

PORT OF SPAIN WIS2 TRAINING WORKSHOP · June 2026

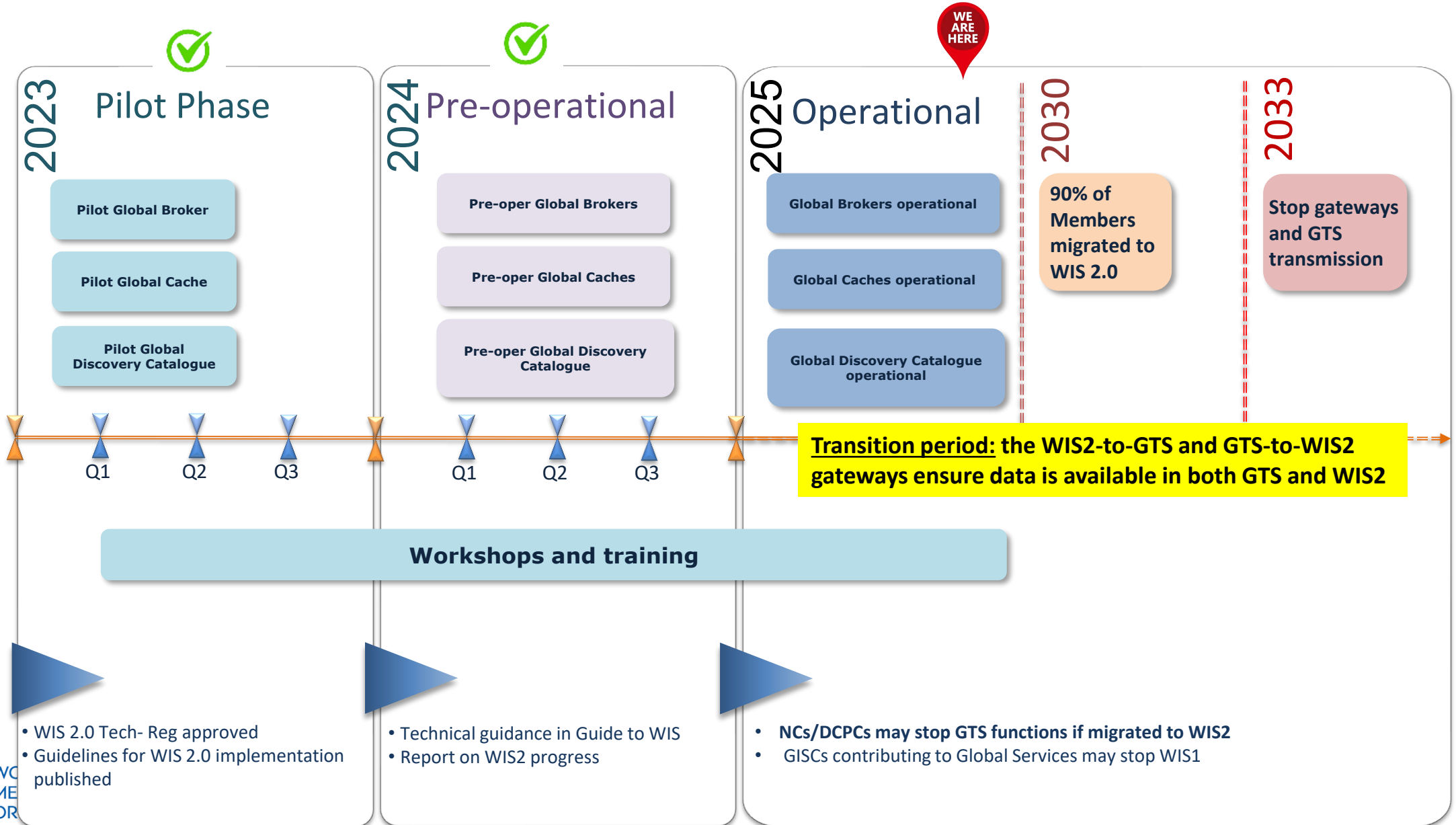
# The GTS-to-WIS2 transition phase

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**Maike Limper**

WMO Secretariat · WIS Section · ESDP Department

# WIS2 Implementation plan

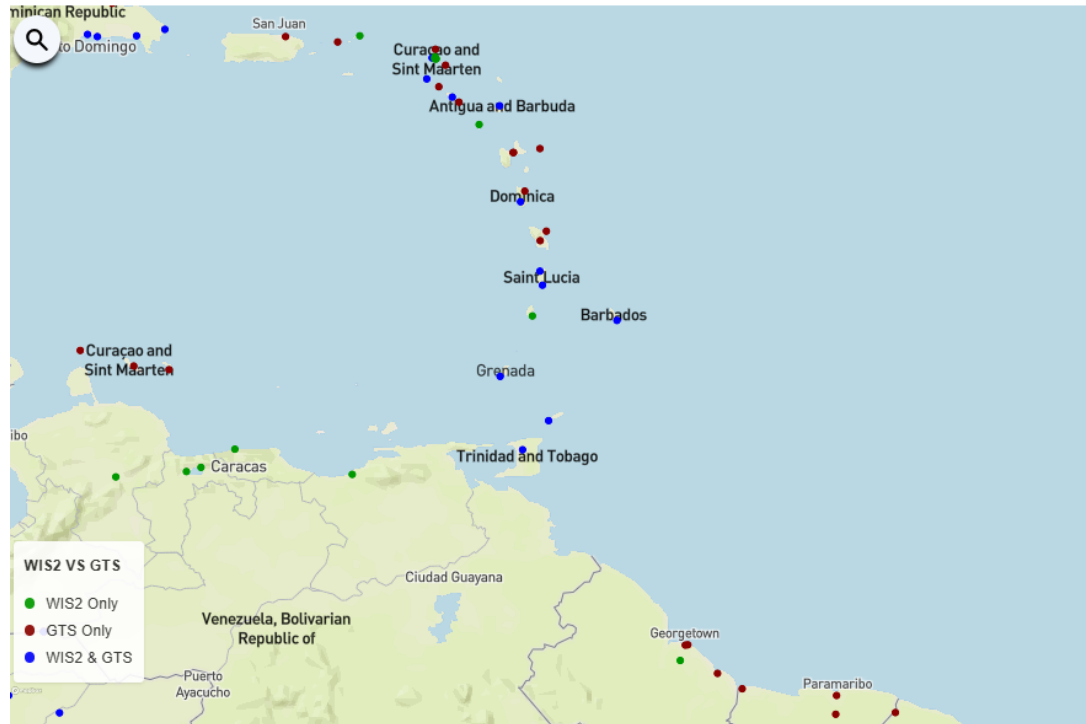


# GTS-to-WIS2 monitoring

<https://wdqms.wmo.int/transition/gts-to-wis2/synop/>

GTS to WIS2 transition of land surface observing stations

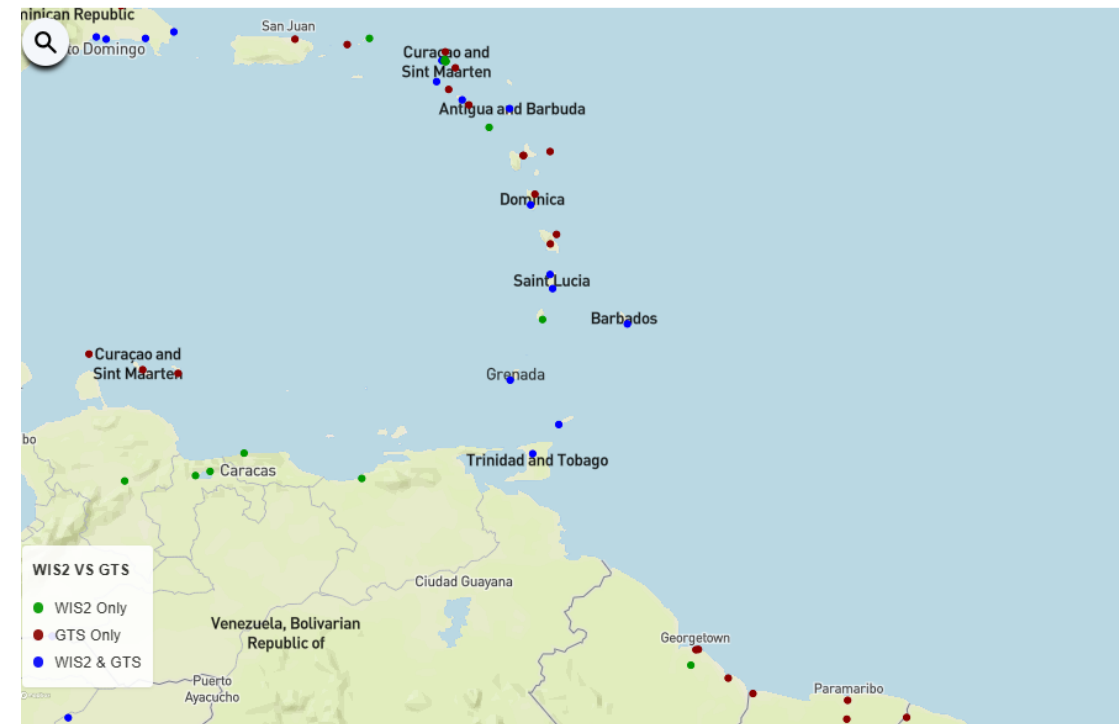
Type of Period: Daily  
Report type: Synop  
Date: 2026-05-29



<https://wdqms.wmo.int/transition/gts-to-wis2/temp/>

GTS to WIS2 transition of land surface observing stations

Type of Period: Daily  
Report type: Synop  
Date: 2026-05-29



# Provisions for the Transition

**Guide** providing the provisions for transitioning from WIS1 and the Global Telecommunication System (GTS) to WIS2 available at:

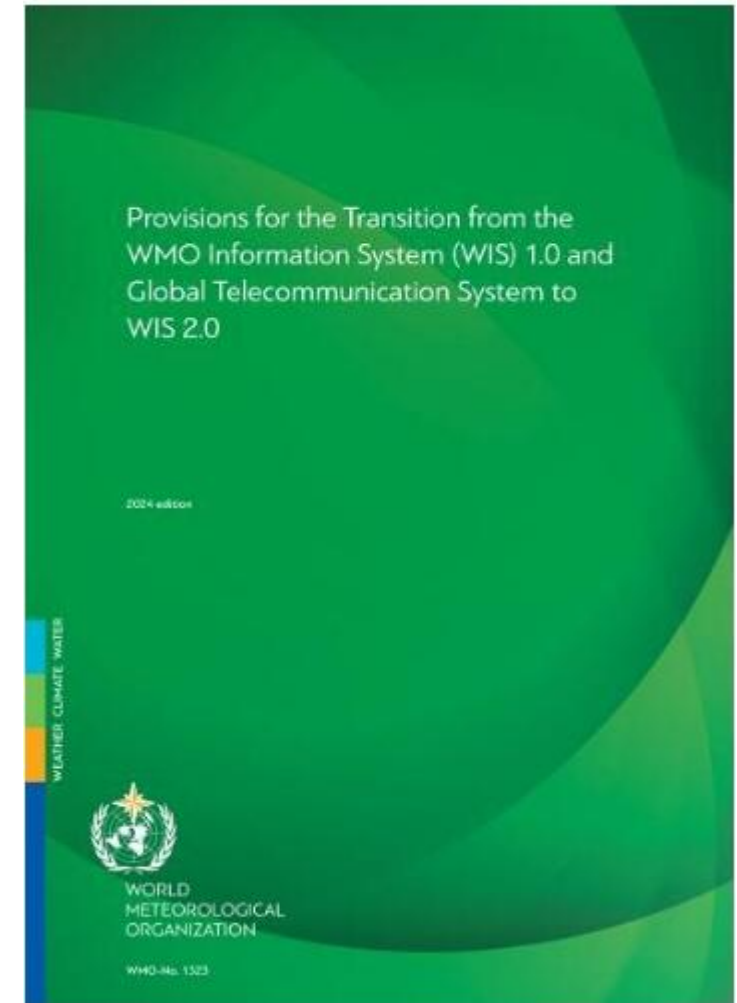
<https://library.wmo.int/idurl/4/69050>

**Each WIS centre** (NC, DCPC, GISC) **decides when** to decommission WIS1 and GTS based on their migration readiness

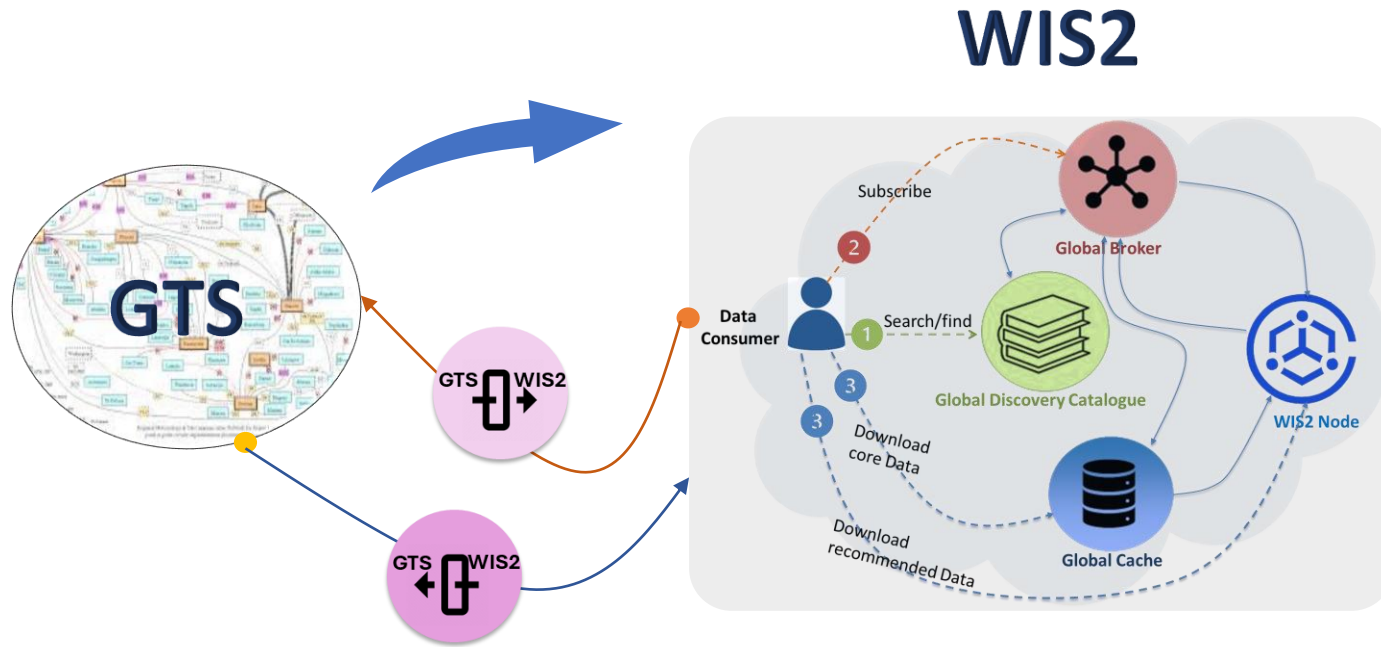
**Gateways** prevent **WIS Centres** from having to operate both **WIS2** and **GTS** simultaneously, and ensure continued data exchange between **GTS** and **WIS2**

**New Data Available Only on WIS 2.0:**

Data from new sources, including GBON, will be distributed exclusively via WIS2, non-migrated centres will not receive this data



# Transition from GTS to WIS2.0



2023

2024

2025

WE ARE HERE

2033

WIS 2.0 Pilot phase

Pre-operational phase

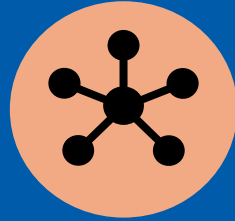
Transition period: the WIS2-to-GTS and GTS-to-WIS2 gateways ensure data is available in both GTS and WIS2

Transition

Stop GTS

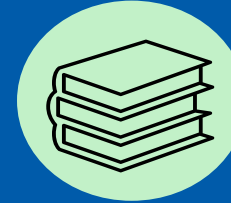
# WIS2 Global Services during transition period

Global Broker



Brazil  
France  
China  
USA

Global Discovery Catalogue



Canada  
China

Global Cache



China  
Germany  
Japan  
Korea  
Saudia Arabia  
USA/UK

Global Monitoring



China  
Morocco

**Global Gateways only available during transition period :**

**GTS-to-WIS2 Gateway**



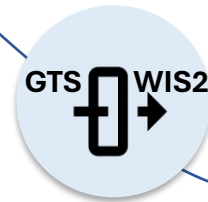
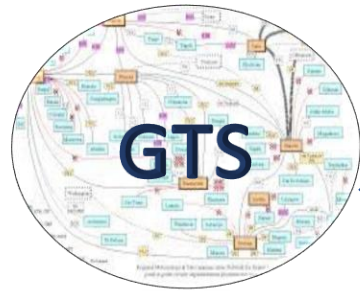
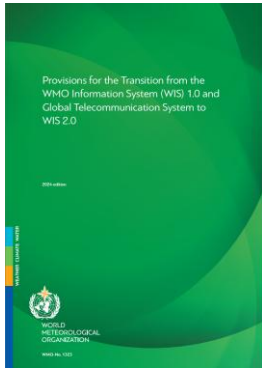
Germany  
Japan

**WIS2-to-GTS Gateway**



China  
UK

# GTS-to-WIS2 gateway



**de-dwd-gts-to-wis2**

**jp-jma-gts-to-wis2**

**origin/a/wis2/centre-id/data/[core|recommended]/T1/T2/A1/A2/ii/CCCC**

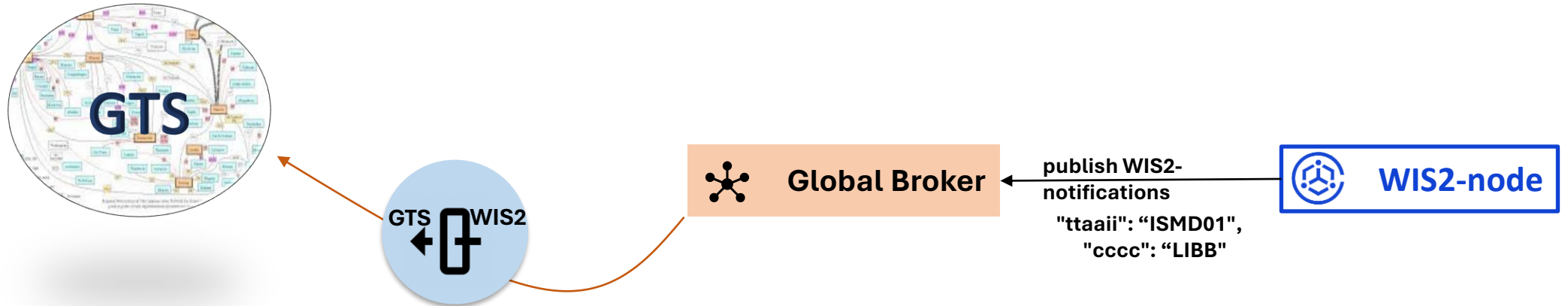
GTS-to-WIS2 gateways publish WIS2-notifications for GTS-data using a topic defined by the GTS headers

**Purpose of GTS to WIS2 gateway**  
The purpose of the GTS to WIS2 gateway is to enable members who have migrated to WIS2 and have stopped their GTS systems to continue receiving GTS data from WIS2.

GTS data



# WIS2-to-GTS gateway



## Purpose of WIS2 to GTS gateway

The purpose of this gateway is to enable GTS members who have not yet migrated to WIS2 to continue to receive GTS data from GTS members who have migrated to WIS2 and stopped their GTS systems.

**Note:** Only data that have been already published in GTS are concerned by this gateway, New data will be available **only** on WIS2.

To enable the WIS2-to-GTS Gateway to republish data on the GTS, WIS2-nodes are required to add additional information in the message properties:

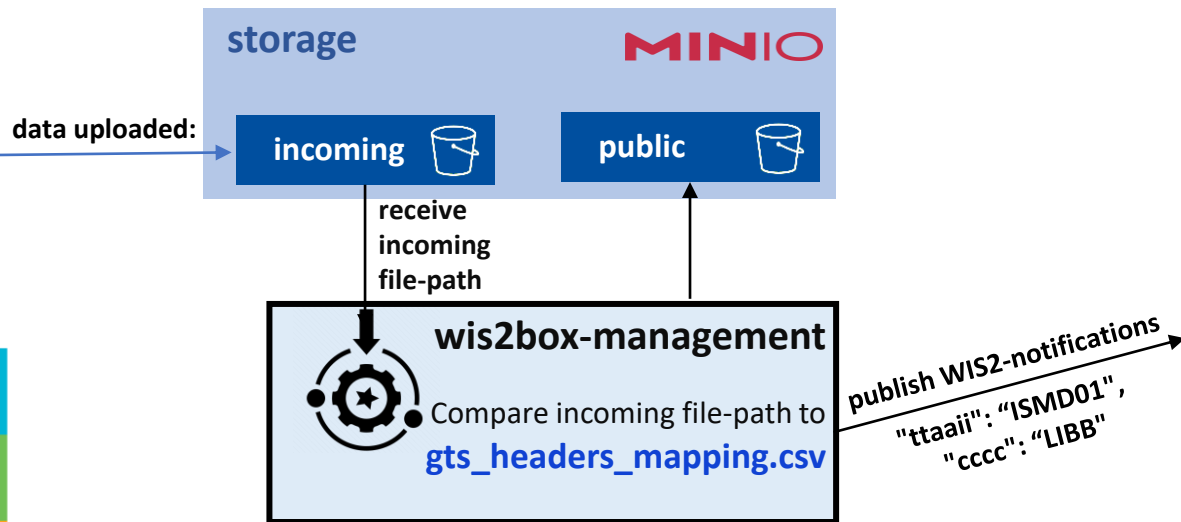
```
"properties": {  
  "gts": {  
    "ttaaii": "FTAE31",  
    "cccc": "VTBB"  
  }  
}
```

**WIS2 Data Publishers adding GTS headers to their WIS2-notifications can stop the transmission of this data on GTS**

# Adding GTS properties using wis2box

As of wis2box-1.3.0, data publishers have two options to (optionally) add GTS properties to their notifications:

1. For files uploaded into MinIO, prepare mapping-file “gts\_headers\_mappings.csv” with required properties



2. For data input using FM-12 SYNOP form in wis2box-webapp, select “Add GTS headers” and provide manually input

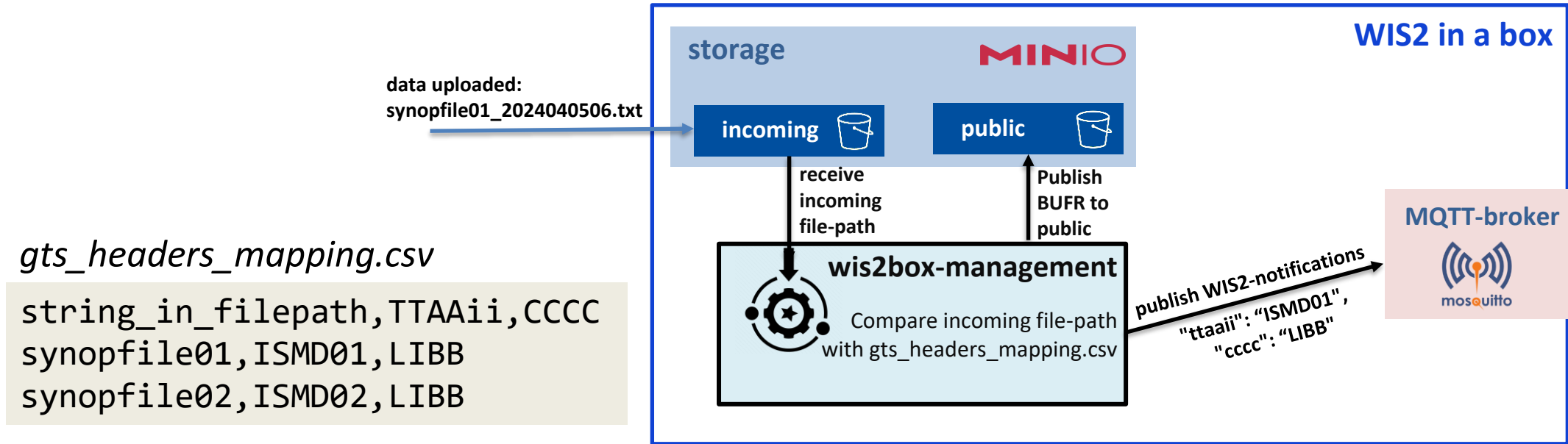
The screenshot shows the 'FM 12' form in the wis2box-webapp. The form contains the following fields and options:

- FM 12**: A text area containing the text: AAXX 03094 64400 42460 71004 10285 20245 30113 40133 8493/ 333 59005 83813 81930 87363 94966 95836=
- Raw FM 12 bulletin**: A section header.
- Dataset Identifier**: A dropdown menu with the value 'urn:wmo:md:maaike-test:wis2box-training' and a description 'Maaike's test dataset for for wis2box-training'.
- wis2box auth token for 'processes/wis2box'**: A text input field with a masked password and a copy icon.
- SUBMIT**: A blue button with a cloud icon.
- Publish on WIS2**: A checkbox that is checked.
- Add GTS headers**: A checkbox that is checked.
- TTAAii**: A text input field with the value 'SICG20'.
- CCCC**: A text input field with the value 'FCBB'.

# Add GTS properties for automated processing in wis2box

wis2box can use a CSV file to map GTS properties to incoming filenames

The CSV file should be named *gts\_headers\_mapping.csv* and placed in the directory defined by the `WIS2BOX_HOST_DATADIR` environment variable



wis2box will **NOT** add GTS headers to the WIS2 Notification Message if:

- *gts\_headers\_mapping.csv* file is not present in `WIS2BOX_HOST_DATADIR` environment variable
- *gts\_headers\_mapping.csv* file is present but the incoming filepath did not contain any of 'string\_in\_filepath' specified

# Add GTS properties for automated processing in wis2box

After updating `gts_headers_mapping.csv`, the `wis2box-management` container must be re-started for the changes to take effect:

```
docker restart wis2box-management
```

If no mapping-file is found at start-up, `wis2box-management` container will emit a **WARNING**:

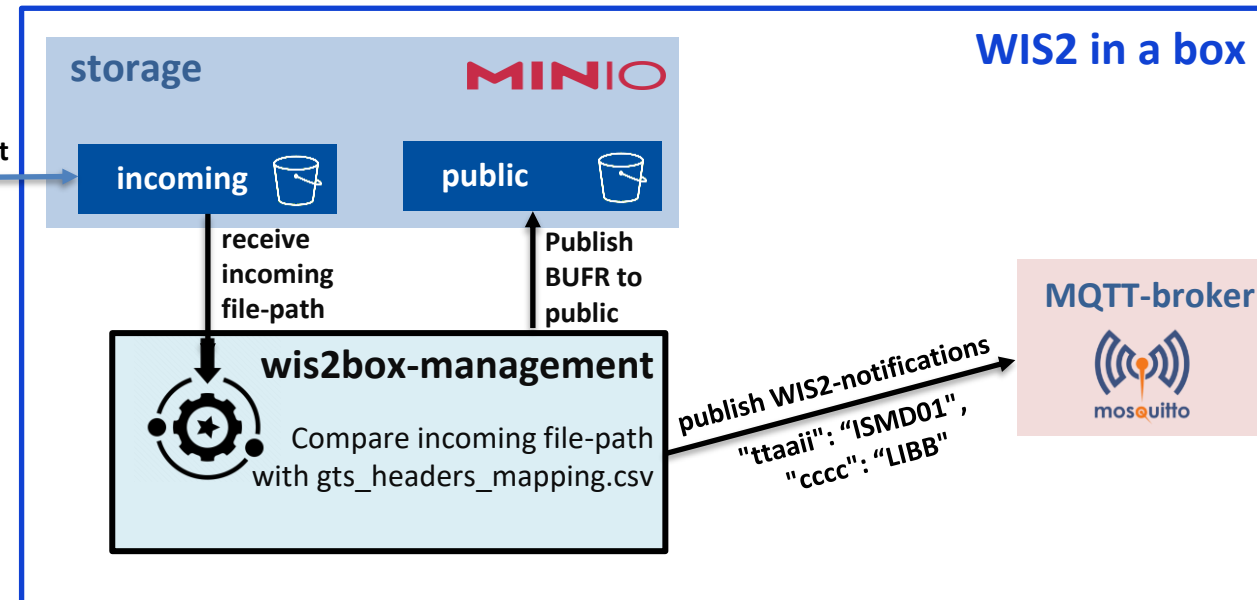
**WARNING:** To add GTS headers, please create `gts_headers_mapping.csv` in `WIS2BOX_HOST_DATADIR`

If the uploaded filename does not contain any of the “`string_in_filepath`”, data publication proceeds as usual, with no GTS-properties being added to the resulting notification



```
gts_headers_mapping.csv
string_in_filepath,TTAAii,CCCC
synopfile01,ISMD01,LIBB
synopfile02,ISMD02,LIBB
```

data uploaded:  
`synopfile01_2024040506.txt`



# GTS-to-WIS2 transition: summary

**Migration to WIS2 is planned to occur between 2025 and 2030**, with an expected progress rate of 90%.

The **GTS** is planned to be **decommissioned** by **2033**

- Provisions for Transition WIS1/GTS to WIS2 outlined in: <https://library.wmo.int/idurl/4/69050>
- *New modules for **Transition Monitoring** available at <https://wdqms.wmo.int>*

After registering operational WIS2 Nodes, WIS Centres wishing to **stop sending data to GTS** via Message Switching Systems (or another way?) are required to **coordinate with WMO Secretariat and their local GISC**

**Gateways** ensure data currently on GTS remains available both on WIS2 and GTS during the transition phase:

- To enable WIS2-to-GTS gateway to re-publish the data on GTS, ensure that your WIS2 Node publishes WIS2 Notifications with additional GTS-properties,
- When publishing new data on WIS2, no GTS-properties need to be provided

**wis2box-users can add the additional GTS-properties to their WIS2 Notification Messages via mapping-file or during manual input**



# Thank you.



WORLD  
METEOROLOGICAL  
ORGANIZATION

[wmo.int](http://wmo.int)

# GTS-to-WIS2 transition: responsibilities

## Regional Telecommunication Hubs (RTHs):

- **Keep MSS operational** and handle bulletin transmission for associated NMCs until all WIS Centres in their area have migrated.
- **MSS shutdown by RTH once region is fully on WIS2** to be coordinated with WMO Secretariat

## WIS Centres:

- **Set-up and operate WIS2 Nodes to share data and metadata**
- May stop MSS and GTS transmissions once all data is published on WIS2 and GTS properties are included in WIS2 Notification Messages (per gateway requirements)
- **New data has to be published via WIS2** (no new GTS headers will be issued by WMO)