

Supporting  
European  
Aviation



# Airspace reservation mechanism

Civil-Military cooperation workshop

Lima, Peru, 2 to 5 December 2019



NETWORK  
MANAGER



# Airspace reservation mechanism



- Airspace requests (Strategic level 1; Pre-Tactical level 2; Tactical level 3)
- Collaborative decision making:
  - Framework documents (actors, roles, responsibilities, priority rules, flexibility parameters)
  - Sharing of information (standard format, authorized partners, need to know principle, automated tools)
  - Integrated Airspace and Trajectory management
  - CDM terminates with an agreement materialized with by publication of airspace availability (or when military reach their flexibility limit)
- Publication through AIP, NOTAM, AUP/UUP



Edition:	1.0
Edition Date:	10/09/2019
Status:	Proposed issue
Intended for:	Specified audience

Adopted by the Military Harmonization Group (MiliHG) on 6<sup>th</sup> of June 2019 (MiliHG/56)

# Airspace Use Plan



<b>ALPHA</b>	List of Available CDR2s;
<b>BRAVO</b>	List of Permanent ATS Routes, and CDR1s temporary unavailable for flight planning;
<b>CHARLIE</b>	List of Active TRAs/TSAs and AMC-manageable R and D areas (AMA); List of active temporary AMC-manageable areas established via NOTAM/AIP Supplement/AIC, list of active FBZ areas linked to AMAs;
<b>DELTA</b>	List of Non AMC-manageable areas (NAM); List of active temporary Non AMC-manageable areas established via NOTAM/AIP Supplement/AIC, list of active FBZ areas linked to NAMs;
<b>ECHO</b>	List of SIDs and STARs temporary unavailable for flight planning due to areas activations as appropriate;
<b>FOXTROT</b>	Additional Information



## AIRSPACE USE PLAN

**AMC** : LFFAZAMC - FRANCE -  
**VALIDITY** : 13/09/2008 06:00 - 14/09/2008 06:00  
**TIME OF TRANSMISSION** : 12/09/2008 13:30

LFFFUIR

### A) Available Category 2 CDRs:

Nr	Route	Portion	FL Min	FL Max	From	Until	Remarks
1	UL851	LUVAL EPL	F215	F285	06:00	09:15	
2	UL851	LUVAL EPL	F215	F285	12:30	16:00	
.....							
8	UZ706	CTL ARDEN	F300	F460	15:30	22:00	
9	UZ707	FAMEN BSM	F270	F460	06:00	08:00	

### B) Unavailable ATS Routes and Category 1 CDRs:

Nr	Route	Portion	FL Min	FL Max	From	Until	Remarks
1	UN858	ABRIX CGC	F195	F460	10:00	12:30	NOTAM A2238

### C) TRA/TSA Manageable Areas (AMA):

Nr	Area	FL Min	FL Max	From	Until	Resp. Unit	FUA/EU	Remarks
1	CBA1A	F115	UNL	07:15	08:15	LFYA	YES	LFFFFIR, CBA1AR
2	CBA1A	F115	UNL	08:30	09:30	LFYA	YES	LFFFFIR, CBA1AR
3	CBA1B	F225	UNL	07:15	08:15	LFYA	YES	CBA1AR
4	LFTSA10A	F195	F315	07:15	10:00	LFXO	NO	ARA
5	LFTSA10B1	F195	F315	07:15	10:00	LFXO	NO	ARA
6	LFTSA20A	F195	UNL	07:15	07:45	LFYA	NO	
.....								
41	LITSA9B	F285	UNL	06:00	10:00	LFXO	YES	LITSA9BR

### D) Non AMC-manageable areas (NAM):

Nr	Area	FL Min	FL Max	From	Until	Resp. Unit	FUA/EU	Remarks
1	CER BORD	F205	F450	08:00	17:30	LFFAZAMC	NO	
2.....								

### E) Unavailable SIDs and STARs closed:

Nr	Area	FL Min	FL Max	From	Until	Resp. Unit	Remarks
NIL							

### F) Additional information

NIL



**FORMAT & CONTENTS FOR THE UPDATED AIRSPACE USE PLAN**

MESSAGE TYPE	“Updated Airspace Use Plan”
SENDING UNIT - REFERENCE-	AMC NAME
VALIDITY PERIOD	D/ xxxx D+1/ 0600
DATE/TIME OF TRANSMISSION	D-1 (after AUP) to D

- First Line: **Identification of the Type of Message**  
[e.g. Airspace Use Plan or Draft AUP]
- Second Line: **Identification of the Sending Unit**  
[e.g. AMC: EDDAZAMC - GERMANY -]
- Third Line: **Definition of the Validity Period of the Message**  
[e.g. 06/06/2008 06:00 - 07/06/2008 06:00]  
The validity period shall cover the 24 hour time period between 0600 UTC the next day to 0600 UTC the day after.  
This time period has to be considered for continuity purposes as a semi-open interval with the first limit included and the last one not.

- Fourth Line: **Date and Time of Transmission of the AUP**  
[e.g. 05/06/2008 13:53]  
In addition to the type of message defined in the first line, the AUP is identified by the day and time of its transmission.

**ALPHA** List of Available CDR2s;  
**BRAVO** List of Permanent ATS Routes, and CDR1s temporary unavailable for flight planning;

ALPHA :

LIST OF AVAILABLE CATEGORY 2 CDRs				
Number	Designator	Flight Level Block	Validity Period	Remarks
sequence number starting with [1] for the first item	AIP ENR 3-2 route designator and identifiers of first and last points of the portion of route concerned with ICAO identifiers	<u>Upper and lower limits inclusive of the IFR flight levels given.</u>	Date/time groups indicating the start and the end of the <u>period of use</u>	Any additional information in plain language.  When two or more items in the AUP are being replaced by one in the UUP, the second and following ones must appear in the UUP with the word "Deleted".
If an AUP element is cancelled, these fields shall not be completed.				

BRAVO:

LIST OF UNAVAILABLE ATS ROUTES AND CATEGORY 1 CDRs				
Number	Designator	Flight Level Block	Validity Period	Remarks
sequence number starting with [1] for the first item	AIP ENR 3-2 route designator and identifiers of first and last points of the portion of route concerned with ICAO identifiers.	<u>Upper and lower limits inclusive of the IFR flight levels given.</u>	Date/time groups indicating the start and the end of the <u>period of unavailability</u>	Any additional information in plain language.
If an AUP element is cancelled, these fields shall not be completed.				
If an AUP element is cancelled, this Field shall contain the word "Deleted".				

CHARLIE:

**LIST OF TSAs/TRAs AND "AMC-MANAGEABLE" R AND D AREAS (AMA)**

Number	Designator	Flight Level Block	Validity Period	Responsible Unit	FUA/EU <sup>29</sup>	Remarks
<i>sequence number starting with [1] for the first item</i>	<i>AIP ENR 5 designator and name of the airspace or portion thereof concerned. Designator of Temporary AMC-manageable areas published via AIP SUPP/NOTA M/AIC. Designator of any FBZ area.</i>	<i>Affected airspace described vertically between the two flight levels concerned.</i>	<i>Date/time groups indicating the start and the end of the <u>period of use</u></i>	<i>Unit responsible for the airspace concerned during the time indicated by the Validity Period.</i>	<i>YES or NO for activation</i>	<i>FUA/EU Restriction ID Codes if YES. If an AUP element is cancelled, this Field shall contain the word "Deleted"</i>
<i>If an AUP element is cancelled, these fields shall not be completed.</i>						



CHARLIE

List of Active TRAs/TSAs and AMC-manageable R and D areas (AMA);  
 List of active temporary AMC-manageable areas established via NOTAM/AIP Supplement/AIC, list of active FBZ areas linked to AMAs;  
 List of Non AMC-manageable areas (NAM); List of active temporary Non AMC-manageable areas established via NOTAM/AIP Supplement/AIC, list of active FBZ areas linked to NAMs;

DELTA

DELTA :

Number	Designator	Flight Level Block	Validity Period	Responsible Unit	FUA/EU <sup>29</sup>	Remarks
<i>sequence number starting with [1] for the first item</i>	<i>AIP ENR 5 designator and name of the airspace or portion thereof concerned. Designator of Temporary AMC-manageable areas published via AIP SUPP/NOTA M/AIC. Designator of any FBZ area.</i>	<i>Affected airspace described vertically between the two flight levels concerned.</i>	<i>Date/time groups indicating the start and the end of the <u>period of use</u></i>	<i>Unit responsible for the airspace concerned during the time indicated by the Validity Period.</i>	<i>YES or NO for activation</i>	<i>FUA/EU Restriction ID Codes if YES. Any additional information in plain language.</i>



**ECHO**

List of SIDs and STARs temporary unavailable for flight planning due to areas activations as appropriate;

**FOXTROT**

Additional Information

ECHO :

**LIST OF UNAVAILABLE SIDs and STARs**

Number	Designator	Flight Block	Level	Validity Period	Remarks
<i>Sequence Number starting with [1] for the first item.</i>	<i>AIP AD 2 airport designator + the designator used for SID/STAR</i>	<i>N/A</i>		<i>Date/time groups indicating the start and the end of the <u>period of unavailability</u></i>	<i>Any additional information in plain language.</i>

FOXTROT :

**ADDITIONAL INFORMATION**

*Any additional information in plain language, if not "NIL".*

# Updated Use Plan



UUPs shall consist of alterations to the current AUP. In particular, UUPs will contain details of:

- ✓ The cancellation of areas allocated in the current AUP;
- ✓ The cancellation/relaxation of FUA/EU restrictions;
- ✓ The new allocation of areas;
- ✓ The new/more constraining activation of FUA/EU restrictions;
- ✓ New CDRs 2 made available as a result of areas cancellation and/or FUA/EU restrictions;
- ✓ New CDRs unavailable due to new allocation of areas and/or new/more constraining activation of FUA/EU restrictions;
- ✓ Modifications made to CDRs already listed in the current AUP;
- ✓ Alterations to, or cancellations of, unavailable ATS routes or CDRs1, AMC-Manageable R and D areas, Non AMC-Manageable areas and FUA/EU restrictions listed in the current AUP.



## UPDATED AIRSPACE USE PLAN

**AMC** : LFFAZAMC - FRANCE -  
**VALIDITY** : 13/09/2008 12:00 - 14/09/2008 06:00  
**TIME OF TRANSMISSION** :

LFFFUIR

### A) Available Category 2 CDRs:

Nr	Route	Portion		FL Min	FL Max	From	Until	Remarks
1	UL851	LUVAL	EPL	F215	F285	14:30	20:00	IN STEAD OF 1230/1600
2	UZ707	FAMEN	BSM	F275	F460	14:30	20:00	

### B) Unavailable ATS Routes and Category 1 CDRs:

NIL

### C) TRA/TSA Manageable Areas (AMA):

NIL

### D) Non AMC-manageable Areas (NAM):

NIL

### E) Unavailable SIDs and STARs:

NIL

### F) Additional information:

NIL





# Publication of AUP/UUP



LARA Booking Tool - FAB AMC

File View Options Filter Tools Window Help

Airspace Planning Display Airspace Status Display Planning Prediction Tool AUP Prediction Tool

Scale: 12 Hours Options (Unnamed preferences)

Tue 20/Oct/2015 00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00

EDR302 R

DANGER1 R GND - 095

EBCBA1C R

EBTRAN1 R 195 - 295 TIGER B

EBTRAN2 R 195 - 295 TIGER B

EBTRAN3 R 195 - 295 TIGER B 095 UNL LION 99

UM150 R KOK-GEBA 30 - 490 99

EBTRAS1 R 195 - 295 TIGER B

EBTRAS2 R 195 - 295 TIGER B

EBTRAS3 R 195 - 295 TIGER B

EBTRAS4 R 195 - 295 TIGER B

EBTRAS5 R 195 - 295 TIGER B

EDR302A R

EDR302B R

Actions My Reservations Reservations AUPs/UUPs Snapshots

Generated 19/10/15 09:29 Sending Unit FABAMC Cluster DUBAI Type AUP

INTENT AUP 20/10/15 06:00 - 21/10/15 06:00

AMC: FABAMC FL Buffer 0 Minimum CDR Opening 0hr 0min Activity Time Buffer 0min Minimum Area Opening 0hr 0min

Area Name	Type	Lower FL	Upper FL	Start Time	End Time	Responsible Unit	FUA	FBZ	Remarks
EBTRAN1	TRA	195	295	09:00	11:05	FABAMC			
EBTRAN2	TRA	195	295	09:00	11:05	FABAMC			
EBTRAN3	TRA	195	295	09:00	11:05	FABAMC			
EBTRAN3	TRA	095	UNL	11:20	13:20	FABAMC			

Segment Name	Lower FL	Upper FL	Start Time	End Time	Remarks	Include
UZ703-BABIX-LERVO	245	660	06:00	09:00		<input checked="" type="checkbox"/>
UZ703-BABIX-LERVO	295	660	09:00	11:05		<input checked="" type="checkbox"/>
UZ703-BABIX-LERVO	245	660	11:05	22:00		<input checked="" type="checkbox"/>
UZ703-BADOS-GASTU	295	660	06:00	22:00		<input checked="" type="checkbox"/>
UN852-BROGY-TERLA	195	660	06:00	09:00		<input checked="" type="checkbox"/>
UN852-BROGY-TERLA	295	660	09:00	11:05		<input checked="" type="checkbox"/>
UN852-BROGY-TERLA	195	660	11:05	11:20		<input checked="" type="checkbox"/>
UN852-BROGY-TERLA	195	660	13:20	22:00		<input checked="" type="checkbox"/>
UM150-DIK-PITES	245	660	06:00	22:00		<input checked="" type="checkbox"/>
UM150-DIK-PITES	245	660	05:00	06:00		<input checked="" type="checkbox"/>

Alpha Bravo Delta Echo Foxtrot Golf FUA

Include All Exclude All

Error/Warning Message Source

To File Delete Close

Export To File Promote Demote Delete View

Network 0.0346 RTG Connected: FULLY Server: 192.168.1.5 LARA B3.0.14.8 / Powered by Grafhica SDK

Search the web and Windows 09:48 20/10/2015

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# Airspace reservation dissemination

Civil-Military cooperation workshop

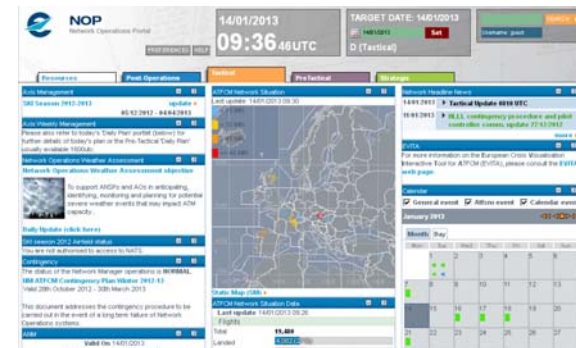
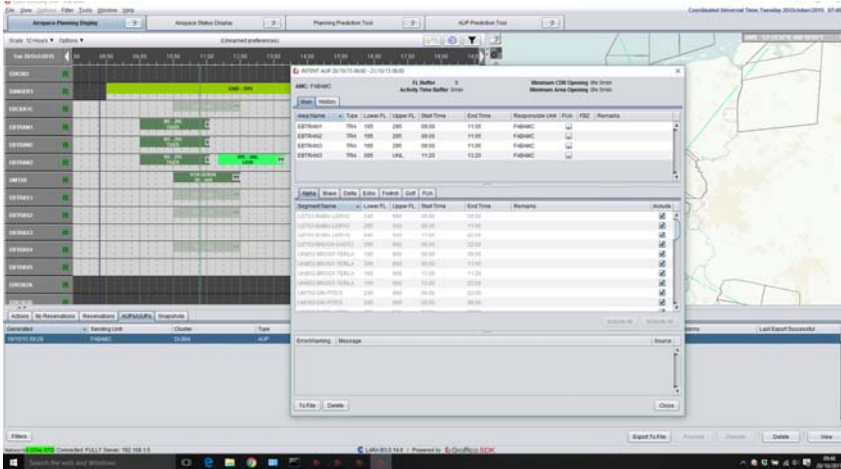
Lima, Peru, 2 to 5 December 2019



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# AUP/UUP process..

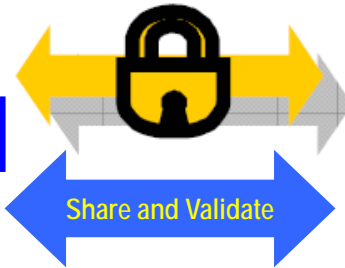


European AUP/UUP

EAUP	14/01/2013 06:00	15/01/2013 06:00
EUUP	13/01/2013 09:00	14/01/2013 06:00
EAUP	13/01/2013 06:00	14/01/2013 06:00

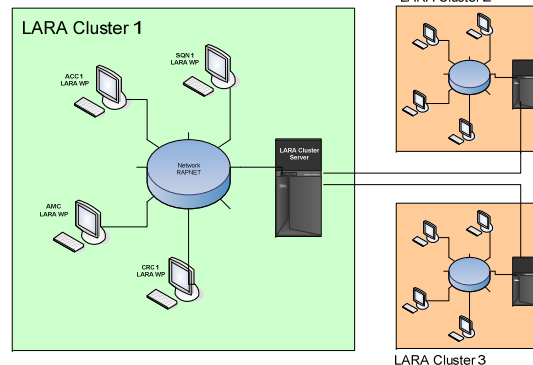


**AUP**  
Released  
Ready  
Draft  
Intent



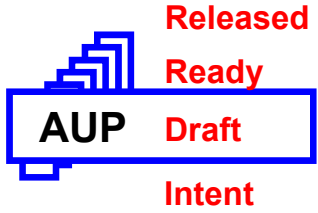
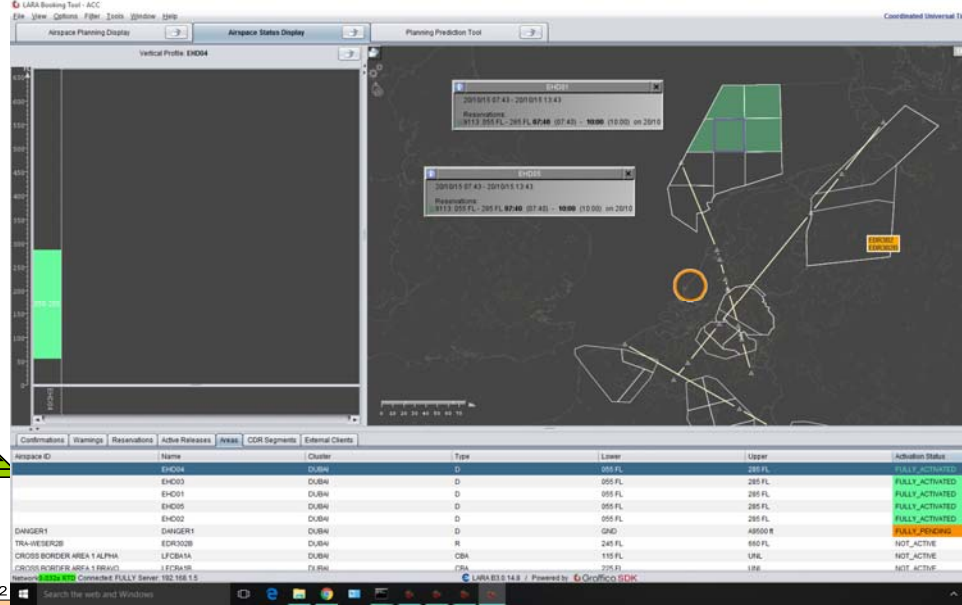
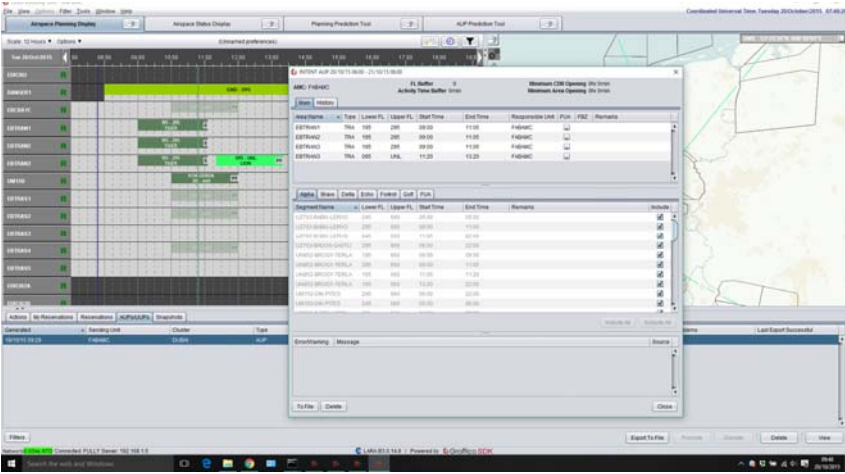
Route ID	RSA ID	FIR ID	UIR ID	WEF ID	TIL		
Type EAUP Valid WEF 14/01/2013 06:00 Valid TIL 15/01/2013 06:00 Released On 13/01/2013 15:08							
Route ID	Between	And	MMH FL	MAX FL	WEF	UNT	FIR
B246	LASDA	ARPOD	065	165	13:00	14:00	UKBY
B246	LASDA	ARPOD	065	165	22:00	00:00	UKBY
B46	UNTOS	ALT	105	245	14:00	15:30	LECB, LECM
O53	ONDAL	YES	095	245	14:00	16:30	LECM
O53	YES	ULSES	095	245	06:00	08:20	LECM
O53	YES	ULSES	095	245	13:15	00:00	LECM
KZ02	ULSED	UNORA	015	055	06:00	06:00	EHA.A
KZ07	SOTAP	UNORA	015	055	06:00	06:00	EHA.A
KZ08	TEVKA	UNORA	015	055	06:00	06:00	EHA.A
KZ40	KOLAV						EHA.A
L140	ODS						UKOV
L140	ODS						UKOV
L179	NBK						EBBU
L179	NBK						EBBU
L23	GONTU						EPWW
L23	OTPES						EPWW
L23	OTPES						EPWW
L23	OTPES						EPWW
L29	GRUDA						EPWW
L29	GRUDA						EPWW
L29	TUPUR						EPWW

Areas (RSA/FBZ) Routes  
(ATS/CDR)  
FUA Restrictions...



Portal or SWIM B2B interface for all users of Network or cluster of FIRs  
  
(Aircraft Operators; Computer FPL Service Providers; ATS/ATC units)

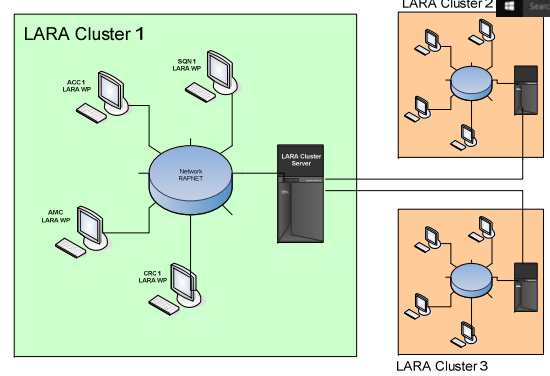
# Real Time status with SWIM B2B interface



Released  
Ready  
Draft  
Intent



Areas (RSA/FBZ) Routes (ATS/CDR) FUA Restrictions...



Portal or SWIM B2B interface for all users of Network or cluster of FIRs (Aircraft Operators; Computer FPL Service Providers; ATS/ATC units)

# Separate consistent process for crisis management..



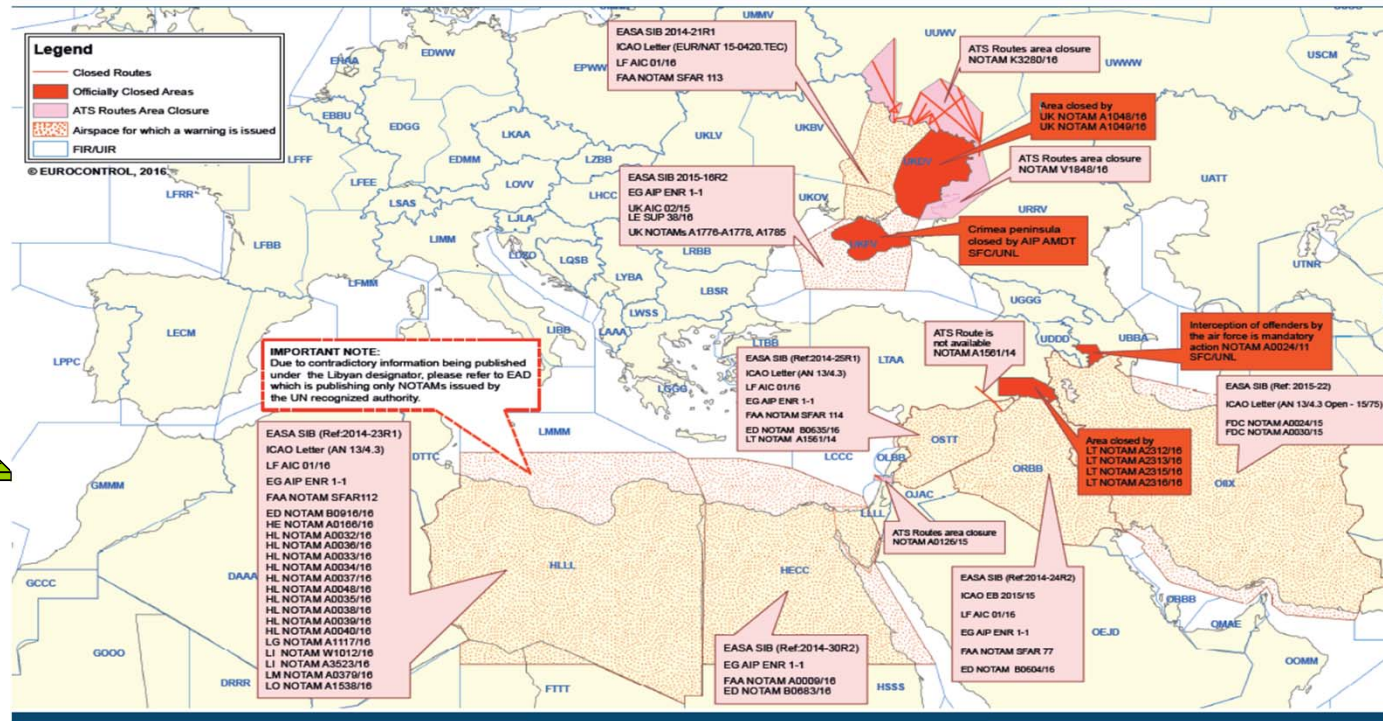
Areas, Routes, FUA Restrictions...

## CLOSURES & WARNINGS

UPDATED ON 04 JULY 2016



Network Manager  
nominated by  
the European Commission



Portal for all users of  
Network or cluster of FIRs  
  
(Aircraft Operators;  
Computer FPL Service  
Providers; ATS/ATC units)



# Thank you