

## DMG41 Notes

19-21.03.2024

The DMG41 was held from 19<sup>th</sup> to 21<sup>st</sup> March 2024 at ICAO Paris Office. The meeting was attended by the following members:

Mr. Michael Pichler	Austria (vice-Chairman)
Mr. Herman Swinnen	Belgium
Mr. Wim Demol	Belgium (Chairman)
Mr. Dirk Zinkhan	Germany
Mr. Benjamin Revel	France
Mr. Laurentiu Brojboiu	Romania (Secretary)
Mrs. Alfiia Iafunyaeva	Russian Federation (on-line participation)
Mr. Vladimir Tsukanov	Russian Federation (on-line participation)
Mr. Diego Cubero Jiménez	Spain
Mr. Matthew Wagner	United Kingdom & SADIS
Ms. Natalia Savvina	ICAO EUR/NAT

The meeting started on Tuesday 19<sup>th</sup> March 09:30 CET. The agenda of the meeting was presented in WP01 for adoption:

### 1. Approval of the Agenda

- WP01 – Agenda (Chair)

### 2. Approval of the DMG/40 report & Actions from previous meetings

Draft Report DMG/40 actions list

- Status of the actions resulting from DMG/40 (DMG Sec)

### 3. Information from other groups

- ICAO EUR/NAT parent groups (EASPG, PCG, METG):
  - IP01 - Follow-up of METG33 conclusions and decisions (Wim; info from Chris)
- ICAO EUR/NAT other groups (AST TF, AST TF/PG, VOLCEX, PT/EAST,...):
  - IP02 – Info on VOLCEX events (Wim; info from Chris)
- ICAO Global Groups (WG-MIE, WG-MOG/SADIS, IMP, METP,...):
  - IP03 - WG MIE activities (Matt/Dirk)
  - IP04 –IWXXM format change (Matt)
- WMO groups of DMG interest (TT AvData,...):
  - IP05 – Update on TT-AvData activities & compatibility of IWXXM versions (Dirk)
- EASA & EU:
  - IP06 – Latest news from SDM and MET3SG (Michael)

### 4. IWXXM action plan

- Consider development of implementation table based on information from METNO
- Actions and coordination to maintain the regional implementation plan Volume III, Table ASBU-EUR-B1-AMET
- Monitor status of translation agreements for IWXXM
- Coordination of interregional IWXXM-data exchange

### 5. OPMET Data Monitoring results, action plans & PHP

- Regular monitoring of OPMET data (EUR DMG-monitoring, EUR Warning Monitoring,...)

- [WP02 – OPMET\\_Monitoring\\_Results\\_February2024 \(Herman\)](#)
  - [WP03 – EUR Warning Monitoring Results \(Michael\)](#)
- Special monitoring of OPMET data (TC-SIGMET, SWXA,...)
  - [WP09 – Special AIREP regulations](#)
  - [Special NO-Monitoring](#)
- Review of open PHP actions or action plans for AOP aerodrome OPMET data
  - [WP04 – PHP-Report \(Diego\)](#)
  - [IP07 – OPMET data from Greenland \(Matt\)](#)
- IWXXM-Monitoring
  - [WP05 – Results of ROC Vienna IWXXM-Monitoring \(Michael\)](#)
- Maintain and update the “EUR RODEX OPMET and SADIS Catalogue”
  - [IP10: EUR RODEX OPMET and SADIS Catalogue](#)

## 6. Performance indices & Volume III – MET OPMET implementation

- Review PIs calculated from latest OPMET monitoring for availability and timeliness of OPMET data in order to
  - Prepare an update proposal for eANP Vol III
  - Prepare detailed information for States failed to comply with defined thresholds
  - Assist States that failed to comply in solving the issues
- Possible development of an online-tool to be used by MET service providers to review results

## 7. RODEX

Subjects covered under this agenda item are:

- New RODEX Back-up procedures/contingency arrangements
- Shortcomings of the RODEX-schema (network limitations, outages,...)
- Coordination with other regions (AMHS I/R-gateways and link)
  - [IP08 – update on the status/planning of the use of the AFS in the AoR of ROC Moscow](#)

## 8. Revised RODC tool

The following ideas have been collected for an RODC-tool:

- Develop an online form for requesting changes to OPMET bulletins and/or contents of OPMET bulletin and allowing increased automation of the METNO procedure.
- Provide information on available/required data (based on DMG monitoring and METNO procedure) in different, reasonable presentation/views
- Provide PI (Performance Indices) via RODC including details enabling States to identify the issues in case of low percentages

## 9. EUR Documents (outside IWXXM elements)

- Doc 014 - EUR SIGMET & AIRMET Guide
- Doc 018 - EUR OPMET data Management Handbook
  - [WP07 – Update Proposal EUR Doc 018 \(Michael\)](#)

## 10. SWIM

- Follow SWIM developments from WG/MIE, SESAR DM and other relevant groups and assist in deriving an implementation plan in the EUR region for SWIM
- Develop a EUR SWIM Plan with possible roles/functions of ROCs and RODBs, including dedicated SWIM-services
  - [IP09 – WMO WIS vs ICAO SWIM: differences and analogies \(Dirk\)](#)

- WP08 – CONOPS for the Transition from OPMET-Data Exchange via AFS to SWIM (Michael)

#### **11. Next meetings**

DMG/42: 18-20 June 2024, Bucharest

DMG/43: 5-7 Nov 2024, Virtual

DMG/44: March 2025, Paris

#### **12. Any Other Business**

(e.g. future retirement(s) and/or job change(s) and transfer of relevant duties)

- Issue with SIGMETs from Türkiye

#### **Agenda Item 1 - Approval of the Agenda**

After approving the agenda, the participants welcomed Mr. Benjamin Revel (ROC Toulouse) as a new member of DMG, nominated by France. A tour-de-table took place for introducing the DMG participants.

#### **Agenda Item 2 - Approval of the DMG/40 report & Actions from previous meetings**

The DMG members were presented the report of DMG40 meeting. After review and clarifications, the report was approved by the group.

**Actions from previous meetings**  
(actions highlighted are considered completed)

<b>Id</b>	<b>Action</b>	<b>Responsible</b>	<b>Target date</b>	<b>Resolution / Comments</b>
	<b>DMG37</b>			
DMG37-4-2	Investigate with AFI region regarding the exchange of data with NACC	ROC Toulouse	DMG38	IP from MF for DMG42 to describe the current routing and possible reasons
DMG37-7-2	Address to a higher-level the issue regarding SIGMETs issuance and dissemination for the 4 FIRs of Turkmenistan	C. Keohan		Remains open – official visit of representatives from Turkmenistan to ICAO EUR/NAT announced for October 2024 - the problem could be addressed there. Updates for DMG42
DMG37-7-3	Provide updates on the possible progress related the AFS communication links with States in their AoR	ROC Moscow	DMG40	DMG40 IP03
	<b>DMG39</b>			
DMG39-5-4	Hand-over Problem Handling Manager actions from Matt to Diego (usage examples from extraction from the monitoring results to creation / updating of tickets).	Matt Diego	DMG41	Practice session with the SIGMET monitoring exercise of ASIA/PAC: 8th, 15th and 23rd November.
DMG39-5-5	Adopt the new format of the monitoring results and use that starting with the next monitoring (Feb 2024).	The monitoring centres	DMG41	ROC London - next major software update is in January, will confirm conformance.
	<b>DMG40</b>			

DMG40-3-1	The ROCs will inform the NOCs in their AoR that extra METNOs are suspended and on the need to stick to the AIRAC dates for announcing the changes	ROCs		New action for DMG FP to include in METNO this info.
DMG40-3-2	Depending on the information coming from MIE meeting in December, an updated paper on the ROC-broker functionality	M. Pichler W. Demol	DMG41	WP08
DMG40-3-3	Try to establish a teleconference with SAM Office and Jun to obtain contact persons in the SAM region for setting up the IWXXM exchange.	C. Keohan M. Wagner	Nov-Dec 2024	
DMG40-3-4	Check if their own data (or other EUR data) is currently received in US bulletins and inform Matt and the SADIS Manager	DMG members	DMG41	On-going action by SADIS to remove problematic bulletins
DMG40-5-1	Provide the credentials for using the PHP application to ROC Toulouse (Benjamin).	H. Swinnen		
DMG40-5-2	Perform a one-day monitor of IWXXM data and will share the results with Herman	M. Pichler	End 2023	WP05
DMG40-5-3	Check with Jan Sondij on the usage of the single catalogue naming throughout Doc 018.  Wim to verify what other documents need to be updated in that respect (DMG Work Programme).	M. Pichler W. Demol	DMG41	WP07
DMG40-8-1	Set-up an on-line meeting between representatives of ONM and Skeyes with the subject of defining the roles and responsibilities and the planned roadmap	H. Swinnen	Dec. 2023	
DMG40-8-2	Provide proposals for amendments of EUR Doc 18 to M.Pichler who will present a WP at DMG41	DMG members		Keep it open, with the intention to have a final version to be presented at METG34.

### Agenda Item 3 - Information from other groups

#### **IP01 - Follow-up of METG33 conclusions and decisions**

Wim Demol presented to the group an inventory of the MET conclusions and decisions by METG, PCG and EASPG meetings, with particular highlight on the current status of those related to the DMG activities. There were noted three on-going actions: the provision by ICAO of Table MET II-2 in csv format to DMG, the request that SADIS and WIFS to continue the provision of both TAC and IWXXM at least until 2030, and the request to the ICAO MET Panel to provide IWXXM Schema for all aeronautical meteorological products.

#### **IP02 - Info on VOLCEX events**

Wim Demol summarised the main activities related to the volcanic ash exercises, as covered into the WP that will be presented to METG34 by the Secretariat. There were noted the achievements coming from the VOLCEX23 exercise and also the planning for the VOLCEX24, scheduled for 18-19 Nov. 2024 (Volcano: Santa Barbara, Location: Terceira, Azores, Portugal).

#### **IP03 - MIE**

Matt Wagner informed the DMG of the current MIE work streams & Activities and the Activities which have DMG member involvement. There was noted that, in addition to Matt Wagner and Dirk Zinkhan, a third member of DMG joined the MIE - Benjamin Revel. MIE has monthly meetings (virtually) and one face-to-face meeting every year (next one, MIE12 scheduled for 7-11 October 2024, Washington DC). The MIE will also be represented at the Cross Working Group Progress (CWGP/2) meeting, 9-11 April 2024, Montreal.

#### **IP05 - Update on TT-AvData activities & compatibility of IWXXM versions**

Dirk Zinkhan presented an update of the TT-AvData activities. Related to the IWXXM version, it was recalled that the latest version (IWXXM 2023-1) was released in July 2023, and the next one will be 2025-2, for which a release candidate is expected in March / April 2024. The main changes introduced by this version are related to: the removal of runway state condition, the removal of limitation of number of reported RVR, possibility to report T and DP in tenth of degrees C, introduction of VONA and QVA.

With regard to IWXXM for Aerodrome MET Observation and Forecast, there was mentioned that a small group of MET3SG members (DWD, FMI, ECTL) is currently working on the development of the corresponding schemas (based on IWXXM-SX). For the Aerodrome MET Forecast, some new functionalities are envisaged, related to introduction of support for time-series and for probabilistic forecasts. The progress of activities can be followed on Github (including also extracts from notes of the virtual meetings).

The DMG members discussed on the format of the versioning number that is to be included into the messages (e.g. “2023-1” or “3.1.0”?). There was also questioned on the version number that needs to be used. Although messages that are conform to a schema version will be correctly processed by applications, it was considered useful to have a recommendation on the IWXXM version that needs to be used (at least for the EUR Region). Such a recommendation would fit well in Doc 018 and this could also be presented further to MIE for consideration.

Action DMG41-3-1: Michael, Dirk and Matt to prepare an IP for DMG42 on a suggested usage of the version numbering in IWXXM messages, and a possible recommendation in EUR Doc 018 on the usage of the new versions (in correlation with Annex 3 Amds).

## **WP06 - IWXXM Format Change**

Matt Wagner informed the group that during the latest MIE virtual meeting a question was risen related to a possible format change in IWXXM from XML to JSON, with highlights on some technical differences and the possible benefits. Dirk presented some considerations related to the current stage of implementation of IWXXM, noting that the standardisation is intended for the data model and the format of data being exchanged via AFS, while the data representation (the way data are provided to the users via SWIM services) may be in XML or other format considered more appropriate (JSON, GeoJSON, etc). It was also noted that other schemas used in aviation are also based on XML (e.g. AIXM, FIXM) and there is no intention known on the possible change of those as well. There was considered that no decision on a change will be envisaged by ICAO for a long period. Also, at European level, no change is expected within the CP1 timeframe. Some of the concerns and considerations discussed during the meeting will be brought forward to the next MIE meetings and the DMG will be updated on the further developments.

## **IP06 - Latest News from SDM and MET3SG**

Michael Pichler updated the DMG members on the reviewing the SDP by the SDM. The process started in October 2023 and lasted until March 2024, and consists mainly on updates to the SDP but also on development of the guidance material. These bring more clarifications related to data that needs to be provided through the Aerodrome MET Information Services (METAR/SPECI & TAF) as well as who has to provide the services (all airports in MET II-2) and who is mandated to consume these services (includes the MET providers). Other clarifications refer to En-Route and APP services, the mandatory usage of QVA and to the compliance for NM Information Service by MET Providers participating in CBCF.

Regarding the MET3SG activities, the group was recalled that SDM initially supported a direct implementation of enhanced services. On the contrary, a position paper of EUMETNET supported a two-tiers approach, and following several discussion between the two parties, an agreement was reached on this two-tiers approach, with remaining work to define the implementation roadmap by a dedicated task team of MET3SG.

Another task team - TT on Service Architecture is currently developing the service definitions for METAR/SPECI and TAF (for SIGMET definition, that is already covered by the En-Route SigWx information service). It is expected that the definitions be finalised during the April meeting of the task team.

Regarding the number of services to be provided, the Task Team on Number of Services is considering that one instance per State is the way to proceed with the implementation.

A dedicated workshop will take place in the last week of March in London Heathrow, aiming at developing the service definition for QVA (the two VAACs, with support from Eurocontrol).

Michael presented to the group the roadmaps for implementing the mandatory services (with a deadline for the end of 2025) and of the enhanced MET Information Services (implementation extended up to end of 2030).

There was mentioned that the current SDP does not include a mandatory requirement on the airport operators for SWIM services consumption. The METPs need to provide AND also to consume services. SADIS provide GRIB2 and SigWx via SWIM services and these need to be consumed. On the other hand, OPMET is still offered by SADIS in 5min files and these are not considered as being SWIM compliant. In that case, one MET SP will need to consume OPMET data via SWIM services directly from other MET SPs, and make those available to internal (national) users.

These and more clarifications will be included into the new SDP, which will be circulated to all stakeholders around 9. April, giving them time to comment until begin of May, with the intention to have it ready for publication in July 2024.

#### **Agenda Item 4 - IWXXM action plan**

##### **Consider development of implementation table based on information from METNO**

The METNO does not contain the information whether the data is translated or not. This information is available, though, from the monitoring results (WP05). This task may be removed or rephrased.

##### **Coordination of interregional IWXXM data exchange**

Matt informed that a meeting with NACC representatives is scheduled for the next weeks to identify what data is available for exchange (and address the implementation of METNO). From the NACC States, only Canada is ready to start IWXXM data exchange.

Regarding IWXXM data from AFI region, the group noted that some IWXXM data are available and concluded on the following action:

Action DMG41-4-1: Benjamin (with support from Joel) will contact Dakkar & Pretoria to see what data is available and plan the start of operational exchange.

##### **IP04 - EUR ANP vol. III**

The DMG was presented with the draft of the paper intended to be presented at METG34 by the ICAO Secretariat. If needed, the paper will be updated by Natalia with the latest information before METG.

#### **Agenda Item 5 - OPMET Data Monitoring results, action plans & PHP**

##### **WP02 - OPMET\_Monitoring\_Reports\_February2024**

H. Swinnen presented to the group the details and the results of the yearly OPMET monitoring in February 2024. Firstly, there were presented clarifications related to the terminology used and also the 7910 version used as a reference.

The results from all the ROCs, RODB Brussels and LROM (SADIS user) were received in due time from all participants. WIFS monitoring was performed this time by LROM. For the first time, IWXXM monitoring results were provided by NOC EBBR Meteo, ROC EGGY, The U.K. SADIS Provider, ROC LOWM and ROC Moscow.

The format compliance of the results to the format agreed at DMG39-DMG40 was summarised for each participating centre.

When analysing the results, the group noticed some examples e.g. for the warning monitoring part, where the monitoring tool by ROC Toulouse missed some of the received data. Matt and Michael offered to do a dedicated one-day monitoring which then can be used to compare the results and help ROC Toulouse to finetune the monitoring tool. The group agreed on the following actions:

Action DMG41-5-1: Benjamin to go through the monitoring results and investigate on the problems recorded for the missing data. Michael and Matt will support with providing the results of a one-day monitoring, for comparison and identifying the problems with the monitoring tool of ROC Toulouse. The exact date will be agreed by the three participants.



Action DMG41-5-2: Michael: to derive the table with the availability of IWXXM data (similar to the one corresponding for the TAC data).

Herman raised the problem regarding the monitored usage of FIR / Loc Ind names containing characters that are not part of the standard character set. He mentioned the problems when circulating such messages over AFS (or even IWXXM data circulated over AMHS). The result would be the replacement of the corresponding character with a standard one (“?”). There was recalled that the issue was previously addressed also by the ICAO Secretariat to METG. Herman prepared a Flimsy paper with such examples, to be discussed during AOB.

Further, Herman presented to the group the difficulties encountered when deriving the State name based on the location indicator of a station. Deriving it from the first two letters (or even the four) is not always possible.

#### **Flimsy 1 – special characters in 7910 and EUR eANP**

After analysing the examples provided by Herman in Flimsy 1, the following action was concluded:

Action DMG41-5-3: Wim will include into the DMG report to METG the problem regarding special characters, with a proposal for a draft decision to request ICAO that the documents provided for DMG activities to contain allowed characters only.

It was mentioned that this issue was not only affecting the processing of the files for the monitoring purposes, but also has an operational impact on the TAC meteorological messages circulated on AFS (e.g. for FIR Names) and IWXXM data (small characters and special characters not currently allowed by the schema).

Regarding the data needed for the update of the EUR ANP Vol. III, the group recalled that there is still a need to check the SIGMET availability and format. For the Special AIREPs, the number of messages is important as well. The information that needs to be captured is the header and the FIR name. Previously, these results were based on a 5-month monitoring performed by ROC Toulouse. Benjamin informed the DMG that this information is stored at ROC Toulouse for a period of 4 month and as such this information may be used for the mentioned purpose.

Action DMG41-5-4: Benjamin will capture SIGMET/AIRMET headers for a period of 4 month and make the results available to DMG and ICAO Secretariat.

Note: the Doc018 currently contains a period of 5 month (Sep – Jan) and only mentions SIGMET - needs to be updated accordingly.

The DMG members agreed on the minimum tables necessary for the DMG activities:

- Performance Indices (for EUR eANP Vol III ASBU Block0 implementation)
- OPMET Catalogue (the EUR RODEX OPMET and SADIS Catalogue)
- OPMET availability Stats for AFS and SADIS (for publication in the report for METG)
- Routine monitoring DMG (for routing deficiencies)

#### **WP03 - EUR Warning Monitoring Results**

Michael Pichler presented the results of the yearly EUR DMG Warning Monitoring that had taken place on 7-8 Feb 2024. The results were received for all centres and the details were already published on the DMG-website. Additionally, the attachment to the working paper

contains the complete set of results. The ROCs were invited to check that EXCEL-file, which already includes some investigations and actions done by ROC London and ROC Vienna.

Action DMG41-5-5: The 4 ROCs will investigate in the Warning monitoring results on possible routing problems and take the appropriate actions

#### **IP07 - Data from Greenland**

Matt Wagner informed the DMG members on the actions taken to make available METARs for BGTL to Denmark, in order to include those into the bulletin SAGL32 BGGH.

Initially, data was received from US in SANT32 KWBC, but this bulletin contains 1243 locations (169 of which are EUR locations). This will not be disseminated anymore outside ROC London. Instead, upon agreement with Denmark, a dedicated bulletin will be used to send BGTL data to Denmark.

#### **WP04 - PHP Report**

Diego Cubero presented the status of the PHP service at 13<sup>th</sup> March and the corresponding actions required, to ensure logged tickets are set to Wait before DMG42, while the Closed ones turn into Final Closed. Regarding the tickets assigned to Valentin, those need to be transferred to Benjamin (account already set-up for him).

Action DMG41-5-6: Matt to transfer Valentin's tickets to Benjamin. Finish the hand-over process by introducing Diego to initiate tickets.

#### **WP05 - Results ROC Vienna IWXXM Monitoring**

During the DMG monitoring (1-14 February 2024) ROC Vienna performed a monitoring of the received IWXXM-data. Michael Pichler processed the results of this monitoring and brought to the attention of the group some examples of data that could be extracted, such as number of IWXXM messages (grouped by message type), the IWXXM version used, or cases where the translation had failed.

The group discussed on this results and considered that the following information would be useful to be extracted from the monitoring results:

- IWXXM version
- IWXXM translated
- IWXXM permissibleUsage
- Translation failures

Action DMG41-5-7: M. Pichler will update a paper to be presented at DMG42 regarding possible information extracted from IWXXM monitoring, in order to decide what to present to METG34.

#### **IP10 - EUR Region and SADIS OPMET Catalogue 2024**

Matt Wagner informed the DMG members on the annual update of the EUR Region and SADIS OPMET Catalogue. This year's version is based on the 1-14 Feb. 2024 monitoring results captured by RODB Brussels and includes some changes to the layout used for presenting the data, varying for different data types in order to capture only required data. It also includes two new IWXXM types: LK (TC advisory) and LS (WS SIGMET).

The Catalogue contains all monitored routine and non-routine OPMET data and all registered non-routine data (even if not monitored).

### **WP09 - Special AIREP Regulations**

During the process of upgrading its visualisation system, Austro Control noted some discrepancies on the time used in the header for Special AIREPs issued in Europe. M. Pichler presented to the group some examples and explained the problems that may arise when using the same header twice (the later message may overwrite the first one, or the later ones may be blocked). In order to consolidate what to present on this issue to METG34, the following was agreed:

Action DMG41-5-8: The DMG members will check the procedures that are in place in their State with respect of issuing AIREPs. The details will be discussed at DMG42, with the intention to have a consolidated paper for METG34.

### **Agenda item 6 – Performance indices & eANP VOL III – MET OPMET implementation**

The performance indices to be published in eANP VOL III were presented in WP02 of Agenda Item 5.

### **Agenda item 7 - RODEX**

#### **IP08 - Update on the Status of the Use of the AFS in the AoR of ROC Moscow**

The paper presented by the Russian Federation updated on the progress made in terms of IWXXM implementation and AFS/AMHS communication links with the States in the AoR of ROC Moscow. These can be summarised as follows:

- Armenia: translation agreement effective until end-2025, when IWXXM provision at source is envisaged
- Belarus: AFS/AMHS connection expected in second half of 2024; seven stations of Belhydromet will transmit OPMET data in IWXXM to ROC Moscow in test mode. Translation agreement is expected to extend until end-2025.
- Kazakhstan: all stations generate OPMET data in IWXXM (METAR/SPECI, TAF) and use national headers; IWXXM data sent to ROC Moscow via AMHS from NOC Astana.
- Kyrgyzstan: translation agreement effective till end-2024. All stations generate OPMET data in IWXXM. IWXXM from Manas aerodrome is sent to Almaty via IP AFDTN/AMHS and further via AMHS to ROC Moscow, in test mode. SE "Kyrgyzaeronavigatsiya" plans to ensure the transmission of OPMET data from other international aerodromes via AMHS to ROC Moscow by the end of 2024.
- Tajikistan: translation agreement effective till end-2024. All stations generate OPMET data in IWXXM at source. TajikAirNavigation will provide connection to AMHS, as soon as it gets ready to transmit IWXXM data to ROC Moscow.
- Turkmenistan: translation agreement effective till end-2024
- Uzbekistan: translation agreement effective till end-2024. Phased modernization of AWOS KRAMS-4 which are used at Uzbekistan airports. Uzaeronavigation plans to complete in 2024 the tender for the purchase of equipment for the transition to AFS under the AMHS protocol

A summarizing table showing the status of IWXXM implementation and AFS (AFTN/AMHS) capabilities of the centres in the AoR of ROC Moscow was presented.

### **Agenda Item 8 - Revised RODC tool**

The DMG noted that currently there is no representation of Algeria to the DMG activities. Until DMG40, M. Mezred was involved in the activities related to the development of the RODC tool. It was agreed that DMG approaches Meteo Algerie to confirm whether they will continue to support the DMG activities, especially in relation to the RODC developments.

*Note: Since the conclusion of the meeting, a positive answer has already been received from Algeria, with the nominations of two representatives to support the DMG activities, especially related to RODC.*

## **Agenda Item 9 - EUR Documents**

### **WP07 - Update Proposal EUR Doc 018**

Michael Pichler summarized the changes already applied to the EUR Doc 018. The paper addressed to the DMG consideration a number of changes that need to be agreed upon.

- Par. 5.4.7 (related to quality control at IROGs) was agreed to be removed. There is no requirement for validating data from other regions, those are supposed to have already been validated.

App. D - the monitoring tool: the group agreed that there is no need to extract the airport name from the XML, the location indicator is enough.

Regarding the provisions in the handbook for the possibility of having an EXTRA METNO, it was agreed to remove those. Additionally, it was agreed that the Remarks section of the METNO messages need to include the explicit statement that during the next period no EXTRA METNO is allowed between the AIRAC periods.

Action DMG41-8-2: The distributed METNO messages shall include in the Remarks section the explicit statement that no EXTRA METNO is allowed between the AIRAC dates.

Action DMG41-8-3: The DMG members to provide proposals for amendments of EUR Doc 18 to M.P. who will present a WP at DMG42

## **Agenda Item 10 - SWIM**

### **IP09 - WMO WIS vs ICAO SWIM**

Dirk Zinkhan offered a presentation on the main differences and analogies between the WMO WIS2 and ICAO SWIM. One of the main differences is that WIS2 is data centric (the consumer discovers data and then determines the services through data may be accessed), while SWIM is service centric (the consumer discovers the service on the SWIM registry and then determines what information it provides). On the technical side, the major difference is the usage of the MQTT protocol by WIS2, while SWIM uses AMQP.

Process is in place for the update of the Eurocontrol specifications of SWM services (probably finished around fall 2024).

Regarding the interoperability between the two systems, it was mentioned that the WIS2 Guide proposes the concept for a gateway to propagate data from WIS2 to SWIM. SMHI (Sweden) has already a prototype for the gateway between WIS2 and SWIM (one way).

M. Pichler recalled to the group that a description of the WIS2 was presented in DMG38 IP02 and, in addition, he provided during the meeting a link to a recorded workshop on WIS2.

### **WP08 CONOPS Transition AFS2SWIM**

M. Pichler presented to the group an updated version of the CONOPS for the transition from AFS to SWIM. There were highlighted a number of topics that need clarification, grouped by categories:

- Applicability of IWXXM versions: there are currently very few information in the available ICAO and WMO documents, and some of those are already outdated. Several questions were noted, like what is the official version to be implemented, what document should include that information, time allowed for users to implement new versions, backward compatibility, version numbering to be included into the message. As SWIM is covering a global implementation, the group considered that these information would be preferably be included into ICAO Annex 3.
- Validation of IWXXM messages: the questions were related to the actions needed when a problem is spotted and to the necessity of defining test cases to follow before exchanging data in new schema. The group was recalled that an on-line validator was previously provided by WMO. Dirk mentioned that it is still available on GitHub, it is version independent and requires a local copy of the schema / schematron rules. Details on that and on its possible usage will be made available later by Dirk. A recommendation could be made by DMG to METG that each State checks its messages before implementing a new IWXXM version.
- transitioning to SWIM: one instance per State for all national observations/forecasts; Can one State offer the service for another State? Would that be considered as CP1 compliant? ROC as a broker - that could be applicable for METAR/TAF and not for the enhanced services. SWIM Registry - currently not available on ICAO side. Data Management - currently there is RODEX, with procedures for quality, change, availability and problem management; there are no equivalent procedures defined yet for SWIM data exchange.

The DMG agreed that these questions need to be addressed to ICAO through MIE and METG by the DMG. The DMG members will check all these questions and send to Michael proposals for the update of this list.

Action DMG41-10-1: DMG members will send their comments on the questions related to SWIM transition to Michael, who will prepare a paper for discussion at DMG42, with the intention to raise these topics further to MIE (October 2024) and METG34.

Dirk has a meeting in three weeks' time (Cross-Working Group Progress) CWGP-2 (9-11 April, Montreal) – it will address some of the questions there, with the intent to have those on a paper for discussion at the October MIE Meeting (Washington). It was not expected, though, to have a formal answer to these questions even after the October MIE meeting.

## **Agenda Item 12 - Any Other Business**

### **Issue with SIGMETs having incomplete polygons**

Michael informed that he had received a CSV file from a software manufacturer highlighting problems with SIGMET messages in IWXXM (a wrong position indication, as the last point describing a polygon shall repeat the first point). That was spotted for FIRs from other regions, as from the EUR region there were only some examples for Turkey. From monitoring, it seems that Turkey is mainly using lines (e.g. N of ...) and only rarely polygons. Michael will contact representatives from Turkey to describe the problem. With regard to data from other regions, Michael will filter the duplicates from the CSV file and forward it to IROGs London and Toulouse to contact their representatives from the corresponding regions in order to address the issue.

Action DMG41-12-1: M. Pichler will provide results of faulty SIGMETs to IROGs London and Toulouse to address those through their counterparts in the respective regions.

### **Working tables**

Regarding the table METNO Overview (the document with all the historic METNOs): Wim questioned whether this table is of use for the DMG members. Michael makes use of it from time to time, but he also keeps the METNOs in a database, to make those available on the DMG website. Wim will check whether it is possible to extract the data from the PostgreSQL database into csv format and distribute it regularly to DMG members.

Action DMG41-12-2: Wim will check the possibility to extract METNO Overview data in CSV from the database.

### **Next meetings:**

DMG42: 18<sup>th</sup> -20<sup>th</sup> June – Bucharest

DMG43: Dates TBD during DMG42.

### **Retirement**

Before the closure of the DMG41 meeting, the DMG chair announced that for Herman Swinnen that was the last DMG meeting, as he is going to retire by the end of March 2024. On behalf of the DMG group, he expressed the gratitude for the great work that Herman provided over the years in support of the DMG activities as the DMG Focal Point, with constant dedication and commitment.

<b>Id</b>	<b>Action</b>	<b>Responsible</b>	<b>Target date</b>	<b>Resolution / Comments</b>
	<b>DMG37</b>			
DMG37-4-2	Investigate with AFI region regarding the exchange of data with NACC	ROC Toulouse	DMG38	IP from MF for DMG42 to describe the current routing and possible reasons
DMG37-7-2	Address to a higher-level the issue regarding SIGMETs issuance and dissemination for the 4 FIRs of Turkmenistan	ICAO		Remains open – official visit of representatives from Turkmenistan to ICAO EUR/NAT announced for October 2024 - the problem could be addressed there. Updates for DMG42
	<b>DMG40</b>			
DMG40-3-3	Try to establish a teleconference with SAM Office and Jun to obtain contact persons in the SAM region for setting up the IWXXM exchange.	C. Keohan M. Wagner	Nov-Dec 2024	
DMG40-5-3	Check with Jan Sondij on the usage of the single catalogue naming throughout Doc 018.  Wim to verify what other documents need to be updated in that respect (DMG Work Programme).	M. Pichler W. Demol	DMG41	
	<b>DMG41</b>			
DMG41-3-1	IP on a suggested usage of the version numbering in IWXXM messages, and a possible recommendation in EUR Doc 018 on the usage of the new versions (in correlation with Annex 3 Amds).	M. Pichler D. Zinkhan M. Wagner	DMG42	
DMG41-5-1	Check the monitoring results and investigate on the problems recorded for AFI Region data.  Michael and Matt will support with providing the results of a one-day monitoring, for comparison and identifying	Benjamin		

	the problems. The exact date will be agreed by the three participants			
DMG41-5-2	Derive a table with the availability of IWXXM data (similar to the one corresponding for the TAC data).	Michael	DMG42	
DMG41-5-3	Include into the DMG report to METG the problem regarding special characters, with a proposal for a draft decision to request ICAO that the documents provided for DMG activities to contain allowed characters only	Wim	METG34	
DMG41-5-4	Capture SIGMET/AIRMET headers for a period of 4 month and make the results available to DMG and ICAO Secretariat	Benjamin	METG34	
DMG41-5-5	Investigate the Warning monitoring results on possible routing problems and take the appropriate actions	4 ROCs	DMG42	
DMG41-5-6	Transfer Valentin's tickets to Benjamin. Finish the hand-over process by introducing Diego to initiate tickets	Matt Diego	DMG42	
DMG41-5-7	Update the paper regarding possible information extracted from IWXXM monitoring, in order to decide what to present to METG34	M. Pichler	DMG42	
DMG41-5-8	Check the procedures that are in place in their State with respect of issuing AIREPs.	DMG members	DMG42/ METG34	
DMG41-8-2	The distributed METNO messages shall include in the Remarks section the explicit statement that no EXTRA METNO is allowed between the AIRAC dates	DMG FP		
DMG40-8-3	Provide proposals for amendments of EUR Doc 18 to M.Pichler who will present a WP at DMG42	DMG members	DMG42	
DMG41-10-1	Send comments on SWIM transition to Michael, who will prepare a paper for discussion at DMG42, with the	DMG members	DMG42	



	intention to raise these topics further to MIE (October 2024) and METG34			
DMG41-12-1	Provide results of faulty SIGMETs to IROGs London and Toulouse to address those through their counterparts in the respective regions	M. Pichler M. Wagner B. Revel	DMG42	
<u>DMG41-12-2</u>	Check the possibility to extract METNO Overview data in CSV from the database	Wim	DMG42	