

*Online Training Workshop on Regional WIGOS Centres (RWC) Functions and Tools for RA V
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Introduction to WDQMS **(WIGOS Data Quality Monitoring System)**

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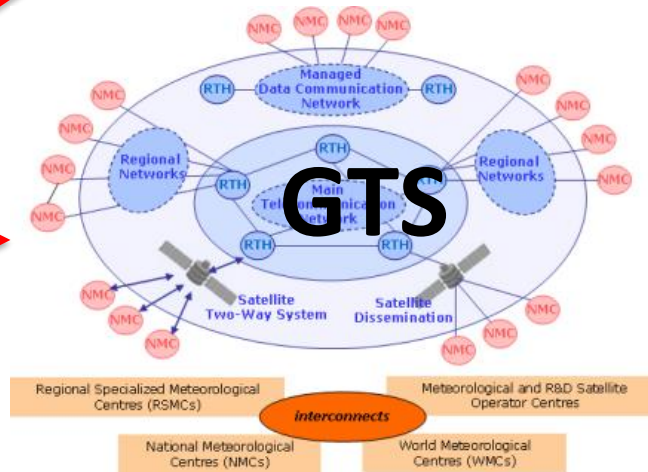
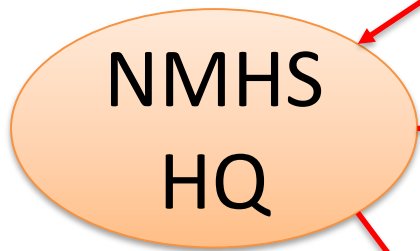
Outline

1. WDQMS concept and functions
2. WIGOS tools
3. The Regional WIGOS Centres functions
4. Roles and responsibilities
5. Final remarks

International data exchange essential for WIGOS Data Quality Monitoring System



Data transmission from site to HQ



WDAQMS !
starts here

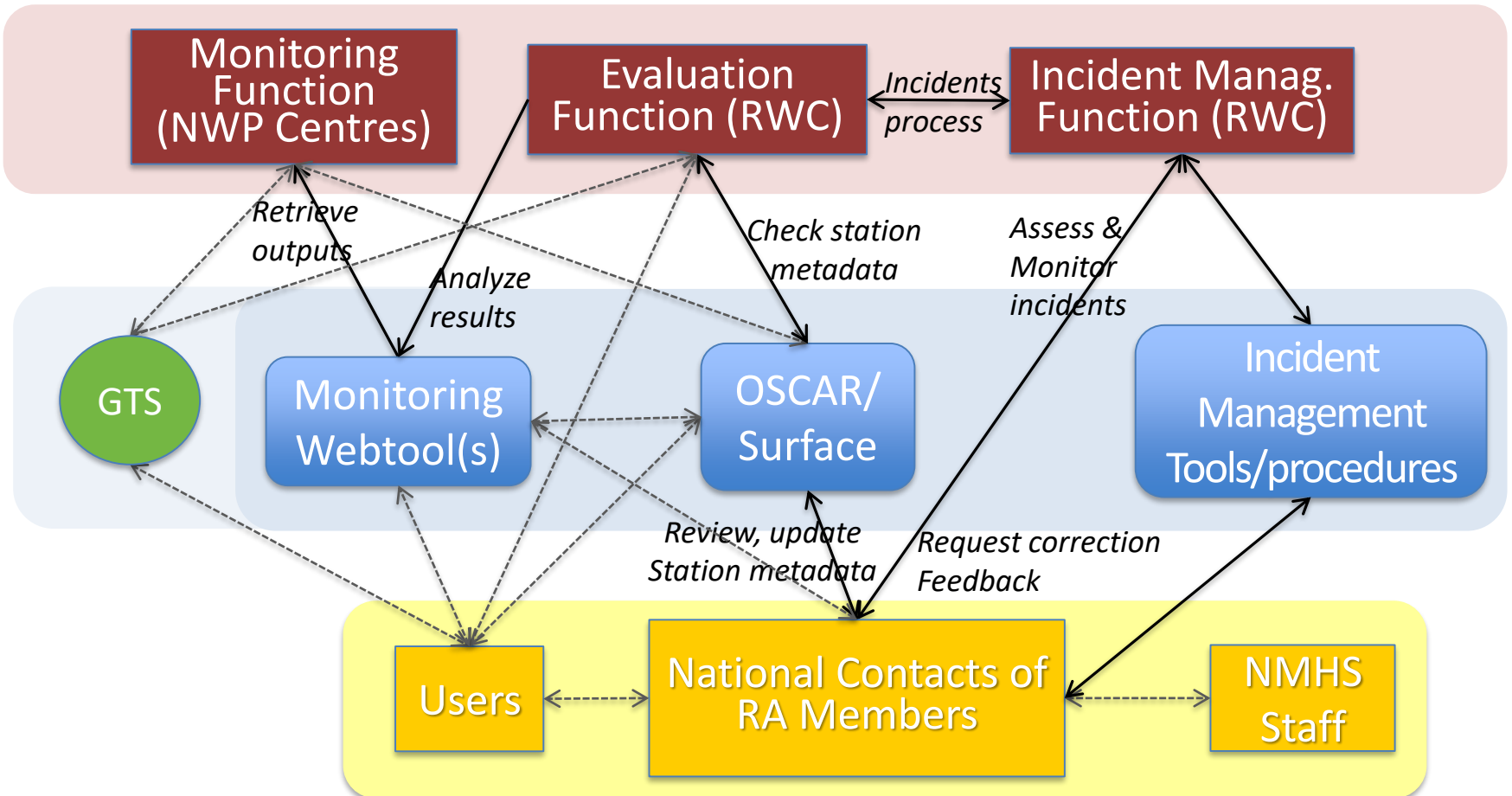
International users
e.g. global NWP centres



International exchange to be indicated in

OSCAR Observing Systems Capability Analysis and Review Tool

The WDQMS process



➤ WDQMS describes how well WIGOS is functioning

New releases and features of WIGOS tools

OSCAR/Surface

Observing Systems Capability Analysis and Review Tool

- Operational since May 2016
- Two new releases expected per year
- Current release 1.6.0 includes **Station Templates** and **Web Client Tool**
- Next release 1.7 will includes **Stations performance – assessed by WDQMS Webtool**

WDQMS (monitoring webtool)

WIGOS Data Quality Monitoring System

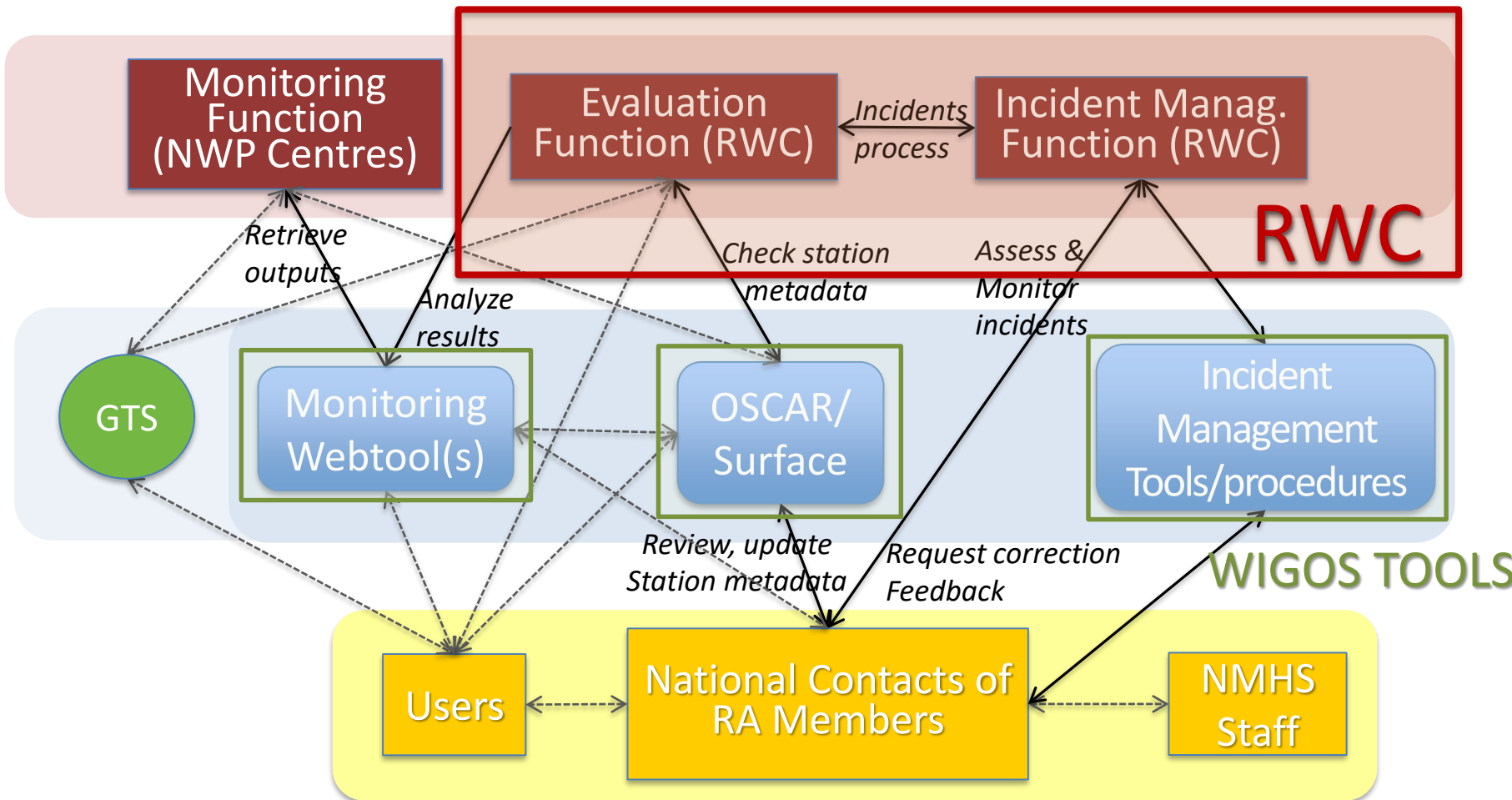
- Operational since March 2020
- Several new releases expected per year
- Current release 1.3.1 **includes monitoring the GCOS networks** and other added features

IMS

Incident Management System

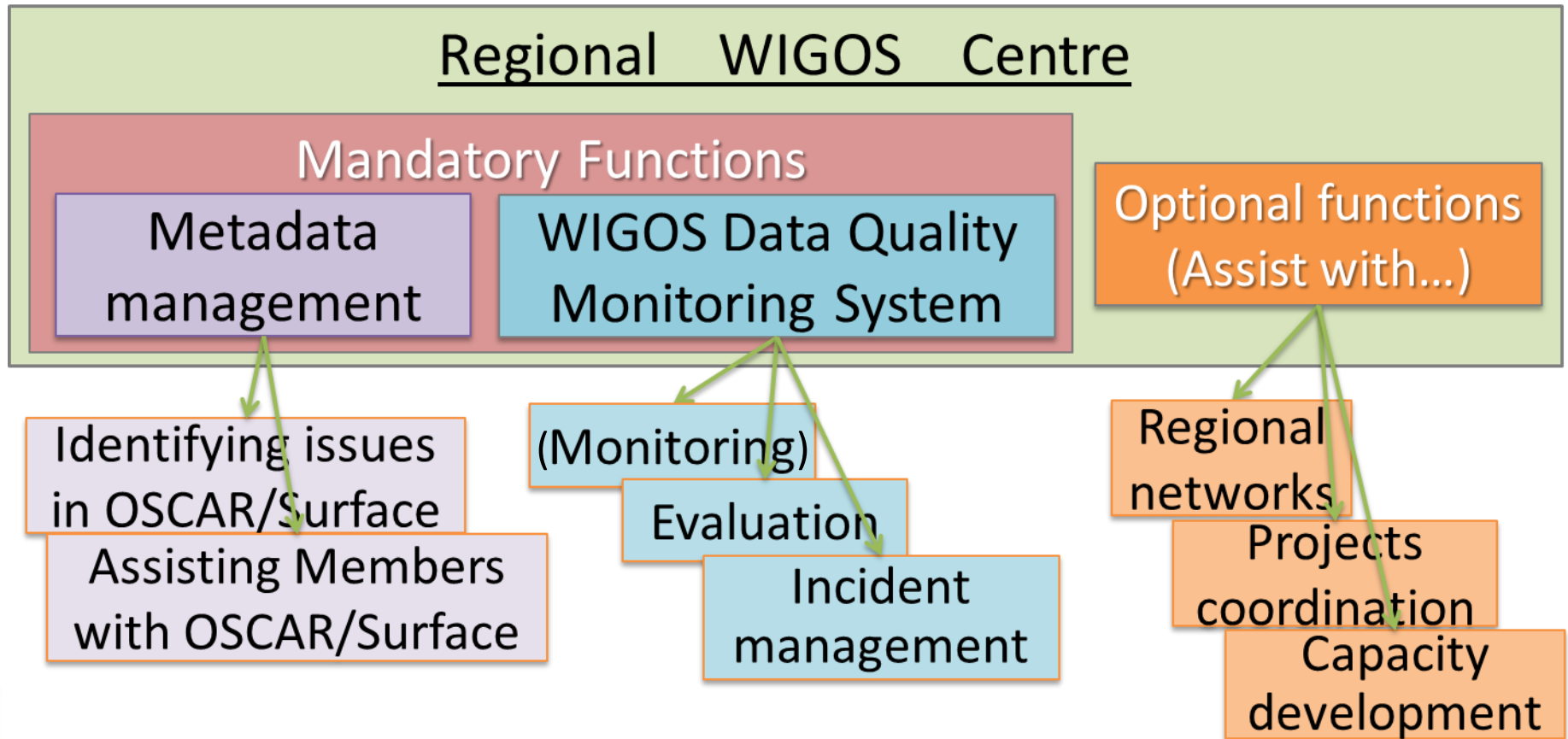
- Prototype used by RWCs in pilot mode operations, from July 2020

The WDQMS process



- RWC evaluate the performances and initiate the incident management system in case of non-compliance

A diagram of the RWCs Functions



Regional WIGOS Centres

➤ **Current mandate:**

- Assist Members with management of WIGOS metadata in OSCAR/Surface;
- Perform the WDQMS functions (Evaluation and Incident Management functions);

➤ **Existing technical guidance:**

- Land surface stations of the GOS;

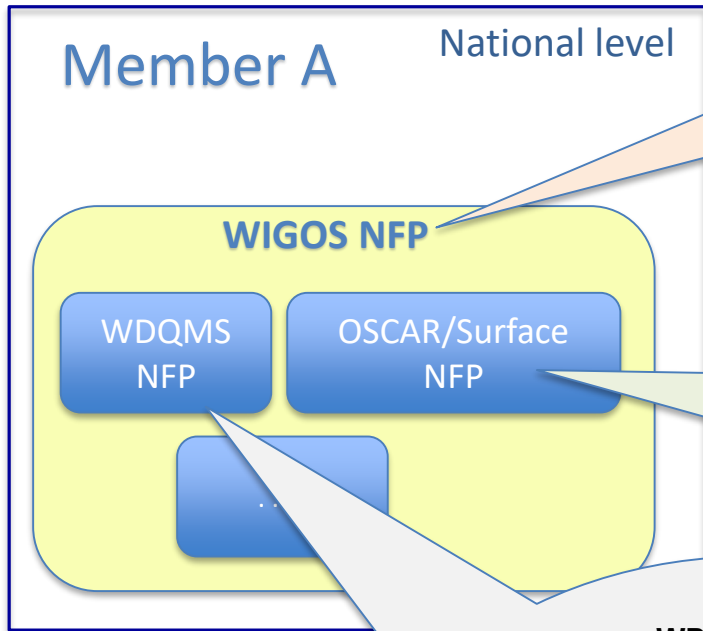
➤ **RWCs established in pilot mode:**

- RA I = East Africa (Kenya, Tanzania), Southern Africa (South Africa), North & West Africa (Morocco – coming soon);
- RA II = the whole region (China, Japan);
- RA III = the whole region (Argentina, Brazil);
- RA V = the whole region (Indonesia, Singapore, Fiji – coming soon);
- RA VI = the whole region (EUMETNET – only monitoring function).



NFPs related to WIGOS

- National Focal Point for **WIGOS**
- National Focal Point for **OSCAR/Surface**
 - OSCAR/Surface is the Observing Capabilities Analysis and Review (OSCAR) tool for surface-based observations
 - Intended to register all the observational metadata related to all surface stations (non-space-based)
- National Focal Point for **WDQMS**
 - WDQMS is the WIGOS Data Quality Monitoring System
 - Provides monitoring results (maps and graphics) in near-real time on the performance of surface stations (data availability and quality)
 - It relates closely with the work of Regional WIGOS Centres (RWC)



WIGOS NFP
Coordinates WIGOS activities at national level:
 communications with WMO; Monitors and reports on status of WIGOS implementation; Identify and follow-up on WIGOS-related capacity development needs;

OSCAR/Surface NFP
Coordinates national activities on WIGOS metadata:
 Delegates responsibilities via user accounts at national level; Promulgates relevant regulatory, guidance and training materials; Works closely with the relevant RWC; Reports on the status of national WIGOS metadata in OSCAR/Surface; Takes actions to correct erroneous and/or missing metadata in OSCAR/Surface.

WDQMS NFP
Coordinates interaction with Regional WIGOS Centres:
 Provides timely answers to all queries and tickets in the context of WDQMS; Initiates and coordinates actions to solve any issues as quickly as possible; Liaises with OSCAR/Surface and other NFPs; Liaises with other relevant WMO Regional Centres, e.g. RICs, RTCs, to find sustainable solutions for issues identified by the WDQMS.

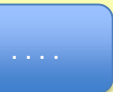
Regional level

Member A National level

RWC

WDQMS
NFP

OSCAR/Surface
NFP



Member C National level

WIGOS NFP

WDQMS
NFP

OSCAR/Surface
NFP



Member B National level

WIGOS NFP

WDQMS
NFP

OSCAR/Surface
NFP



RWC staff:

- identify performance issues with observations provided by Members
- raise tickets and follow-up on them, using the incident management system;
- provide support and assistance to Members and Region for their WIGOS implementation efforts.



WIGOS tools and RWCs

- WIGOS tools comprise of
 - WIGOS Data Quality Monitoring System ([WDQMS](#)) web-tool for quality monitoring and evaluation
 - Metadata repository [OSCAR/Surface](#)
 - WDQMS Incident Management System (IMS) web-tool (see presentation)
- WDQMS web-tool is directly linked to OSCAR/Surface (see presentation)
- Regional WIGOS Centres are key users of the WIGOS tools, while Members are requested to make use of the WIGOS tools as well



Thank you Merci



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