

# REPORT OF THE DATA MANAGEMENT GROUP

## FIRST MEETING

*(London, 12-14 October 2010)*

The METG/20 meeting (Paris, Sep. 2010) adopted under the Decision 20/06 that the EUR OPMET Bulletin Management Group (BMG) of the Meteorology Group (METG) be replaced by the EUR OPMET Data Management Group (DMG). The composition (and functional need) of the group was established as follows:

- Austria (ROC representative, SIGMET Test Focal Point, RODB)
- Belgium (METNO Focal Point, RODB and RODB Focal Point)
- Denmark (RODC)
- France (ROC representative, Volcanic Ash Focal Point, RODB)
- Netherlands (SADIS User – Monitoring Reference Point; PHP Manager)
- Romania (Secretary)
- United Kingdom (ROC representative, SADIS OPMET Gateway)

The first meeting of the Data Management Group was held from 12 to 14 October 2010 in NATS premises, London and was attended by 10 participants:

### List of participants

Mr. Michael Pichler	Austria
Mr. Herman Swinnen	Belgium
Mr. Wim Demol	Belgium
Mr. Johnny Funder	Denmark
Mr. Patrick Simon	France
Mrs. Annemiek den Uijl	Netherlands
Mr. Laurentiu Brojboiu	Romania (Secretary)
Mr. Ed Boorman	United Kingdom
Mr. James Randall	United Kingdom
Mr. Kevin Loy	United Kingdom (Rapporteur)

### WP 1 – Adoption of the provisional agenda

In the beginning of the meeting, the provisional agenda was discussed. There was agreed to introduce three more items: Composition and working arrangements for DMG, update of documentation following the change BMG->DMG, and weather exchange schema (WXXM). The approved agenda of the meeting was the following:

1. Approval of the Agenda
2. Composition and working arrangements for DMG
3. Actions from previous meeting
4. Information from other groups
5. EUR OPMET Data Update procedure and data monitoring and reporting
  - i) Routine
  - ii) Non-routine (incl. SIGMET issues)

- iii) Volcanic Ash
- 6. Addressing of EUR and Non-EUR OPMET data
- 7. Performance Indices
- 8. RODEX
- 9. Documentation
  - a) EUR OPMET Data Management Handbook
  - b) PHP
  - c) Update BMG->DMG
- 10. WXXM
- 11. AOB

### **Election of the chairman and vice-chair.**

The participants discussed on the METG 20 decision that the BMG be replaced by DMG, and on the new composition and functional needs of the group. It was considered that the members (in particular, the former members which are no longer part of DMG) were not officially informed on the changes (other than the METG20 report). Therefore, it was agreed that a formal letter be sent to those members informing on the METG decision, and expressing the appreciation for the valuable contribution during their participation in BMG, and asking for possible future collaboration to support projects where their expertise will be needed.

Preceding the election of the chairman, there was discussed on the workload, the commitment and the resources from the corresponding organisations (of the potential candidates) to support the DMG activities. There were also clarifications that the change from Rapporteur to Chairman is only of formal nature and does not imply additional attributions or prerogatives.

Finally, based on the preceding results and expertise accumulated, the group agreed to continue with Mr. Kevin Loy acting as Chairman of the group and Mr. Patrick Simon as Vice-chairman.

### **Agenda Item 3: Actions from the previous meeting**

The group reviewed the status of the actions established at the last BMG meeting. The completed tasks were erased from the list (highlighted in yellow; see comments) while the pending actions were maintained and, if necessary, rescheduled.

Ag. Item/BMG	Action item	Responsible	Target date
BMG36-4-5	Analyse the OPMET archives to determine whether there are European FIRs for which test SIGMETs are issued but no real data received so far.	J. Randall	
BMG37-3-1	Confront the FASID update proposals (to be received from ICAO) with the results of the current monitoring. Respond back to ICAO (and Kevin Loy) on major discrepancies.	H. Swinnen	BMG38
BMG37-3-5	Propose a list of the key tasks of the group (terms of reference) and possible assignments of the tasks to the members. After review by the group, the list will be forwarded to ICAO Paris in order to contact the corresponding agencies via a state letter and obtain support for the BMG working activities	K.Loy ICAO	BMG39

BMG37-7-1	Update the Doc 7910 for the location indicators that refer MOTNE.	Spain	
BMG37-7-3	Finalise the user interface for the catalogue and for providing the use cases.	J. Randall	BMG39
BMG37-7-5	The three ROCs will provide the routing tables to Johnny Funder.	London Toulouse Vienna	BMG38
BMG37-7-6	Develop backup procedures for their corresponding centres (). The resulting document for all three ROCS will have a target date to be presented at BMG39	ROC London ROC Toulouse	
BMG37-7-7	Evaluation of the compliance with the provisions of the EUR OPMET Handbook related to validation (including software validation and procedures for the operators)	The three ROCs	BMG38
BMG37-7-8	Cooperate with Italy to restructure the 40s bulletins (possible recompilation?).	Patrick Simon	DMG02
BMG37-5-3	For the bulletins that the addressing is not solved by the actions above, the ROCs should investigate, were appropriate, the use of automatic response with "Unknown address" message to the originators	The three ROCs	DMG02
BMG37-4-4	Contact the Italian Civil Aviation directly to address the problem of correct usage of SIGMET headers	P. Simon	BMG38
BMG37-4-6	Provide the current distribution list of FV bulletins to ROCs Vienna and London to be implemented accordingly at these centres, and further coordinate the sending from Toulouse to the two ROCs only	P. Simon	BMG38
BMG37-4-8	Coordinate with ASIA/PAC region on the correct addressing of bulletins sent to EUR Region (for the bulletins received in Vienna directly from ASIA/PAC, as well as for the bulletins not received at all in the EUR Region).	London	BMG38
BMG37-4-9	Continue to participate to the next ASIA/PAC monitoring exercise scheduled for November 2010.	The 3 ROCs De Bilt (Sadis)	
BMG37-4-10	Contact the ASIA/PAC OPMET TF Rapporteur / ICAO Bangkok to ask for correct addressing of FTJP31-32 bulletins, according to FASID MET 2B.	Ed Boorman	BMG38
BMG37-4-17	Contact the BMG representative from the MID region in order to coordinate the regular distribution of the necessary data	M. Pichler	BMG38
BMG37-8-1	Agreement on the EXERCISE/TEST subject with the VA Steering Group members, with the occasion of the VOLCEX SG Meeting in June 2010, Reykjavik.	P. Simon	June 2010

BMG37-8-2	IP for METG20 with an inventory of the problems handled since last METG meeting	A.den Uijl	METG20
BMG38-3-1	Starting next monitoring date, Toulouse will perform ISCS monitoring (the same way that De Bilt is doing for SADIS).	Patrick	
BMG38-4-1	Provide UK with the updated list of the reports that are requested by the users in the ASIA/PAC region. In case the problem can not be solved with Singapore, UK will start to routinely distribute those reports to the two users (Tai Pei and Urumqi).	W. Demol K. Loy	
BMG38-4-2	Inventory of data that is requested (SUG Annex 1 ) but not monitored in EUR (WP for DMG02)	H. Swinnen	DMG02
BMG38-4-3	The graphical VAA (VAG) will be monitored during the next exercise by Patrick (GTS), Kevin (UK) and Annemiek (AFS/SADIS	A. den Uijl P. Simon K. Loy	Sep. 2010
BMG38-4-4	Updated SIGMET informational letter sent to Greg Brock in order to be presented as a WP to METG20. The list of the SIGMET focal points should be included as well, in order to ask states for corrections/completions of the list. The WP to be presented should also raise the question on SIGMET sequence numbering	M. Pichler	METG20
BMG38-4-5	Investigate to find possible options for addressing the FV bulletin length issue. WP to METG	P. Simon	VOLCEX Paris, dec. '10
BMG38-4-7	Contact ICAO Paris (Greg Brock) in order to obtain an updated list of the AFTN addresses to be used to distribute the VAA to each state.  This list should be included by the BMG into the RODC catalogue	K. Loy	DMG02
BMG38-4-8	The current timers should be investigated, and the three ROCs should agree on a proposal	3 ROCs	On-going
BMG38-4-10	Investigate whether the data originated by EDZWYMYX are part of a bi-lateral agreement, and if affirmative correct the addressing, to be EBZZYBYX	H. Swinnen	BMG39
BMG38-4-11	UK will check what data not received by EBBR are available at ROC London and do the necessary routing to Brussels	K. Loy	BMG39
BMG38-4-12	For the data that is not received by Brussels neither in ROC London, the other two ROCs should investigate and do the corresponding action, as follows: Vienna (for SA and FC) and Vienna + Toulouse (for FT)	M. Pichler P. Simon	BMG39
BMG38-4-13	Contact the AFTN responsible in Netherlands in order to obtain information on the way those bulletins get to EHDB. The response should be addressed further through PHP	A. den Uijl	BMG39

BMG38-4-14	Consolidate information regarding the way the misrouted bulletins are received by LOWM. Also will investigate for each misrouted bulletins whether is received also on the normal way, from the corresponding IROG (in which case the misrouting could be suppressed).	M. Pichler	DMG02
BMG38-4-15	Set up a Work Package for AFI data addressing	P. Simon	DMG02
BMG38-7-1	Provide update and feed-back to Michael on the RODEX Back-up Procedure, in time to prepare a progress report to METG20	K. Loy P. Simon M. Pichler	METG20
BMG38-8-1	Prepare a working paper on the AIREP and GAMET issues to be presented to METG	A. den Uijl P. Simon	METG20
BMG38-8-2	Prepare an WP for METG20 with an inventory of the problems handled since last METG meeting, including details of the problems that need addressing at a higher level	A. den Uijl	METG20
BMG38-8-3	Come up with a proposal of the details to be presented into the PHP report	A. den Uijl	BMG39
BMG38-9-1	E-mail to the BMG members the overall evaluation sheet on the compliance with the monitoring tool specification	H. Swinnen	BMG39
BMG38-9-2	Provide UK with the monitoring results from Feb 2010 and with the electronic format of the SUG An. 1, ver. Mar 2010.	H. Swinnen	METG20
	Derive the performance indices in order to be presented at METG20	J. Randall	
BMG38-9-3	Proposal for the key performance indices calculated by the BMG and presented to METG	P. Simon	METG20
BMG38-9-4	Set up the Work Package "RODC Procedures"	H. Swinnen A. den Uijl	BMG39

When reviewing the above list, there was a long discussion on the reference used for the monitoring exercises. As the FASID tables are the official ICAO document that comprises the requests, these should be used. Furthermore, the tables are now available on-line to be downloaded as csv files from the ICAO website, and are currently processed by Johnny Funder on the RODC project. The frequency of update was appreciated as one to two times a month. Herman Swinnen pointed out, though, that after a long effort, ICAO Montreal was finally able to make the SUG Annex 1 available in a very convenient format to be ingested into the monitoring tool. The conversion from the FASID in csv format to the one used into the application was appreciated as not always being straight-forward (hierarchical structure, fonts, character sets, regions not split, code legend and annotations, additional remarks, ... can be a potential problem that lead to ambiguous automated decisions and even manual corrections to be made for interpreting the format of the source information). Therefore, the following was agreed:

- To ask ICAO whether it is possible to (also) export the FASID tables into the agreed format (the one used currently for SADIS Annex 1) and make it available for downloading on the ICAO website; **action by Herman?**

- To develop our own tools to ensure the necessary data will be derived from FASID tables to be ingested into the monitoring tables instead of from the SADIS Annex 1.

Additional information will be needed from ICAO on the format, the amendments and the frequency of updates for the Global FASID tables.

#### **Agenda Item 4: Information from other groups**

##### *METG 20*

DMG discussed the points of interest from the METG 20 Summary of discussions, particularly the decision on the replacement of the BMG with DMG, and the corresponding functional needs. It was agreed that K. Loy will contact Greg Brock (ICAO Paris), prior to DMG02 (March 2011) where he is expected to participate, in order to identify more precisely what the expectations are from the DMG.

#### **Agenda item 5: EUR OPMET Data Update procedure and data monitoring and reporting.**

##### *WP07 – OPMET Databank monitoring*

The monitoring took place between 1-3 Sept 2010. The reference tables used were based on a new version of FASID MET 2A downloaded from the ICAO website on 25/08/2010. The overall results show an increase in the availability of both METAR and TAF. Action plans to clarify why the availability differs between databases are under development. In order to improve the situation, the following were agreed:

For the data required but never received:

Action DMG01-5-1: In order to be accurate, Wim Demol will take the most recent version of the FASID MET 2A to derive the monitoring stats and submit the information to ICAO Paris in order to be passed to the corresponding ICAO offices.

For the aerodromes that still provide both FC and FT:

Action DMG01-5-2: The list of those aerodromes will be split by region and submitted, via PHP, to ICAO Paris (Greg Brock).

For the US bulletins (SAUS70, 75 KWBC):

Action DMG01-5-3: Until Washington solves the production, UK will recompile and distribute the corresponding US bulletins. The new bulletins will be announced via METNO procedure.

Action DMG01-5-4: UK will check the routing of the bulletin SAOS33 LOWM to ensure distribution to EBBR.

It was mentioned that the next monitoring will take place in February 2011 and the corresponding results will be presented to DMG02.

##### *IP/2 – Information about AUTOMETAR EHRD Rotterdam*

The Netherlands informed the group that the METAR of Rotterdam / The Hague airport shall fully change into an AUTO METAR by January 2011.

##### *WP04 SIGMET Monitoring*

Michael Pichler (as DMG SIGMET focal point) presented the results of the latest SIGMET monitoring tests, which took place on 1<sup>st</sup> Sep (WS) and 2<sup>nd</sup> Sep (WV, FV). After double checking the results, the corresponding action plans were derived and some of the problems were solved by correcting the routing.

Action DMG01-5-5: Kevin Loy will contact Kyran Dollard (Ireland) to clarify the issue on the WS bulletins routed by UK to Ireland.

## **Agenda item 6            Addressing of EUR and Non-EUR OPMET data**

### *WP06 – OPMET Data Validation*

The working paper presented by France informed about the current situation regarding the OPMET validation performed by ROC Toulouse. The validation is in general similar to that described in the EUR OPMET Handbook, with some particularities (no wild card used, consistency between AHL date time, Z hour, validity). When analysing the timers defined in the handbook, anomalies were spotted and presented to DMG. It was noted that those values were not updated for a long time, and especially after Amd 75, they are not sensible and need review.

Action DMG01-6-1: The members agreed that the current situation needs a deep review, under an Work Package - no 4 OPMET Validation. The lead person will be Patrick Simon, and the three ROCs as members (Michael Pichler, Ed Boorman). The Work Package will treat at a later stage different validation aspects, but for the beginning the priority will be the review of the timers, with a deadline for DMG03, to ensure that the outcome is included into the new edition of the Handbook to be presented at METG21.

Action DMG02-6-2: Johnny Funder will amend the chapter 12.2.5 (Timers) of the EUR OPMET Handbook to be replaced by the remark "Currently under review", until the WPkg 4 is completed.

Patrick Simon informed the group on the consistent validation rule implemented in France for all systems using OPMET data. An IP will be presented next DMG meeting.

### *WP05 AIREP and Special AIREP dissemination*

The group was presented the provisions related to AIREP and Special AIREP contained by various documents: ICAO Annex 3, EUR ANP, EUR SIGMET Guide. It resulted that there is a need to distribute these messages to WAFC, and therefore the following was agreed:

Action DMG01-6-3: DMG will propose ICAO to undertake a review (via a state letter) in order to obtain the WMO headings used for dissemination of AIREP/ Special AIREP and to properly update the routing tables in order to ensure the appropriate addressing of these messages.

Action DMG01-6-4: DMG will propose to AMOF SG a change in the format of the Special AIREP messages to include the FIR name (in line with the SIGMET format).

## **Agenda Item 8            RODEX**

### **RODC**

Following a working session with James Randall, Johnny Funder presented to the group the stage achieved so far in developing the OPMET Data Catalogue concept. A detailed diagram was used to illustrate the working concept and design of the process, as follows: the input is obtained from the Global FASID table MET 2A, merged with information from the DMG monitoring process. The

resulting table(s) comprises for each aerodrome / FIR the bulletins that contain the corresponding data. The tables will be updated to the latest (AIRAC) METNO changes from the Update Procedure. Starting from these tables, states will express their requirements which will be comprised into other corresponding table. Based on the requirements, the routing will be derived for each of the ROCs.

The group expressed its satisfaction with the progress recorded and with the overall working concept and design. It was agreed that:

Action DMG01-8-1: Johnny Funder and James Randall will continue working on the project, with the aim to reach a base level until next DMG, where progress will be reported. Working examples and output samples will be available for presentation.

Action DMG01-8-2: Herman Swinnen will provide a set of monitoring results from September 2010 (raw format) to Johnny Funder in order to be used as a sample for populating the table(s).

The group considered that after completion of the project, there will be a need to regularly update the tables, based on the restructuring of data and on change in the user requirements. Herman Swinnen was designated as the focal point to operate these updates, while Laurentiu Brojboiu will provide back-up.

#### *WP02 Terms of References for Work Packages DMG*

Annemiek den Uijl presented the agreed principles used to derive projects and work packages for the DMG. Each WPkg manager shall update the WPkg each meeting accordable. The current Work Packages were discussed:

WPkg 1: RODC System (Lead: Johnny Funder, James Randall; see above).

WPkg 2: ROC Back-up (Lead: Michael Pichler. Members: Patrick Simon, Ed Boorman).

WPkg 3: Update of documentation (task from METG to reflect changes from BMG->DMG) Lead: Annemiek den Uijl. Member: Wim Demol)

WPkg 4: OPMET Validation (first stage: timers review. deadline: DMG03; lead: Patrick Simon; members: Michael Pichler, Ed Boorman)

WPkg 5: Training (kept dormant until WPkg 1,2,4 are completed)

WPkg 6: Procedures (lead: Annemiek den Uijl, Herman Swinnen)

WPkg 7: AFI Data addressing (Lead: Patrick Simon)

### **Agenda Item 9                      Documentation**

#### *WP08 OPMET DB Documents*

On behalf of the EUR OPMET DB Agents, Wim Demol presented the current status of the Interface Control Document (ICD) and EUR OPMET DB Specification Document (DB Spec). While the former exists as a stand-alone document and as an appendix to the EUR OPMET Handbook, the later was not published as a public document and it was only used by DMG and ODAG for their relevant activities.

It was proposed the new version of the ICD be stopped as a stand-alone document and instead be updated into the handbook. The catalogue will be still published on the FTP/HTTP servers for the DMG members' usage.

Action DMG01-9-1: The new version of the ICD was considered approved by DMG and will be sent by Wim Demol to Johnny Funder to be updated into the EUR OPMET Handbook.

As for the DB Specification Document, there was discussed on the sections containing monitoring and reporting procedures. It was appreciated as very useful to synchronise the DB monitoring with



the OPMET monitoring process for AFTN/GTS landlines and SADIS. Taking into account that proposal, it was requested a short review by the ODAG agents.

Action DMG01-9-2: Wim Demol, Patrick Simon and Michael Pichler will review the DB Specification Doc and present the new version to the next DMG.

As the DB Spec document is relevant only to DMG activities, it was considered that no further approval for this doc is needed from METG and that it will be published on the private part of the DMG FTP/HTTP servers.

As for the databanks monitoring, it was considered it can still provide useful information for the benefit of the group, in order to optimise the current situation with respect to data distribution and availability. There is no need to routinely report the results to METG. Situations of abnormal use will be handled via the PHP procedure and via this way be brought to the attention of the METG.

#### *WP03 – PHP Report*

Annemiek den Uijl, as PHP Manager presented the group the inventory of the tickets addressed through the procedure since last BMG meeting (June 2010). For the pending problems that still wait to be solved, the corresponding members were requested to take action.

Action DMG01-9-3: UK, France and Belgium to investigate on the problems mentioned and update the ticketing application with the respective information / status.

With respect to ICAO actions, it was noted that it had already been set up the corresponding user name and password. Clarifications and support in managing the problems should be presented to Greg Brock before the next DMG.

Action DMG01-9-4: Annemiek will provide PHP information to Greg Brock and Ed Boorman.

It was considered useful to DMG to include into the next PHP reports more details on the actions taken. Instead, for reporting to METG, statistics and problems of institutional nature not solved yet should be reported.

#### **Agenda Item 10      WXXM**

The group was informed that Eurocontrol and FAA adopted version 1.1.1 of the WXXM schema, which was available since spring 2010.

Discussions have taken place between UK and Belgium, with regard to bilateral testing for the exchange of MET data in XML format, using AFTN and AMHS and for the translation from TAC to XML and vice versa. However, some aspects, mainly related to software, have to be confirmed prior to proceeding. Once confirmed that the test is feasible, the intention, engagement and progress will be reported to ICAO and Eurocontrol.

It was considered necessary that DMG express its commitment to support the MET activities in Eurocontrol related to WXXM Packages. Kevin Loy will contact Dennis Hart on this matter.

As information for the group was mentioned that Eurocontrol requested UKMO to provide the VAG (current csv files) into XML format.

#### **Agenda Item 11      Any Other Business**

The group was informed on the following matters:

- The replacement of the Belgium COM switch is planned for January 2011, so possible short interruptions of service may be expected
  - James Randall should work and make the PI tool more easy to be dealt with DMG colleagues, like Ed Boorman.
  - The monitoring tool specifications will be updated by Herman Swinnen (App D to the OPMET Handbook) and the new version will be distributed by e-mail to the DMG members directly after this meeting..
  - Following a request from Romania, the presence into the databanks of OPMET data from military aerodromes (non-civil) can be done only by bilateral agreement. DMG is not responsible for those data, but for civil aerodromes only.
- 
- Dates and location of the next meeting
    - DMG02: Brussels 15-17 March 2011
    - DMG03: Copenhagen 21-23 June 2011

**List of actions resulting after DMG01**

Ag. Item/BMG	Action item	Responsible	Target date
BMG36-4-5	Analyse the OPMET archives to determine whether there are European FIRs for which test SIGMETs are issued but no real data received so far.	J. Randall	
BMG37-3-5	Propose a list of the key tasks of the group (terms of reference) and possible assignments of the tasks to the members. After review by the group, the list will be forwarded to ICAO Paris in order to contact the corresponding agencies via a state letter and obtain support for the BMG working activities	K.Loy ICAO	DMG02
BMG37-7-3	Finalise the user interface for the catalogue and for providing the use cases.	J. Randall	DMG02
BMG37-7-5	The three ROCs will provide the routing tables to Johnny Funder.	London Toulouse Vienna	DMG02
BMG37-7-6	Develop backup procedures for their corresponding centres ( ). The resulting document for all three ROCS will have a target date to be presented at DMG02?	ROC London ROC Toulouse	
BMG37-7-8	Cooperate with Italy to restructure the 40s bulletins (possible recompilation?).	Patrick Simon	DMG02
BMG37-5-3	For the bulletins that the addressing is not solved by the actions above, the ROCs should investigate, were appropriate, the use of automatic response with "Unknown address" message to the originators	The three ROCs	DMG02
BMG37-4-6	Provide the current distribution list of FV bulletins to ROCs Vienna and London to be implemented accordingly at these centres, and further coordinate the sending from Toulouse to the two ROCs only	P. Simon	DMG02
BMG37-4-9	Continue to participate to the next ASIA/PAC monitoring exercise scheduled for November 2010.	The 3 ROCs De Bilt (Sadis)	
BMG37-4-10	Contact the ASIA/PAC OPMET TF Rapporteur / ICAO Bangkok to ask for correct addressing of FTJP31-32 bulletins, according to FASID MET 2B.	Ed Boorman	DMG02
BMG38-3-1	Starting next monitoring date, Toulouse will perform ISCS monitoring (the same way that De Bilt is doing for SADIS).	Patrick	
BMG38-4-1	Provide UK with the updated list of the reports that are requested by the users in the ASIA/PAC region. In case the problem can not be solved with Singapore, UK will start to routinely distribute those reports to the two users	W. Demol K. Loy	DMG02

	(Tai Pei and Urumqi).		
BMG38-4-2	Inventory of data that is requested (SUG Annex 1 ) but not monitored in EUR (WP for DMG02)	H. Swinnen	DMG02
BMG38-4-3	The graphical VAA (VAG) will be monitored during the next exercise by Patrick (GTS), Kevin (UK) and Annemiek (AFS/SADIS	A. den Uijl P. Simon K. Loy	Feb 2011
BMG38-4-5	Investigate to find possible options for addressing the FV bulletin length issue. VOLCEXParis, dec. '10	P. Simon	DMG02
BMG38-4-7	Contact ICAO Paris (Greg Brock) in order to obtain an updated list of the AFTN addresses to be used to distribute the VAA to each state.  This list should be included by the DMG into the RODC catalogue	K. Loy	DMG02
BMG38-4-8	The current timers should be investigated, and the three ROCs should agree on a proposal	3 ROCs	On-going
BMG38-4-10	Investigate whether the data originated by EDZWYMYX are part of a bi-lateral agreement, and if affirmative correct the addressing, to be EBZZYBYX	H. Swinnen	DMG02
BMG38-4-14	Consolidate information regarding the way the misrouted bulletins are received by LOWM. Also will investigate for each misrouted bulletins whether is received also on the normal way, from the corresponding IROG (in which case the misrouting could be suppressed).	M. Pichler	DMG02
BMG38-4-15	Set up a Work Package for AFI data addressing	P. Simon	DMG02
DMG01-5-1	Derive availability deficiencies from DB monitoring and submit to ICAO	Wim Demol	DMG02
DMG01-5-2	List of a/d with both FC and FT (per region) be sent through PHP to ICAO Paris	Wim Demol	DMG02
DMG01-5-3	Recompilation of US bulletins and announce via METNO	UK	DMG02
DMG01-5-4	Check the routing of SAOS33 LOWM	UK	DMG02
DMG01-5-5	Contact Ireland on WS routing	K. Loy	DMG02
DMG01-6-1	Work on validation work package – timers review	P. Simon M. Pichler Ed Boorman	DMG03
DMG01-6-2	Replace Timers chapter in the Handbook with mention "Under review"	J. Funder	
DMG01-6-3	Propose ICAO Paris state letter on Special AIREP used	P. Simon	DMG02
DMG01-6-4	Propose AMOF SG the FIR indication into the AIREP format	P. Simon	
DMG01-8-1	Continue work on RODC to finalise base level	J. Funder J. Randall	DMG03
DMG01-8-2	Provide monitoring results to feed the RODC tables	H. Swinnen J. Funder	DMG02

DMG01-9-1	Submit ICD to update the Handbook	W. Demol J. Funder	DMG02
DMG01-9-2	Review the DB Specification doc (monitoring)	W. Demol M. Pichler P.Simon	DMG02
DMG01-9-3	Review pending problems in PHP. Update ticket status	K. Loy H. Swinnen P. Simon	DMG02
DMG01-9-4	Provide PHP information to Greg Brock and Ed Boorman	A. den Uijl	DMG02