

# **WIGOS Data Quality Monitoring System (WDQMS)**

## **Introduction to the Incident Management Process**

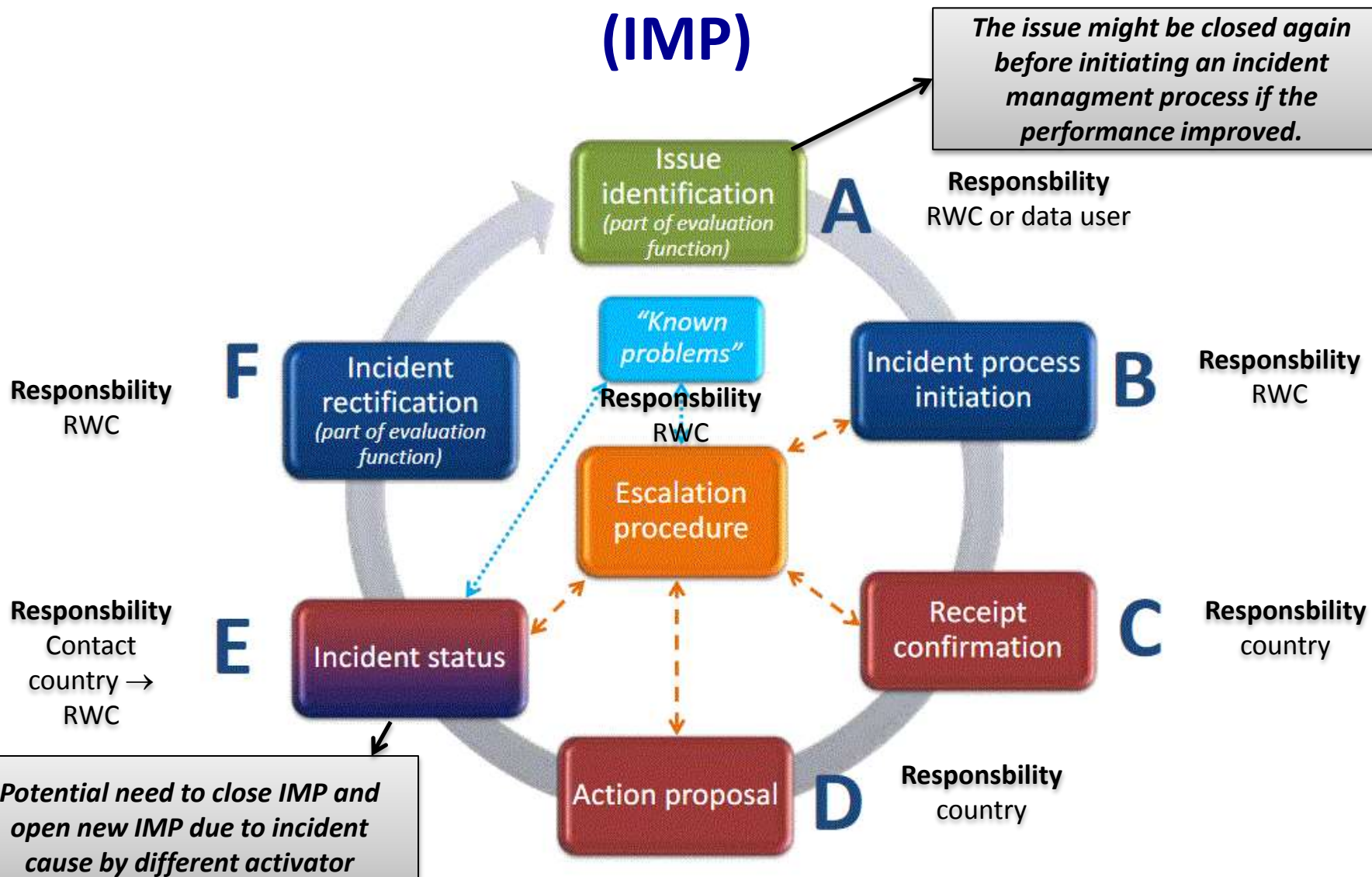


**WMO OMM**

World Meteorological Organization

Organisation météorologique mondiale

# The steps of the Incident Management Process (IMP)



# Non-compliance during evaluation process

- Regional WIGOS Centres (RWC) will **evaluate the performance of stations** of countries under their responsibility on a daily basis by reviewing the performances displayed in the available web tools.
- Check the performance concerning the three main quality monitoring categories **data availability, timeliness and accuracy** regarding the WDQMS performance targets (e.g. GBON requirements).
- In the case of any non-compliance of a particular station **raise an incident ticket** by describing the **incident**, according to the WIGOS incident management process.

➤ **ISSUE IDENTIFICATION – STEP A: part of the evaluation process**

# Example incident management system ticket

<b>KEN-63688-005-20160712</b>			
<b>INCIDENT MANAGEMENT TICKET</b>			
<b>PART A: ISSUE IDENTIFICATION (Completed by issue reporter)</b>			
Reporters Details			
Date/Time	12/07/2016 13:36 UTC	Name	X. YYYY
Organization	KMD	Email	xyyyyyy@zzz.zz
Station Details			
Network Type	Land(Fixed)	WMO ID	63688
Country	Kenya	Station name	Eldoret International Airport
Issue Description			
<i>The SYNOP data from station 63688 has been missing in all the DA NWP centres.</i>			
<b>PART B: ISSUE RAISED AS INCIDENT (PROCESS INITIATION) (Completed by RWC)</b>			
Date/Time	12/07/2016 13:39 UTC	Name	X. YYYY
Evaluation results	Confirmed that the data from 63688 is missing from ECMWF, NCEP and JMA		
No incident process required (insert 'X')	<b>Incident Ticket Number</b>	005	<b>Priority</b> <small>(low, medium, high, very high)</small>
Comments			
<b>PART C: RECEIPT CONFIRMATION (Completed by national contact)</b>			
Date/Time	13/09/2016 12:30 UTC	Name	W. ZZZZZ
Comments	Confirmed that SYNOP data is measured at the station and sent to GISC Nairobi		



# Example incident management system ticket (cont.)

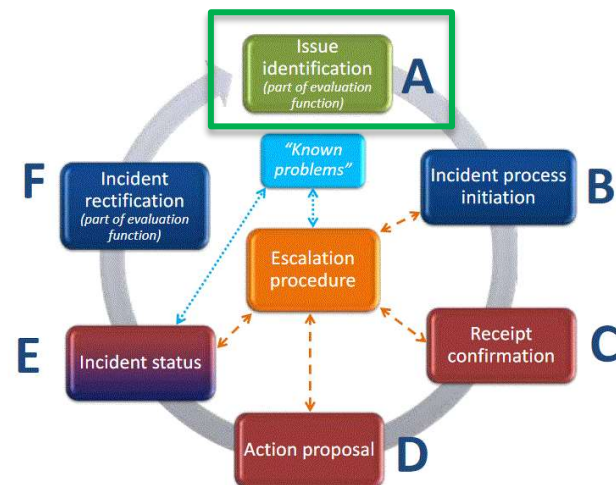
<b>PART D: ACTION PROPOSAL</b> <i>(Completed by national contact)</i>			
Date/Time	13/09/2016 13:30 UTC	Name	W. ZZZZZ
Details of Proposed Action/Timeline to solve the incident/Comments			
Follow up with the GISC to confirm why the SYNOP data is not available on the GTS by 15 <sup>th</sup> September 2016.			

<b>PART E: INCIDENT STATUS</b> <i>(Completed by national contact and/or RWC)</i>			
<i>(Updates are required weekly and when any significant action is taken)</i>			
Date/Time	Organization	Name	Details of action taken / incident status
14/09/2016	KMD	X. YYYY	Station was sending data to the GISC but not to the Automatic Message Switching System. Therefore data was not being routed to the GTS. The situation has been rectified.
16/09/2016	KMD	X. YYYY	The station under observation.
21/09/2016 10:57 UTC	KMD	X. YYYY	This station 63688 has been removed from ECMWF, NCEP and JMA. In addition to this, from 5 <sup>th</sup> September we have data in WMO Quality Monitoring Portal from this station. This station is now ok as far as data availability is concerned. This incident is closed.

<b>PART F: CONFIRMATION OF SUCCESSFUL INCIDENT RECTIFICATION</b> <i>(To be completed by RWC)</i>			
<i>(Participants informed and incident ticket closed and set to 'Complete' in the Incident Summary)</i>			
Date/Time	21/09/2016 10:59 UTC	Name	X. YYYY

# ISSUE IDENTIFICATION – STEP A

- Once an issue has been reported to the RWC or has been identified by the RWC, the issue will be documented by **creating a new ticket**.
- Each ticket should have a **unique number** that consists of five parts [ccc-ID-nnnnn-i-yyyymmdd]:
  - ccc: a three-character country code, for example “KEN”
  - ID (for example, WMO ID or WIGOS identifier in the future)
  - nnnnn: a sequential number (for every new ticket opened)
  - i: a figure indicating if the issue has been raised as an incident (using “1”) or not (“0”)
  - yyyymmdd: the year (yyyy), month (mm) and day (dd) when the ticket was created



# ISSUE IDENTIFICATION – STEP A

RWCs should insert the following information in part A of the ticket:

- Date and time when the ticket describing an issue was created
- Station details, in particular WIGOS station identifiers and network type, station name and WMO Member
- Name of the person and organization that raised the issue, including contact details (email address)
- Full description of the issue, (dates when the issue was first identified, characteristics of the issue, quality monitoring category of incident type (availability or timeliness of data or accuracy)).

# ISSUE IDENTIFICATION – STEP A

- RWCs should add the issue to the ticket summary by setting **“i” in the incident ticket number to “0” at this stage** (not being identified as incident yet), and set the ticket status to open.
- RWCs should monitor each issue at surface land stations and upper-air (radiosonde) land stations over 5 working days before raising the issue into an incident and initiating the incident management process

## ➤ INCIDENT PROCESS INITIATION – STEP B

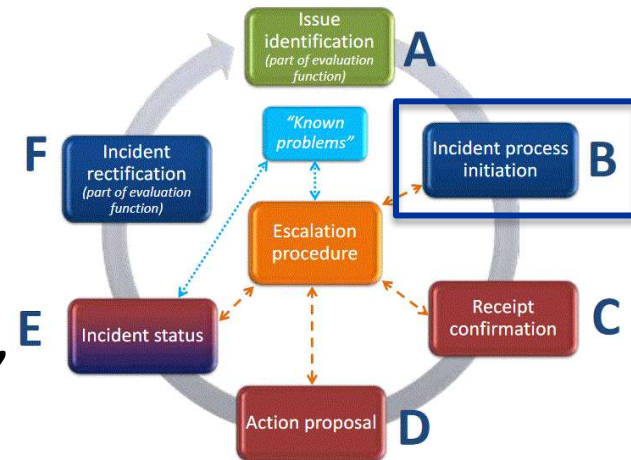


# ISSUE IDENTIFICATION – STEP A

- If an identified issue has been monitored over the defined periods and the issue has been resolved (or has disappeared) without further action taken by the RWC or the issue is out of RWC's responsibility, this shall be highlighted by adding **“No incident process required”**
- The issue ticket shall either be closed, or
- The performance of the station will be further monitored over the next 2 days before deciding to finally close the issue or to raise an incident.

# INCIDENT PROCESS INITIATION – STEP B

- RWCs will be responsible for initiating the incident management process.
- Once an issue (part A) has been deemed serious enough to be raised as an incident, a **notification to the WDQMS NFP of the country** is required.
- This will involve the following tasks and additions to the ticket:
  - Convert the issue ticket number into an incident ticket number (which will be used in all future correspondence)
  - Changing “i” in the incident ticket number from “0” to “1”
  - Add date and time of incident raising (process initiation)
  - Add details of the evaluation results to the ticket why the RWC raised an incident
  - Prioritize the level assigned to the incident



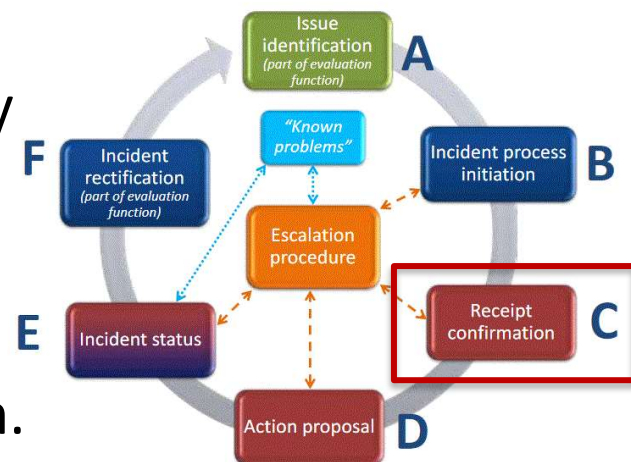
# INCIDENT PROCESS INITIATION – STEP B

- Bring the problem to the **attention of the country in question**, making the ticket available to them and requesting the relevant **WDQMS NFP** to take corrective action as rapidly as possible
- RWCs should change the incident ticket number to “**1**” = “incident” in the ticket summary, set the ticket **status to open**, update the date, status and other relevant parts accordingly.

## ➤ Awaiting RECEIPT CONFIRMATION – STEP C

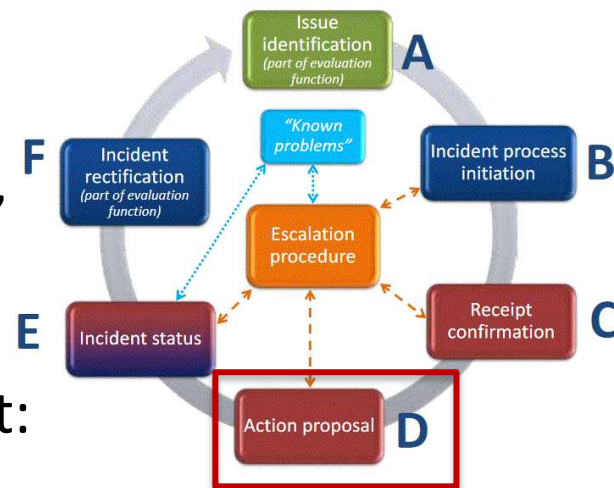
# RECEIPT CONFIRMATION – STEP C

- As soon as the WDQMS NFP of the country has received the incident ticket with the unique incident number from the RWC, **actions shall be taken** to investigate the cause of the incident and to find a solution.
- Part C of the incident ticket should be **updated by the WDQMS NFP**, and RWC should be informed about the update immediately.
- WDQMS NFP should send a receipt confirmation to RWC including date/time, name of recipient and potential comments.
- Once a confirmation is received at the RWC, the **ticket status** should be set as “**in progress**”.



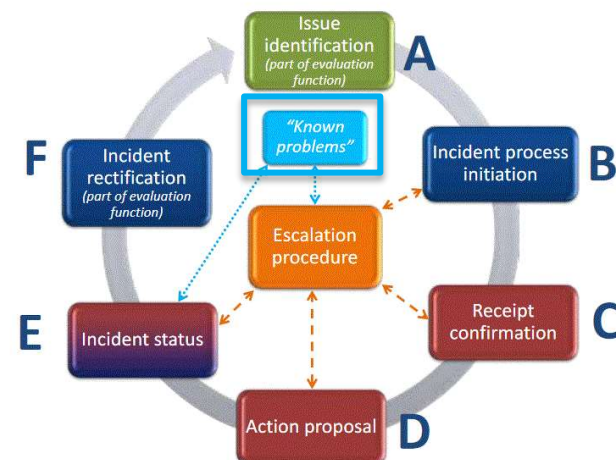
# ACTION PROPOSAL – STEP D

- As soon as the country has identified the cause of the incident and found a solution, the **WDQMS NFP** should alert the RWC of the proposed actions by adding the following information to the incident ticket:
  - Date/time,
  - name of NFP and
  - details of proposed action including timeline to solve the incident and additional relevant comments
- The incident ticket should be **updated by the WDQMS NFP**, and the RWC should be informed about the update as soon as possible.



# INCIDENT STATUS – STEP E

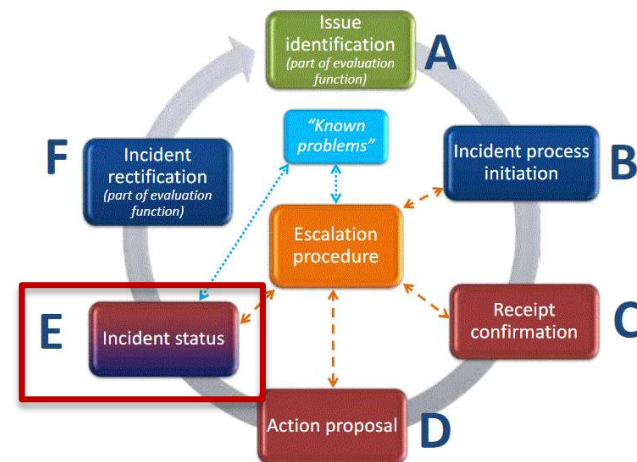
- The **WDQMS NFP** will regularly provide **summarized updates** on the status of the incident:
  - Any significant action that has been taken and which should be recorded
  - essentially a work log of the actions undertaken during the lifetime of the ticket by adding date/time, organization and name of who is taking action, as well as the resulting status after each action
  - Routinely to be updated on a weekly basis (including “no change” reports)
  - At the moment when the incident has been rectified





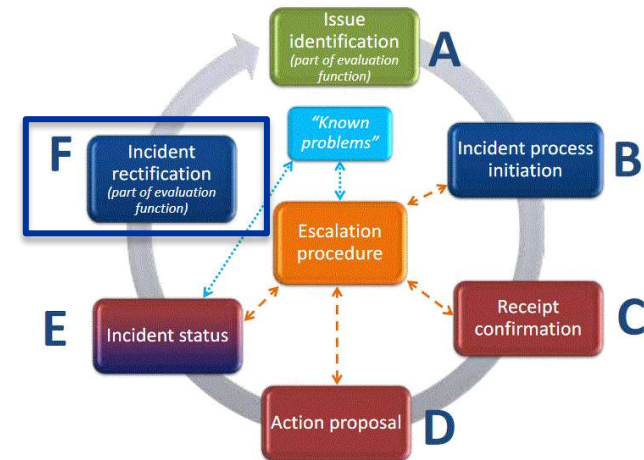
# KNOWN PROBLEMS LOG, other activators

- It might be found that an incident cannot be rectified because no (immediate) action can be taken.
- RWC should **close the ticket** and put the incident into the “**Known problems**” log
- One of the most likely known problems that might be identified at the beginning of RWC operations is that stations do not provide **any data to GTS** although being listed as **operational and affiliated to GOS in OSCAR/Surface** (“silent stations”).
- It also might be the case that actions taken so far have been unsuccessful because the incident has been caused by a **different activator**. In this case, RWC should close the ticket and initiate a new IMP with a different incident description.



# INCIDENT RECTIFICATION – STEP F

- **WDQMS NFP to inform the RWC** if and when the incident has been **rectified**.
- RWC will check whether the incident ticket can be closed or has to be kept open due to ongoing non-compliance .
- In the case of ongoing non-compliance, the RWC will ask the WDQMS NFP to take further actions, to be recorded in part E.
- If the incident ticket can be closed, the RWC will
  - add a closing date/time to the ticket
  - inform the WDQMS NFP and the issue reporter and data users
  - archive the ticket as a “resolved incident” in the ticket summary
- **The IMP will be completed once the station continuously performs correctly again.**



# ESCALATION PROCEDURE

- In the unlikely event of non-response of the country to the RWC incident reporting and the incident is sufficiently severe, the incident escalation procedure will state who should be contacted at a higher level.
- In the most severe cases, this may involve asking the WDAQMS NFP if needed to approach the Permanent Representative with WMO of the corresponding country or WMO Secretariat asking for advise and support.
- The incident escalation procedure might also be initiated if long-lasting incidents are identified as “known problems” (problems that are ongoing and cannot be solved within the responsibility of the RWC and the WDAQMS NFP).



# Thank you

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