WIS2 Node registration

Who can operate a WIS2 Node to share data on WIS2 ?

Two types of entities (WIS Centres) can operate a WIS2 Node :

- **National Centre (NC) operate WIS2 Node** to publish data related to a specific country or territory, they should be published through a
- **Data Collection or Production Centre (DCPC)** publish data related to a region, program, or other specialized function within WMO

Organization wishing to share data on WIS2 that are not (yet) recognized as WIS Centres may refer to these instructions Designation process of a DCPC
...or they may contact their NC to share data via their WIS Centre

WIS2 Global Registry

WMO Secretariat records WIS2 Nodes in the <u>WIS2 Global Registry</u>

Global Brokers will only redistribute WIS2 Notifications for WIS2 Nodes recorded in the WIS2 Global Registry

<u>National Focal Points on WIS matters</u> use the WIS2 registration form to initiate the process to add a new WIS2 Node to the WIS2 Global Register

- ***If you don't have an NFP on WIS matters yet, please nominate one !***
- (new) DCPCs should work with WMO Secretariat to determine their authoritative person for registering a WIS2 Node

For an overview of WIS2 Nodes currently registered and assessed to be "operational" see
https://community.wmo.int/en/operational-wis2-nodes

WIS2 Registration Process

WIS2 Registration steps:

- **Request to host a WIS2 Node** via WIS National Focal Point (NFP) or PR

- **Assign a centre-id**: The centre identifier (centre-id) is an acronym as proposed by the Member and endorsed by the WMO Secretariat (see next slide)

- **Complete the WIS2 Register**: The WIS NFP shall complete the WIS2 Register operated by the WMO Secretariat (using this form)

- **Provide Global Service details**: The WMO Secretariat provides connection details for the Global Services (e.g. IP addresses) so that the WIS2 Node can be configured to provide the access.

- **WIS2 Node assessment**: The principal GISC conducts the assessment and verifies that the WIS2 Node is compliant with WIS2 requirements.

- **Add new centre to WIS2**: GISC notifies WMO Secretariat and confirms that this WIS2 Node can be added to WIS2

- **Communicate details to the Global Services**: WMO Secretariat provides the WIS2 Node connectivity details to the Global Brokers to subscribe to the WIS2 Node.

| Action by NC/DCPC |
| Action by GISC |
| Action by WMO Secretariat |

Determining a Centre ID of your WIS2 Node

Guidance on assigning a valid centre-id

- centre-id = **TLD** **'-'** (abbreviated) **centre name**
- **TLD** (top-level domain) defined by data.iana.org/TLD.
- **Centre name** may contain '-' but no special characters
- centre-id is <u>lowercase</u>

On the next slides we propose some examples, some of which are based on official MET website where available

For example:

https://www.moezala.gov.mm/ → mm-moezala

Example
- Algeria: **dz-meteoalgerie**
- Kazakhstan: **kz-kazhydromet**
- Uruguay: **uy-inumet**
- Saudi Arabia: **sa-ncm**
- St. Kitts and Nevis: **kn-metservice**
- Singapore:
  - **sg-mss**
  - **sg-mss-asmc** (DCPC)
- Poland: **pl-imgw**
- ECMWF: **int-ecmwf**

WORLD METEOROLOGICAL ORGANIZATION

1950-2025 SCIENCE for ACTION

NCs and DCPCs for countries in this training

Country	GISC	WIS Centre	Centre name	New centre-name (to be confirmed)	proposed centre-id	NFP
Albania	TBD	NC	The Hydro-meteorological Institute	Department of Meteorology (DM) of Institute of Geosciences (IGEO)	al-dm	Pending Nomination
Austria	Offenbach	NC	Central Institute for Meteorology and Geodynamics	-	at-zamg or at-geosphere	Ms Anita PAUL
Azerbaijan	Moscow	NC	National Hydro-meteorological Department	Azerbaijan Hydrometeorological Service	az-meteo	Mr Akbar ASGAROV
Croatia	Offenbach	NC	Meteorological and Hydrological Service	Croatian Meteorological and Hydrological Service	hr-dhmz	Ms Željka Klemar
Croatia	Offenbach	DCPC	Marine Meteorology Centre	-	hr-mmc	Ms Željka Klemar
Georgia	Moscow	NC	Department of Hydrometeorology	Hydrometeorology of Georgia	ge-hydromet	Ms Tamara GOBEJISHVILI
Mauritius	Casablanca	NC	Mauritius Meteorological Services	-	mu-metservice	Pending Nomination
Montenegro	Offenbach	NC	Hydrometeorological Institute of Montenegro	Hydrometeorological and Seismological Service of Montenegro (IHMS)	me-ihms or me-meteo	Pending Nomination
North Macedonia	Offenbach	NC	Republic Hydrometeorological Institute	Hydrometeorological Service (HMS)	mk-hms	Mr Aleksandar KARANFILOVSKI
Republic of Moldova	Moscow	NC	Serviciul Hidrometeorologic de Stat Moldova	-	md-meteo	Pending Nomination
Romania	Offenbach	NC	National Meteorological Administration	-	ro-meteoromania	Mr Andrei NAGY
Slovenia	Offenbach	NC	Meteorological Office	National Meteorological Service of Slovenia	si-meteo	Pending Nomination
Ukraine	Toulouse (tbc)	NC	Ukrainian Hydrometeorological Centre	-	ua-meteo	Mr Dmytro SKARCHENKO
Türkiye	Offenbach	NC	Turkish State Meteorological Service	-	tr-tsms	Mr Nafiz KOKURCAN
Türkiye	Offenbach	DCPC	Eastern Mediterranean Climate Centre (EMCC–RA VI)	-	tr-mgm-emcc	Mr Nafiz KOKURCAN
Serbia	Offenbach	NC	Republic Hydrometeorological Service of Serbia	-	rs-hidmet or rs-rhmz	Mr Perisa SUNDERIC
Serbia	Offenbach	DCPC	RCC–Belgrade	-	rs-rcc-belgrade (pending proposal)	Mr Perisa SUNDERIC

Verifying your WIS Centre Name

Check Centre Name listed in Manual on WIS, Vol I

    - please contact WMO Secretariat for updates.

Note:

A WIS2 node is associated with a WIS Centre:

- WIS Centres are currently listed in the *Manual on WIS, Vol I* , *Appendix B: Approved WIS Centres*
- New list to be published in *Manual on WIS, Vol II* , *Appendix C: Approved WIS 2.0 Centres* (for approval at INFCOM-4 in 2026)

WIS2 Node Registration is a great opportunity to review your current Centre Name. If it is not up-to-date, please contact WMO Secretariat for the update to be reflected in the Appendix C to WIS2 Manual.

Note that Centre Name will be recorded in the WMO Codes Registry as part of the WIS2 Topic Hierarchy:
https://codes.wmo.int/wis/topic-hierarchy/_centre-id

Notation	Name	Description	Status
ag-antiguamet	ag-antiguamet	Antigua and Barbuda Meteorological Services	stable
ai-metservice	ai-metservice	Caribbean Meteorological Organization (Anguilla)	stable
ar-smn	ar-smn	Servicio Meteorológico Nacional (Argentina)	stable
bb-barbadosmetservices	bb-barbadosmetservices	Meteorological Services (Barbados)	stable

* To be approved at INFCOM-4 in 2026

WIS 2 Node registration form

[Link to the WIS2 Registration Form](#)

Required inputs for WIS2 Node registration:

- *Submitter contact*
  - **Should be NFP on WIS matters**
  - WMO Secretariat will contact the submitter after receiving form submission to validate identity
  - If you need assistance to nominate or update your NFP on WIS matters, contact wis2-support@wmo.int

- *WIS2 Node details*
  - *Membre-name*
  - *Centre-id*
  - *WIS2 Node broker connection string**

*for wis2box, the broker connection string would be one of the following:
- **mqtt://<wis2box-host-address>:1883 -** MQTT over TCP (without SSL)
- **mqtts://<wis2box-host-address>:8883 -** MQTT over TCP (with SSL enabled)
- **ws://<wis2box-host-address>/mqtt:80** - MQTT over websockets (without SSL)
- **wss://<wis2box-host-address>/mqtt:443** – MQTT over websockets (with SSL enabled)

Thank you