



International Civil Aviation Organization

**Middle East Air Navigation Planning and
Implementation Regional Group (MIDANPIRG)**

Fourteenth Meeting
(Jeddah, Saudi Arabia 15-19 December 2013)

**Agenda Item 4: Performance Framework for Regional Air Navigation Planning and
Implementation**
4.3 ATM/SAR

MID REGION ATS ROUTE NETWORK

(Presented by the Secretariat)

SUMMARY

This paper addresses the development of the MID Region ATS Route Network and other issues pertaining to ATS Routes changes that form part of the Regional network.

Action by the meeting is at paragraph 3.

REFERENCES

- ARN TF/6 Report
- ATM/AIM/SAR SG/13 Report

1. INTRODUCTION

1.1 The Thirteenth meeting of the MIDANPIRG ATM/AIM/SAR Sub-Group (ATM/AIM/SAR SG/13) held in Cairo, Egypt, 30 September to 3 October 2013, was attended by a total of forty seven (47) participants from twelve (12) States (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Libya, Qatar, Saudi Arabia Sudan, UAE and Yemen) and one (1) International Organization/Agency (MIDRMA).

1.2 The Sixth meeting of the ATS Route Network Task Force (ARN TF/6) held in Cairo, Egypt, 22-24 April 2013, was attended by a total of Thirty Six (36) participants, including experts from ten (10) States (Bahrain, Egypt, Iran, Iraq, Jordan, Oman, Qatar, Saudi Arabia, Sudan and United Arab Emirates) and (4) four International Organizations/Industries (CANSO, Eurocontrol, IATA and MIDRMA).

2. DISCUSSION

2.1 The ATM/AIM/SAR SG/13 meeting was apprised of the outcome of the ARN TF/6 meeting. It was highlighted that the ARN TF/6 meeting reviewed the Table ATS 1 – ATS Routes of the MID Basic ANP. Accordingly, the Proposal for Amendment (MID Basic ANP 13/02-ATM) was processed and approved by the President of the ICAO Council on behalf of the Council, on 3 August 2013.

2.2 The ATM/AIM/SAR SG/13 meeting noted with concern that some States are still implementing changes to the Regional ATS Route Network without complying with the established procedures for the amendment of the MID Air Navigation Plan (ANP).

2.3 The ATM/AIM/SAR SG/13 meeting noted with appreciation the implementation of RNAV 1 Routes in Bahrain and Emirates Flight Information Regions (FIRs), which improved the ATS route network and relieved the traffic congestion in these areas; as well as the opening of the route segment NWB – KITOT for traffic above flight level 350.

2.4 The meeting may wish to note that the ARN TF/6 meeting updated the route catalogue and discussed the possibility of introducing a new approach to improve the ATS route structure in the MID Region in accordance with MIDANPIRG/13 Conclusion 13/3. Accordingly, the meeting, through Draft Conclusion 6/2, requested States and Users to provide feedback on the priority of action to implement the identified top 20 routes extracted from the ATS Route Catalogue, taking into consideration the major traffic flows in the MID Region, the definition of City Pairs, the PBN and FUA concepts

2.5 In connection with the above, the ATM/AIM/SAR SG/13 meeting agreed on the top ten (10) routes as at **Appendix A** to this working paper, to be considered as priority for the enhancement of the MID Region ATS Route Network. Based on the above, the meeting agreed to the following Draft Conclusion:

Why	To improve the ATS Route Network in the MID Region, in a prioritized manner
What	State Letter /Implementation of the top ten ATS routes
Who	ICAO MID Regional Office / States
When	January 2014 / May 2014

DRAFT CONCLUSION 13/I: IMPLEMENTATION OF THE TOP TEN ATS ROUTES

*That, concerned States be urged to take necessary measures to implement the identified routes at **Appendix 4A** to the Report on Agenda Item 4.*

2.6 The ATM/AIM/SAR SG/13 meeting was apprised of the outcome of the side meeting on the Normalization of the Baghdad FIR, which was held during the proceedings of the meeting. It was noted that Bahrain, Iraq, Iran, Jordan, Kuwait, Saudi Arabia, and the MIDRMA attended the side meeting and their contributions and spirit of cooperation were highly appreciated.

2.7 The ATM/AIM/SAR SG/13 meeting commended Iraq for the progress achieved, especially with regard to the improvement of the Communication, Navigation, and Surveillance (CNS) infrastructure in Baghdad FIR. Furthermore, the meeting discussed the concerns raised by Iraq related to the traffic flows in Baghdad FIR. Based on the above, the meeting agreed to implement four ATS routes as follows:

- Iraq to Bahrain through Kuwait: UKMUG-SIDAD- New Point East of RABAP then to join the ATS Route network within Bahrain;
- Iraq to Bahrain through Kuwait: SIDNA-New point West of ASLAN-RABAP;
- Iraq to Saudi Arabia: SIDNA- RALTI – RAF; and
- Saudi Arabia to Iraq: HFR-ELODI-KABAN.

2.8 Based on the foregoing, the ATM/AIM/SAR SG/13 meeting agreed that the two proposed RNAV 1 routes between Iraq and Kuwait mentioned above, to be included among the top ten (10) proposed routes. The meeting noted with appreciation Kuwait cooperation to implement these routes during the second quarter of 2014.

2.9 The ATM/AIM/SAR SG/13 meeting agreed that the proposed routes between Iraq and Saudi Arabia above to be implemented by **6 February 2014**. The meeting extended thanks to Saudi Arabia for their excellent cooperation. Accordingly, the meeting agreed to the following Draft Conclusion:

Why	To improve the traffic flows over Baghdad FIR
What	Proposal for Amendment of the MID Basic ANP Table 1 –ATS Routes
Who	Iraq, Saudi Arabia and ICAO
When	6 February 2014

DRAFT CONCLUSION 13/2: IMPLEMENTATION OF THE ATS ROUTES SIDAN TO RAF AND FROM HFR TO KABAN

That,

- a) Iraq and Saudi Arabia provide the ICAO MID Regional Office with the a joint draft proposal for amendment to the MID Basic ANP for the implementation of the ATS Routes: SIDAN to RAF and from HFR to KABAN; and*
- b) ICAO MID Regional Office takes necessary measures to process the proposal for amendment, in accordance with the standard procedures.*

2.10 In accordance with the above, the ATM/AIM/SAR SG/13 meeting noted with appreciation that Iraq would reduce the longitudinal spacing to 20 NM in the Baghdad FIR, further to the implementation of the above Routes between Jeddah and Baghdad FIRs.

2.11 The ATM/AIM/SAR SG/13 meeting raised concerns regarding the use of like-sounding 5LNCs in close geographical location and noted Iraq and Saudi Arabia remarkable cooperation to solve such issue. In this respect, it was noted with appreciation that SIKLA (like-sounding with SILKA) was replaced by NORGI and IVANO (like-sounding with OVANO) by DAVAS.

2.12 Based on the above, the ATM/AIM/SAR SG/13 meeting encouraged States and Users to identify and report 5LNCs duplication and/or like-sounding issues to the ICAO MID Regional Office to take necessary mitigation measures in coordination with concerned parties.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) urged States to adhere to the established ICAO procedures related to the publication and amendment of ATS routes;

- b) approve the Draft Conclusions in para. 2.5 and 2.9;
- c) urged States to take all the necessary measures to implement the planned routes or route segments included in their deficiency list, which will enhance the ATS route network in the MID Region; and
- d) encourage States and Users to identify and report 5LNCs duplication and/or like-sounding issues to the ICAO MID Regional Office to recommend appropriate solutions.

APPENDIX A

MID TOP 10 PROPOSED ATS ROUTES

TPR	ATS Route Catalogue Reference	ATS Route Affected	States Concerned	Status			Remarks
				Reviewed by	Date	Changed	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	RC-035	UL602	Iraq – Syria	ATM/AIM/SAR SG/13	SEP 2013	Yes	Pending for Syria approval
2	RC-045	New	Bahrain-Qatar- Saudi Arabia-Sudan-UAE	ATM/AIM/SAR SG/13	SEP 2013	Yes	
3	RC-055	L315	Egypt-Saudi Arabia	ATM/AIM/SAR SG/13	SEP 2013	Yes	Implemented with opposite direction
4	RC-056	New	Egypt	ATM/AIM/SAR SG/13	SEP 2013	Yes	Route amendment
5	RC-070	New	Egypt-Libya	ATM/AIM/SAR SG/13	SEP 2013	Yes	
6	RC-082	New UQ 597	Egypt-Jordan-Saudi Arabia	ATM/AIM/SAR SG/13	SEP 2013	Yes	Route amendment
7	RC-083	New UQ 598	Egypt-Libya-Saudi Arabia	ATM/AIM/SAR SG/13	SEP 2013	Yes	
8	Eurocontrol Proposal 1	New	Egypt	ATM/AIM/SAR SG/13	SEP 2013	New	
9	UKMUG-SIDAD	New	Bahrain-Iraq-Kuwait	ATM/AIM/SAR SG/13	Oct 2013	New	RNAV 1 Routes
10	SIDNA-ASLAN	New	Bahrain-Iraq-Kuwait	ATM/AIM/SAR SG/13	Oct 2013	New	RNAV 1 Routes

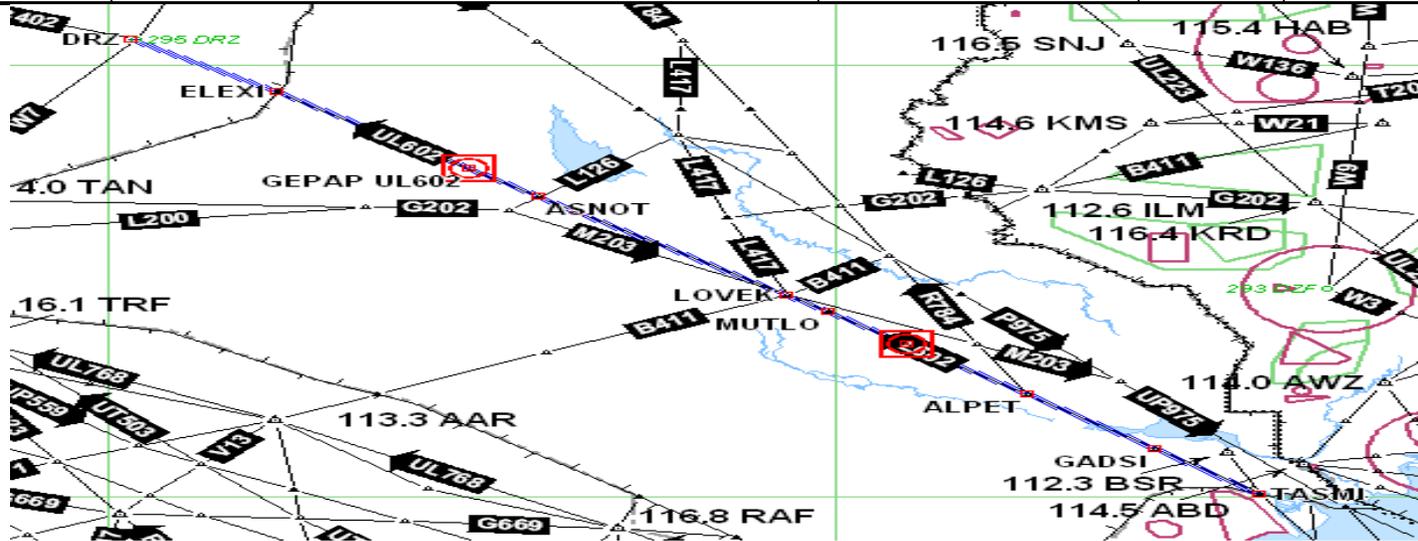
Table explanation

- a) TPR used as reference for the proposed Top 10 routes to be considered for implementation, numbers do not reflect the level of priority.
- b) Source of the proposed routes.
- c) Affected ATS Routes by the implementation of the new proposed routes.
- d) States Concerned with the implementation.
- e) The Group, Sub-Group or Task Force that had reviewed and updated the status of implementation of these top 10 routes.
- f) Date of last status update.
- g) Indicates if the status is changed or Not.
- h) Remarks

MIDANPIRG/14-WP/13
 APPENDIX A

A-2

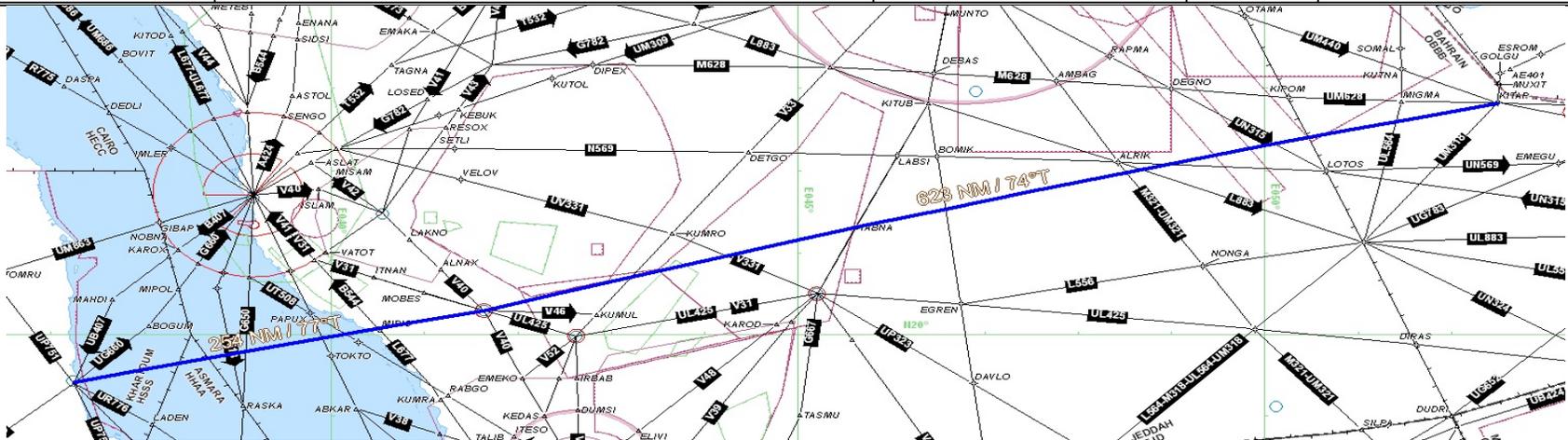
MID/RC-035 (TPR 1)	ATS Route Name: UL602	Entry-Exit: TASMI - ELEXI	Inter-Rgional Cross Reference if any		Users Priority	URGENT	Originator of Proposal	Iraq
							Date of Proposal	RDGE/11 (Oct 2009)
Route Description		States Concerned	Expected Implemen- tation date	Implementation Status	ANP Status	Action Taken / Required	Deadline for each Action	
GEPAP 334905.80N 0422850.64E ELEXI 344130N 0410900E		Iraq Syria		Entire route Westbound	Suspended in the Damascus FIR	Syria requested additional time to examine the communication requirements by concerned FIR's.	Conditional on Communication AIRAC date (25 Sept. 2008) Pending acceptance by Syria, of status of communication infrastructure	
Flight Level Band: FL240-FL460						Once the communication issues are resolved it is expected that the ATS route will be implemented.		
Potential City Pairs:						Iraq has no objection		
Conclusions/Remarks						Last updated	ATM/AIM/SAR SG/13 SEP 2013	



MID/RC-035 - (TPR 1)

MID/RC-044

MID/RC-045 (TPR 2)	ATS Route Name: New Route	Entry-Exit: PSD-BHA-KITAP BOGUM-ASTOG	Inter-Regional Cross Reference if any		Users Priority	Originator of Proposal	IATA
						Date of Proposal	ARN TF/2
Route Description		States Concerned	Expected Implemen- tation date	Implementation Status	ANP Status	Action Taken / Required	Deadline for each Action
Port Sudan (PSD) Al BAHA (BHA) KITAP Flight Level Band: Potential City Pairs: DGAA, DNMM, HSSS, OEJN, SBGR to OBBI, OMAA, OMD, OTBD (Central and Eastern Arabian Peninsula to Sudan, West Africa, South America)		Bahrain, Qatar, Saudi Araiba, Sudan, United Arab Emirates				Bahrain has no objection Qatar, Saudi Arabia might be accepted as conditional Route Sudan no objection from Port Sudan to SALWA (CDR) UAE Comments required KSA suggest Port Sudan BHA- KITAP (Normal route) will avoid CDR	
Conclusions/Remarks		Saves 58 miles and 3196 Kg of CO2 to recalculate			Last updated	ATM/AIM/SAR SG/13 SEP 2013	

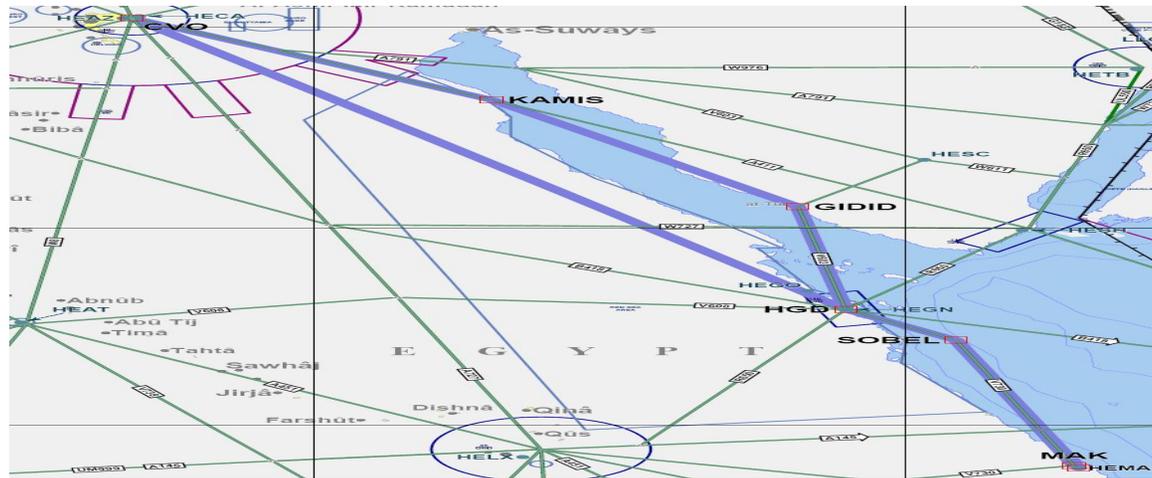


MID/RC-045 - (TPR 2)

MIDANPIRG/14-WP/13
APPENDIX A

A-4

MID/RC-055 (TPR 3)	ATS Route Name: New Route L315	Entry-Exit: HEMA-CVO	Inter-Regional Cross Reference if any		Users Priority		Originator of Proposal	IATA
							Date of Proposal	ARN TF/2
Route Description MAK-CVO		States Concerned	Expected Implemen- tation date	Implementation Status	ANP Status	Action Taken / Required	Deadline for each Action	
CVO HGD GIBAL		Egypt Saudi Arabia				L315 to be discussed with Saudi Arabia for direction of route To be followed up Both States agreed to study the proposal pending final agreement by June 2012 Opposite Direction		
Flight Level Band: Upper								
Potential City Pairs: North-western Red Sea to HECA and Europe								
Conclusions/Remarks		Saves 9 miles				Last updated	ATM/AIM/SAR SG/13 SEP 2013	

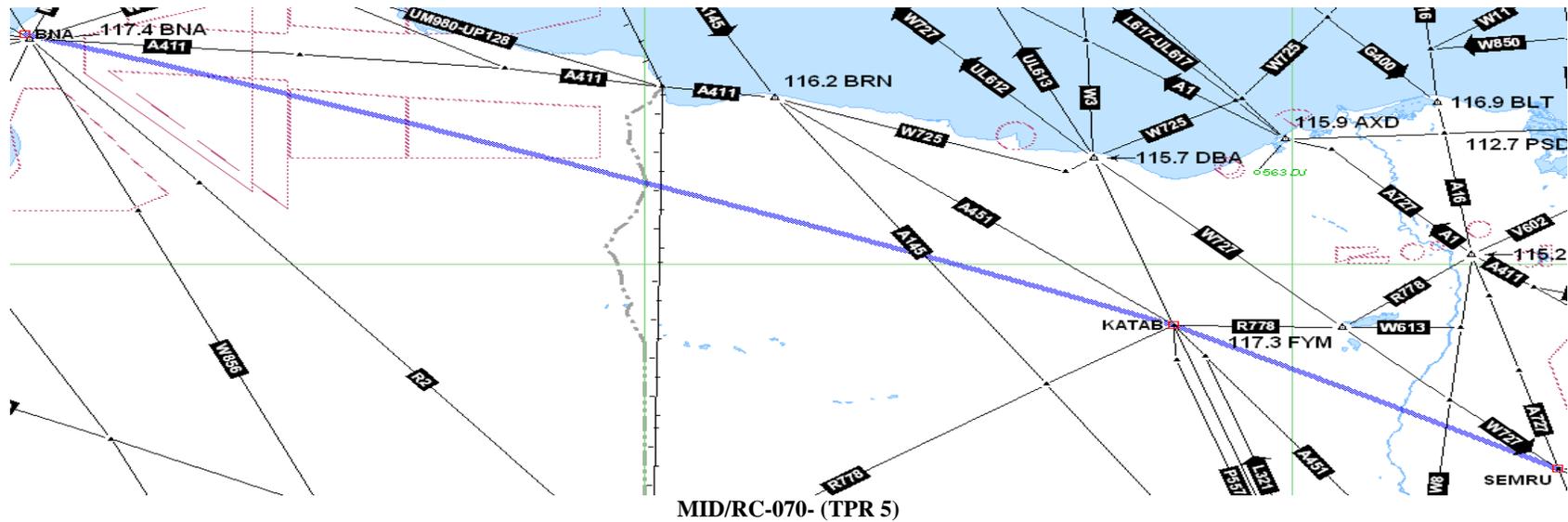


MID/RC-055- (TPR 3)

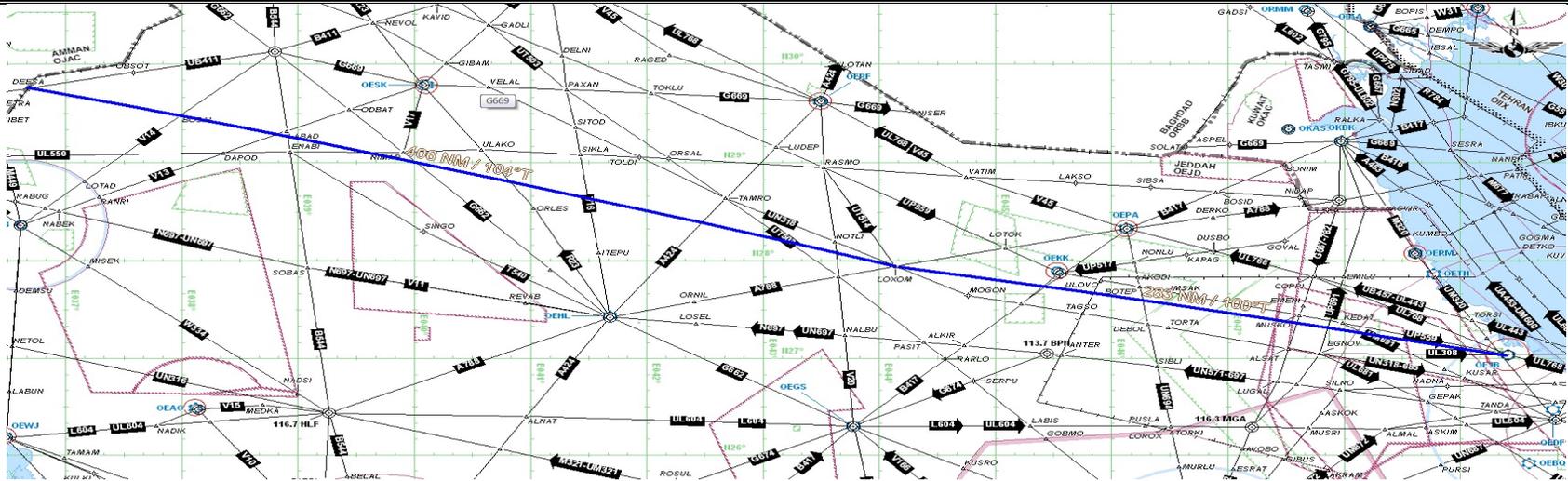
MIDANPIRG/14-WP/13
APPENDIX A

A-6

MID/RC-070 (TPR 5)	ATS Route Name: New Route	Entry-Exit: BNA-KATAB- SEMRU	Inter-Regional Cross Reference if any		Users Priority	High	Originator of Proposal	IATA
							Date of Proposal	ARN TF/1
Route Description		States Concerned	Expected Implemen- tation date	Implementation Status	ANP Status	Action Taken/Required	Deadline for each Action	
BNA (N32 07.5 E020 15.2) – KATAB (N29 25.0 E029 05.1) – SEMRU (N28 02.0 E032 03.1)				New ATS route.		Differed for the future Implement if possible Priority Routes		
Flight Level Band: FL290 – FL410								
Potential City Pairs: CMN/ALG/TUN/TIP-DOH								
Conclusions/Remarks		This AWY would save considerable track miles BNA – KATAB – SEMRU Libya FIR to Egypt FIR				Last updated	ATM/AIM/SAR SG/13 SEP 2013	



MID/RC-082 (TPR 6)	ATS Route Name: New Route UQ597 Eastbound	Entry-Exit: DANAD - METSA - ASH - ULOVO	Inter-Regional Cross Reference if any		Users Priority	High	Originator of Proposal	IATA iFLEX Proposal
							Date of Proposal	17 May 2011
Route Description		States Concerned	Expected Implemen- tation date	Implementation Status	ANP Status	Action Taken/Required	Deadline for each Action	
DANAD 28 51 06N 028 06 09E METSA 29 27 07N 034 59 03E ASH ULOVO 27 48 30N 045 54 20E		Egypt Jordan Saudi Arabia			Not in the ANP	connecting to UP559. Implement if possible Priority Routes KSA suggest DEESA -LOXOM- JBL In Egypt to follow the current route network	TBD	
Flight Level Band:								
Potential City Pairs: Dakar FIR, Algiers FIR, Tripoli FIR, Cairo FIR, Jeddah FIR								
Conclusions/Remarks	Proposals agreed to by some State during the iFLEX workshop Dubai					Last updated	ATM/AIM/SAR SG/13 SEP 2013	



MID/RC-082-- (TPR 6)

MIDANPIRG/14-WP/13
APPENDIX A

A-8

MID/RC-083 (TPR 7)	ATS Route Name: New Route UQ598 Westbound	Entry-Exit: DITAR – NABED – PASAM – HIL - ANTER - KUTEM		Inter-Regional Cross Reference if any		Users Priority	High	Originator of Proposal	IATA iFLEX Proposal
		Date of Proposal	17 May 2011						
Route Description		States Concerned	Expected Implemen- tation date	Implementation Status		ANP Status		Action Taken/Required	Deadline for each Action
DITAR 26 59 03N 025 00 00E AST NABED 27 18 01 032 17 06E PASAM 27 30 45N 034 55 42E HIL Via A791 KUTEM		Libya Egypt Saudi Arabia						Needs to be discussed with Egypt if A145 can be bidirectional East of LXR Implement if possible Priority Routes Important Segment HGD-PASAM	TBD
Flight Level Band:									
Potential City Pairs:									
Conclusions/Remarks						Last updated	ATM/AIM/SAR SG/13 SEP 2013		

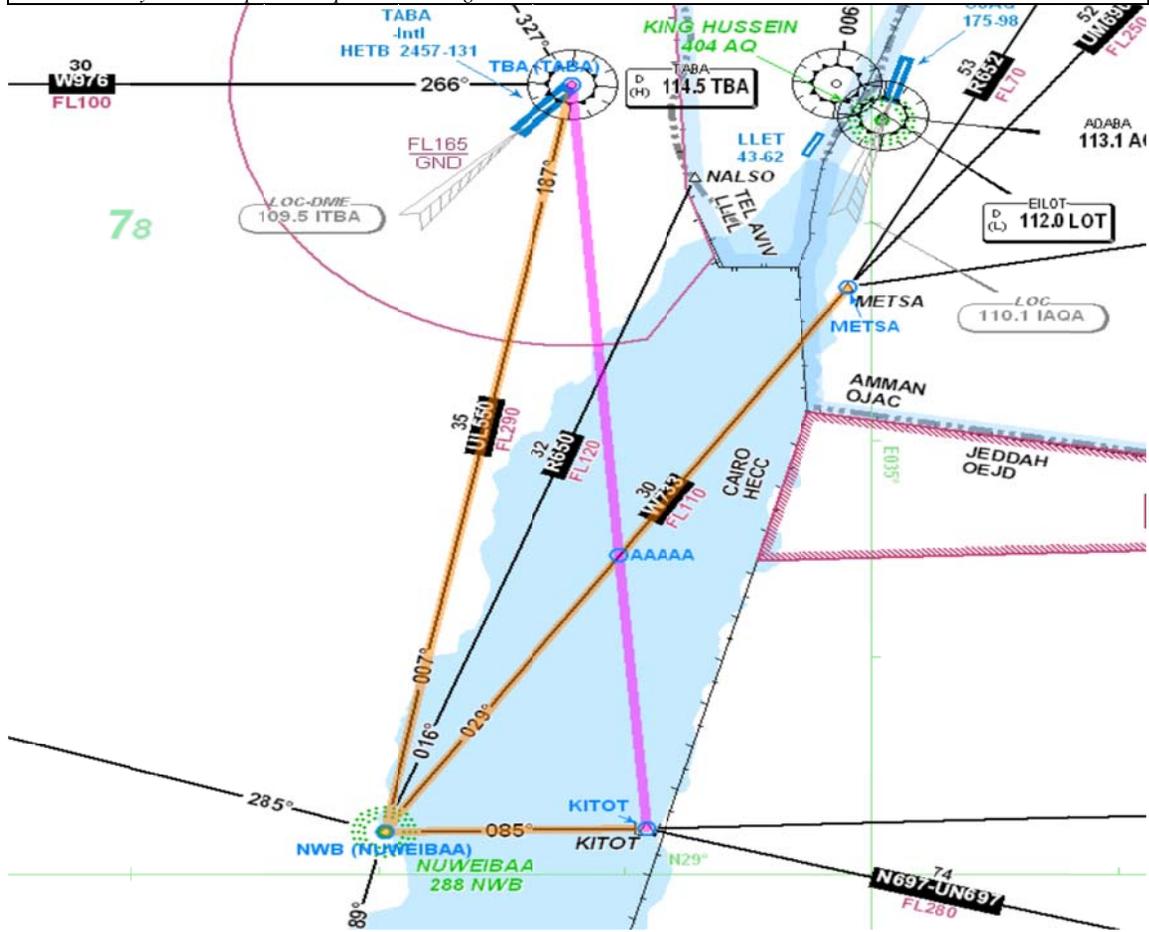


MID/RC-083- (TPR 7)

Eurocontrol proposals

Reference	Objective and Proposal	State(s) concerned
TPR 8	<i>Objective:</i> To further improve ATS route network within Cairo FIR.	EGY
	To implement bi-directional ATS route TBA - AAAAA - KITOT.	Originator EUROCONTROL

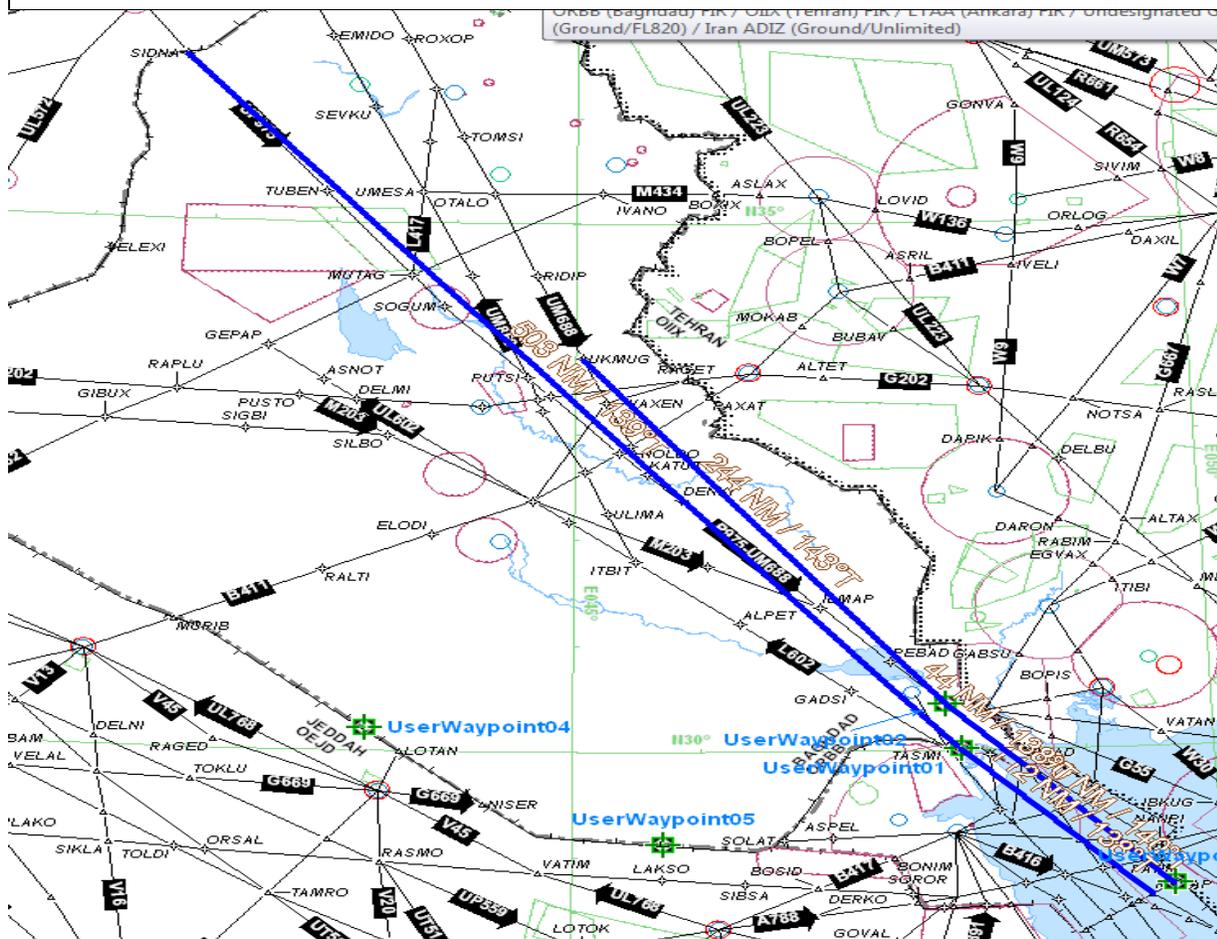
Notes:
 1. AAAAA - crossing point between new TBA - KITOT and existing ATS route W733 allowing connection to/from METSA.
 2. Shorter by 9.2NM option compare to existing TBA - NWB - KITOT.
 3. Shorter by 28.6NM option compare to existing TBA - NWB - METSA.



(TPR 8)

Reference	Objective and Proposal	State(s) concerned
TPR 9	<i>Objective:</i> To further improve ATS route network between Baghdad and Kuwait FIRs.	Bahrain-Iraq-Kuwait
	To implement ATS route UKMUG-SIDAD- New Point East of RABAP then join the ATS Route network within Bahrain.	Originator ATM/AIM/SAR SG13 Oct 2013
Notes: 1. RNAV 1 Routes, target date of implementation second quarter of 2014.		

Reference	Objective and Proposal	State(s) concerned
TPR 10	<i>Objective:</i> To further improve ATS route network between Baghdad and Kuwait FIRs.	Bahrain-Iraq-Kuwait
	To implement ATS route SIDNA-New point West of ASLAN-RABAP.	Originator ATM/AIM/SAR SG13 Oct 2013
Notes: 2. RNAV 1 Routes, target date of implementation second quarter of 2014.		



TPR 9 and 10