
Country Report at **DOST- PAGASA** In the **Philippines**

Rolymer P. Canillo
Andre Jude M. Jose



JMA WIS Workshop
18-20 November 2025



Table of Contents

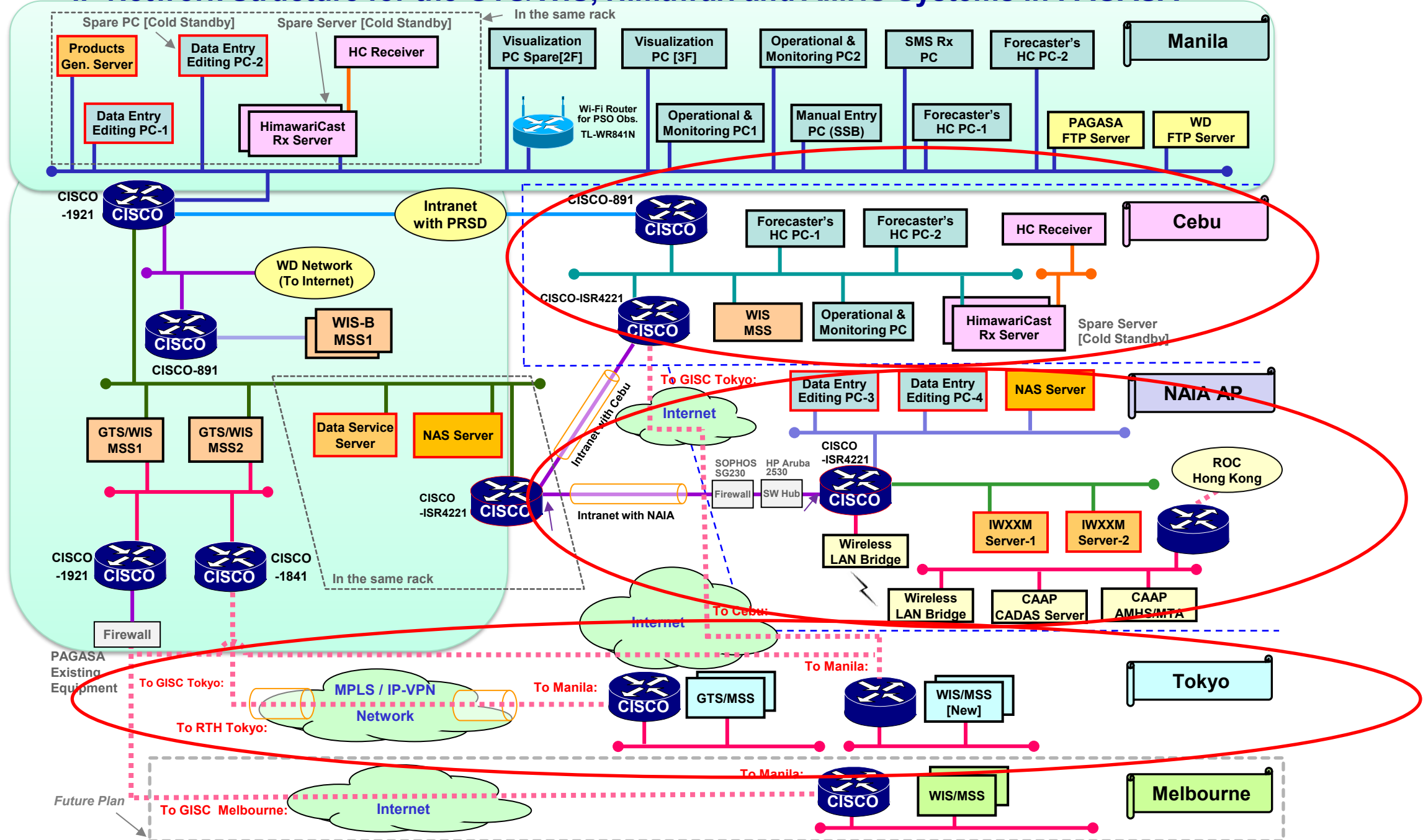
1. Status of system/network configuration
2. Challenges of the current system/network
3. Status of WIS2.0
4. Challenges of the WIS2.0 of system/network
5. Expectation to JMA and other countries
6. AOB (Any Other Business)



1. Status of system/network configuration



IP Network Structure for the GTS/WIS, Himawari and AMHS Systems in PAGASA Ver6.0 / 21c01



GTS/WIS CONNECTIVITY



WIS 1.0 operational



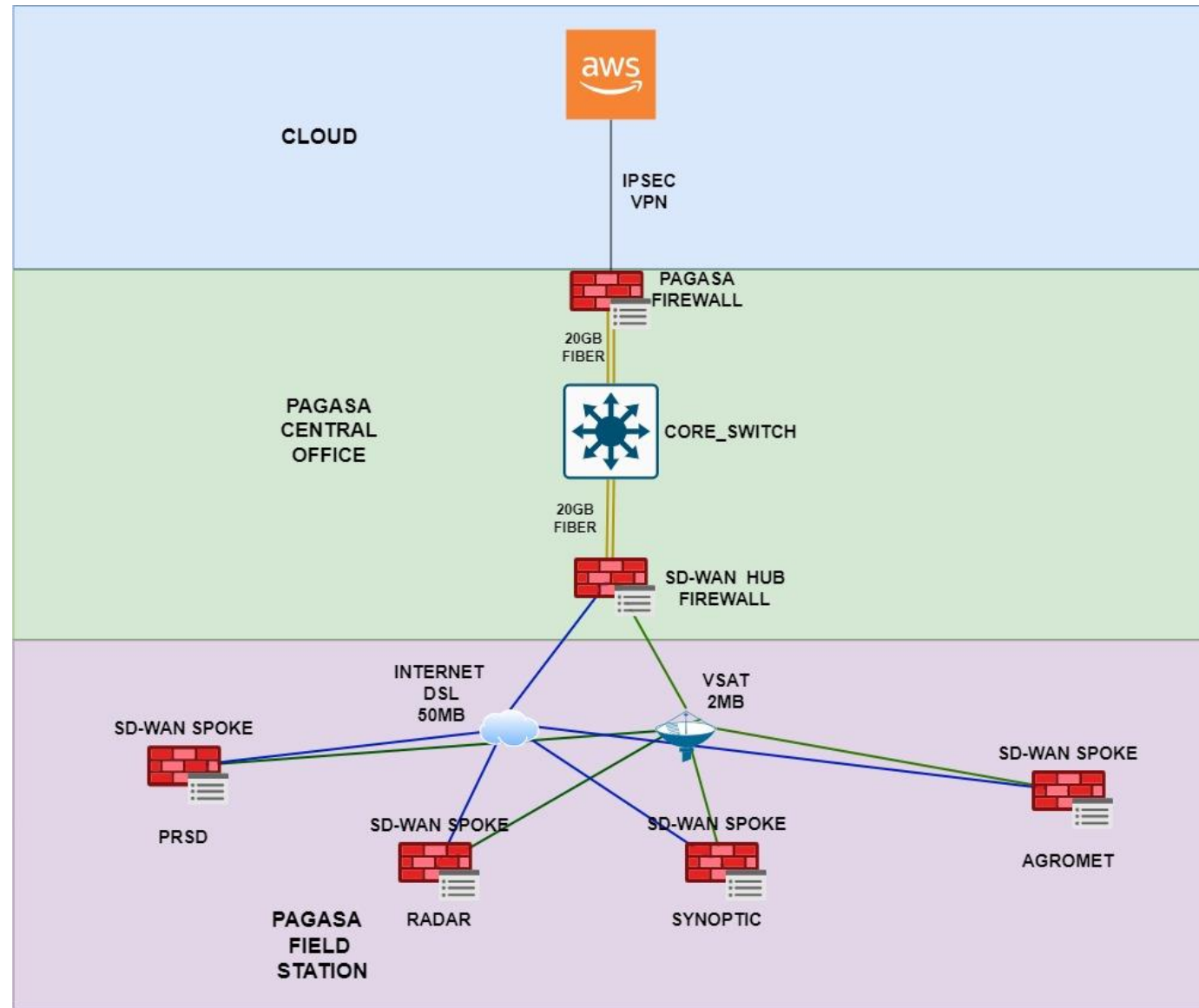
IPVPN (main) operational



Stand by



PAGASA
NETWORK
CONNECTIVITY
ALL OVER THE
PHILIPPINES



Status of system/network configuration

- Recent history and update plan for MSS
 - 2009: Migrated from Frame Relay to IP-VPN
 - 2010: Upgraded the System to include migration from TAC to TDCF
 - 2018: Upgraded the System including MSS Data I/O Control Software , Data Entry Software, and Visualization Software as well as WIS Part A and WIS Part B connection with GISC Tokyo
 - December 2025: Upgrade of Hardware and Operating System of the MSS
- Fund
 - Domestic
- Service level by system supplier
 - 24/7
- Application on the MSS
 - GPV Viewer, Digital Atmosphere, MDCAT and MDRIMS In-house applications



Status of system/network configuration

Country	Protocol	Data
Japan	WMO Socket	SYNOP, SHIP, TEMP, METAR, Himawari-8, ...
Japan	FTP	Global Spectral Model GRIB2 Data
UK	FTP	Unified Model GRIB2 Data
USA	FTP	Global Forecast System for WRF, Initial conditions North American Multi-Model Ensemble (NMME) for Climate Predictability Tool (CPT)
Taiwan	FTP	Model for Prediction Across Scales (MPAS)



2. Challenges of the current system/network



Challenges of the current system/network

- High cost of IPVPN MPLS dedicated access 2 Mbps.
- So many data received, required more storage.
- Archipelagic features of the country may resort to new communication technology but should not that expensive, like eliminating the use of VSAT communication and use star link communication.



3. Status of WIS2.0



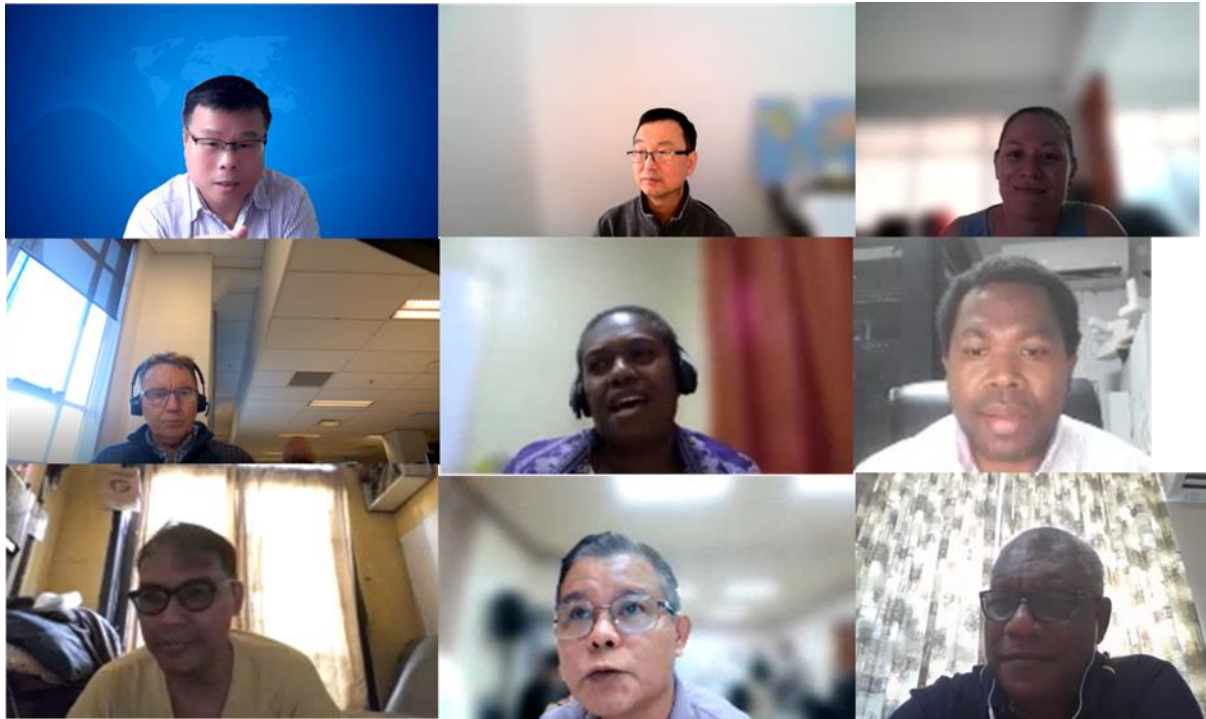
Status of WIS2.0

- There has been continuous cooperation / meeting with WMO in the implementation in RA V c/o Yongqing Chen, done on June 5, 2025
 - Discuss :
 1. Overview of the WIS 2.0 implementation in RA V
 2. Potential Resources to support the WIS 2.0 implementation in RA V
 3. Discussion on the possible approach to support Pacific Members
-

Status of WIS2.0

Third RA V ET-WIS meeting

Thursday, 05 June 2025, 0330 – 0500 UTC
Online, MS Teams



WMO Secretariat:

- Yongqing Chen (RAP Singapore)
- Ryuji Yamada (RAP Singapore)
- Henry Taiki (RAP Samoa)
- Tessa Tafua (RAP Samoa)
- Julianne Thu (RAP Singapore)
- Sun Qian (RAP Singapore)

Status of WIS2.0

Highlight of what transpired on the meeting.

Approach to supporting Pacific Members

Dr Qu proposed a two-step approach for regional WIS 2.0 implementation:

- Capable countries with resources should establish their own WIS2 Nodes, either on-premises or on-cloud.
 - For countries lacking capacity or resources, more established centres could ideally host WIS2 Nodes on their behalf. For instance, Australia possessed the capacity to operate two WIS2 Nodes, one for BoM's operations and another for a country without its own Node.
-

Status of WIS2.0

- PAGASA is supportive in the implementation of WIS2.0.
- Set up on premise WIS 2.0 server on VM server is already done.
- Registered DNS server to <https://wis.pagasa.dost.gov.ph> now available on-line.



The screenshot displays the WIS 2.0 web interface. At the top, there is a navigation bar with the PAGASA logo and a 'SETTINGS' button. Below the navigation bar, a welcome message reads 'Welcome to WIS 2.0 in a box!'. The main content area is divided into two sections. The first section is titled 'Hourly synoptic observations from fixed-land stations (SYNOP) (ph-pagasa)'. It includes a map of the Philippines and the following details: Topic: origin/a/wis2/ph-pagasa/data/core/weather/surface-based-observations/synop and Metadata Identifier: urn:imo:md:ph-pagasa:core:surface-based-observations:synop. Below this section are buttons for 'EXPLORE', 'OBSERVATIONS', 'METADATA', and 'MESSAGES'. The second section is titled 'CAP Alerts published by ph-pagasa'. It includes a map of the Philippines and the following details: Topic: origin/a/wis2/ph-pagasa/data/core/weather/advisories-warnings and Metadata Identifier: urn:imo:md:ph-pagasa:it&qx6. Below this section are buttons for 'METADATA' and 'MESSAGES'. At the bottom of the page, there is a footer that reads 'Powered by wis2box-ujl 1.1.0' and 'wis2box Documentation'.



4. Challenges of the WIS2.0 of system



Challenges of the WIS2.0 of system

- Implementation is not yet fully understood by personnel within the organization and need more information.
- Still need more technical assistance.
- May require a dedicated internet service one operational and one back up of different service provider and possible require a bigger bandwidth.



5. Expectation to JMA and other countries



Expectation to JMA and other countries

- Continuous support from JMA (i.e. technical, invitation in event like WIS 2.0 workshop, on line and physical)
- Expect that countries may continue to help each other, sharing information working hand in hand to successfully implement WIS 2.0.



6. AOB (Any Other Business)



AOB (Any Other Business)

- *PAGASA is grateful to JMA for the unwavering support for the Philippines not only in WIS 2.0 implementation but in other resources like the HIMAWARI Satellite and GSM data access.*
- *Looking forward to getting the most and successful outcome of this workshop.*



THANK YOU

