SAFE SKIES.
SUSTAINABLE FUTURE.

ESAF Regional Aeronautical Meteorology Seminar

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Presentation Overview

REGIONAL OPMET DATA BANK (RODB)

- Background
- Responsibilities
- Monitoring Strategy

States Readiness

- Receive and transmit Space Weather
- WAFS/SADIS data/information

General shift from products to information services

Regional SIGMET Test Advisories

- Background
- Responsibilities
- Reporting

Distribution paradigm change (Challenge)

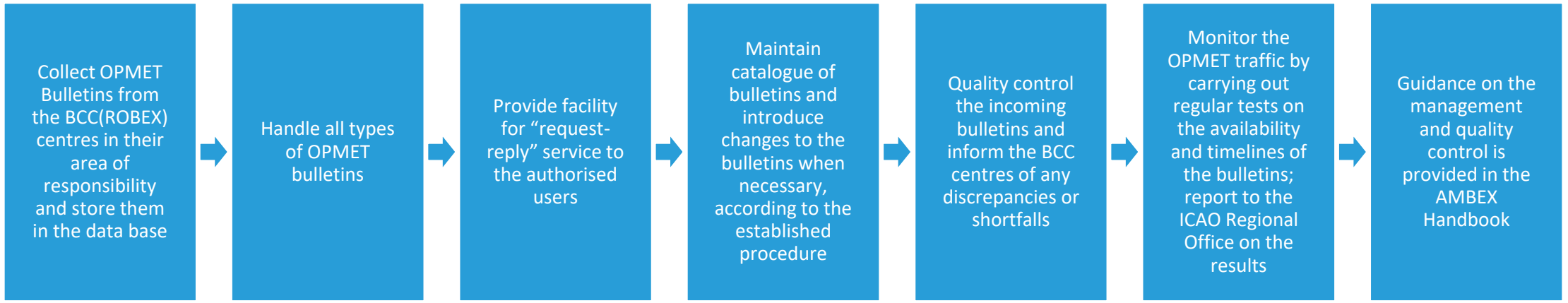
Current and future discussions

REGIONAL OPMET DATA BANK

Two centres have been designated by the Africa-Indian Ocean Planning and Implementation Group (APIRG) through (APIRG/13 Conclusion 67, 2001), to serve as OPMET data banks: Dakar and **Pretoria**

Support the AMBEX Scheme and facilitate exchange of OPMET Information

Responsibilities of RODB



Monitoring strategy

- Improved communication and interaction between the RODB and message originators
- Improved availability of OPMET messages in the OPMET data bank can be adopted as the measure or a tool which shows that states or message originators still have a challenge which need special attention
- Bilateral agreement which provides details on how challenges related to data availability can be addressed since each state got a unique problem.
- A regular reminder which deals specifically with the quality level of messages which are sent to the Data Bank (this can be done through the dedicated focal points)
- Message originators shall be encouraged to improve their infrastructure to a level that they will be able to validate their messages prior the issuance

Regional SIGMET Test

- The MET Divisional Meeting (2002) formulated recommendation 1/12 b), 'Implementation of SIGMET requirements, which call, inter alia, for the relevant planning and implementation regional groups (PIRGs) to conduct periodic tests on the issuance and reception of SIGMET messages'
- APIRG conclusion 16/56 (2007) calls for SIGMET test advisories to be conducted annually in order to assist the meteorological watch offices to resolve deficiencies related to the preparations, issuance and dissemination of SIGMET Information.
- The purpose is to check the awareness of the participating Meteorological Watch Offices (MWOs) of the ICAO requirements for the issuance of SIGMET, and the adequacy of the existing telecommunication procedures for dissemination of the advisories and SIGMETs

SIGMET Tests (RODB responsibilities)

- Records the reception of the SIGMET test advisories and the corresponding time; and provide a summary table to the VAAC or TCAC with a copy to the Regional Office.
- Prepare a consolidated summary report and submit to the ICAO regional offices Dakar and Nairobi.
- The report includes recommendations for improvement of the SIGMET exchange and availability.
- South Africa has the responsibility to issue the triggering message for the SIGMET for other weather phenomena, and
- Display these (SIGMET Test advisories) in both text and graphical format with the use of the Geocentric Information Briefing (GIB) facility.

Regional SIGMET Test

- Participating States, for which discrepancies of the procedures or other findings are identified by the tests, are advised by the AFI ICAO Regional Offices and requested to take necessary corrective action.
- The results of the tests are also reported to the AFI Infrastructure and Information Management Sub-Group (IIM/SG) meetings.

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Space Weather Information-Reception

Readiness

- South Africa has been ready, and they currently receive Space Weather Information from four designated global Centres.
- Received information made available to Users via the web-portal and available flight briefing platform.
- Training on the impact and interpretation of this information have been championed by experts from the South African National Space Agency (SANSA)

- **Space Weather Centre**

	WMO Headers	
Space Weather Centres	TAC Advisory	IWXXM Advisory
ACFJ - Australia	FNXX01 YMMC	LNXX01 YMMC
ACFJ - France	FNXX01 LFPW	LNXX01 LFPW
PECASUS	FNXX01 EFKL	LNXX01 EFKL
USA	FNXX01 KWNP	LNXX01 KWNP

Readiness to receive - WAFS

World Area Forecasting System

The purpose is to provide the global aviation community with operational meteorological forecasts and information about meteorological phenomena required for flight planning and safe, economic, and efficient air navigation.

Highlights on how SAWS prepared itself to accommodate the new Generation of WAFS

	Before Nov 2023	Past – Nov 2023
Horizontal Resolution	1.25° x 1.25°	0.25° x 0.25°
Vertical Levels	17	55
Intervals	3 hourly	1, 3 and 6 hourly depending on the parameters
Data size	40 MB	2100 MB (2.1 GB)
Model intervals	4 times per day	4 times per day

SAWS upgraded its International Internet bandwidth from 60 Megabits per second (Mbps) to 160 Mbps to accommodate the high volume WAFS data/information.

Proposed Amendment 81 to Annex 3 to the Convention on International Civil Aviation – (ICAO State Letter AN 10/1.1 – 24/33)

18 March 2024

Adoption by the ICAO Council

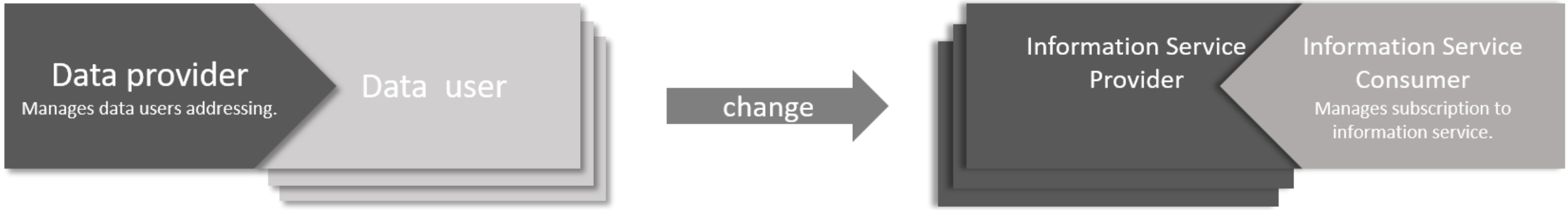
22 July 2024

Approval by more than half of the Contracting States

28 November 2024

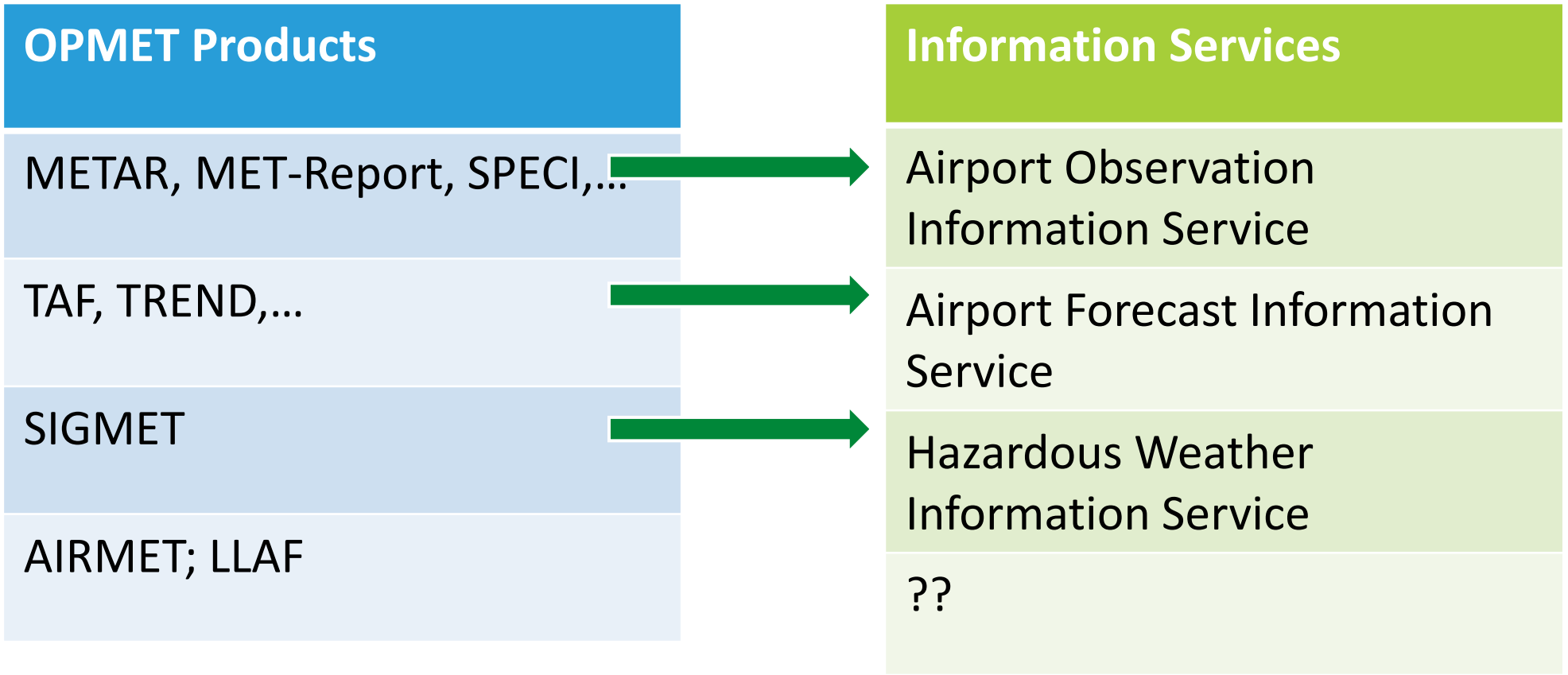
Effective Implementation Date

Distribution paradigm change (Challenge)



General shift from products to information services

Where we are Vs Global engagements



Current and Future Discussions on Aeronautical Meteorology

Develop a consolidated strategic plan for the transition of all current ICAO-defined aeronautical MET information services (i.e., IAVW, OPMET, SWX, WAFS) to SWIM information services, as well as the implementation of new information services that will replace existing services (e.g., aerodrome observation service, aerodrome forecast service).

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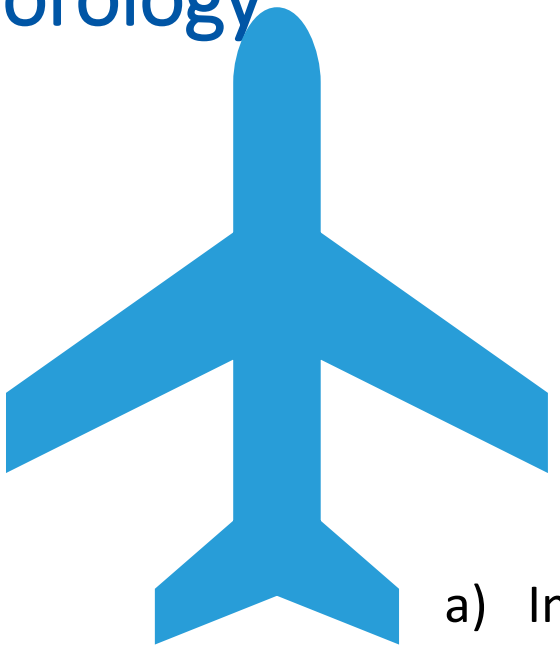

Develop a communication plan to inform all aeronautical MET information stakeholders, including:

1. MET authorities,
2. MET service providers, and
3. users, regarding:

a) Implementation of new services;

b) Discontinue of legacy information; and

c) Benefits of new services.

Thank you

Thank You

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