



नीवे NIWE

(ISO 9001:2008)

---

# WIND DATA SHARING POLICY

---

NATIONAL INSTITUTE OF WIND ENERGY  
CHENNAI-600100



# NATIONAL INSTITUTE OF WIND ENERGY CHENNAI 600100

## Wind Data Sharing Policy (WDSP)-NIWE

### BACKGROUND AND INTRODUCTION

#### Wind Resource Assessment Programme in India

The Wind Power development programme in India was initiated at the end of Sixth Five Year Plan, in 1983-84. In order to identify wind farmable sites in the country, the Government of India launched a national wind resource assessment programme in 1985. Ministry of Non- Conventional Energy Sources (now Ministry of New and Renewable Energy, MNRE) decided to venture a National Wind Resource Assessment programme with dedicated wind monitoring stations to identify windy locations in the country. The task was assigned to the Field Research Unit, Bangalore of Indian Institute of Tropical Meteorology, Pune, in mid 1980s in association with the National Aerospace Laboratories (NAL), Bangalore. Under the programme, 20 m tall tubular guyed masts (tilt-up design) with instrumentation at two levels viz at 10 and 20 m above ground levels were commissioned at carefully chosen locations. The FRU of IITM Bangalore had collected wind data from **448** stations in various states and Union Territories.

After the establishment of National Institute of Wind Energy (formerly, Centre for Wind Energy Technology) in Chennai, the National Wind Resource Assessment Programme has been transferred to NIWE and the activities of FRU-IITM was terminated. Since 2001 the National Wind Resource Assessment Programme is being executed by NIWE on behalf of the Ministry of New and Renewable Energy. Over the period, the height of wind turbines has seen phenomenal upward trend and thus it was also necessary to increase the height of wind monitoring masts to measure the wind close to the hub height. Hence, in order to fulfill the industry need, NIWE started to install taller masts. Initially the wind monitoring was carried out only in known windy areas. Then it was extended to other areas which are not covered in earlier projects to complete the Indian Wind Potential Mapping. All the states and the major union territories, from Kashmir to Kanyakumari are covered under this programme

Under the programme, NIWE has commissioned 50m, 80m, 100m and 120m height masts with multiple level sensors to collect dedicated wind resource data including wind profile along height. The basic data (wind speed, wind directions, temperature and pressure) that are being collected is 10 minutes averaged as



# NATIONAL INSTITUTE OF WIND ENERGY

## CHENNAI 600100

per the industry standard based on 2 seconds samples of wind speed and direction data at multi-level. At present, the sampling rate has been even increased up to 2 sample per second (2 Hz). The data collected under the programme is being used widely to establish wind farms in the country and most of the wind farms established in the country till now are based on the reference data collected under this National Programme of wind resource assessment directly or indirectly. Cumulatively 809 stations have been established as on October 2016 under these programs and the brief information of the same is available in the official website of NIWE.

In order to facilitate wind power developers, policy makers, R&D institutions, in the onshore (*F. No. 66/183/2016-WE, Ministry of New and Renewable Energy, Government of India, Dated: 22 October 2016*) wind power guidelines announced by the Ministry of New and Renewable Energy indicates to provide measured data from all the wind masts installed by NIWE through financial assistance from Government of India through IT mechanism without charging any cost. In this connection, certain guidelines are formulated by NIWE for the systematic data sharing and usage, as follows:

### I. General Policy Guidelines

- a. NIWE is responsible for operation and maintenance of WMS stations as per relevant National/International Protocols. The data collected at WMS (wind Monitoring Stations) are transmitted to the CRS (central receiving stations) at NIWE, Chennai and data is subjected to quality checks and is preserved safely at multiple locations both raw as well as processed format.
- b. NIWE is authorized to provide the processed data from all the WMS through IT mechanism as per National Data Policy. Data sets will be made accessible only through a prescribed process of registration / authorization by respective departments / organizations will be available to the recognized institutions / organizations / public users and through defined procedures. The data will be sent to intended receiver through Secured File Transfer Protocol (SFTP). The methodology involves, storing of data in a file which will be locked using a secured password. The password will be sent to the intended recipient registered mobile number by SMS (short Message Service) or through a registered e-mail id to enable through either the recipient to access the data and download it for further action.



# NATIONAL INSTITUTE OF WIND ENERGY

## CHENNAI 600100

- c. Data obtained by the parties through website would be for their exclusive use only and under no circumstances, these data, in full, part or in any other form, is to be disclosed/distributed/copied/reproduced/transferred/sold to other agencies either electronically or in physical form. **Parties downloading data will have to agree electronically (by clicking on the check box or tab provided) to the terms and conditions of downloading data from NIWE website. Users in all cases will be bound by the terms and conditions agreed to.**
- d. **Authorization to reproduce the downloaded data must be obtained from NIWE.**
- e. All the measured data are expected to be error free. The wind data on NIWE web pages are in the public domain being provided free of cost for the exclusive use wind Industry, academia, researchers, unless specifically noted otherwise, for any lawful purpose so long as you do not: 1) claim it is your own (e.g., by claiming copyright for NIWE)), 2) use it in a manner that implies an endorsement or affiliation with NIWE/MNRE, or 3) modify its content and then present it as official government material. User cannot present information of your own in a way that makes it appear to be official government information.
- f. Use of the NIWE name ("National Institute of Wind Energy") and/or its official name are protected under trademark law and may not be used without permission from the NIWE. Use of the NIWE name and/ or its officials name to identify unaltered NIWE content or links to NIWE web sites are allowable uses.
- g. The user assumes the entire risk related to its use of information on NIWE Web pages data. NIWE provides such information "as is," and NIWE disclaims any and all warranties, whether express or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will NIWE be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of this data. National Institute of Wind Energy (NIWE), Chennai makes no warranty express or implied, or assumes any legal liability or responsibility for the data or use findings of the results from the analysis of the data. NIWE will not involve any of such operational consequences matters.



# NATIONAL INSTITUTE OF WIND ENERGY

## CHENNAI 600100

- h. MNRE/NIWE will be the sole and exclusive owner of the data, (both raw and processed) received from all WMS to the CRS at NIWE, Chennai. The details of wind monitoring stations installed by NIWE are available in the website.
- i. Sensitive data as defined in various Acts and rules of the Government of India, if any may not be shared.

## II. Data Policy

1. The unprocessed raw data would be made available only for verification of the processed data, collaborative work with National and International Institutions to develop wind maps and other value added products with specific permissions from Director General of NIWE. All such wind maps/projects developed and other value added products will be examined by a Wind Monitoring Expert Committee (WMEC) consisting of experts from the Ministry, NIWE, IMD, ISRO, IIT and other reputed institutions under the Chairmanship of DG ,NIWE
2. Under collaborative projects, raw data will be sent to intended receiver through Secured File Transfer Protocol (SFTP) by registered e-mail. The methodology involves, storing of data in a file which will be locked using a secured password in a secured static IP address. The secured static IP address will be sent to the intended recipient by SMS (short Message Service) to enable the recipient to access the data and download it for further action.
3. The annual average data uploaded every month on the NIWE website for public dissemination will be archived at NIWE and is accessible to public openly.
4. **Data Authorship:** All the data users who are accessing / using the data shall acknowledge the ministry / NIWE in all forms of publications. The authorship decision for publications resulting from using MNRE/NIWE measuring data should follow the ethical rules of the journals and Professional organizations.
5. **Acknowledgements:** All publications using NIWE data are suggested to include the following acknowledgement:



# NATIONAL INSTITUTE OF WIND ENERGY

## CHENNAI 600100

“The wind profile data was collected by NIWE, as part of the Government of India Wind Monitoring Project, which was sponsored by MNRE (Ministry of New and Renewable Energy). The involvement of the NIWE (National Institute of Wind Energy) is acknowledged. [The acquisition of the wind profile data was carried out by NIWE using the ----- instruments and was funded by Government of India]”.

6. Legal framework Data will remain the property of the agency/department/ ministry/ entity of which collected them and reside in their IT enabled facility for sharing and providing access. Access to data under this policy will not be in violation of any Acts and rules of the Government of India in force, as it is in public interest to deployment of wind power plants. Legal framework of this policy will be aligned with various Acts and rules covering the data.
7. The newly establishing WMS funded by Govt. of India data will be uploaded regularly.