data and information is vital for sustainable development, to protect lives and property, research and decision support, and mitigation of hydro-meteorological induced hazards.
- 3.2 Currently there is no specific legal statute regarding the collection and exchange of hydrological (and meteorological) data and information with line agencies/public/individual as well as with other regional and international entities.

4. Objectives of the Guidelines

- 4.1 These Guidelines would provide the technical and conceptual principles/framework required to promote data exchange and interoperability within the line agencies/public and individuals.
- 4.2 Guidelines is intended to provide a framework for exchange and dissemination of data and information within national as well as bilateral, regional and international organizations to whom Bhutan is signatory.

5. Data covered by the Guidelines

- 5.1 These Guidelines cover all hydro-meteorological data or information collected by NCHM in geographical location within Bhutan only.
- 5.2 These guidelines cover all hydro-met data and information archived/held by the Center regardless of the sources of data.
- 5.3 Request for the following data and information shall not be considered:
 - a) Entire data set (All stations/all parameters);
 - b) Meteorology and hydrology model set up;
 - c) Model raw data;
 - d) Climate raw data and files;
 - e) Shape files;

6. Data sharing Terms and Conditions

- 6.1 The Data Provider reserves the right to deny access to information if deemed inappropriate for sharing with other agencies or individuals.

- 6.2 The Data Provider reserves the right to prioritize requests for data based on purpose.
- 6.3 Request for data of nationwide coverage and/or observational time-scale shall be assessed on a case-by-case basis, subject to the clients agreeing to a separate instrument of partnership in the project/study of interest.
- 6.4 Data is for the named person(s)/institution for the sole purpose of their work /on the named project/research; and should not be shared with any third party wholly or partially.
- 6.5 Any reports/findings/publications/articles or any information/knowledge thereof arising from the use of data will be shared with the Center to understand the need and priorities of data users and improve data services.
- 6.6 The use of raw data for any commercial purpose or for profit is prohibited.
- 6.7 Data source must be referenced.

7. Data exchange procedures

- 7.1 The normal procedure for exchange of data or information is for the organization requiring data to request for an individual or repeated exchange, in writing, with the relevant Data Provider.
- 7.2 Data Receiver shall submit duly completed Data Requisition Form either in hard or soft copy addressing to the contact address. Incomplete form shall not be processed. Requests should precisely and unambiguously define what data or information is required and by when, including details of the parameter, time period, reporting interval and monitoring station required.
- 7.3 The intended use of the data or information should be defined in the request and if the supplied data or information is subsequently to be used for other purposes other than expressed, new permission should be sought from the Data Provider.

8. Time for provision

- 8.1 Where organizations are exchanging data or information, where major processing or analysis is not required, the Data Provider shall supply this within a maximum of 7 working days of receiving a written request. Data Provider will otherwise provide the reasons why it cannot be provided within 7 days.
- 8.2 Where repeated exchanges are established, or (near) real-time data is required, the Data Provider and Data Receiver should agree a timetable for regular delivery.

9. Format/transfer method

- 9.1 Data and information shall be in a format maintained by the Data Provider and will be provided electronically.
- 9.2 Hard copy data will only be entertained provided the cost for process and printing are borne by Data Receiver.

10. Data quality and disclaimer

- 10.1 Through the use of quality control procedures, Data Provider will make every effort to maintain quality and consistency of data and information being shared under this Guideline.
- 10.2 Where data and information is exchanged that has not undergone full quality control and is considered provisional, the Data Provider shall inform the Data Receiver at the point of transfer.
- 10.3 Appropriate use of data and information exchanged under these Guidelines is the responsibility of the Data Receiver. The Data Provider accepts no liabilities for any damage, loss, claim, or lawsuit arising from any error, inaccuracy or other problems with the data or results arising out of the use of the data.

11. Use and redistribution

- 11.1 Data or information exchanged under these Guidelines shall not be used by the Data Receivers in connection with other activities other than what is specified in the requisition form.
- 11.2 Data Receiver shall not redistribute data or information exchanged under these Guidelines to any third party without the prior agreement or consent of the Data Provider.
- 11.3 Data Receiver shall not redistribute data and information publicly via its online web-portal, social media for security, aeronautic and other uses.

12. Ownership and acknowledgment

- 12.1 The provision of data or information under these Guidelines confers only a right for the Data Receiver to use it. Ownership of the data or information will not be transferred.
- 12.2 In any publications, reports or products arising from use of the data or information, the Data Receiver undertakes to acknowledge the Data Provider as the source.

13. Data/Service Charge

- 13.1 Currently Hydrometeorological data and information exchanged are done free of cost.
- 13.2 Data Provider reserves the right to charge the Data receivers based on the change in government policies or other reasons.
- 13.3 It is expected that most data will be exchanged free of charge and handling charges will only be levied where data requires significant manual processing prior to exchange.

14. Data Access and Sharing Protocol for Data Provider

- 14.1 Data shall be shared from a single point of contact authorized by respective Divisions.
- 14.2 Weather and Climate data shall be accessible from Weather and Climate Services Division and shared upon approval of the Head of the Agency/Division Chief.
- 14.3 Hydrology data shall be accessible from Hydrology and Water Resource Services Division and shared upon approval of Head of the Agency/Division Chief.
- 14.4 Snow and Glacier data shall be accessible from Cryosphere Services Division and shared upon approval of Head of the Agency/Division Chief.
- 14.5 Data shall be shared with the public upon request and submission of completed and signed NCHM Data Request Form (Annexure 1). Users shall be denied access with incomplete Data Request Form.
- 14.6 Requests involving printed copy of data shall be accompanied by a written request along with the Data Request Form specifying the purpose for which data/products are requested.
- 14.7 Requisition for printed copies for claims, legal matters and other official requirements shall be assessed, endorsed and signed by the Chief of the Divisions on a case-by-case basis, which shall be further endorsed by the Director, wherever necessary.

14.8 All data request made by end users and details of data provided shall be logged and documented by the respective Divisions and sections.

14.9 Unauthorized use and distribution of data in any medium to any users is prohibited.

15. Coming into effect

15.1 These Guidelines will come into effect upon the approval by the Governing Board.

15.2 Changes to these Guidelines, must be endorsed by the Governing Board.

16. Termination and withdrawal

18.1 This Guidelines may be terminated by the decision of the Governing Board and/or when it is replaced by an appropriate Hydro-met Data sharing policy of the Government.

17. Other

19.1 The Guidelines shall not affect arrangements for the exchange of data and information between the Signatories provided for in other bilateral or multilateral agreements.

Guidelines as endorsed by the 4th Governing Board Meeting of the Centre held on 3rd January 2020 at Osel Hotel, Thimphu.



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