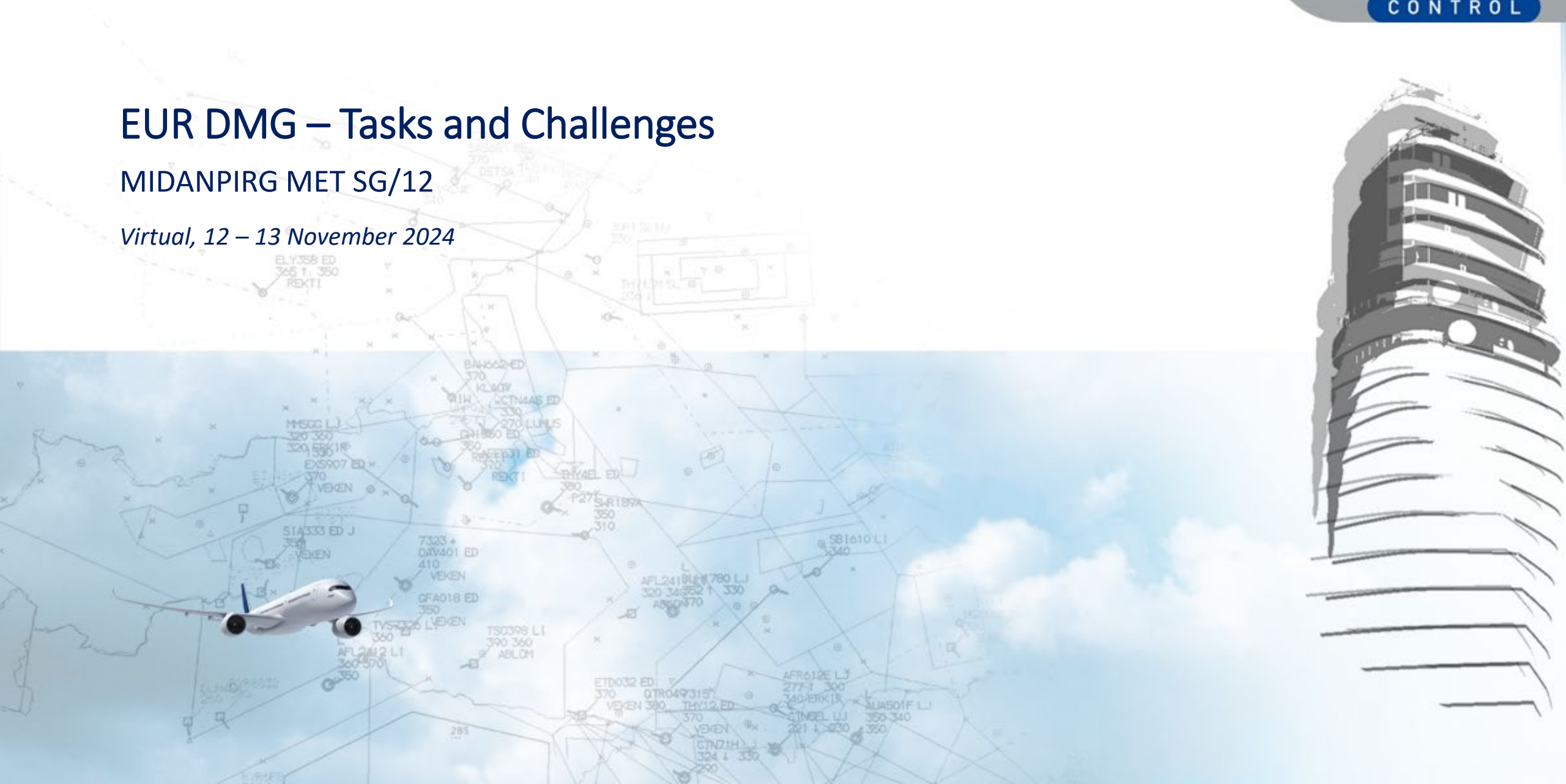


EUR DMG – Tasks and Challenges

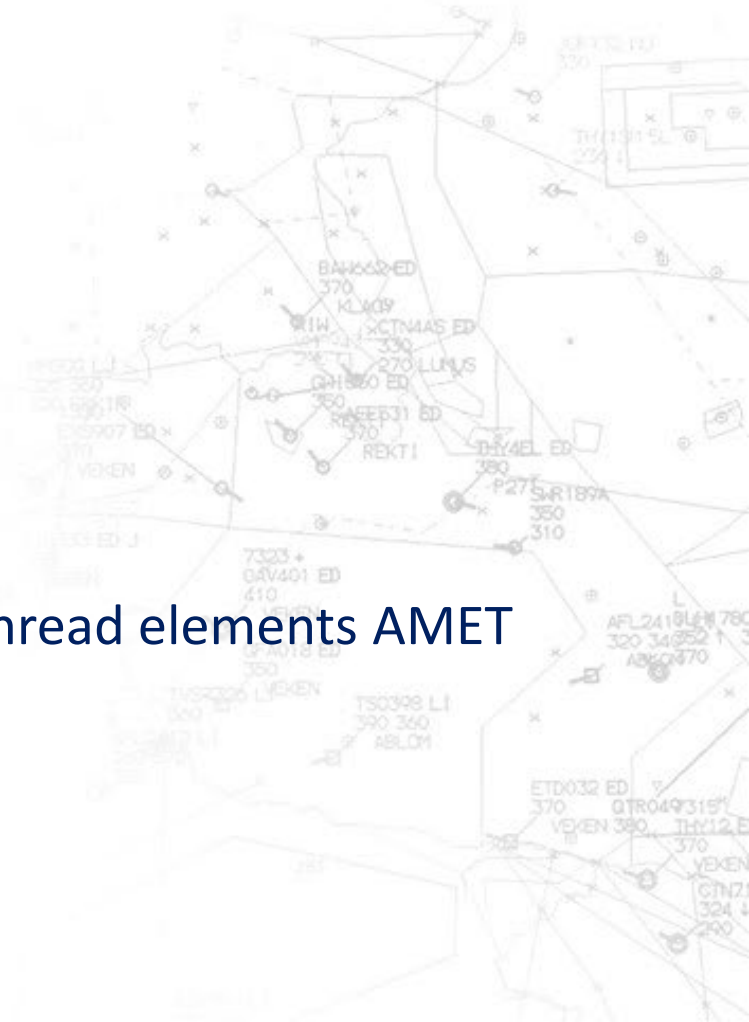
MIDANPIRG MET SG/12

Virtual, 12 – 13 November 2024



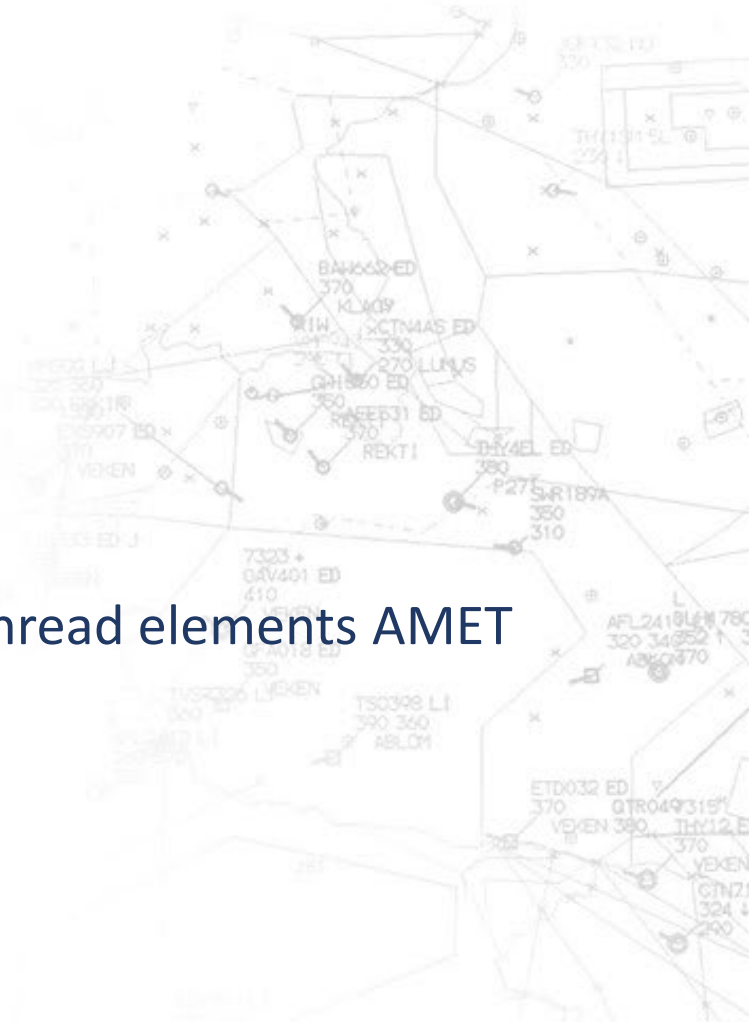
Current tasks and challenges of the DMG

- Managing and Maintaining EUR ICAO Doc 018
- OPMET data exchange:
 - Monitoring & Optimizing
 - Management of changes
- Maintaining the EUR RODEX and SADIS OPMET Catalogue
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Current tasks and challenges of the DMG

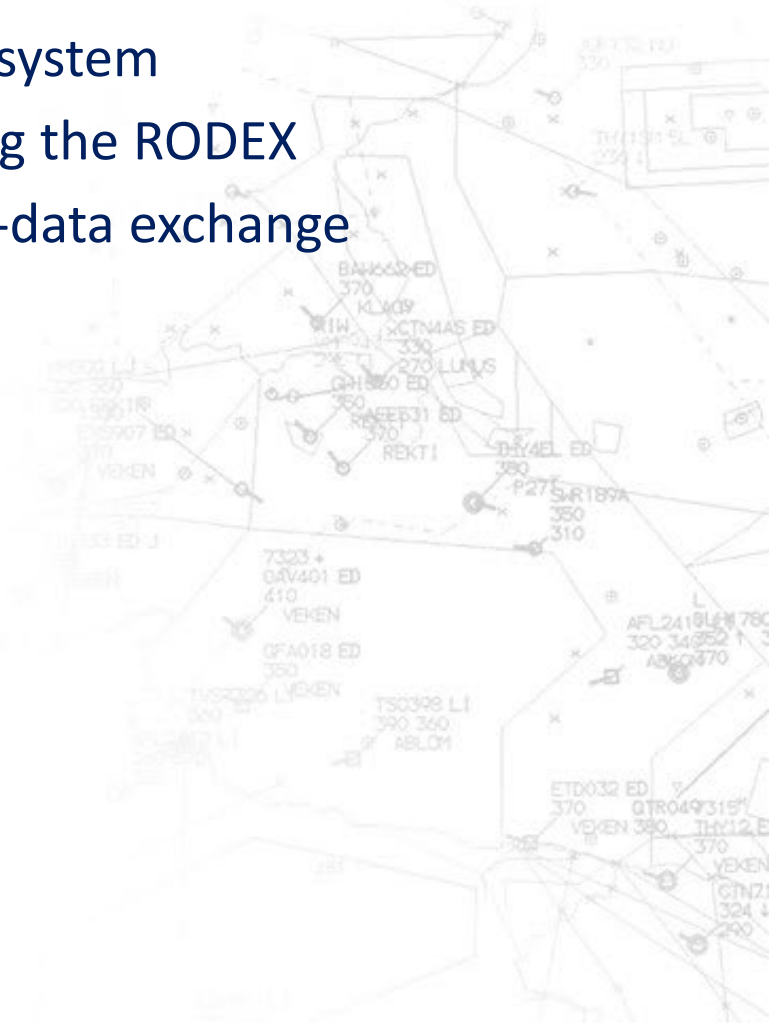
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EUR ICAO Doc 018 „EUR OPMET Data Management Handbook“

Content

- Description of the EUR RODEX (Regional OPMET Data Exchange) system
- Description of the different components and functions composing the RODEX
- Information on OPMET data types (TAC and IWXXM) and OPMET-data exchange
- Message Validation Procedures
- Problem Handling Procedure
- Monitoring Procedure and Tool Specification
- Data Update Procedure
- ICD for the RODBs (Regional OPMET Database)
- OPMET Performance Indices
- RODEX Backup Procedure



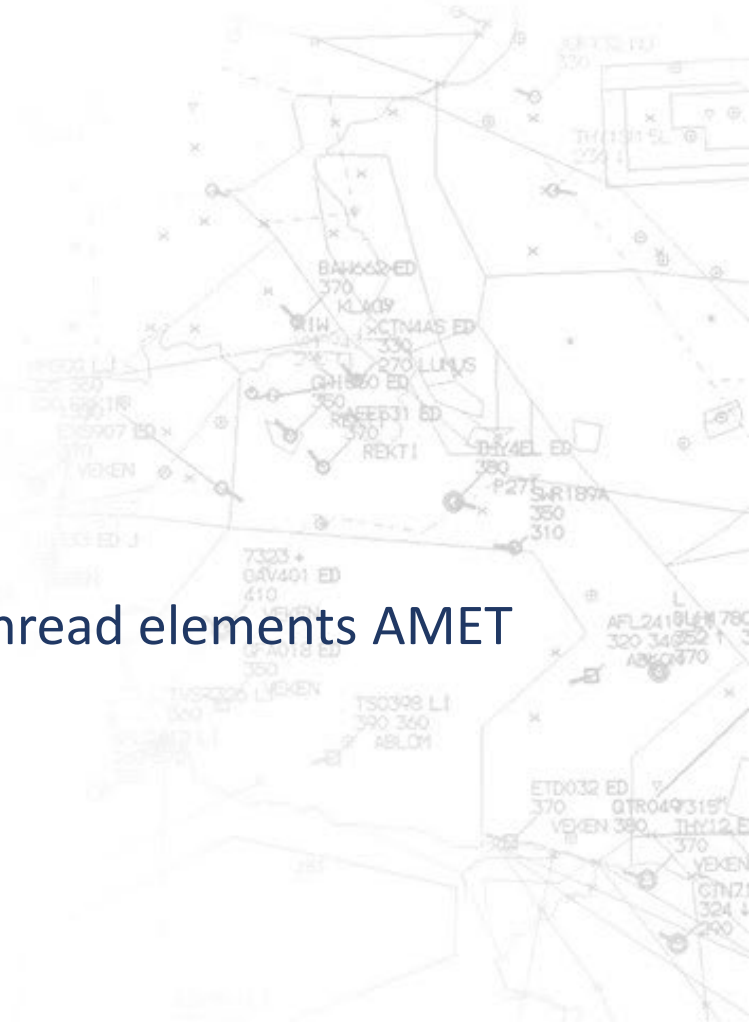
Maintaining ICAO EUR Doc 018

- DMG-members regularly review the content to identify
 - Unclarities and Inconsistencies
 - Outdated information
 - Missing Information due to ongoing developments
- Proposed changes are reported to METG-meetings for adoption
- After that it is presented by the Regional Officer to the EASPG approval and adoption
- Latest, adopted version available from the [EUR ICAO Office Paris website](#)



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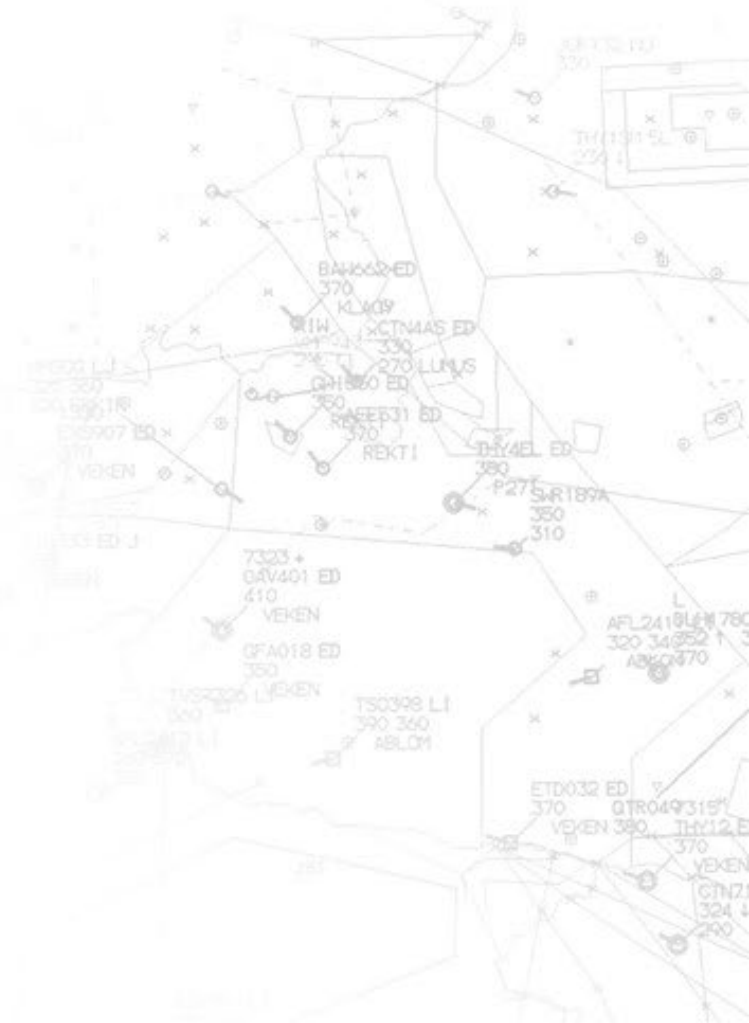
OPMET data exchange – Monitoring & Optimizing

The optimizing and managing is supported by:

- Yearly DMG monitoring exercise 1.-14. February (TAC & IWXXM)
 - Routine data monitoring 1.-3. February
 - Non-Routine data monitoring 1.-14. February
 - Dedicated SIGMET, ARS, VAA, TCA, SWXA on two days
- Participating to yearly APAC SIGMET monitoring in Nov./Dec.

The monitored data is used to:

- Identify routing deficiencies
- Updated EUR RODEX and SADIS Catalogue
- Calculate Performance Indices
- Improve data flow between regions



OPMET data exchange – Managing Changes

Changes are managed via the METNO-Procedure:

- Dedicated procedure described in Doc 018, APP B
- Users are informed via E-mail (no NO-message sent via AFS)

AIRAC 05/09/2024 EUR OPMET Data Modification Acceptance.

WD Wim Demol <dmw@skeyes.be>
 An AVINOR; Bjonnerud, Bjorn; Dan Vietor; DMG Collective Denmark; DMG Collective KNMI; DMG Collective UK; Michael Eckert; Graf, Michael; Gry Rogstad; Halim Lakehal; Kopka, Kristin; Leonforte, Giuseppe; Merete Solvang; Hochreiter Roland; Jimenez Diego (Gast); DMG Collective Madrid; **+16 weitere**
 Cc Michel Vangeel; Xavier Wilson; Elena Averyanova (Averyanova.Elena@mecom.ru); sergei grabko; Корбулакова Вера Константиновна

Wenn Probleme mit der Darstellungsweise dieser Nachricht bestehen, klicken Sie hier, um sie im Webbrowser anzuzeigen.

Dear Colleagues,

(Date format: DD/MM/YYYY)

For the METNO EUR OPMET 240905 AIRAC Cycle 05/09/2024, the OPMET Data change requests received are.

1) Received from ROC Moscow on 25/06/2024, with effect on 01/07/2024:

RMRPT SARS33 UUUJ UUMO
 RMRPT FCRS33 UUUJ UUMO
 RMRPT SPRS33 UUUJ UUMO
 RMRPT LARS33 UUUJ UUMO
 RMRPT LCRS33 UUUJ UUMO
 RMRPT LPRS33 UUUJ UUMO

The NOBX99 EBBR METNO bulletin has been emailed as next on 29/08/2024:

METNO EUR OPMET 240829
 RMRPT SARS33 UUUJ UUMO
 RMRPT FCRS33 UUUJ UUMO
 RMRPT SPRS33 UUUJ UUMO
 RMRPT LARS33 UUUJ UUMO
 RMRPT LCRS33 UUUJ UUMO
 RMRPT LPRS33 UUUJ UUMO

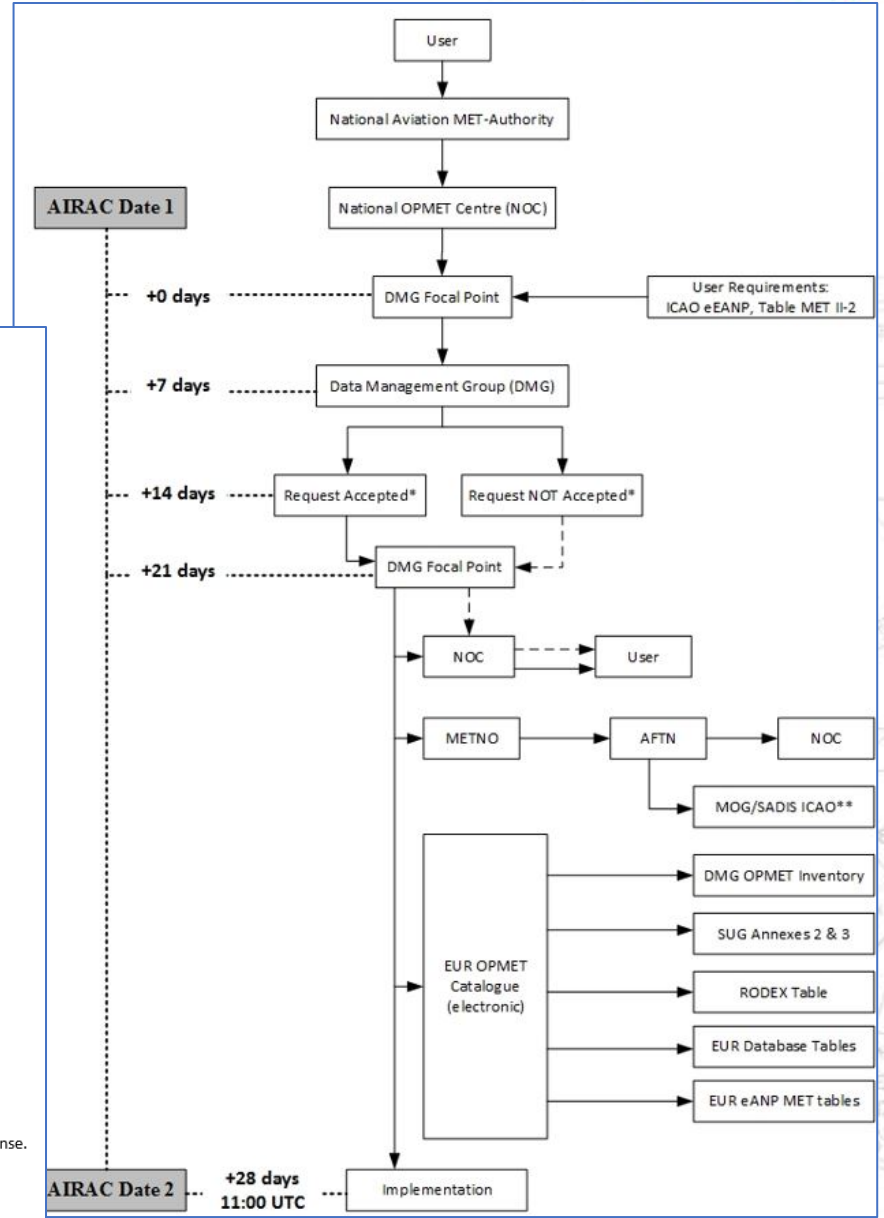
Important dates relating to the AIRAC METNO Procedure, cycle 03/10/2024:

05/09/2024: Closure for new METNO modification requests regarding the METNO EUR OPMET 241003, AIRAC Cycle 03/10/2024.

12/09/2024: Notification by e-mail of all concerned DMG Contacts of the new amendment requests received till 05/09/2024.

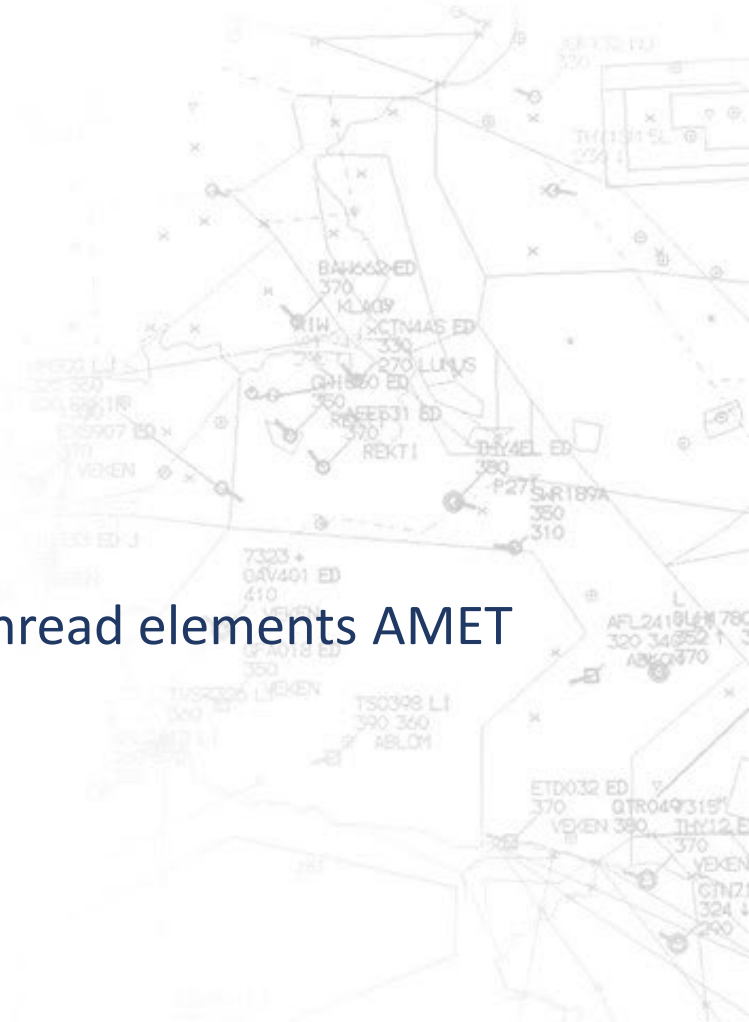
19/09/2024: Comments to these modification requests need to be forwarded via e-mail to the Data Management Group Focal Point (DMG FP): dmg_fp@skeyes.be, by this date. Nil comments shall be considered as a positive response.

26/09/2024: Endorsed modifications by METNO NOBX99 EBBR eMail to the ROCs, involved NOC Centres, ICAO Europe, the SADIS provider State, DMG Members and METNO subscribers. Subscribers can opt out by reply.



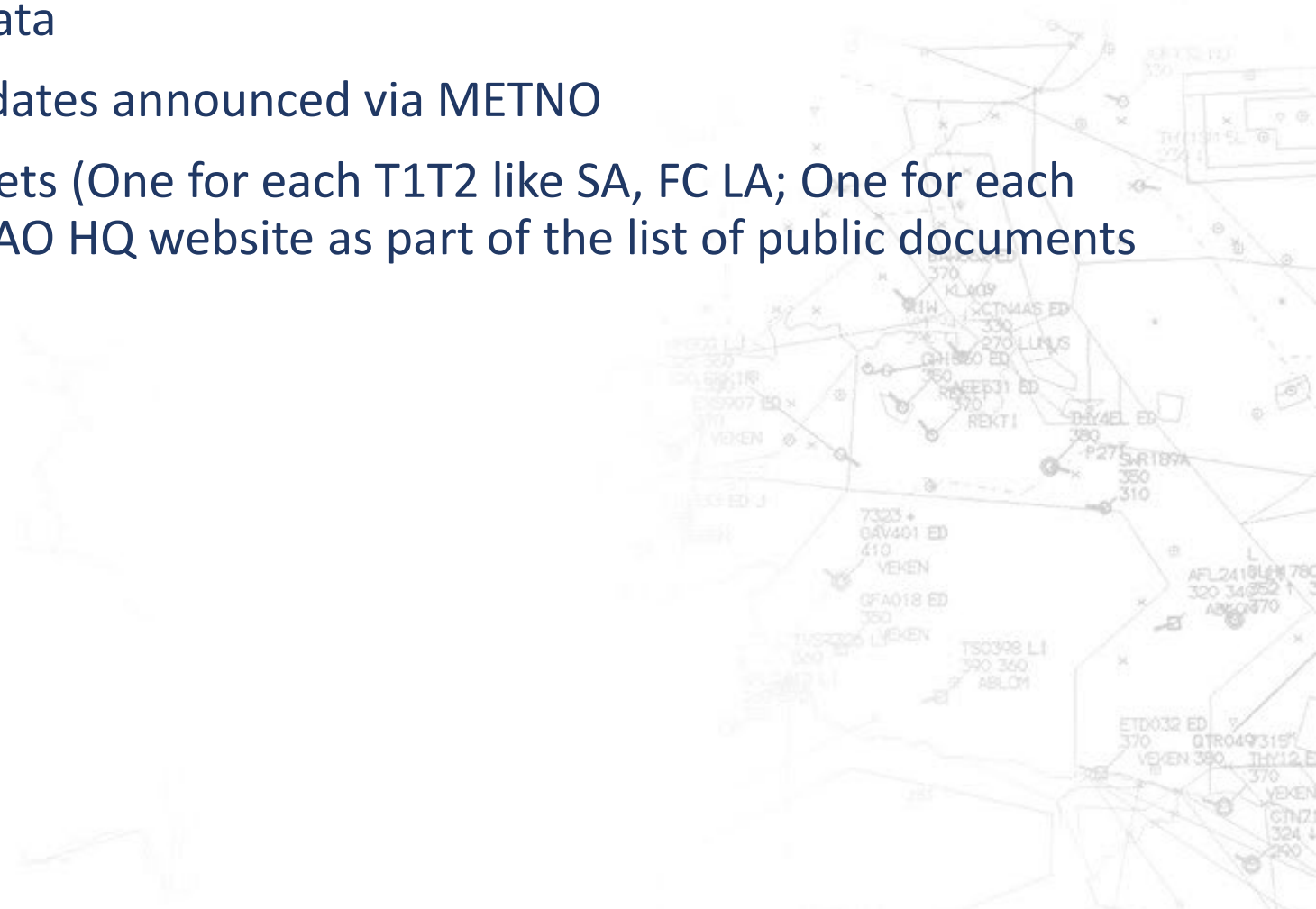
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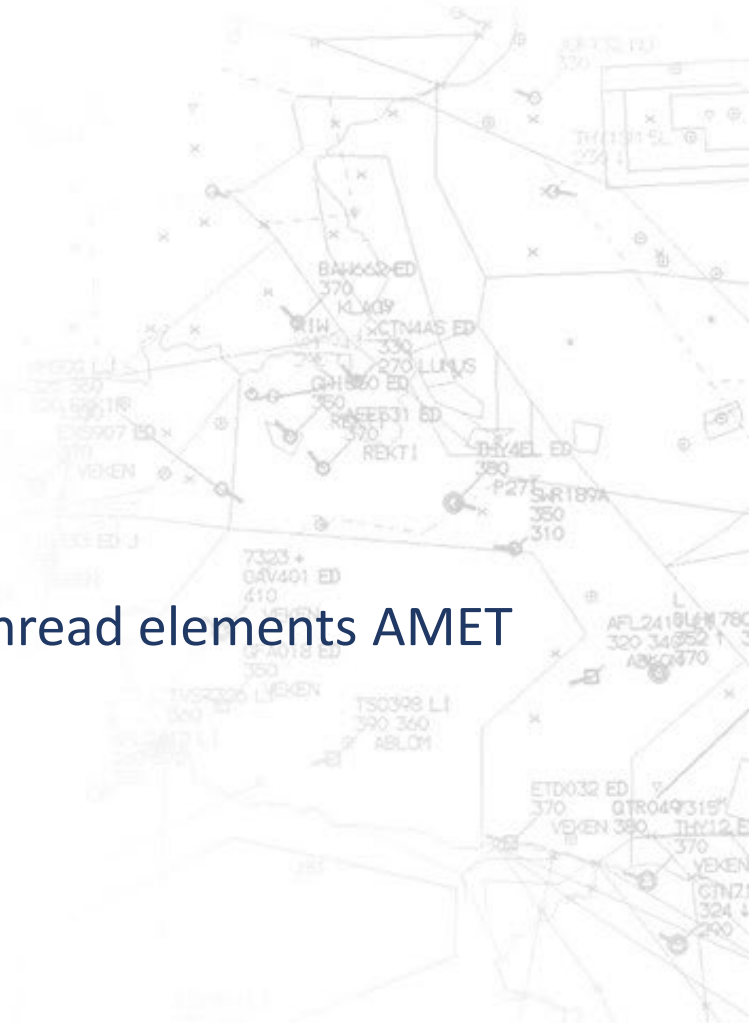
Maintaining the “EUR RODEX and SADIS OPMET Catalogue”

- List of agreed exchanged OPMET data
- Based on DMG-monitoring and updates announced via METNO
- The EXCEL-file contains several sheets (One for each T1T2 like SA, FC LA; One for each region) and can be found on the ICAO HQ website as part of the list of public documents from [MOG-SADIS](#)



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Developing a tool for an automated METNO-Procedure (RODC)

- Currently the METNO-procedure is performed manually
- DMG members from Météo Algérie are working on an automated tool

International Civil Aviation Organization
EUR Regional OPMET Data Catalogue

ROC_TOULOUSE

EUR OPMET UPDATE Data Changes

Search by Regions ▼ complete the following form for requesting changes to OPMET bulletins.
* required field if empty write null

Search by ▼

opmet ▼

Account ▼

Printing lists ▼

Message Identifier: *	METNO EUR OPMET
Airac Cycle *	Select AIRAC cycle ▼
Action :	Add Report <input type="radio"/> Remove Report <input type="radio"/> New Bulletin <input type="radio"/> Delete Bulletin <input type="radio"/>
ttaaill: *	SA ▼ AA ▼
cccc:*	CCCC
Locind : *	Locind1 locind2 locind3 etc....

Preview Message

Remove Last Message Submit Messages

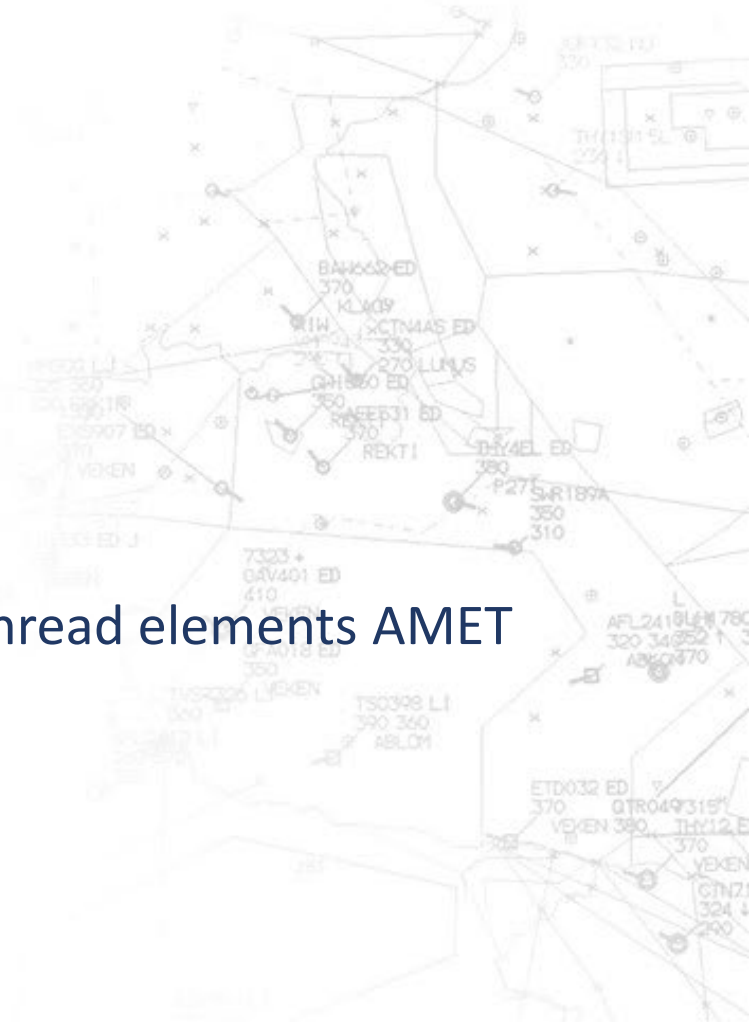
HOME ICAO DMG LOGOUT

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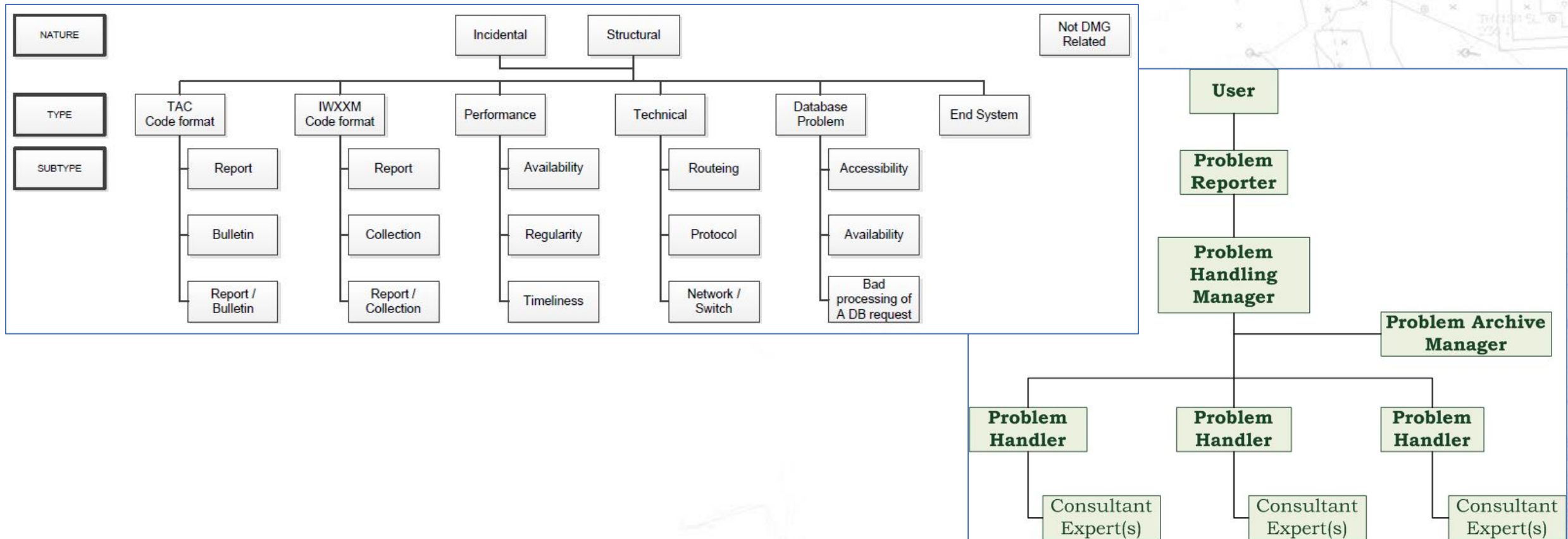
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Handling problems via the PHP tool

- Skeyes (ANSP of Belgium) developed a tool, enabling the DMG to handle identified OPMET data exchange problems



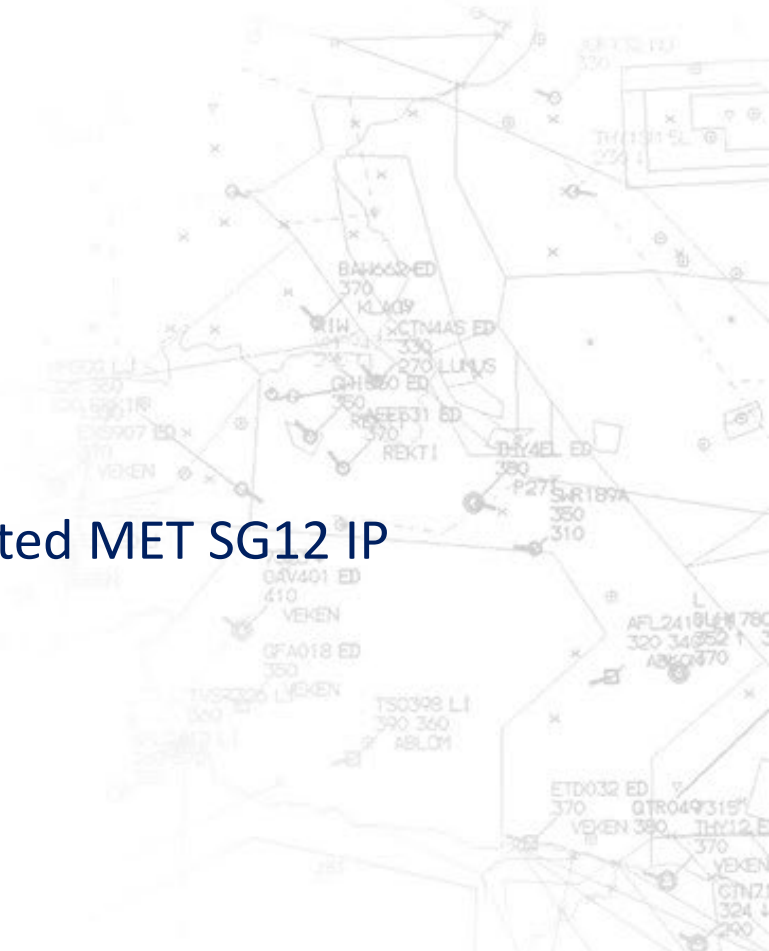
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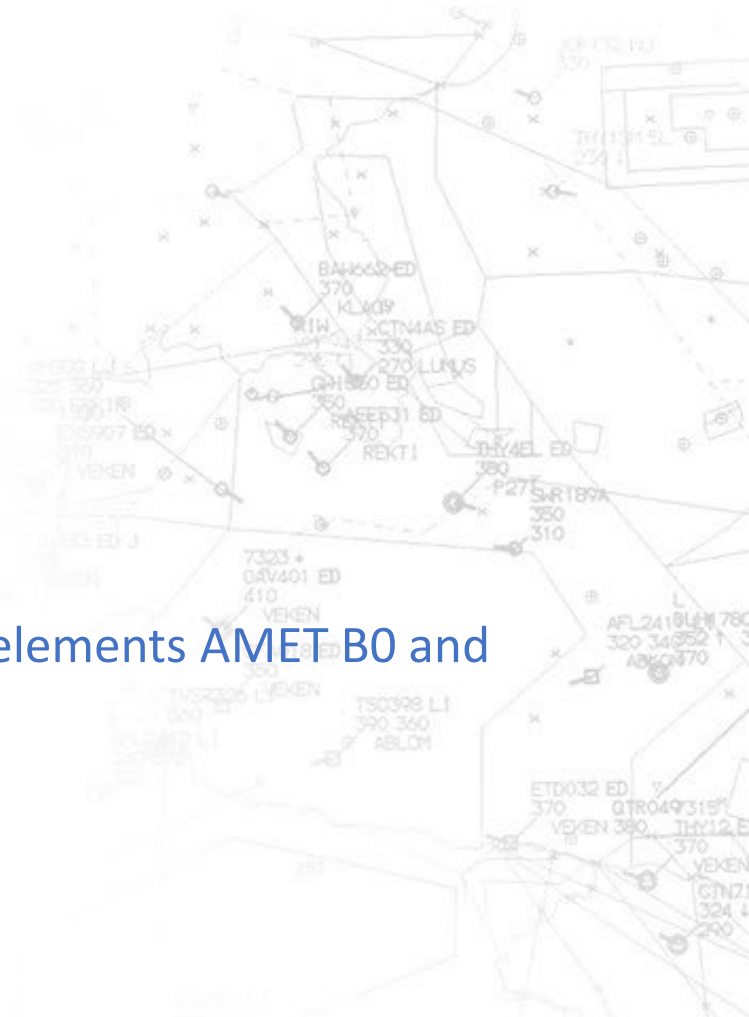
Monitor and support IWXXM-implem. in the EUR-region

- Latest version of Doc 018 include basic information on IWXXM
 - Basic format
 - Report status indicator
 - Permissible usage
 - Metadata to be included when translated
 -
- EUR ROCs provide translation service to support States
- Further information on IWXXM-implementation status in dedicated MET SG12 IP



Current tasks and challenges of the DMG

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Providing PI for the EUR eANP, Volume III in regard to the ASBU thread elements AMET B0 and AMET B1

Example AMET B0

Yellow – identified in Feb monitoring 2023 (existed and status has not changed)
 Amber – first identified in Feb monitoring 2024 (new)
 Light Green – identified in Feb monitoring 2023 and corrected by Feb 2024
 Dark Green – implemented correctly for both Feb 2023 and 2024 monitoring
 Red – on the list of air navigation deficiencies
 Blue – not applicable

Module	Elements	Albania	Algeria	Armenia	Austria	Azerbaijan	Belarus	Belgium	Bosnia and Herzegovina	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland
AMET B0	WAFS	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	QMS	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	METAR availability	Dark Green	Yellow	Dark Green	Dark Green	Dark Green	Yellow	Dark Green	Dark Green	Dark Green	Dark Green	Yellow	Dark Green	Dark Green	Dark Green	Dark Green
	TAF availability	Dark Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	METAR timeliness	Dark Green	Amber	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Light Green	Dark Green	Dark Green	Dark Green
	TAF timeliness	Light Green	Dark Green	Dark Green	Dark Green	Yellow	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	SIGMET availability	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	SIGMET format	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	VAAC	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	VONA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
WAFS	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	

Module	Elements	France	Georgia	Germany	Greece	Hungary	Ireland	Israel	Italy	Kazakhstan	Kyrgyzstan	Latvia	Lithuania	Luxembourg	Malta	Monaco
AMET B0	WAFS	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Blue
	QMS	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	METAR availability	Dark Green	Dark Green	Dark Green	Yellow	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	TAF availability	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	METAR timeliness	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	TAF timeliness	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Light Green	Dark Green	Dark Green	
	SIGMET availability	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	
	SIGMET format	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	
	VAAC	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	
	VONA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	
WAFS	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue		



Providing PI for the EUR eANP, Volume III in regard to the ASBU thread elements AMET B0 and AMET B1

Example AMET B1

Module	Elements in IWXXM format	Albania	Algeria	Armenia	Austria	Azerbaijan	Belarus	Belgium	Bosnia and Herzegovina	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland
AMET B1	METAR/SPECI	Green	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
	TAF	Green	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
	SIGMET	Green	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
	AIRMET	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	VAA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	TCA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

Module	Elements in IWXXM format	France	Georgia	Germany	Greece	Hungary	Ireland	Israel	Italy	Kazakhstan	Kyrgyzstan	Latvia	Lithuania	Luxembourg	Malta	Monaco
AMET B1	METAR/SPECI	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green	Yellow	Orange
	TAF	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green	Yellow	Blue
	SIGMET	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green	Yellow	Blue
	AIRMET	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	VAA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	TCA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

Module	Elements in IWXXM format	Montenegro	Morocco	Netherlands	North Macedonia	Norway	Poland	Portugal	Republic of Moldova	Romania	Russian Federation	Serbia	Slovakia	Slovenia	Spain	Sweden
AMET B1	METAR/SPECI	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	TAF	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	SIGMET	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	AIRMET	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	VAA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	TCA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue



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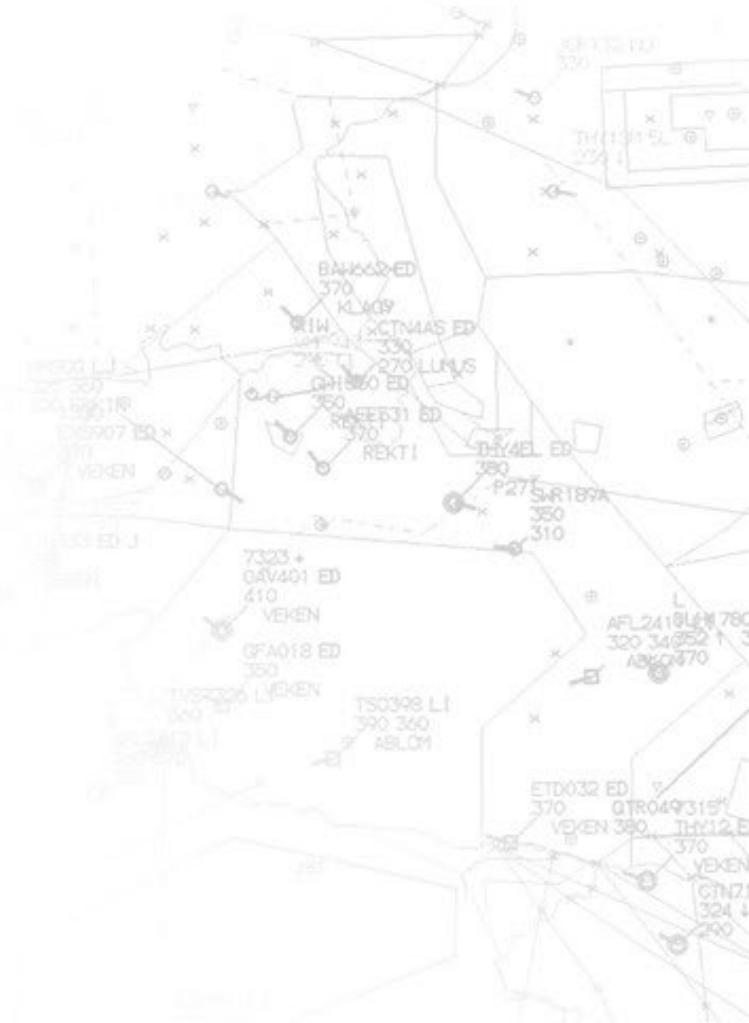


Developing a CONOPS for the transition from AFS to SWIM

- ICAO GANP ASBU is foreseeing SWIM to be implemented by the end of 2031
- Current plan to remove TAC from ANNEX 3 in 2030 as the standard for operational OPMET-data exchange → only IWXXM to be used
- EU (European Union) expedited the SWIM implementation, mandating States to implement basic SWIM-services for legacy data (METAR, TAF, SIGMET) by end of 2025
- DMG drafted a CONOPS (Concept of Operations) for the transition to SWIM

Problems/questions for the transition from AFS to SWIM

- The CONOPS currently
 - Describes and compares current RODEX vs SWIM
 - Highlights identified problem cases or lack of guidance for
 - Applicability of IWXXM-version (which and when)
 - One or more instances of SWIM-services per State
 - Minimum & mandatory filtering options
 - Possibility to provide SWIM services on behalf of another State
 - Security (usage of Public Keys, VPNs,..)
 - Need of a regional broker or central data catalogue
 - Need for defining a topic structure for geo-servers
 - Data Quality monitoring



Thank you!

