The presentation to Externals of the NM24.0 Release via video-conference took place on the 11th of February 2020.

Please find below:

- The recording: https://www.eurocontrol.int/event/eurocontrols-nm240-release-webinar
- The link toward the NM24.0 Release Notes: https://www.eurocontrol.int/publication/network-manager-release-notes-planned-implementation-2020-2021
- The slides used during the Presentation (below in this pdf)
- This document is available on the public website (as a pdf) at: https://www.eurocontrol.int/publication/network-manager-release-notes-planned-implementation-2020-2021

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Presentation of NM24.0 to Externals

EUROCONTROL – Network Manager Directorate
11/02/2020

v1.1
Classification TLP : White (Public)

Welcome to the
Presentation of NM24.0 to Externals

Agenda

1- Introduction and interface set-up

2- NM24.0 Release presentation:

- **2.1- Important notifications related to NM24.0 OPT (operational testing) session**
- **2.2- FBs (Functional Blocks) presentation**

3- Way forward toward NM24.0 migration

1- Introduction: Recording

Presentation is recorded; recording (audio and slides) will be available on the Eurocontrol public website in a few days:

https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774

The URL is available in the NM Release Notes (§1) and in the invitation for this presentation.

1- Introduction

- Goals of the presentation:
  - Present the new features of the Release NM24.0.
  - Operational Project Managers will present their Functional Block.
  - Enable you to assess the impacts on your procedures or systems.
  - Ask questions (today after each FB presentation, or by eMail at nm.releases@eurocontrol.int).

- Why doing the presentation now?

  ⇒ SHOM2 Gate (Software Hand-Over Meeting) is passed.

  ⇒ System testing and Operational Acceptance testing are still on-going, so Release content may slightly change until the Release migration.

  NM Release Notes remain the reference document with regards to the NM Release Content.

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2- NM24.0 Presentation

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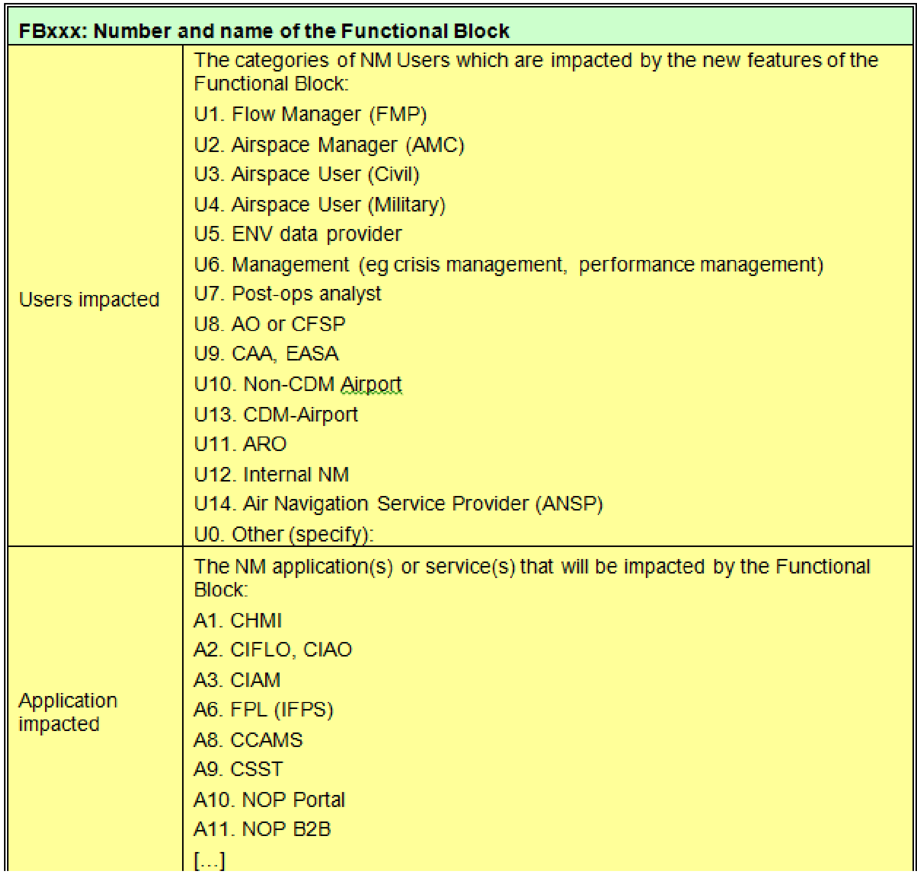
2.1- The NM Release Notes

- The NM Release Notes contain the latest information on Releases:
    - OPT (Operational Testing) Session information, OPT guide, etc.
    - Webex presentation information (including slides and recording)
    - Release migration plan per system and services
    - Releases important notifications
    - Release content in a structured format
- Release Notes are available at:

https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774

To receive information on the Release (including NM Release Notes updates, OPT information, presentations, etc.): subscribe to the mailing list (cf. §1 of the NM Release Notes)



FBxxx: Number and name of the Functional Block	
Users impacted	The categories of NM Users which are impacted by the new features of the Functional Block: U1. Flow Manager (FMP) U2. Airspace Manager (AMC) U3. Airspace User (Civil) U4. Airspace User (Military) U5. ENV data provider U6. Management (eg crisis management, performance management) U7. Post-ops analyst U8. AO or CFSP U9. CAA, EASA U10. Non-CDM Airport U13. CDM-Airport U11. ARO U12. Internal NM U14. Air Navigation Service Provider (ANSP) U0. Other (specify):
Application impacted	The NM application(s) or service(s) that will be impacted by the Functional Block: A1. CHMI A2. CIFLO, CIAO A3. CIAM A6. FPL (IFPS) A8. CCAMS A9. CSST A10. NOP Portal A11. NOP B2B [...]

2.1- NM24.0: The OPT (Operational Testing) (Release Notes §4.2.3)

NM24.0 will be available for testing with the OPT (operational testing) session!

- NM24.0 OPT session will start on the **3rd of March** and end on the **24th of April.**
- With the NM24.0 OPT you will be able to:
  - Test NM24.0 on your systems with your procedures.
  - Download, install and test the new NM24.0 CHMI.
  - Test the new NM24.0 NOP Portal.
  - Test some new FBs (operational scenario provided in the OPT instructions).

- NM B2B: NM24.0 will be available on PREOPS (together with **Draft** documentation, including WSDL and XSD) as from the 30 March 2020 14:00 UTC

- All you need is to already have access to NM systems. No registration required (unless you want to exchange FPL messages with the OPT platform).

- NM OPT instructions hyperlink will be available in NM Release Notes §4.2.3.

⇒ **Questions: nm.opt@eurocontrol.int**

2.1- NM24.0: Important notifications (Release Notes §4.1)

- **Browsers** recommended in NM24.0:
    - FireFox,
    - Chrome.
  - For these recommended browser brands, NM undertakes to investigate and attempt to resolve problems that can be reproduced on the latest stable version of that brand (anything else is on a “best efforts” basis).
  - Please note that Internet Explorer will no more be supported as from NM24.0.

- The recommended operating system is Windows 10.

Issues reported on CHMI using Windows 7 will be fixed on a best effort basis.

- NM B2B: Decommission of NM B2B **NM22.0** webservice.

Any questions?

2.2- NM24.0 FBs and CRs presentation

Only new features impacting operations and Externals are presented

Topic	Topic Title
Important notification	
I2_118817	Problem when updating the EOBT with a second FPL
CR_047923	Change ACH sending parameter
Operations Improvements	
FB1085	eHelpDesk improvements
Airspace Management and Advanced FUA	
FB1064	ASM - Advanced FUA process improvement
Airport and TMA Network Integration	
FB1027	AOP/NOP Integration - Phase IV
FB1066	Tower Update A-DPI evolution
FRA (Free Route Airspace)	
FB1084	FRA improvements (Traffic Volumes dynamic updates)
Operations Improvements	
FB1042	ATFM messaging for AOs via B2B
FB1059	ATFCM Domain improvements
FPFDE (Flight Plan and Flight Data Evolution)	
FB1074	FF-ICE filing Function - file eFPL
EAIMS (European ATM Information Management Service)	
FB1086	CACD validation of RAD
n-CONECT	
FB1095	RAD Full Completion
FRA (Free Route Airspace)	
FB1041	FRA improvements – Activation
CTM (Cooperative Traffic Management)	
FB1070	Target Time improvements
FB987	STAM further developments
FB1072	Predictability improvements

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I2_118817: Problem when updating the EOBT with a second FPL

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1- Stakeholders impacted

- Airspace User (Civil)
- Airspace User (Military)
- AO or CFSP
- Non-CDM Airport
- CDM-Airport
- Advanced ATC TWR Airport
- ARO
- Internal NM
- Air Navigation Service Provider (ANSP)

I2_118817	Service affected				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation					
Data structure					
User Interface					
Procedures	Yes				
Training	Yes				
B2B					
Other					

2- Background – Why

- Fix a software deficiency

3- New features

Critical bug fix - Problem when updating the EOBT with a second FPL

The update of the EOBT with a second FPL is not allowed in IFPS.

If it is attempted by sending a FPL to IFPS, an ACK message is returned with a "COMMENT: Existing FPL has been updated". This is completely misleading because the existing FPL has not been updated!

After this fix is delivered, when an FPL associates to another FPL changing the EOBT, the second FPL shall be invalidated with the new EFPM401 error saying

“NOT ALLOWED TO USE A FPL TO UPDATE THE EOBT. DLA OR CHG IS REQUIRED”

4- Impact of the changes

- If a flight plan originator attempts to update of the EOBT with a second FPL, the second FPL will be rejected by IFPS.
- As this change may cause a FPL to be rejected by IFPS when with the previous IFPS software the FPL was accepted, there may be a need for external User’s to change procedures and/or training material.

5- Questions

Any questions?

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Flight Planning Improvements

CR_047923: Change ACH sending parameter

This CR will be published in the next version of the NM Release Notes

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1- Stakeholders impacted

- Non-CDM Airport
- CDM-Airport
- Advanced ATC TWR Airport
- ARO
- Air Navigation Service Provider (ANSP)

CR_047923	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation					
Data structure					
User Interface					
Procedures					
Training					
B2B					
Other	YES (1)				

(1) The services impacted are the ATS Units that receive ACH messages.

2- Background – Why

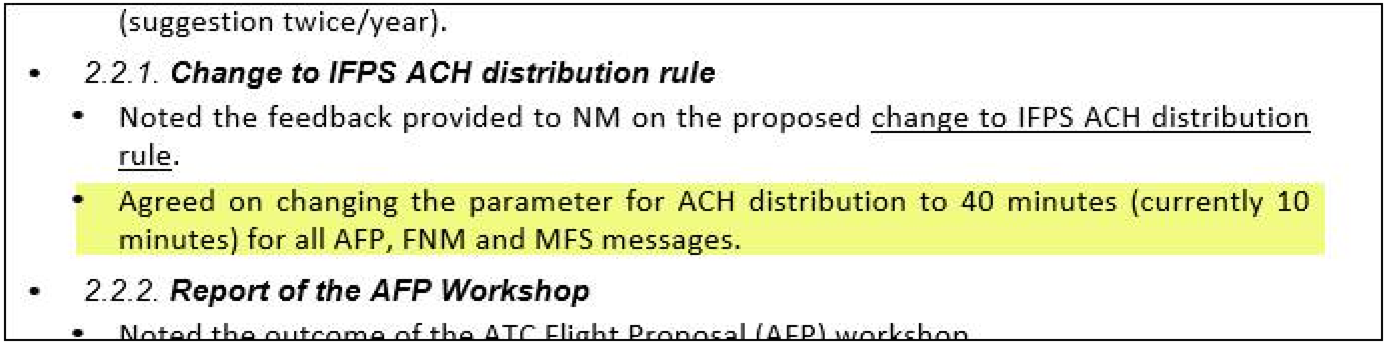
- A request from ANSPs that complain of too many (unnecessary) ACH messages being sent to them by IFPS.

- IFPS currently sends an ACH message when the time of the estimate changes by more than 10 minutes (with no other change to the flight).

3- New features

During ODSG47, it was agreed to change the IFPS system parameter to 40 minutes.

Excerpt from ODSG47 meeting notes:



(suggestion twice/year).

- 2.2.1. ***Change to IFPS ACH distribution rule***
  - Noted the feedback provided to NM on the proposed change to IFPS ACH distribution rule.
  - Agreed on changing the parameter for ACH distribution to 40 minutes (currently 10 minutes) for all AFP, FNM and MFS messages.
- 2.2.2. ***Report of the AFP Workshop***
  - Noted the outcome of the ATC Flight Proposal (AFP) workshop

The parameter will be set to 40 minutes on the NM Test system for the verification/validation of the NM24.0 release, with the plan to have the parameter value of 40 minutes on OPS when NM24.0 is deployed.

4- Impact of the changes

- ATS Units will not receive as many updates via ACH message.

5- Questions

Any questions?

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FB1085: eHelpDesk improvements

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1- Stakeholders impacted

- Flow Manager (FMP)
- AO
- Airport (all types)
- Post-ops analyst

FB1085	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation					
Data structure		**YES**		**YES**	
User Interface		**YES**			
Procedures					
Training					
B2B					
Other					

2- Background – Why

NM – eHelpDesk improvements

Summer 2018-19 Experience

- Capacity shortfalls
- Exponential increase of requests
- Jeopardize the Network service

Summer 2019-20 Strategy

- Enhance Network support
- Automation
- Integration
- Request classification
- Gradually introducing the B2B channel

Phone coordination reduction
(Improved overall service)

3- New features

- The eHelpDesk improvements FB contains following change requests:
  - Critical Flights
  - Indication of REA Flights
  - Earliest take off time provision

3- New features (1)

Critical Flights

- Some flights schedules are key for airspace users operation plan.
- Reducing the ATFM delay is critical for their business.

The new features will permit:

- Aircraft Operators to mark their flights as **“Critical”**
- A **tick-box** will be available to indicate the **criticality**
- Number of critical flights will be **limited** depending on the Network situation (minimum = 1)

As a result:

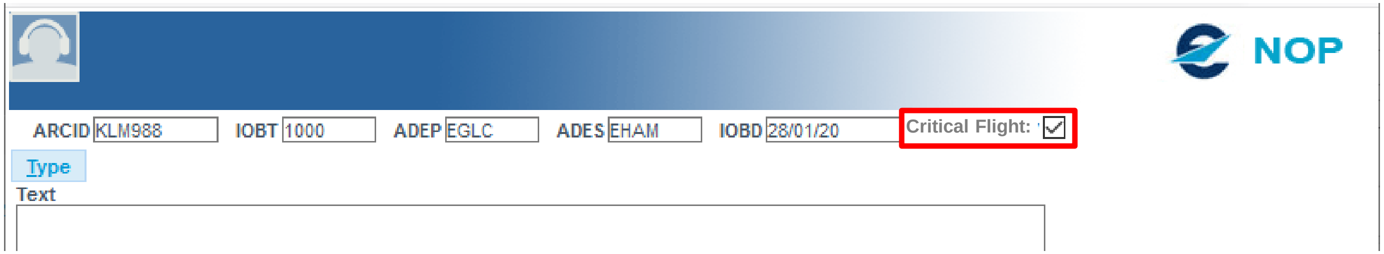
- Critical flights will be highlighted (**magenta colour)** in the queue
- The request for improvement associated will **never be automatically rejected**

3- New features (2)

- REA Flights
  - Requests for Flights is REA status are preferentially treated by NMOC
  - These requests will be highlighted in the **details area** of the request
  - **No impact on the system** behaviour, only the highlighting for the operators
- Request for Improvement - *Earliest take off time provision*
  - Aircraft operators will be able to **provide the earliest take off time** that they can make and help the operator when finding the most suitable improvement.
  - This can:
    - Increase the likelihood of getting the improvement
    - Reduce the time of response

4- Impact of the FB (1)

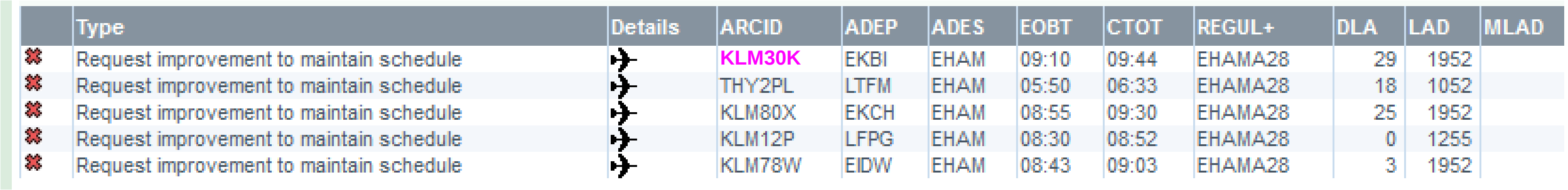
- Critical Flights
  - New **tick-box** available for the AOs to indicate flights that are **critical** for the operations



ARCID KLM988 **IOBT** 1000 **ADEP** EGLC **ADES** EHAM **IOBD** 28/01/20 Critical Flight: ☑

Text

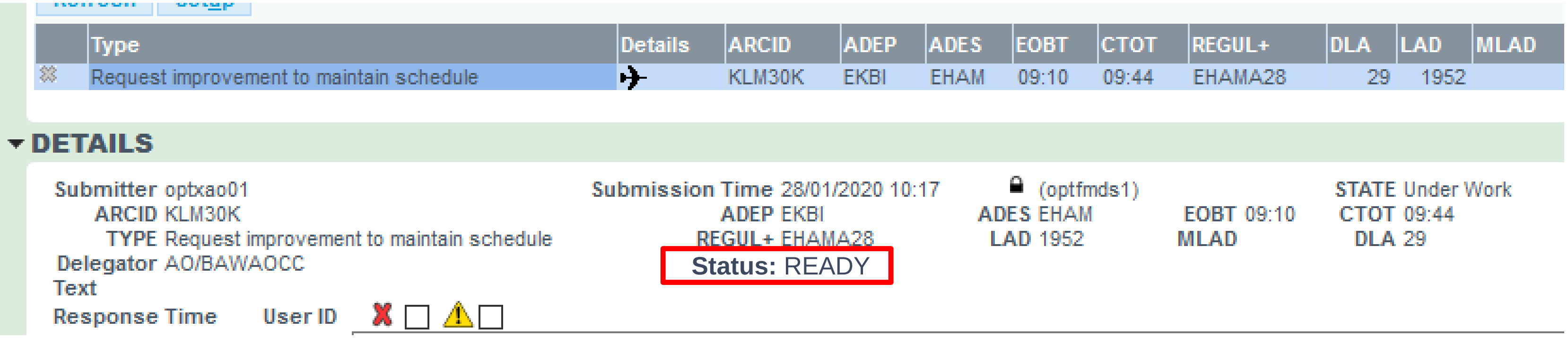
  - Critical flights will be **highlighted** in the **queue** and on the **NOP flight list** (Aircraft ID will be bold with magenta colour)



	Type	Details	ARCID	ADEP	ADES	EOBT	CTOT	REGUL+	DLA	LAD	MLAD
✖	Request improvement to maintain schedule	✈	**KLM30K**	EKBI	EHAM	09:10	09:44	EHAMA28	29	1952	
✖	Request improvement to maintain schedule	✈	THY2PL	LTFM	EHAM	05:50	06:33	EHAMA28	18	1052	
✖	Request improvement to maintain schedule	✈	KLM80X	EKCH	EHAM	08:55	09:30	EHAMA28	25	1952	
✖	Request improvement to maintain schedule	✈	KLM12P	LFPG	EHAM	08:30	08:52	EHAMA28	0	1255	
✖	Request improvement to maintain schedule	✈	KLM78W	EIDW	EHAM	08:43	09:03	EHAMA28	3	1952	

4- Impact of the FB (2)

- Ready Flights
  - In the **details area** of the flight, it will be indicated if the flight is in **REA status**

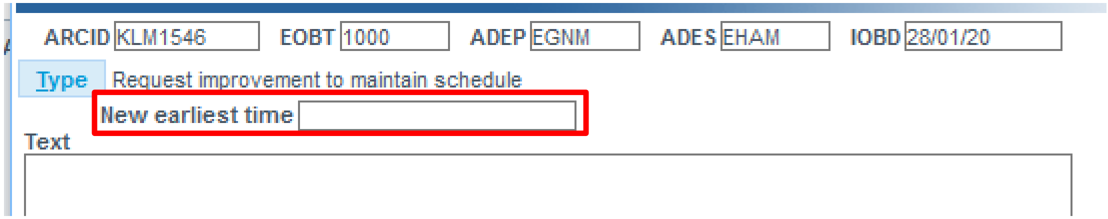


	Type	Details	ARCID	ADEP	ADES	EOBT	CTOT	REGUL+	DLA	LAD	MLAD
	Request improvement to maintain schedule	✈	KLM30K	EKBI	EHAM	09:10	09:44	EHAMA28	29	1952	

DETAILS

Submitter optxao01
ARCID KLM30K
TYPE Request improvement to maintain schedule
Delegator AO/BAWAOCC
Text
Submission Time 28/01/2020 10:17
ADEP EKBI
REGUL+ EHAMA28
Status: READY
(optfmds1)
ADES EHAM
LAD 1952
EOBT 09:10
MLAD
STATE Under Work
CTOT 09:44
DLA 29
Response Time **User ID** ☐ ☐

- Request for Improvement (Earliest take off time provision)



ARCID KLM1546 **EOBT** 1000 **ADEP** EGNM **ADES** EHAM **IOBD** 28/01/20
Type Request improvement to maintain schedule
New earliest time
Text

5 - How to use the service and best practices

TELEPHONE	o It is strongly recommended to reduce to the minimum the use of the telephone coordination. o The telephone coordination *shall not be used* to request improvements, exclusions from regulations or extensions requests before COBT-20 (exceptional reasons permit TWR to contact afterwards).
INTERFACE	o It is strongly recommended to *use the electronic coordination* means (B2B/NOP) to transmit the necessary requests. This has a beneficial effect on the treatment of most urgent requests. o FMP using electronic desk shall choose between B2B or B2C interface and never use the two channels simultaneously.
PROCEDURES	o *Review the ATFCM manuals* to understand when and where you are entitled to request helpdesk assistance. o Remember that helpdesk requests have *limited possibilities* subject to Network *capacity constraints*.
TRAINING	*Train your operational staff* with the new features and remind the procedures and operational best practices.

6- Questions

Any questions?

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FB1064: ASM - Advanced FUA process improvement

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1- Stakeholders impacted

- Airspace Manager (AMC)
- AO or CFSP

FB1064	Service affected				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation					
Data structure	Yes	Yes	Yes		
User Interface	Yes	Yes	Yes		
Procedures	Yes	Yes	Yes		
Training					
B2B	Yes	Yes	Yes		
Other					

2- Background – Why

- Short background of the FB:
  - NPZ zones are established to avoid short crossings of multiple ATC airspaces in FRA that create complex situations for ATC
  - Business needs:
    - Support more dynamic management of NPZ to optimize Airspace capacity.
    - Controlled by state AMC via AUP
    - Manage Time and Levels
  - Benefits:
    - Increased system flexibility will further optimise airspace usage

3- New features

- FB1064: CR_046917 NPZ processed via AUP/UUP

- AMCs will be able to process no planning zones (NPZs) via AUP/UUP
  - NPZ of category NAM: active by default, but can be reduced in time/vertical limits by AMC (no full cancellation).
  - NPZ of category AMA: activated on request by AMC. It can be reduced in time/vertical limits and/or fully cancelled by AMC
- Adapted business rules to allow allocation of NPZs in the AUP.
  - Category AMA or NAM
  - New rules for Identification and Publication of NPZs
  - Link to responsible/lead AMC
- Support for NPZ in CIAM, B2B (writing access for ASM tools and reading access for eAMI by AOs/CFSPs) and NOP Portal in the same way as for other elementary RSA.
- NPZ will need an associated FUA restriction, by default activated with the allocation of NPZ
  - Associated FUA restriction shall be published in RAD Appendix 7
  - FUA restriction ID for NPZ published according to ERNIP part 1 rules (e.g. LINPZ1 – associated FUA restriction LINPZ1R)

3- ERNIP Part 1 – Publication rules

Each NPZ shall be identified based on the following rules (to publish in AIP GEN 2.2):

Coded Identification: **LENPZ1** or **EFNPZ999 or ECNPZ123** (examples)

Rules:

Up to 8 (eight) characters composed by:

- 2 (two) letters: nationality letters for location indicator in accordance with ICAO Doc 7910, if zone is located entirely in one State, or
- 2 (two) letters: letters “EC”, if zone is located across two or more State borders, followed by
- 3 (three) letters: abbreviation “NPZ”, followed by
- 1 (one) - 3 (three) digits: a digit from 1 to 999; leading “0” or “00” shall not be used.

No type of sign, special character or space to separate the elements comprising the identification.

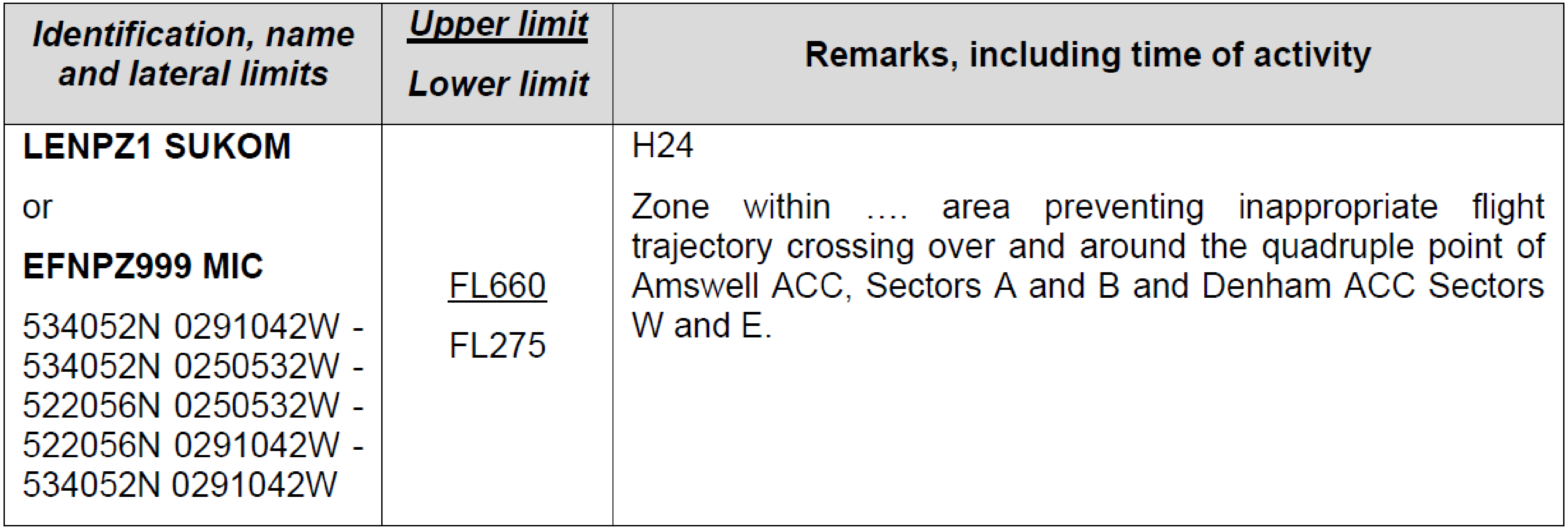
- *Note~~s~~:*

Name (if applicable): **LENPZ1 SUKOM** or **EFNPZ999 MIC** or **ECNPZ123 MIC** (examples)

3- ERNIP Part 1 – Publication rules

New rules for Identification and Publication of NPZs (3/3):

Fictitious Example



Identification, name and lateral limits	***Upper limit*** ***Lower limit***	**Remarks, including time of activity**
LENPZ1 SUKOM or **EFNPZ999 MIC** 534052N 0291042W - 534052N 0250532W - 522056N 0250532W - 522056N 0291042W - 534052N 0291042W	FL660 FL275	H24 Zone within …. area preventing inappropriate flight trajectory crossing over and around the quadruple point of Amswell ACC, Sectors A and B and Denham ACC Sectors W and E.

3- ERNIP Part 1 – Publication rules

No Planning Zone
RAD Appendix 7 - Fictitious example

Change record	RSA	Restriction	ID Number	Time Availability	Operational Goal
	L_NPZ1	Not available for traffic.	L_NPZ1R	H24	Traffic is not allowed to flight plan across defined no planning zone.
	ECNPZ999	Only available for traffic 1. DEP/ARR E _ _ _ 2. Via AAAAA or BBBBB	ECNPZ999R	H24	Traffic is not allowed to flight plan across defined no planning zone except specified flows.

4- Impact of the FB

- **B2B**: eAMI content will change as it is going to contain NPZ info. AMCs using B2B to populate draft AUPs/UUPs will need to accommodate use of NPZs, if required. The change will not provide a new access mean, but a modification of a format used in B2B.

- **CIAM**: New parts of CIAM HMI interface in order to manage NPZ information in the AUP/UUP.

- **NOP**: EAUP/EUUP as presented on the NOP will be modified to contain display of NPZs.

4- Impact of the FB

NPZ Migration (for existing ones)

In pursuance of the NPZ migration, States will need to provide EUROCONTROL, by March the 10th, with the following information:

i. NPZ identification in accordance with ERNIP Part 1 - Annex 4 III. Publication Guidelines
ii. Identification of the associated FUA restrictions, to be inserted in the RAD Appendix 7 - FUA restrictions;
iii. Indication on AMA/NAM classification of the NPZs;
iv. Assigned AMCs.

5- Questions

Any questions?

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FB1027: AOP/NOP Integration - Phase IV

1- Stakeholders impacted

- Flow Manager (FMP)
- AO or CFSP
- CDM-Airport
- Other (AOP – NOP Airport)

FB1027	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation		**Yes**			
Data structure					
User Interface					
Procedures		**Yes**			
Training					
B2B		**Yes**			
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why

CR_045109 Process C-DPI before EOBT - 3h

- Transition towards AOP – NOP data exchange
- Get early information from airports on flights that will not operate before AO cancels FPL
- Improved predictability; More accurate traffic load

3- New features

CR_045109 Process C-DPI before EOBT - 3h

- Accept and process the C-DPI before EOBT – 3h
- C-DPI can be provided from as early as a FPL exists in ETFMS (earliest at EOBT – 48 h)
- Flight suspended + traffic load updated
- Include reason “FLIGHT_CANCEL_IN_AODB” (Airport Operational Database) in the C-DPI message (advised)

4- Impact of the FB

A-CDM airports

- May provide C-DPI earlier if they wish; DPI ICD update required
- Requirement enforced only for an A-CDM airport engaged in an ongoing AOP-NOP project with the NM

Airlines

- Flight dispatchers should not send DLA/CHG messages as this action would de-suspend the flight
- If they anticipate they would not operate, the AO should CNL the FPL

Future improvement

- Improve FLS comment to highlight the suspension reason when it is present in C-DPI

5- Questions

Any questions?

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FB1066: Tower Update A-DPI evolution

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1- Stakeholders impacted

- Flow Manager (FMP)
- Post-ops analyst
- AO or CFSP
- CDM-Airport
- Advanced ATC TWR Airports

FB1066	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation		**Yes**			
Data structure					
User Interface		**Yes**			
Procedures		**Yes**			
Training		**Yes**			
B2B					
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why

- Tower Update A-DPI implemented in NM23.0
  - Special processing by ETFMS based on depstatus value “TWRUPDATE” for regulated flights
  - Triggered manually by TWR controller in case of an operational/technical problem while taxiing, flight under control or TWR/ATC
  - Processed automatically by NM systems
  - Reduces need for phone coordination (TWR ↔ NMOC) for individual flights

- A-DPI TWRUPDATE Main uses (since NM23.0)
  - ➢ Request a 10 min CTOT extension
  - ➢ Request the next available CTOT
  - ➢ Request de-suspension of a flight that was suspended by the airport via C-DPI (Advanced ATC TWRs)

- Ongoing trial with 5 airports since July 2019
  - EDDF, EDDH, LFPG, ENGM, LKPR

2.1- CR_047510 - Background – Why

CR_047510 Over-delivery check for A-DPI TWRUPDATE

A-DPI TWRUPDATE Main uses:

- Request a 10 min CTOT extension
- Request the next available CTOT
- Request de-suspension of a flight that was suspended by the airport via C-DPI

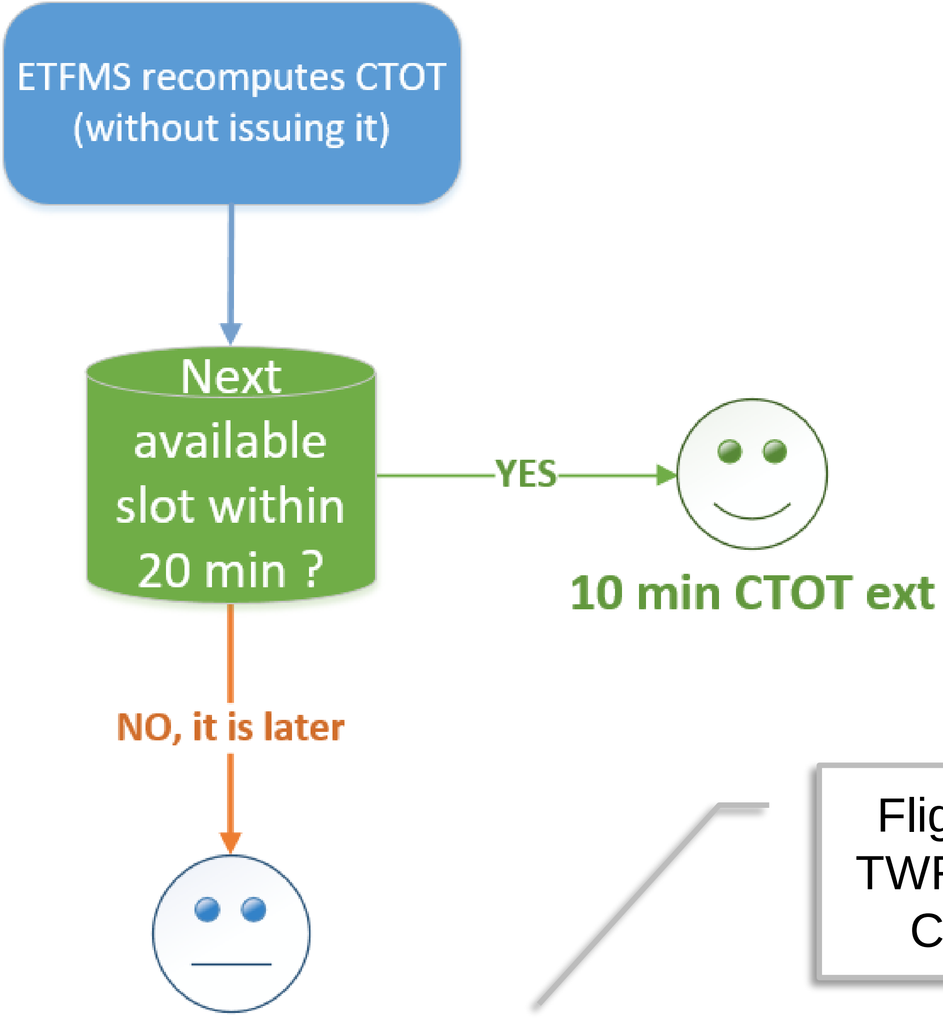
- Network impact assessment not fully replicated (when automated)

Objectives:

- Contain the risk of over-deliveries, minimizing any safety implications
- Complement existing conditions with an over-delivery check
- Transition to a permanent operational procedure and roll-out to other airports

2.2- CR_047510 - New features

CR_047510 Over-delivery check for A-DPI TWRUPDATE



ETFMS recomputes CTOT (without issuing it)

Next available slot within 20 min ?

YES

10 min CTOT ext

NO, it is later

Issue next available CTOT

All other existing conditions continue to be checked…

Flight gets REA status; TWR may call NMOC for CTOT improvement

2.3- CR_047510 - New features

CR_047510 Over-delivery check for A-DPI TWRUPDATE

All other existing conditions continue to be checked…

…Airports requested to receive the next available CTOT instead of rejection, whenever possible

Send next CTOT instead of rejection when:

- A CTOT has previously been granted to the flight
  - “CTOT ALREADY EXTENDED” suppressed
- The limit of 3 granted CTOT extensions in the past rolling hour has been reached
  - “HOURLY LIMIT FOR AUTOMATIC CTOT EXTENSIONS EXCEEDED” suppressed

2.4- CR_047510 - Impact of the FB

CR_047510 Over-delivery check for A-DPI TWRUPDATE

Airports who have already updated their system based on NM23.0 specifications

- Some error messages have been suppressed
- Airports to assess impact on systems and procedures

Airports participating to the trial

- Fewer CTOT extensions may be granted in favour of next available CTOT (the ratio will be quantified post-ops)
- The trial will end with the NM24.0 migration → these airports will continue to send the A-DPI TWRUPDATE operationally

New airports wishing to provide A-DPI TWRUPDATE

- Local system update required; specs published in the DPI Implementation Guide
- Contact the NM A-CDM team for guidance and to plan operational test

3.1- CR_047513 - Background – Why

CR_047513 De-suspension rule via TWRUPDATE A-DPI

A-DPI TWRUPDATE Main uses:

- Request a 10 min CTOT extension
- Request the next available CTOT
- Request de-suspension of a flight that was suspended by the airport via C-DPI

Objective:

- Provide A-DPI TWRUPDATE also for FAM suspended flights

3.2- CR_047513 - New features

CR_047513 De-suspension rule via TWRUPDATE A-DPI

- TWR will have the possibility to provide A-DPI TWRUPDATE to request de-suspension of a FAM suspended flight

- The CDM status "*Actual Off-Block*" will be kept when the flight is suspended by the airport (via C-DPI) or by FAM
- A-DPI TWRUPDATE will be accepted only when the CDM Status is “*Actual Off-Block*”
  - If not, message rejected with “NOT REPORTED AS OFF BLOCK”

3.3- CR_047513 - Impact of the FB

CR_047513 De-suspension rule via TWRUPDATE A-DPI

Airports wishing to provide A-DPI TWRUPDATE for a FAM suspended flight

- Local procedure update may be required
- Local system update required; specs published in the DPI Implementation Guide
- Contact the NM A-CDM team for guidance and to plan operational test

4- Questions

Any questions?

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FB1084: FRA improvements

Live Updatable Traffic Volumes

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1- Stakeholders impacted

- ADS
- Flow Manager (FMP)
- AO
- Post-ops analyst
- ENV Coordinators

FB1084	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation		YES			
Data structure		**YES**		**YES**	
User Interface		**YES**			
Procedures		**YES**			
Training		**YES**			
B2B		**YES**	**YES**		
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why

- The change responds to a FABEC request originated in 2016 via the NM consultation groups.
- The change implements one the enhancements required in Free Route Airspace context.
- Restrictions can be modified within an AIRAC as live updates, but the definition of traffic volumes cannot be modified so dynamically.
- Traffic volumes are relatively static and can only be *renamed* and recreated but not altered by live updates.
- The existing process is time-consuming and requires effort from both CACD and NMOC Flow Controllers. It also affects the local tools using the traffic volumes data via B2B.

2- Background – Why

Reasons to request a live-update:

- Traffic volumes *may be incorrectly defined* in the ENV data (e.g. missing flows) and require modification to correctly regulate the traffic they select.
- Traffic patterns can evolve during the operational day, especially in certain environments, or in particular due to operational measures that have already been put in place to regulate them.

Scope of the change:

- Pre-tactical or tactical phases
- Permanent corrections of the flows definition

3- New features

The change permits to process live updates on traffic volumes flows:

1) To correct the definition of the flows of a traffic volume.
2) To correct the load presented by wrong traffic volume definition.
3) To correct the measures associated with the traffic volume.

4- New procedures

1) Environment Request (Data Modification Request)
   a) Traffic Volume changes - live update
   b) ANSP/NMOC coordination
2) Change applied and evaluated in ENV
   a) NMOC validates the change in simulation
3) Change applied in live environment
   a) NMOC applies the change in live

5- Operational testing & training

1) NM recommends to participate in the operational testing session
2) NM strongly advices ANSP to include the change as part of their staff training
3) NM strongly advices ANSP to include the Operational Instruction content as part of their staff training

6- Questions

Any questions?

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FB1042: ATFM messaging for AOs via B2B

Includes **I2_118832:** Retrieving original ADES for diverted flight via B2B

1- Stakeholders impacted

- AO or CFSP
- Air Navigation Service Provider (ANSP)

FB1042	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation					
Data structure					
User Interface					
Procedures					
Training		Yes			
B2B		Yes			
Other					

2- Background – Why

AOs and CFSPs requested to add Slot Related messages in the NM B2B web service: NM will move strategically through a service digitalization.

- What was the problem it intends to solve?
  - Some AOs move entirely on FPL B2B; the slot information (that were missing in the NM B2B services) created, on AOs side, a mixture of FPL B2B and CASA messages on AFTN/SITA. As well, it is part of NM strategy to have the legacy data exchange implemented into the NM B2B web services.
- What are the benefits?
  - FPL and CASA data exchange in the legacy and B2B services.
- What are the possible next steps?
  - Except AFPs (ATC Flight Plan), with the CASA information implemented into the B2B service, we align the legacy and B2B input and output.

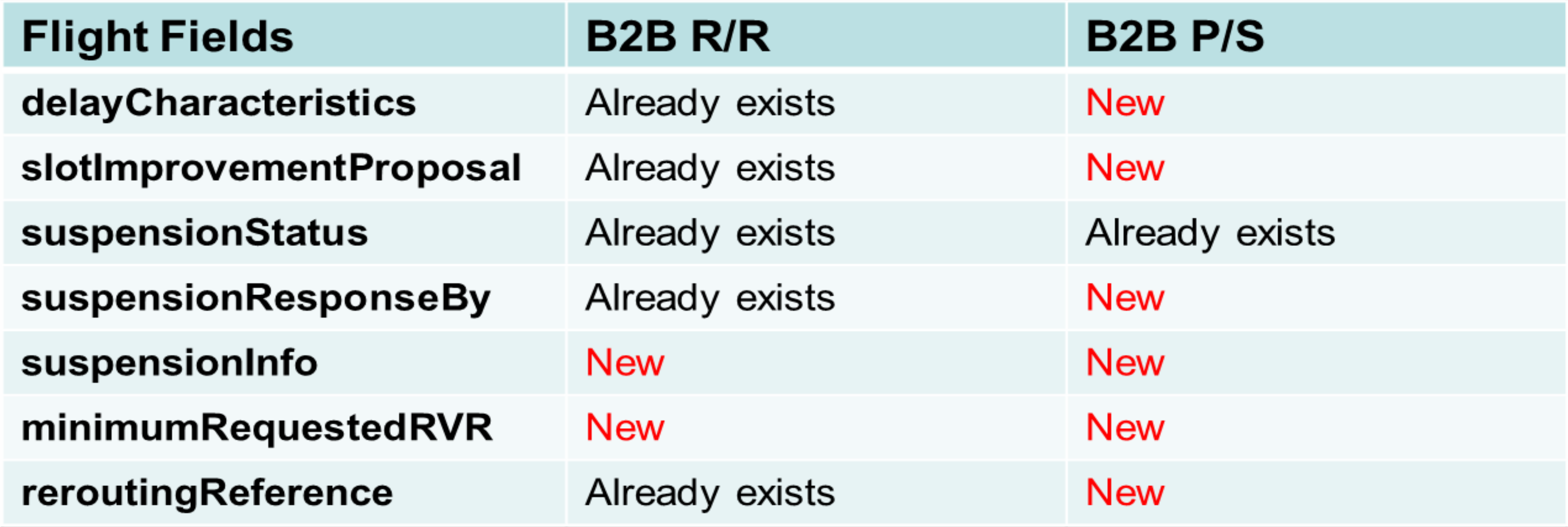
3- New features

The implementation is done like below:

- Output messages can be retrieved:
  - Via **B2B request/reply** (FlightList queries)
  - Via **B2B P/S FLIGHT_DATA** topic (*aka* **PSFD P**ublish **S**ubscribe **F**light **D**ata)
- Input messages will be submitted via dedicated B2B R/R (flight.flightmanagement)**.**

3- New features

- **OUTPUT MESSAGES**
- Output messages can be retrieved:
  - Via **B2B request/reply** (FlightList queries)
  - Via **B2B P/S FLIGHT_DATA** topic (*aka* **PSFD P**ublish **S**ubscribe **F**light **D**ata)

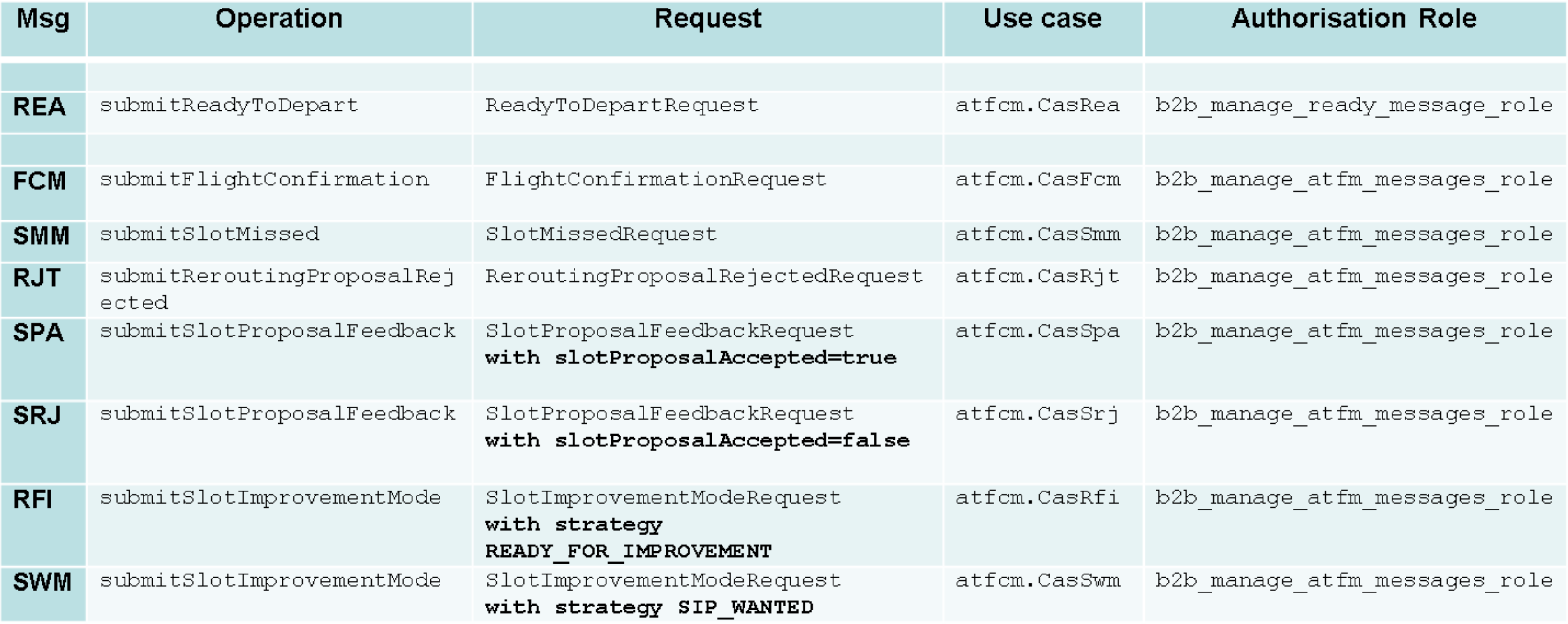


Flight Fields	B2B R/R	B2B P/S
delayCharacteristics	Already exists	New
slotImprovementProposal	Already exists	New
suspensionStatus	Already exists	Already exists
suspensionResponseBy	Already exists	New
suspensionInfo	New	New
minimumRequestedRVR	New	New
reroutingReference	Already exists	New

- **Authorisation** (same use cases as for users who can subscribe to FLIGHT_DATA P/S topic):
  - `b2b.PublishSubscribe`
  - `atfcm.FltData`

3- New features

- **INPUT MESSAGES**
- Input messages will be submitted via dedicated B2B R/R (**`flight.flightmanagement`**):



Msg	Operation	Request	Use case	Authorisation Role
REA	submitReadyToDepart	ReadyToDepartRequest	atfcm.CasRea	b2b_manage_ready_message_role
FCM	submitFlightConfirmation	FlightConfirmationRequest	atfcm.CasFcm	b2b_manage_atfm_messages_role
SMM	submitSlotMissed	SlotMissedRequest	atfcm.CasSmm	b2b_manage_atfm_messages_role
RJT	submitReroutingProposalRejected	ReroutingProposalRejectedRequest	atfcm.CasRjt	b2b_manage_atfm_messages_role
SPA	submitSlotProposalFeedback	SlotProposalFeedbackRequest **with slotProposalAccepted=true**	atfcm.CasSpa	b2b_manage_atfm_messages_role
SRJ	submitSlotProposalFeedback	SlotProposalFeedbackRequest **with slotProposalAccepted=false**	atfcm.CasSrj	b2b_manage_atfm_messages_role
RFI	submitSlotImprovementMode	SlotImprovementModeRequest **with strategy READY_FOR_IMPROVEMENT**	atfcm.CasRfi	b2b_manage_atfm_messages_role
SWM	submitSlotImprovementMode	SlotImprovementModeRequest **with strategy SIP_WANTED**	atfcm.CasSwm	b2b_manage_atfm_messages_role

B2B messages are translated into ADEXP format and are sent to TACT, being visible in the CHMI and NOP Portal under the operational log

3- I2_118832 - Retrieving original ADES for diverted flight via B2B

- This fix is delivered to be able to indicate the original filed aerodrome of destination in case the flights was diverted.
- In the NM B2B Flight service, the **flight.flightId.keys.aerodromeOfDestination** will be always the original filed ADES.
- In case of diversion, the below fields will complete the flight information.

  - The **flight.flightId.keys.aerodromeOfDestination** is always:

    + The original filed ADES

  - The **flight.divertedAerodromeOfDestination** is always:

    + The diverted ADES if the flight was diverted

    + Not present if the flight was not diverted

3- New features – new Event Types

- The ETFMS Flight Data (EFD) messages could contain other Event Types like: “RRM”, “OAR”, “RJT”, “RFR”, “RSI”, “SIP”, “SSP”, “UCD”.
- These new events mean:
  - RRM - Rerouting Proposal Creation, triggered by a Rerouting Proposal (RRP) or Rerouting Notification (RRN) message,
  - OAR - ATFM Rerouting,
  - RJT - Rerouteing reJecTion (RJT) message. An RJT is a negative response to a Rerouteing Proposal (RRP) message,
  - RFR - Re-route after reroute cancellation,
  - RSI - CASA Revoke slot proposal,
  - SIP - CASA booking (SIP),
  - SSP - CASA STAM Proposal,
  - UCD - Update MCDM Data.
- Example:

```
-TITLE EFD
-TIMESTAMP 191218020000
-EVENT RRM
-EVENTCLASS MSG
-FLTSTATE FS
```

4- Impact of the FB

- If the external systems migrate to the release NM24.0, then the Publish/Subscribe Flight Data will contain the new fields (cf previous slides);
- The Input messages (cf previous slides) is considered as write service. Therefore, an operational validation will be performed before the operations (like any other NM B2B Write service);
- This FB is planned to be part of the NM Release OPT (Operational Testing Session), As well, once the Pre_OPS instance is migrated to NM24.0, the new features are available on this platform before the operational NM24.0 migration.

5- Questions

Any questions?

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FB1059: ATFCM Domain improvements

CR_046613 - Flag diverted flights from CPRs information

1- Stakeholders impacted

CR_046613 - Flag diverted flights from CPRs information

- Flow Manager (FMP)
- AO or CFSP
- Non-CDM Airport
- CDM and Advanced ATC TWR Airport
- ARO
- Air Navigation Service Provider (ANSP)
- Internal NM

FB1059	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation		Yes			
Data structure					
User Interface					
Procedures					
Training		Yes			
B2B					
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

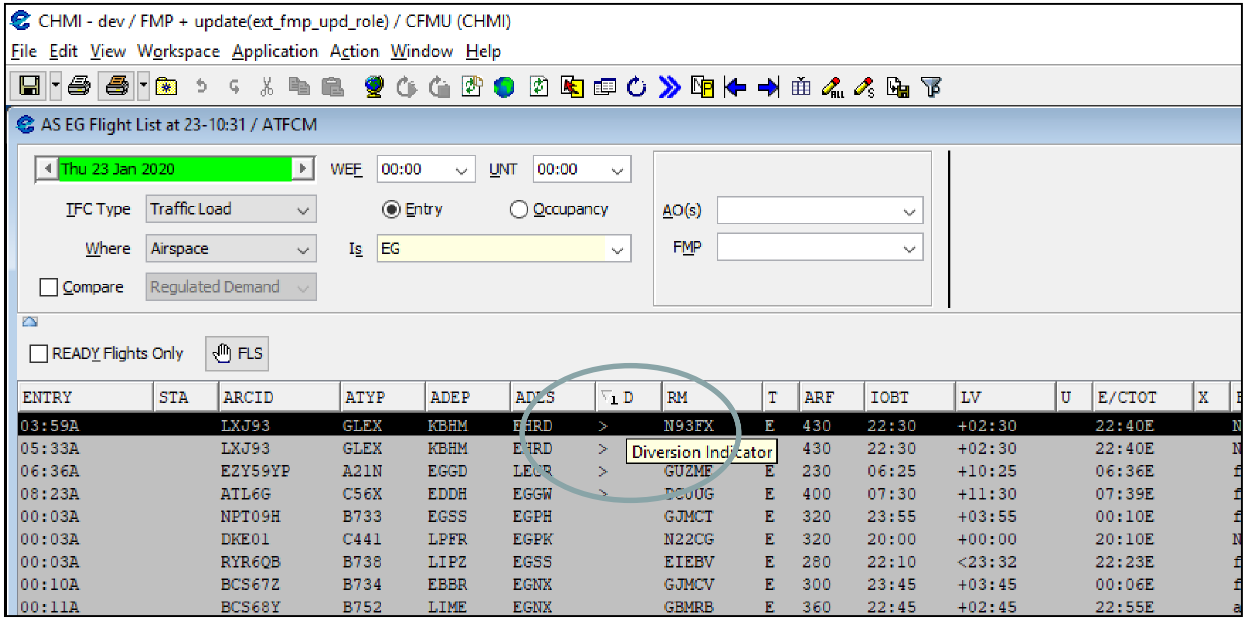
2- Background – Why

- Why was FB1059 developed?
  - Today, the diversion is indicated and shared only after a Div_ACH or a Div_ARR is received (messages received by IFPS and forwarded to ETFMS). Not all the ATM systems are able to send Div_ACH.
- What was the business need?
  - To be able to identify more diverted flights based on the CPR data received. Therefore, the flights are correctly shown as diverted to the real ADES (and not the filed one).
- What was the problem it intends to solve?
  - The radar positions are projected on the initial flight profile even if they indicate a trajectory with a different ADES compared with the original filed ADES.
- What are the benefits?
  - More diverted flights identified, better loads and counts based on the actual diverted ADES.

3- New features

- CR_046613 (Flag diverted flights from CPRs information) will be transparent to the user: more flights will be identified as Diverted.
- Reminder: The diversion is already visible on CHMI and NOP applications and provided via NM B2B webservices. In CHMI and NOP application, the Flight List could indicate the diversion in the “D” column (by the sign >). As well, in case of diversion, the Flight Data will contain the diverted aerodrome (under ADES field) and the original filed ADES (under the Filed ADES field).
- Details on implementation: the flights will be diverted based on the ADES received in the CPRs when is different from the original filed ADES. The change is applied when the ADES in the CPR is:
  - The same as ADEP,
  - One of ALTN received in the original FPL,
  - On the overlapping CPRs areas when the CPR ADES could be different, the diversion will be triggered after the CPRs reception for a defined beriod (10min) with the same CPR ADES.

3- Reminder - Diverted flights are already available in NM23.5 CHMI and NOP


CHMI - dev / FMP + update(ext_fmp_upd_role) / CFMU (CHMI)
File Edit View Workspace Application Action Window Help

AS EG Flight List at 23-10:31 / ATFCM

Thu 23 Jan 2020 WEF 00:00 UNT 00:00

TFC Type Traffic Load ● Entry ○ Occupancy

Where Airspace Is EG

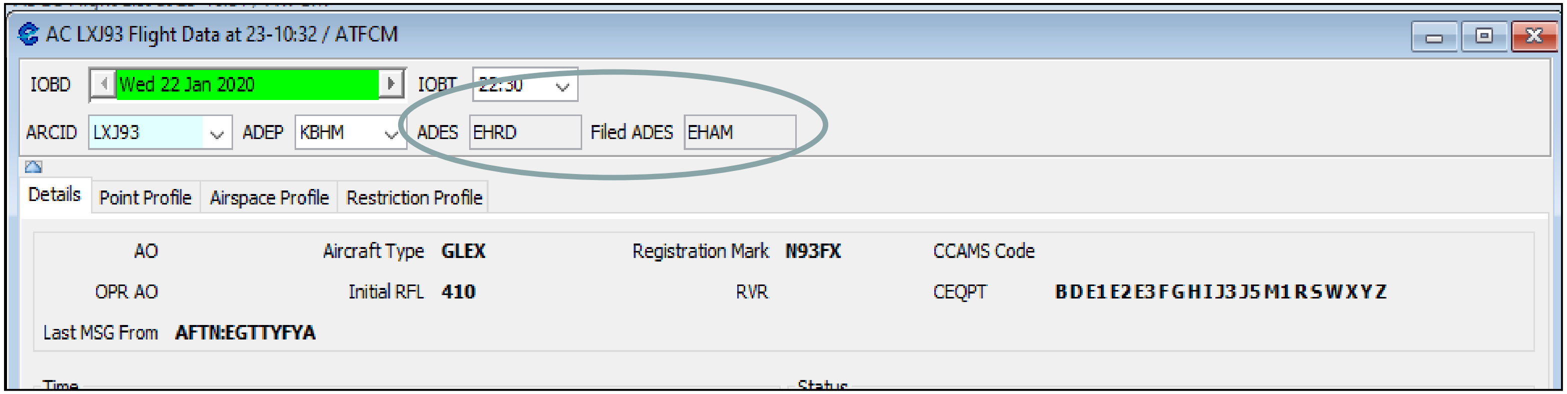
AO(s)

FMP

☐ Compare Regulated Demand

☐ READY Flights Only FLS

ENTRY	STA	ARCID	ATYP	ADEP	ADES	D	RM	T	ARF	IOBT	LV	U	E/CTOT	X
03:59A		LXJ93	GLEX	KBHM	EHRD	>	N93FX	E	430	22:30	+02:30		22:40E	
05:33A		LXJ93	GLEX	KBHM	EHRD	>	Diversion Indicator		430	22:30	+02:30		22:40E	
06:36A		EZY59YP	A21N	EGGD	LECR	>	GUZMF	E	230	06:25	+10:25		06:36E	
08:23A		ATL6G	C56X	EDDH	EGGW	>	[illegible]	E	400	07:30	+11:30		07:39E	
00:03A		NPT09H	B733	EGSS	EGPH		GJMCT	E	320	23:55	+03:55		00:10E	
00:03A		DKE01	C441	LPFR	EGPK		N22CG	E	320	20:00	+00:00		20:10E	
00:03A		RYR6QB	B738	LIPZ	EGSS		EIEBV	E	280	22:10	<23:32		22:23E	
00:10A		BCS67Z	B734	EBBR	EGNX		GJMCV	E	300	23:45	+03:45		00:06E	
00:11A		BCS68Y	B752	LIME	EGNX		GBMRB	E	360	22:45	+02:45		22:55E	



AC LXJ93 Flight Data at 23-10:32 / ATFCM

IOBD Wed 22 Jan 2020 IOBT 22:30

ARCID LXJ93 ADEP KBHM ADES EHRD Filed ADES EHAM

AO

Aircraft Type **GLEX**

Registration Mark **N93FX**

CCAMS Code

OPR AO

Initial RFL **410**

RVR

CEQPT **B D E1 E2 E3 F G H I J3 J5 M1 R S W X Y Z**

Last MSG From **AFTN:EGTTYFYA**

Time

Status

4- Impact of the FB1059 / CR_046613 - Flag diverted flights from CPRs information

- No impact.
- More flights will be identified as being diverted.

5- Questions

Any questions?

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FB1074: FF-ICE filing Function - file eFPL

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NETWORK MANAGER

v1.3

1- Stakeholders impacted

- Airspace User (Civil)
- AO or CFSP

FB1074	Service affected				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation	Yes				
Data structure	Yes				
User Interface					
Procedures	Yes				
Training	Yes				
B2B	Yes				
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why

- FB1074 implements features that couldn’t be addressed with the initial FF-ICE Filing Service deployment in NM23.0 and further evolved in NM23.5.
- It is an incremental step towards the ICAO FF-ICE Filing service specification.
- The FF-ICE will eventually replace the current ICAO procedures and processes for the filing of a flight plan, and provide the means for the exchange of flight plan data, including trajectory and aircraft performance.
- Next step goal is full alignment with FF-ICE Filing service spec.

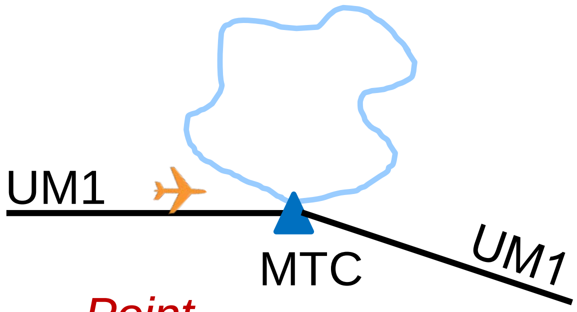
3- New features

- ‘EnRoute Delay’ information in the ‘structured’ route
- Flight Plan originator
- Airport slot information (departure/arrival)
- IATA flight identification

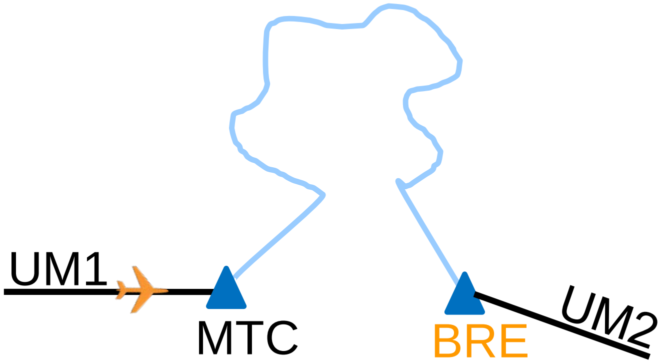
EnRoute Delay

- ‘EnRoute Delay’ information only in the ‘structured’ route
  - trajectory details submission not permitted
  - Maximum 9 EnRoute Delay indications

- Operations at a Point or along a Route segment (other possibilities not supported)



Point



Route Segment

EnRoute Delay - Route elements examples

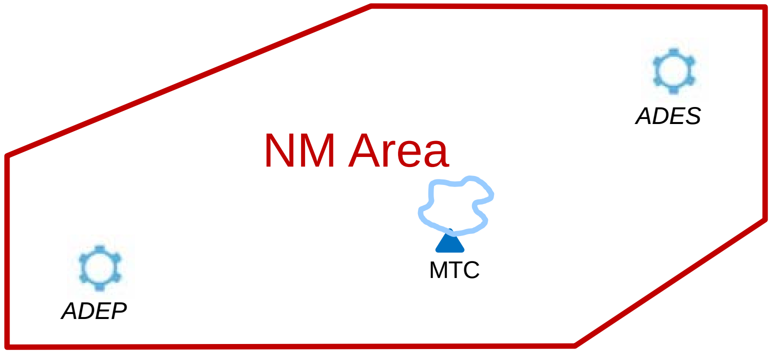
Operations at a Point

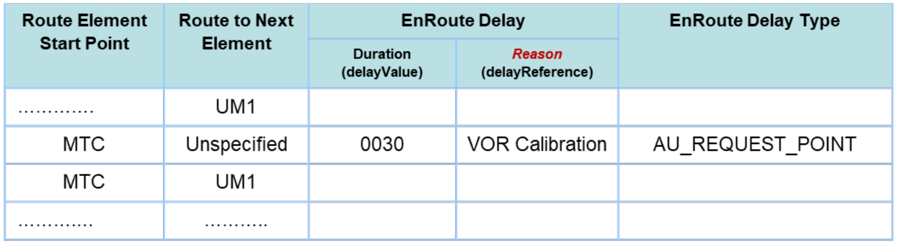
Route Element Start Point	Route to Next Element	EnRouteDelay		EnRouteDelayType
		Duration (delayValue)	*Reason* (delayReference)	
…………	UM1			
MTC	Unspecified	0030	VOR Calibration	AU_REQUEST_POINT
MTC	UM1			
…………	………..			

Operations along a Route Segment

Route Element Start Point	Route to Next Element	EnRoute Delay		EnRoute Delay Type
		Duration (delayValue)	*Reason* (delayReference)	
…………	UM1			
MTC	Unspecified	0045	Photography	AU_REQUEST_SEGMENT
BRE	UM2			
…………	………..			

EnRoute Delay - Translation Rules (1)





Route Element Start Point	Route to Next Element	EnRoute Delay		EnRoute Delay Type
		Duration (delayValue)	*Reason* (delayReference)	
…………	UM1			
MTC	Unspecified	0030	VOR Calibration	AU_REQUEST_POINT
MTC	UM1			
…………	………..			

- EnRoute Delay (at a Point or on a Segment) into a STAY, as follows:
  - STAY/indicator in the Field 15c corresponding to the EnRoute Delay information (duration and associated point(s)), and
  - STAYINFO/ indicator in the Field 18 corresponding EnRoute Delay reason

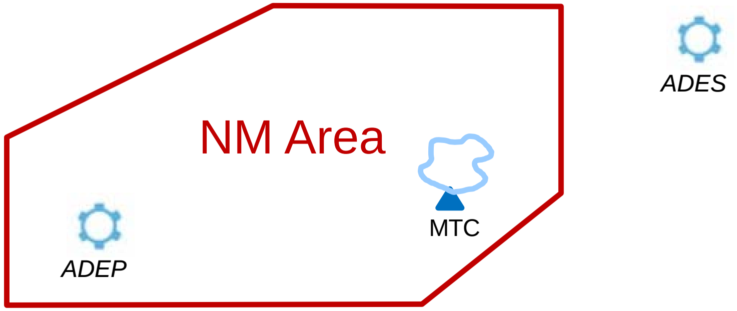
F15 … **MTC STAY1/0030 MTC** …

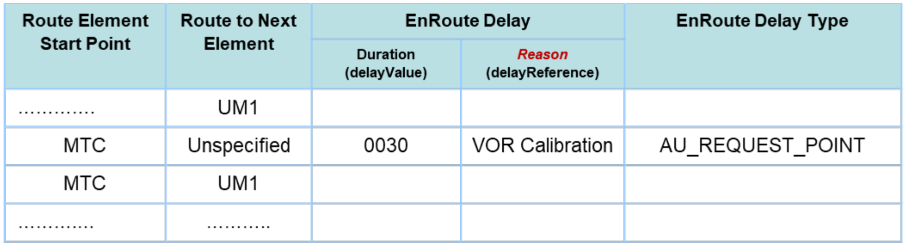
F18 … **STAYINFO1/VOR CALIBRATION** …

F15 … **MTC STAY1/0030 BRE** …

F18 … **STAYINFO1/VOR CALIBRATION** …

EnRoute Delay - Translation Rules (2)



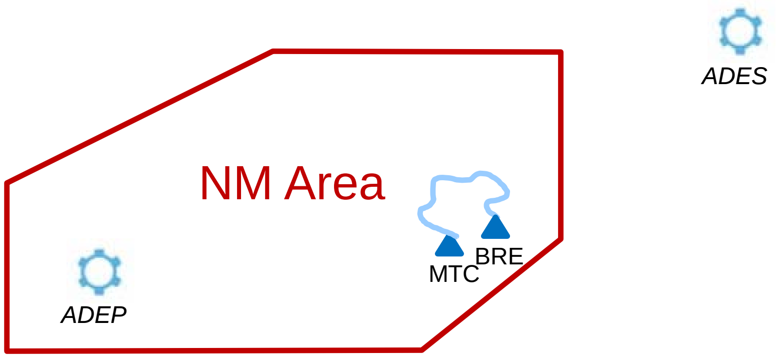


Route Element Start Point	Route to Next Element	EnRoute Delay		EnRoute Delay Type
		Duration (delayValue)	*Reason* (delayReference)	
....	UM1			
MTC	Unspecified	0030	VOR Calibration	AU_REQUEST_POINT
MTC	UM1			
....	....			

- EnRoute Delay (at a Point) into a DLE, as follows:
  - DLE/indicator in the Field 18 corresponding to the EnRoute Delay information (duration and associated point)

F18 **… `DLE/MTC0030` …**

EnRoute Delay - Translation Rules (3)



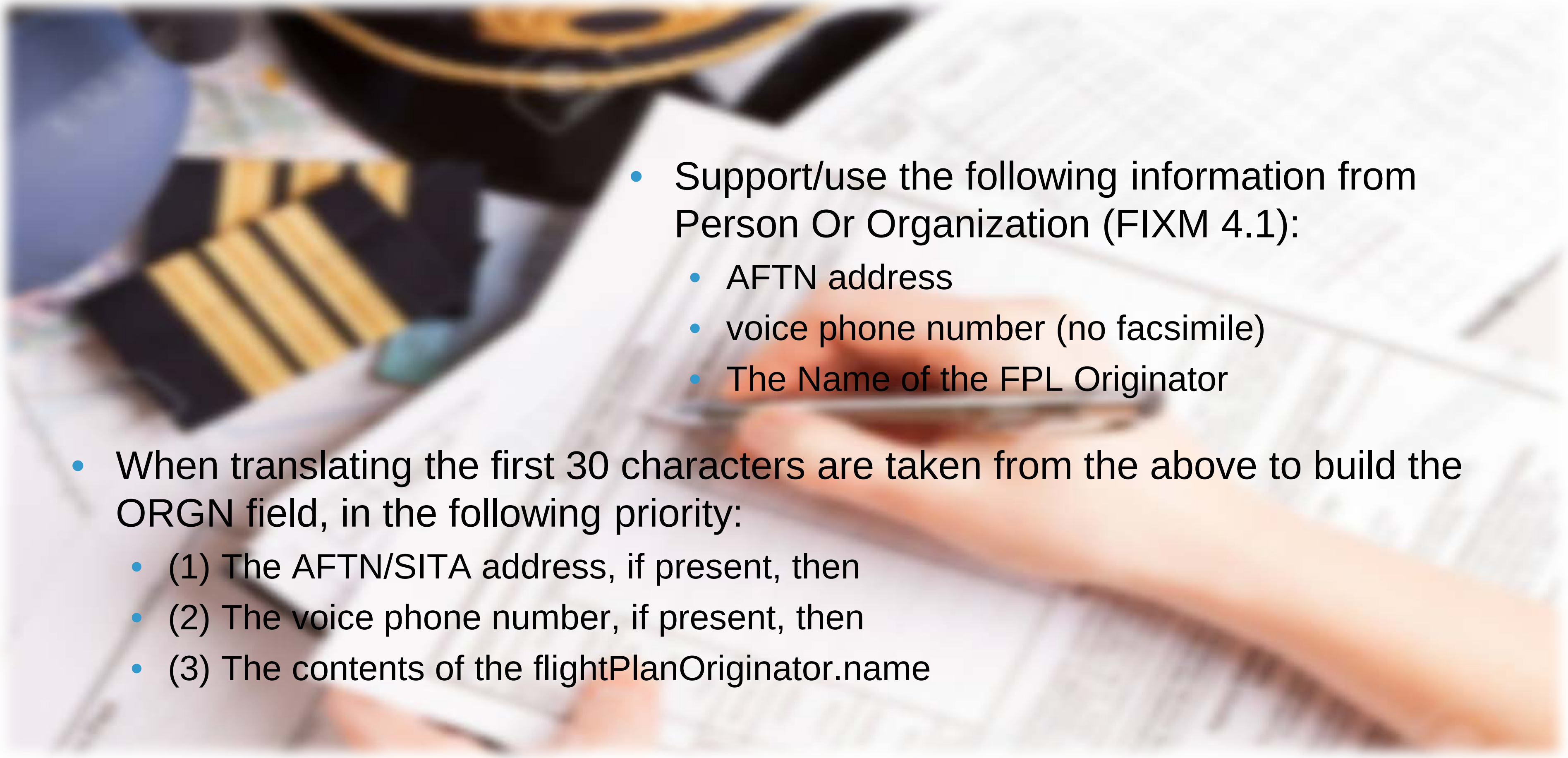
Route Element Start Point	Route to Next Element	EnRoute Delay		EnRoute Delay Type
		Duration (delayValue)	*Reason* (delayReference)	
…………	UM1			
MTC	Unspecified	0045	Photography	AU_REQUEST_SEGMENT
BRE	UM2			
…………	………..			

- EnRoute Delay (on a Segment) into a DLE, as follows:
  - DLE/indicator in the Field 18 corresponding to the EnRoute Delay information (duration and start point)
  - DCT in F15 between the start and end point of the Segment

F15 **… UM1 MTC DCT BRE UM2 …**

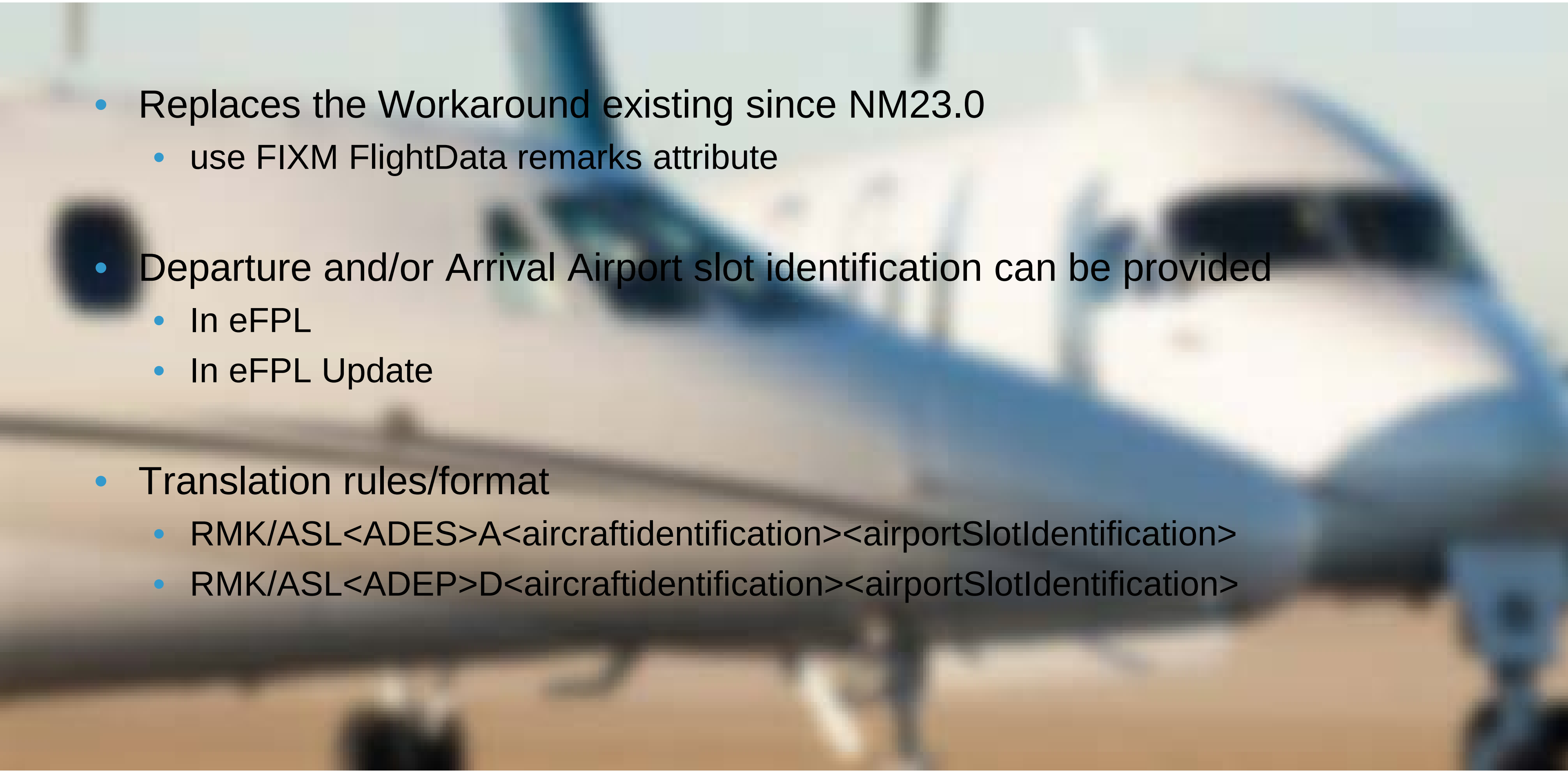
F18 **… DLE/MTC0045 …**

Flight Plan originator



- Support/use the following information from Person Or Organization (FIXM 4.1):
  - AFTN address
  - voice phone number (no facsimile)
  - The Name of the FPL Originator
- When translating the first 30 characters are taken from the above to build the ORGN field, in the following priority:
  - (1) The AFTN/SITA address, if present, then
  - (2) The voice phone number, if present, then
  - (3) The contents of the flightPlanOriginator.name

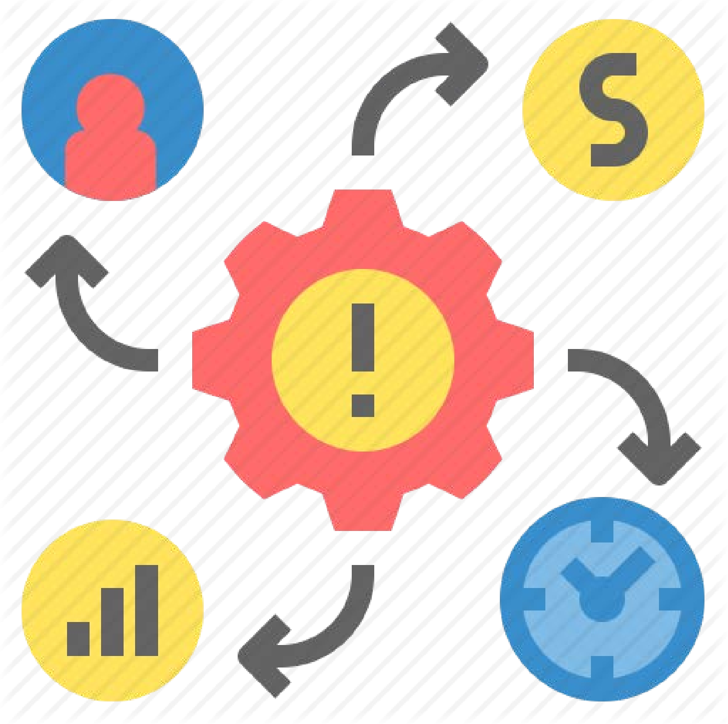
Airport slot information



- Replaces the Workaround existing since NM23.0
  - use FIXM FlightData remarks attribute
- Departure and/or Arrival Airport slot identification can be provided
  - In eFPL
  - In eFPL Update
- Translation rules/format
  - RMK/ASL<ADES>A<aircraftidentification><airportSlotIdentification>
  - RMK/ASL<ADEP>D<aircraftidentification><airportSlotIdentification>

4- Impact of the FB

- Expected possible Impact of the FB on externals relates to:
    - current procedures,
    - systems changes



Documentation

- NM
  - NOP/B2B Reference Manual https://ost.eurocontrol.int/sites/B2BWS/default.aspx
    - Flight Services, FIXM Validation Rules for NM B2B, etc.
  - EUROCONTROL Network Manager Release Notes - Planned for implementation 2019-2020
  - *FF-ICE/R1 Extended Release Notes – Release NM 24.0*

- FIXM CCB
  - FIXM Implementation Guidance

5- Questions

Any questions?

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FB1086: CACD validation of RAD

v2.0

1- Stakeholder impacted

- National RAD Coordinator (NRC)

FB1086	Service affected				
	Flight Planning	Flow	Aeronautical Information/ AS data	Reporting	Other
Internal computation					
Data structure					
User Interface					
Procedures			Yes		NRC
Training			Yes		NRC
B2B					
Other					

2- Background – Context

- An NRC and/or LRC and the NM RAD Team must be informed when a CACD entity has been updated or even deleted in CACD by an ENV Coordinator or the NM ADS team.
- The other way around, the ENV Coordinators and the NM ADS team need to be informed and eventually asked to approve the changes made in RAD towards CACD. Because RAD restrictions and also RAD set of aerodromes need to be mirrored in CACD in the end.
- Every RAD restriction must be in CACD in the end for transmission to IFPS to validate FPLs on compliance.

2- Background – Why

- A basic data change in CACD could have an impact on the existing restrictions in CACD.
- Such an update could have the same impact on the RAD Restrictions in the RAD@NES
- The NRC, LRC and the NM RAD team must be able to investigate the impact of a basic data update.

3- New features

- All restrictions affected by a basic data update in CACD will be reported to the NRC, LRC and NM RAD team.
- Any CACD update done on the current operational data or on any validity period in the future will trigger a selection of potentially affected CACD restrictions and potentially affected RAD restrictions.
- This will allow NRC and/or LRC to update the affected RAD restrictions.

- The NM RAD team will then generate incremental files if needed.
- A crosscheck between CACD restrictions and RAD Restrictions will be performed by the NM ADS team.

4- Impact of the FB

- NRC
  - RAD restrictions are validated against the basic data of a corresponding validity period.
  - RAD restrictions will be semantically correct towards future AIRACS at an earlier stage.

- NM RAD Team
  - Anticipation of updates before the AIRAC is effective.
  - Less RAD incremental files

5- Questions

Any questions?

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FB1095: RAD Full Completion (Phase 1)

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NETWORK MANAGER

v2.0

1- Stakeholders impacted

- National RAD Coordinator (NRC)
- Local RAD Coordinator (LRC)

FB1095	Service affected				
	Flight Planning	Flow	Aeronautical Information/ AS data	Reporting	Other
Internal computation					
Data structure					
User Interface			Yes		NRC & LRC
Procedures			Yes		NRC & LRC
Training			Yes		NRC & LRC
B2B					
Other					

2- Background – Why

- Provide an application which allows the National and Local RAD coordinators (NRC & LRC) to define and maintain RAD restrictions and to interface with neighboring NRCs and the NM RAD team.
- Provide an application which allow the NM RAD team to consolidate the proposed RAD restrictions or amendments to existing ones and publish the RAD document.

3- New features

- Replacement of the legacy RAD excel spreadsheet by a tailored application that allow the NRC & LRC to store, maintain and edit their RAD restrictions.
- Provide an application that facilitates coordination with neighboring states.
- An application which automates the interfacing with the NM RAD team.
- An application which allow the RAD team to consolidate the proposed RAD restrictions and which allows to publish the RAD document.
- An application which allows the NRC & LRC to plot individual elements of a RAD restriction or the complete restriction on a map.

- In a future release RAD@NES will also allow to feed the CACD system in a computer assisted way with the RAD restrictions.

4- Impact of the FB

- NRC
  - RAD restrictions are stored and maintained in a dedicated application.
  - RAD restrictions are subject to a standard grammar
    - which minimizes potential misunderstandings,
    - which facilitates the future mapping into CACD
    - which facilitates indirectly the export in AIXM format.
  - The RAD application allows close coordination with
    - neighbouring NRCs
    - NM RAD Team
  - Plotting facilities

- NM RAD Team
  - Facilitates the generation of the RAD file
  - Allows close coordination with the NRCs & LRCs

5- Questions

Any questions?

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FB1041: FRA improvements – Activation

v1.0

1- Stakeholders impacted

- ENV data provider
- Other (NEC & LEC)

FB1041	Service affected				
	Flight Planning	Flow	Aeronautical Information/ AS data	Reporting	Other
Internal computation					
Data structure			Yes		NEC & LEC
User Interface			Yes		NEC & LEC
Procedures			Yes		NEC & LEC
Training			Yes		NEC & LEC
B2B					
Other					

2- Background – Why

- Allow the FRA data providers to transmit the FRA related data as
  - a set of point usages,
  - airspace or airspace border definitions only,
  - Aerodromes’ arrival and departure points
- Generate and maintain -in a computer assisted way- the FRA restrictions from the point usages.

3- New features

- The external users will no longer have to understand the complex restrictions data models.
- The FRA data providers can now transmit their FRA data as point usage data (Entry, Exit or Intermediate) referring to FRA airspaces and FRA airspace borders and align the usages in the 3rd and 4th dimension.
- With point usages Arrival and Departure the use of the various points can be made exclusive for or limited to the traffic going to or coming from particular aerodrome or set of aerodromes.

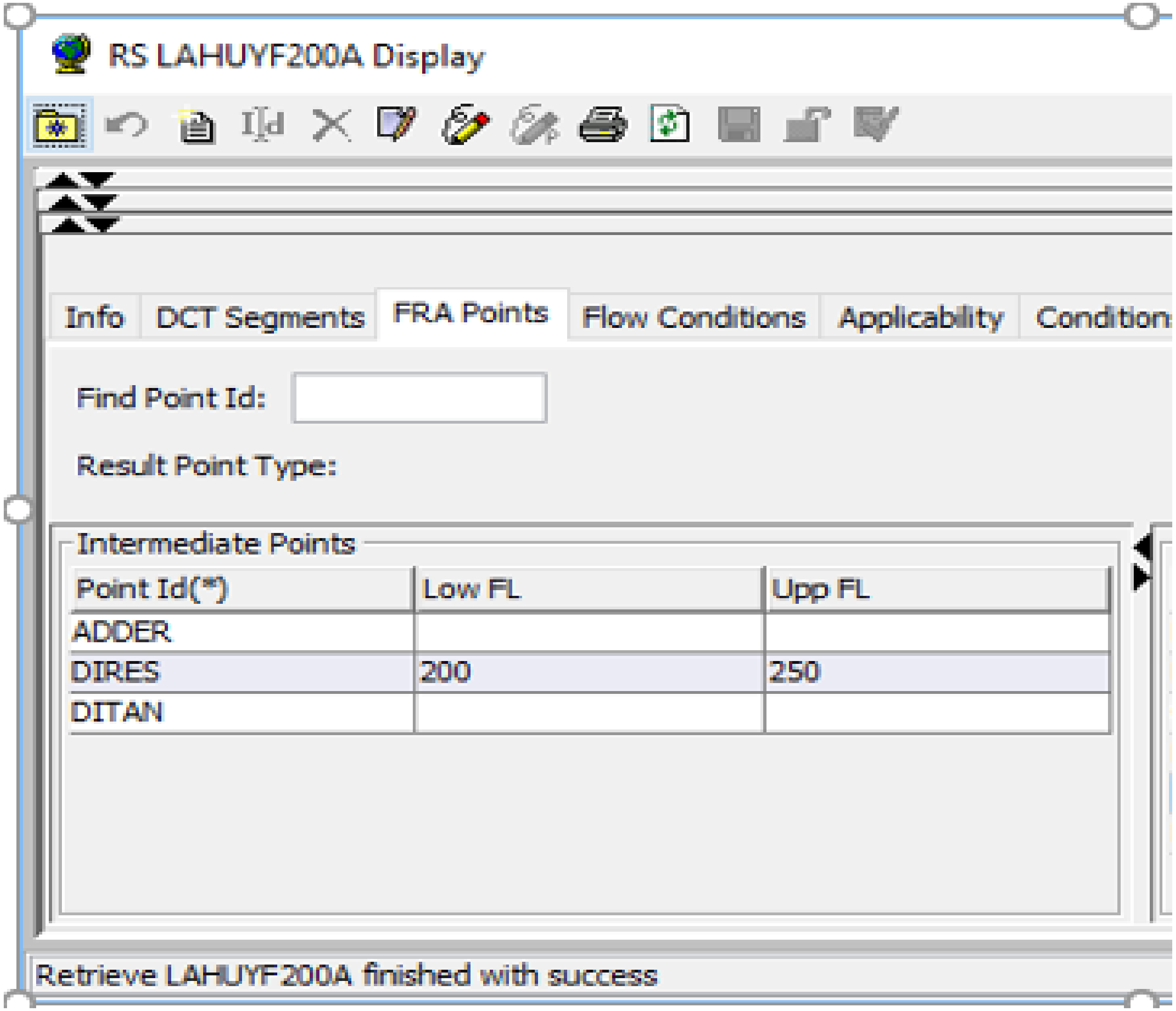
- Remark: From this data FRA restrictions will be generated and maintained in a computers assisted manner. Hence for the data consumers (AOs, CFSP etc…) the change is transparent.

4- Impact of the FB (1)

- NEC (National Environment Coordinator) & LEC (Local Environment Coordinator):
  - FRA data will be transmitted to the NM ADS team as point usage.
    - a PT can have an intermediate role for a given FRA airspace at particular times and levels
    - a PT can have an Entry and/or Exit role for a given FRA airspace border at particular times and levels
    - a PT can have an Arrival and/or Departure role for a given FRA airspace and an aerodrome or set of aerodromes at particular times and levels

- NM ASD team:
  - Collect the data
  - Generates the FRA restriction in a computer assisted manner

4- Impact of the FB (2)



Find Point Id:

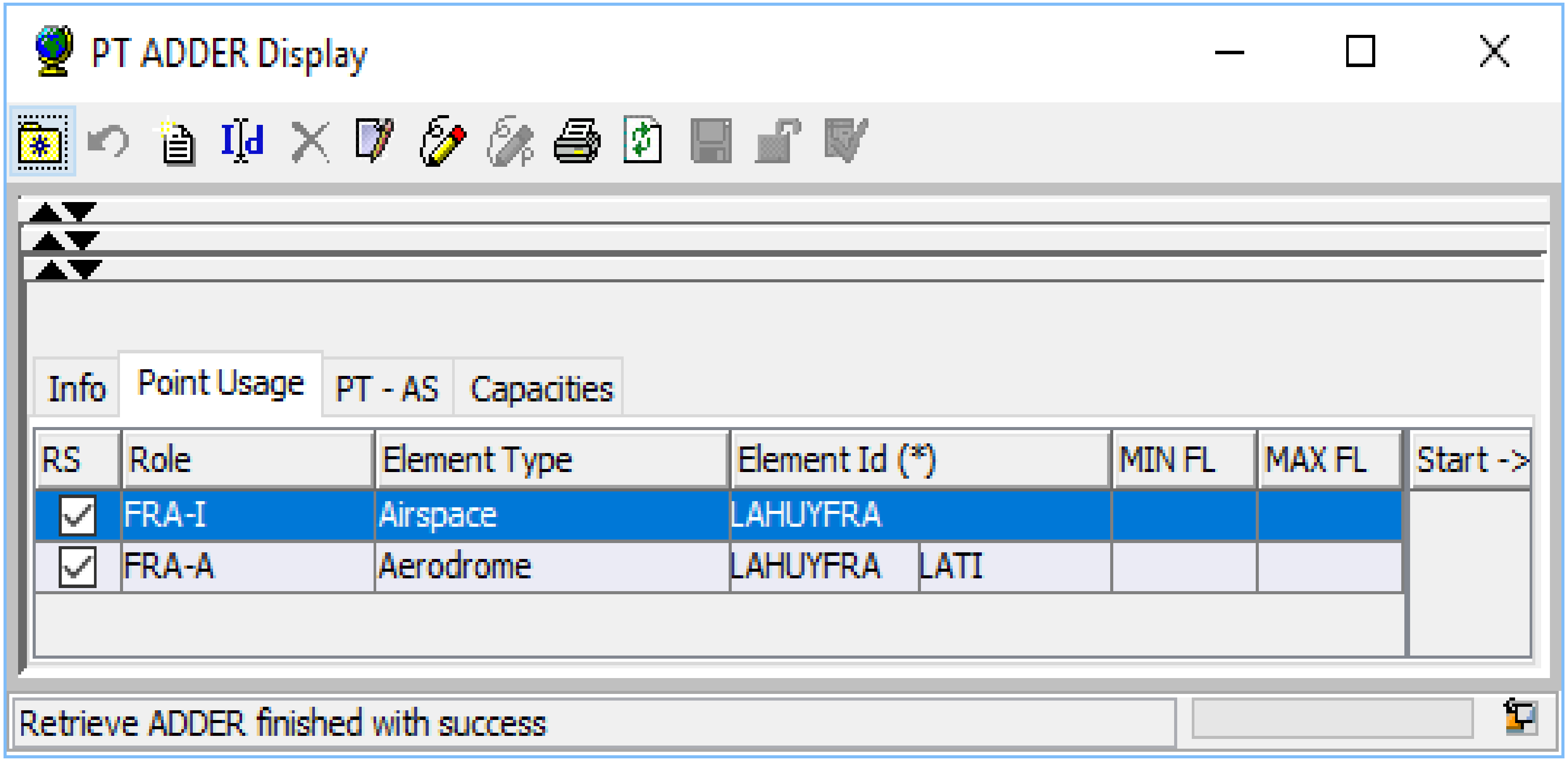
Result Point Type:

Intermediate Points

Point Id(*)	Low FL	Upp FL
ADDER		
DIRES	200	250
DITAN		

Retrieve LAHUYF200A finished with success

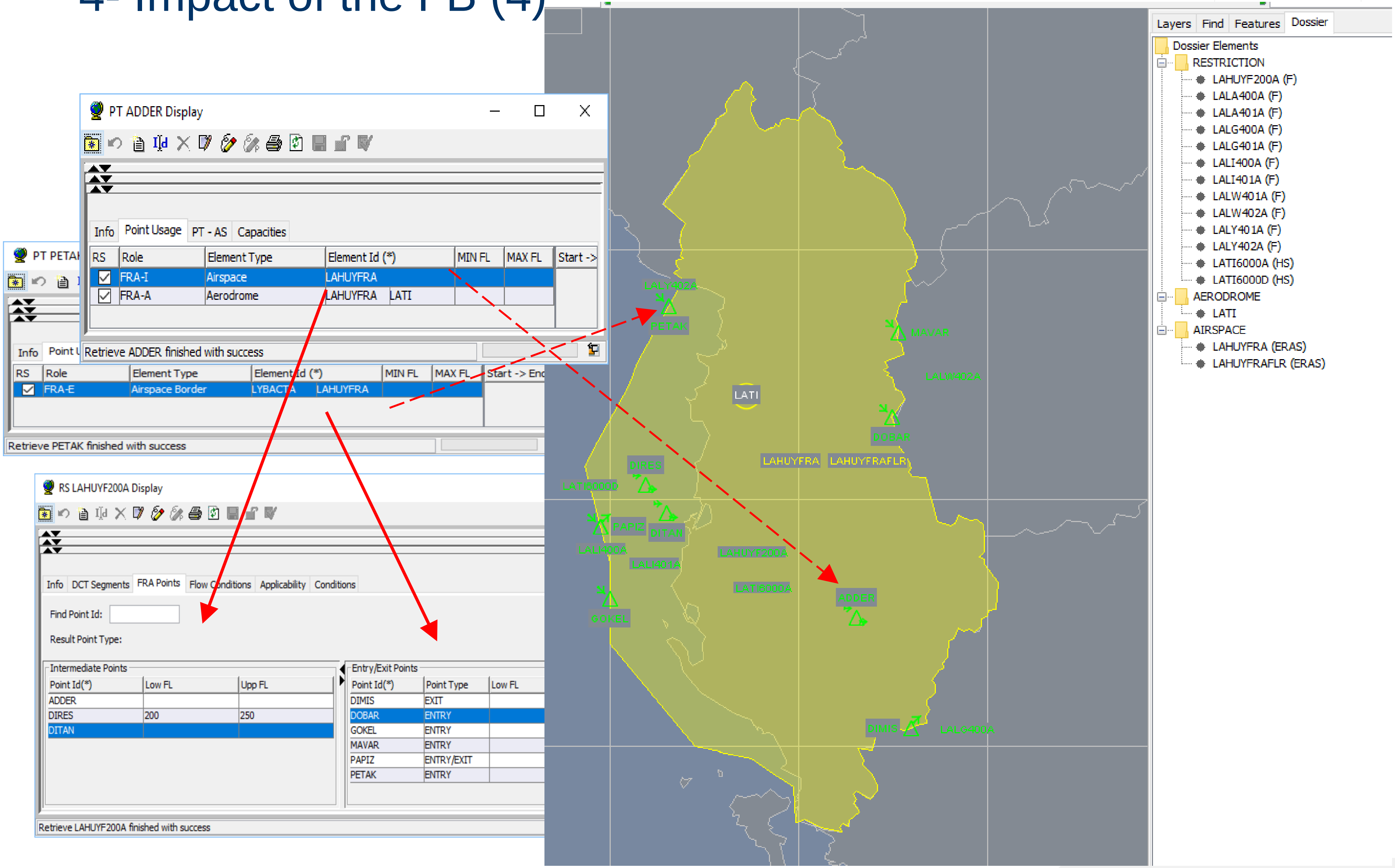
4- Impact of the FB (3)



RS	Role	Element Type	Element Id (*)		MIN FL	MAX FL	Start ->
☑	FRA-I	Airspace	LAHUYFRA				
☑	FRA-A	Aerodrome	LAHUYFRA	LATI			

Retrieve ADDER finished with success

4- Impact of the FB (4)



PT ADDER Display

RS	Role	Element Type	Element Id (*)	MIN FL	MAX FL	Start ->
☑	FRA-I	Airspace	LAHUYFRA			
☑	FRA-A	Aerodrome	LAHUYFRA LATI			

Retrieve ADDER finished with success

PT PETAK

RS	Role	Element Type	Element Id (*)	MIN FL	MAX FL	Start -> End
☑	FRA-E	Airspace Border	LYBACTA LAHUYFRA			

Retrieve PETAK finished with success

RS LAHUYF200A Display

Find Point Id:

Result Point Type:

Intermediate Points

Point Id(*)	Low FL	Upp FL
ADDER		
DIRES	200	250
DITAN		

Entry/Exit Points

Point Id(*)	Point Type	Low FL
DIMIS	EXIT	
DOBAR	ENTRY	
GOKEL	ENTRY	
MAVAR	ENTRY	
PAPIZ	ENTRY/EXIT	
PETAK	ENTRY	

Retrieve LAHUYF200A finished with success

- Dossier Elements
  - RESTRICTION
    - LAHUYF200A (F)
    - LALA400A (F)
    - LALA401A (F)
    - LALG400A (F)
    - LALG401A (F)
    - LALI400A (F)
    - LALI401A (F)
    - LALW401A (F)
    - LALW402A (F)
    - LALY401A (F)
    - LALY402A (F)
    - LATI6000A (HS)
    - LATI6000D (HS)
  - AERODROME
    - LATI
  - AIRSPACE
    - LAHUYFRA (ERAS)
    - LAHUYFRAFLR (ERAS)

5- Questions

Any questions?

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FB1070: Target Time improvements

FOUNDING MEMBER SESAR JOINT UNDERTAKING

NETWORK MANAGER

1- Stakeholders impacted

This change may affect those clients participating in formal AOP-NOP and arrival planning projects only. The arrival planning information is shared using the NM web services. This change relates to passing of defined DCT and POINTS as terminal procedures of arrival (STAR) to NM. The DCTs must be defined in the NM Environment.

- **Flow Manager (FMP)**
- ENV data provider
- **Post-ops analyst**
- **Non-CDM Airport**
- **CDM-Airport**
- **Air Navigation Service Provider (ANSP)**
- Other: **Advanced Tower**

FB1070	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation		Yes			
Data structure					
User Interface					
Procedures					
Training					
B2B		Yes			
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why (1/2)

- Short background of the FB:
  - Why was it developed?
    - To provide to the user a way to inform NM when a flight's terminal procedure of arrival (STAR) is DCT from the route to the ADES, via a specified point.
    - This specified point can be an:
      - intermediate point of the current STAR, or
      - intermediate point of the route,
      - an ad-hoc point, not part of the STAR definition or part of the route.
  - What was the business need?
    - Strategic Objective 05 - to develop European connectivity and airport services
    - Ability for the airport or extended arrival management system to inform NM that the planned terminal procedure of arrival has changed.

2- Background – Why (2/2)

- What was the problem it intends to solve?
  - Before this change, the NM system would not process ATC planned terminal (arrival) procedures containing DCT.
- What are the benefits?
  - Sharing of information reduces the likelihood that the airport/extended arrival management system and the NM systems contain different planning information for the same flight.
  - Enables the airport or extended AMAN to inform NM of target times at the coordination fix when the planned terminal procedure of arrival has changed
  - Improves the NM system’s planned trajectory for the flight (pre and post departure)
- What are the possible next steps?
  - Under special arrangements, those users participating in arrival planning information exchange with NM may now include STAR DCT in their general Arrival Planning Information exchanged with NM.

  - Special arrangements include **trials or preparation activities leading to the future operational deployment of arrival planning information exchange with NM.**

3- New features

- New features brought by the CR/FB for externals compared to today.

  - API with STAR field containing ‘**DCT**’, ETFMS selects a non-ICAO DCT STAR of kind = NON_ICAO

  - API with STAR field containing ‘**DCT**’, ETFMS selects a non-ICAO DCT STAR of kind = CONNECTING_POINT

  - API with STAR field containing ‘**known POINT-on-the-existing STAR route**’, ETFMS selects a defined DCT from the point to the ADES

  - API with STAR field containing ‘**POINT not -on-the-existing STAR route**’, ETFMS calls Pathfinder to connect the (F15 + existing STAR route) to the point. The point has a defined DCT to the aerodrome.

4- Impact of the FB

- This change only affects those airport or extended AMAN systems that have special arrangements for **the future operational deployment of <u>arrival planning information</u> exchange with NM.**

- Changes to current procedures, way of working etc., will be defined in the API Implementation Roadmap, API Implementation Guide that will be published during 2020.

5- Questions

Any questions?

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FB987: STAM further developments

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NETWORK MANAGER

FB987: STAM further developments

- **Initial deployment of NCAP (Network Collaborative Advanced Planning) tool with DSNA. Only impacting participant airlines.**
- NCAP tools provide RRPs with IFPS valid alternative routes to avoid congested airspace.
- NM24.0:
  - STAM Measure ID available for retrieval as B2B field
  - STAM ID is needed to retrieve RRP constraints and create route tailored for each airline
- Initial operational trial to be held in late spring/early summer.
- Outcomes of the trial and way forward will be communicated through usual forums and workshops.

Any questions?

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FB1072: Predictability improvements

Yo-Yo flight plans identification

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NETWORK MANAGER

v2.0

1- Stakeholders impacted

- Flow Manager (FMP)
- Airspace User (Civil)
- AO or CFSP

FB1072	**Service affected**				
	Flight Planning	Flow	Aeronautical Information/AS data	Reporting	Other
Internal computation	Yes	Yes			
Data structure					
User Interface					
Procedures					
Training					
B2B		Flight list			
Other					

Internal computation: Change in the way the various parameters exposed to externals (eg. CTOT) are computed.

2- Background – Why

- NM is committed to support reduction of flight plans with Yo-Yo profile.
- A Yo-Yo flight – the descent followed by the climb in the cruising phase.
- Purpose of this FB is to carry out predictability enhancements defined in Flight Plan Predictability Action Plan approved by NDOP, with goal to increase level of predictability in tactical operations.
- **Since NM 23.0,** NM System detects filed flight plans containing Yo-Yo profile and presents this information through CHMI/NOP Portal flight list.

2- Background – Why

ODSG/47:

- Agreed on improving the NM detection tool by including a length parameter and by providing the service by B2B (NM 24.0).

- Agreed on IFPS change to reject FPL with variations in the following ranges 4000/5000FT and above, over the horizontal length of the trajectory less than 300 NM, with the possibility for AOs to indicate (FPL items 18) an intentionally filed YoYo profile (estimated NM25 +).

AOG/23:

- confirmed YYDG conclusion and agreed on the proposed way forward
- requested from CFSPs to start providing **realistic** optimum routes

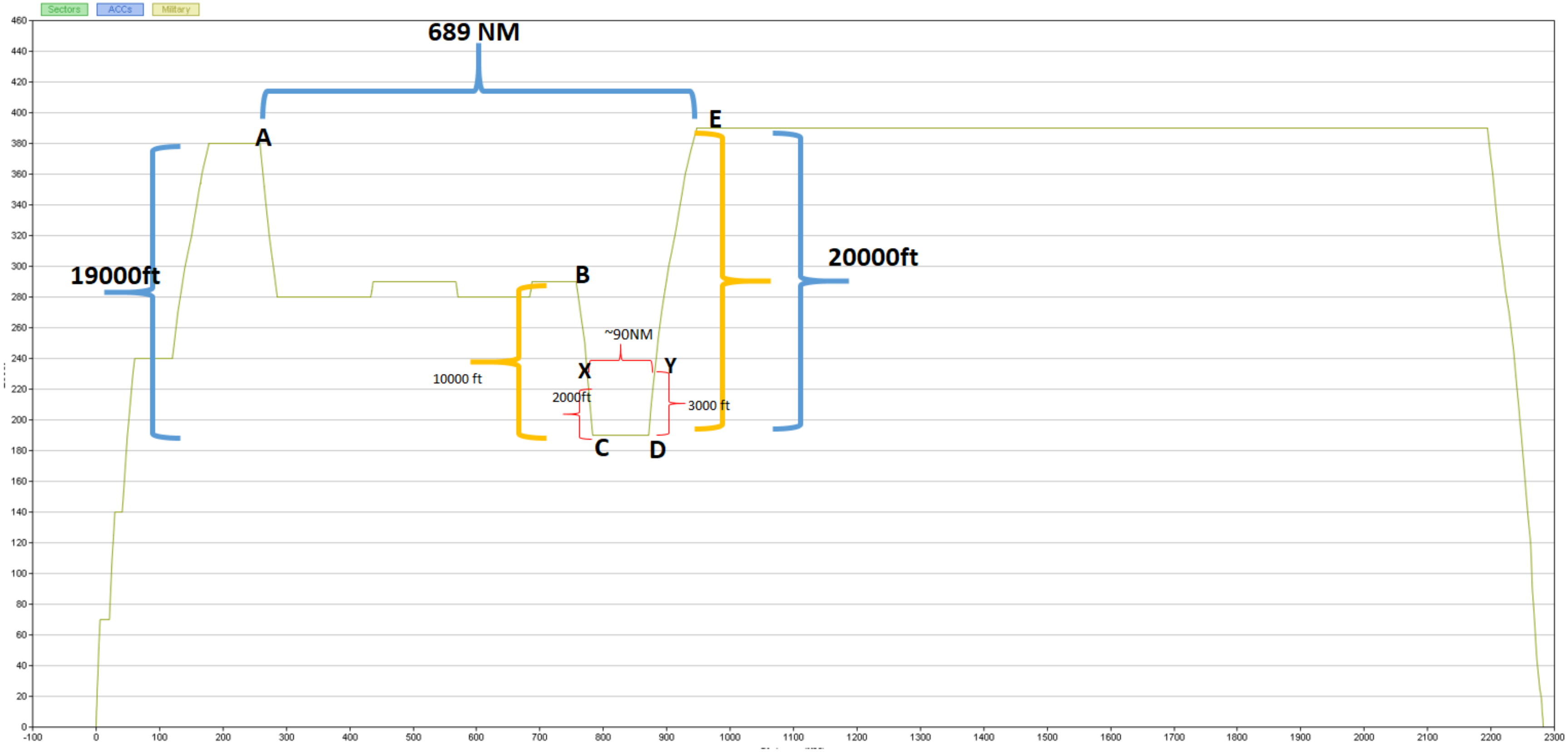
NETOPS/25:

- NM to apply the rejection or suspension of YoYo FPLs (as soon as practicable).

3- New features

- Yo-Yo information will be **distributed through B2B**.
- FB1072 will enable more precise filtering by NM systems of operationally critical Yo-Yo profile as it will include **the length parameter** in identification criteria.

New filter => to address more complex YY examples



“YY REJ candidate check”

For (≥2000/3000ft = 3000/2000ft, ≤300 NM) => YY will be identified and presented to Users (B2B, NOP, CHMI) => **NM 24.0**

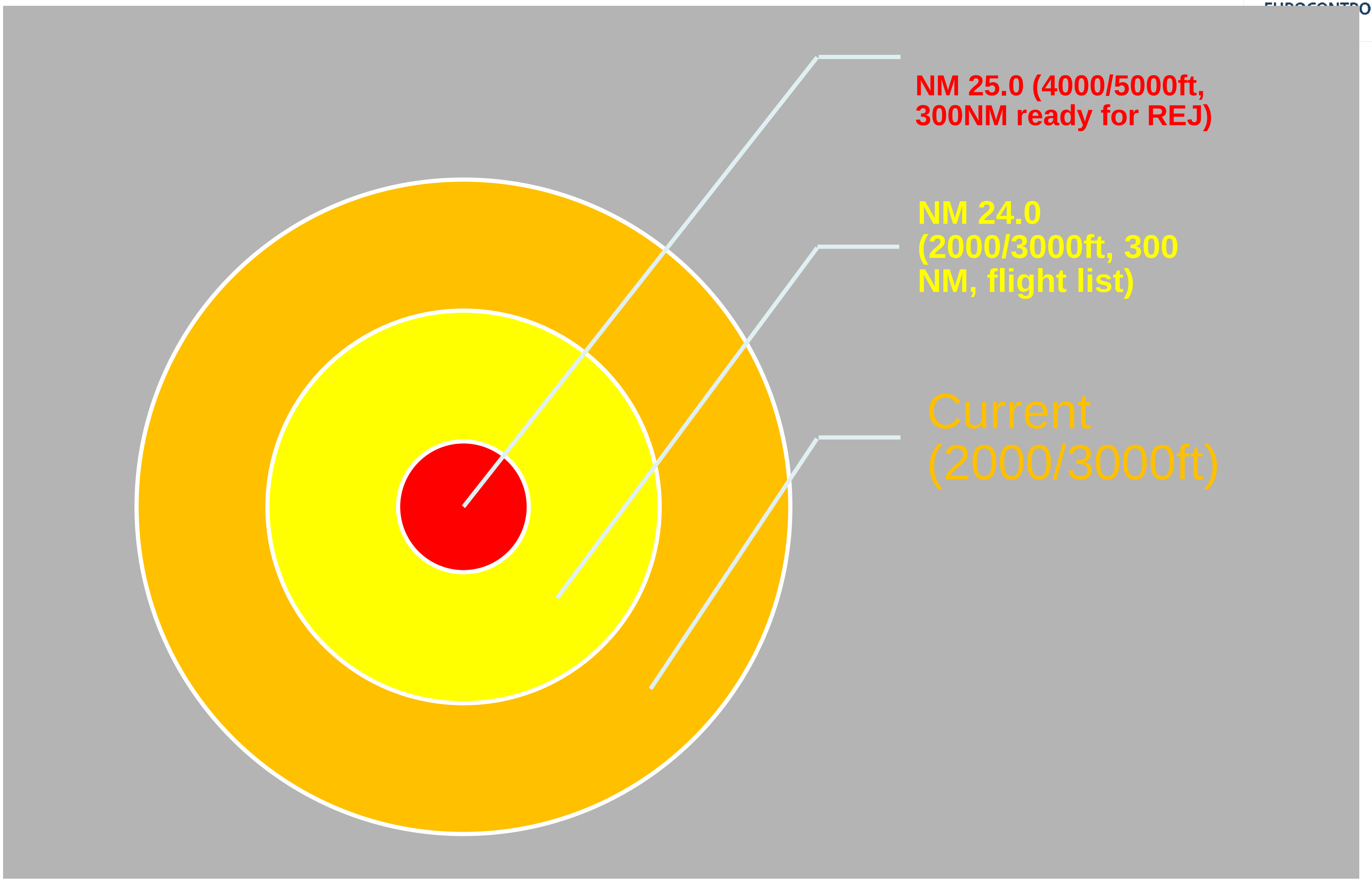
For (≥4000/5000ft = 5000/4000ft, ≤300 NM) => YY will be identified REJ candidate => **NM 25.0** (sub category of above)

Other YYs – not presented to Users

NM 24.0

Vertical change	Length	CHMI/NOP/B2B
Category 2000/3000ft to 4000/5000ft	0 – 300 NM	Lowercase letter
Category 4000/5000ft and above	0 – 300 NM	Uppercase letter
Other	N/A	Not visible

“YY REJ candidate check”



NM 25.0 (4000/5000ft, 300NM ready for REJ)

NM 24.0 (2000/3000ft, 300 NM, flight list)

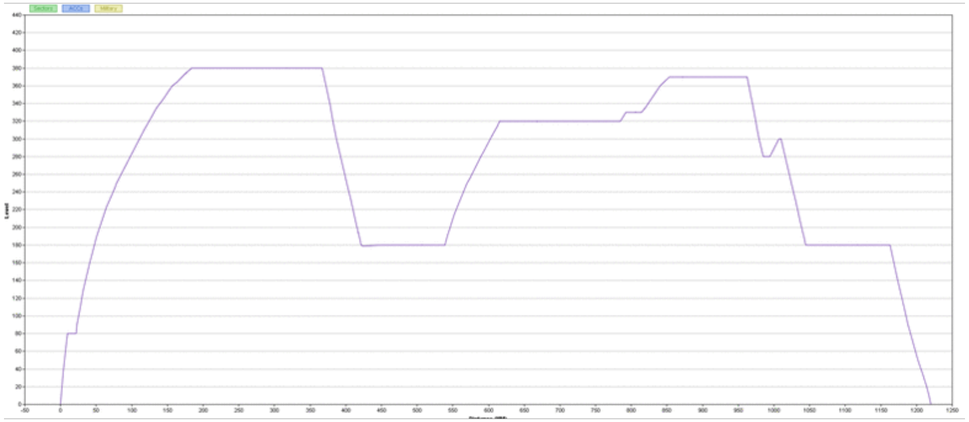
Current (2000/3000ft)

4- Impact of the FB

- NM 24.0 / FB1072

- This FB will impact only Users deciding to make use of the Yo-Yo information made available via NM B2B.

- Due to length parameter introduction, less number of Yo-Yo profiles will be presented to User (focus on “operationally interesting” Yo-Yo FPLs)



5- Questions

Any questions?

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NM24.0 Way Forward

FOUNDING MEMBER
SESAR JOINT UNDERTAKING

NETWORK MANAGER

NM24.0: The OPT (Operational Testing) (Release Notes §4.2.3)

NM24.0 will be available for testing with the OPT (operational testing) session!

- NM24.0 OPT session will start on the **3rd of March** and end on the **24th of April.**
- With the NM24.0 OPT you will be able to:
  - Test NM24.0 on <u>your</u> systems with <u>your</u> procedures.
  - Download, install and test the new NM24.0 CHMI.
  - Test the new NM24.0 NOP Portal.
  - Test some new FBs (operational scenario provided in the OPT instructions).

- NM B2B: NM24.0 will be available on PREOPS (together with **Draft** documentation, including WSDL and XSD) as from the 30 March 2020 14:00 UTC

- All you need is to already have access to NM systems. No registration required (unless you want to exchange FPL messages with the OPT platform).

- NM OPT instructions hyperlink will be available in NM Release Notes §4.2.3.

⇒ **Questions: nm.opt@eurocontrol.int**

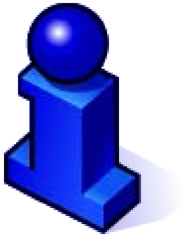
Way forward to NM24.0 migration

- NM24.0 migration is planned to start on the 28/04/2020 (last 1 week)
    - Detailed Release migration plan may be found in the NM Release Notes (§4.2.4).
    - As for any release, the date of migration is subject to the output from final technical and operational testing.
    - Any change will be communicated via the NM Release Notes.

- To receive information on the Release (including NM Release Notes updates, OPT information, presentations, etc.): subscribe to the mailing (cf. §1 of the NM Release Notes)

- Any question related to the Release: nm.releases@eurocontrol.int

Any questions?



Many thanks for your participation!

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