Update on EUMETSAT's preparations for the migration from GTS to the WIS 2.0

Presented to CGMS-52 WG-IV session, agenda item 3.3

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Executive summary of the WP

In the next years WMO will perform a phased introduction of its next generation information system (WIS 2.0). This brings with it a change of paradigm for both data providers and consumers; it also presents a number of opportunities for CGMS Members.

This paper gives a brief summary of the WIS 2.0 architecture and provides an update on how EUMETSAT is preparing for its migration to WIS 2.0.

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EUMETSAT, version 1A, March 2024

Global broker

pub

core data

Receives data announcements from supplier and passes them to consumer based on topic subscriptions

sub sub pub recommended data and non-cached core data

Supplier

pub

- Hosts data on internet accessible site
- Announces data availability to global broker

core data

Global cache

Maintains global cache of, i.a., core data

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Subscribes to topics at global

Informed by brokers when

Retrieves data from global

data are available

cache (or producer)

Consumer

broker(s)

E EUMETSAT **CGMS**

EUMETSAT, version 1A, March 2024

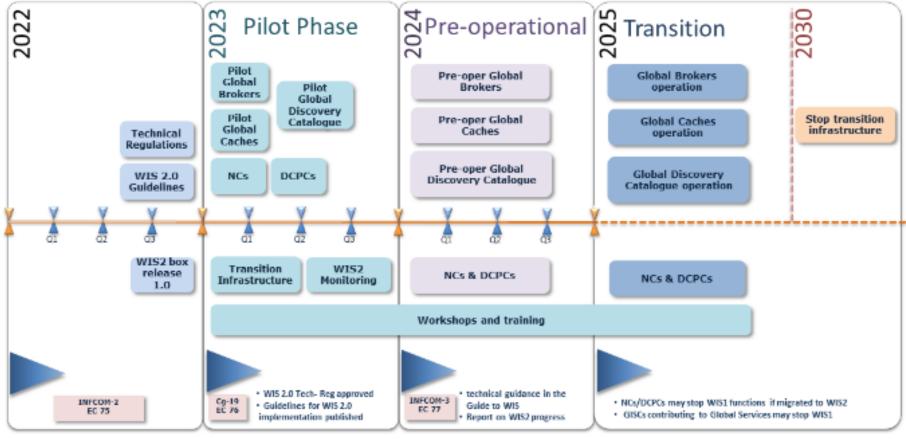
Satellite data specific issues

- Large data volumes (about 50% of GTS traffic at Global Information System Centre (GISC) Offenbach is from EUMETSAT)
- EUMETSAT is a WIS Data Collection or Production Centre (DCPC) but not a National Centre (NC) or GISC, so has no message switch etc.
- Data flow very asymmetric much more out (satellite products) than inward (some data for calibration etc.)
- Lots of core data which are not on GTS (e.g. images). These would be available in WIS 2.0 context
- EUMETSAT will also provide additional recommended data via WIS 2.0 (directly from supplier)

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WMO WIS 2.0 implementation timeline



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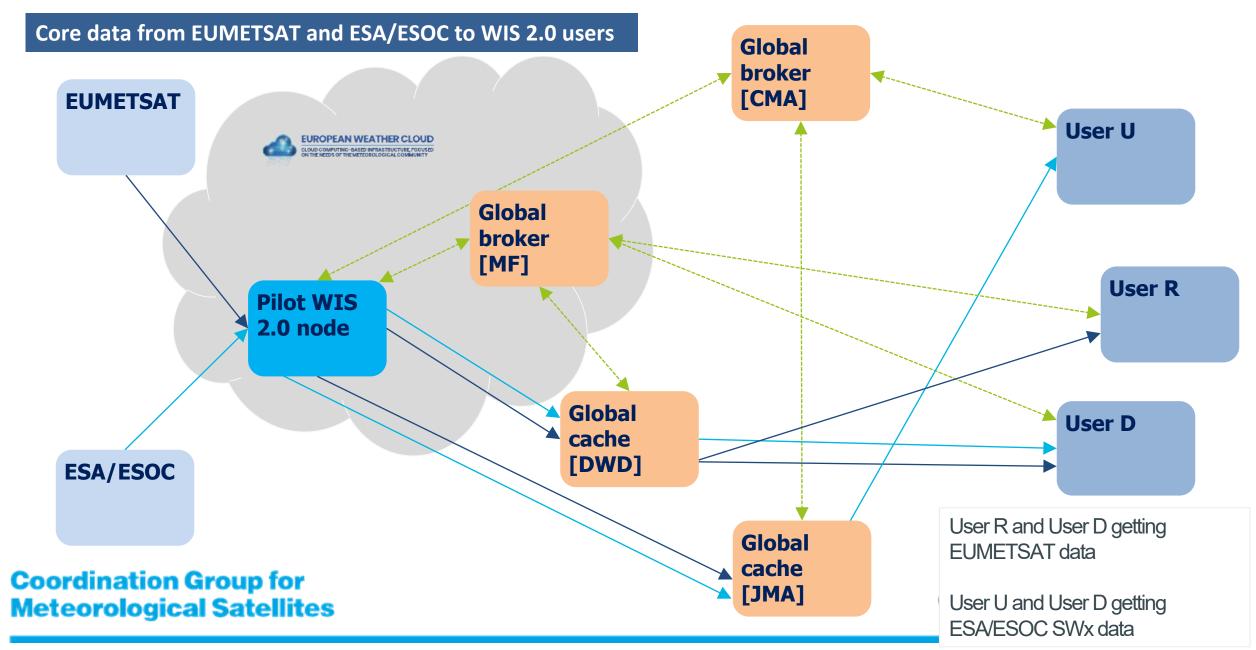


Latest status (March 2024)

- Participation in coordination of global pilot projects EUMETSAT's transition is one of these
- EUMETSAT WIS 2.0 pilot node running officially since 19/09/2023
- Collaboration with ESA/ESOC about a pilot WIS 2.0 service for space weather exchange successful. Initial SWx data (SOSMAG on GEO-KOMPSAT-2A) available via ESA on EUMETSAT's WIS 2.0 pilot node
- Explaining WIS 2.0 to core users at CGMS, ITSC, DBNet, CEOS, WMO ET-SSU, AOMSUC, GODEX_{NWP}, and GSICS
- Already running:
 - Global Brokers, Caches, Metadata Catalogues and Monitoring Centres
 - WIS 2.0 nodes providing core data
- There are plenty of data already available on WIS 2.0

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Next steps in EUMETSAT's move to WIS 2.0

The following are the main goals for 2024:

- Confirmation of requirements for EUMETSAT's operational WIS 2.0 node
- Design, implementation, verification, and validation of operational WIS 2.0 node
- Consolidation of WIS 2.0 topic hierarchy for satellite data working closely with CGMS and WMO Expert Teams
- Publication of complete set of discovery metadata for current GTS traffic
- Delivery of current GTS traffic via WIS 2.0 node

There is a need to carefully consider the impact of WIS 2.0 on, inter alia, EARS/DBNet

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Key issues of relevance to CGMS:

- ➤ In the coming years, WIS 2.0 will replace the GTS and provide much greater opportunities for global data exchange
- ➤ The WIS catalogue will be frozen in 2024, meaning no new data will be exchanged via the GTS after this point
- CGMS Members will need to prepare for migration of data flows to WIS 2.0
- HLPP, §3.4.1: "Ensure the WIS 2.0 usage for satellite data provision and discovery"

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To be considered by CGMS:

➤ Recommendation: CGMS Members are recommended to continue to develop plans for the adoption of WMO's WIS 2.0 in support of international data exchange.

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