



International Civil Aviation Organization

**Middle East Air Navigation Planning and
Implementation Regional Group**

**Sixteenth Meeting (MIDANPIRG/16)
(Kuwait, 13 – 16 February 2017)**

Agenda Item 5.2.2: Specific Air Navigation issues

**MID REGION ATM ENHANCEMENT PROGRAMME
(MAEP)**

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of the Third Meeting of the MID Region ATM Enhancement Programme Board (MAEP Board/3).

Action by the meeting is at paragraph 3.

REFERENCES

- MAEP Board/3 Report

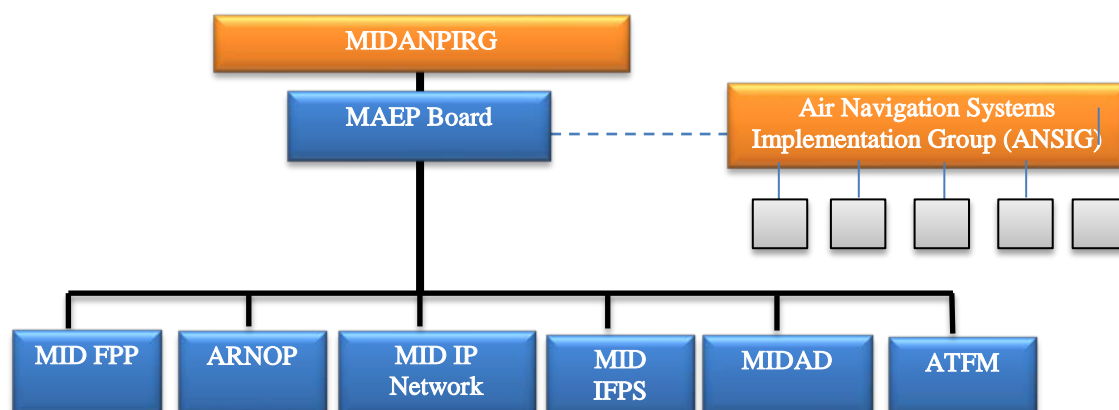
1. INTRODUCTION

1.1 The Third Meeting of the MID Region ATM Enhancement Programme Board (MAEP Board/3) was held in Cairo, Egypt, from 16 to 18 January 2017.

2. DISCUSSION

2.1 The MAEP Board/3 meeting agreed that the Board be composed by default of members from all the MID States without the need for the signature of a Memorandum of Understanding (MOU), similar to other MIDANPIRG subsidiary bodies.

2.2 Considering the challenges faced for the establishment of MAEP with a centralized approach for the implementation of air navigation regional projects, the MAEP Board/3 meeting agreed that each MAEP project would be implemented as a standalone project. Nevertheless, the meeting agreed that the MAEP Board would continue to provide a platform for regional collaboration towards a prioritized, coordinated and harmonized projects implementation. Accordingly, the meeting agreed to dissolve the MAEP Project Coordination Team (MPCT). The meeting agreed to a revised MAEP Organizational Structure as follows:



2.3 Based on the above, the MAEP Board/3 meeting revised and updated the MAEP Board Terms of Reference (TORs) as at **Appendix A** and agreed to the following Draft Decisions:

Why	To dissolve the MAEP Projects Coordination Team (MPCT)
What	Dissolution of the MPCT
Who	MIDANPIRG/16
When	February 2017

DRAFT DECISION 3/1: DISSOLUTION OF THE MPCT

That, the MAEP Projects Coordination Team (MPCT) is dissolved and its duties and responsibilities be taken over by the MAEP Board.

Why	To revise the Terms of Reference of the MAEP Board
What	MAEP Board Terms of Reference
Who	MIDANPIRG/16
When	February 2017

DRAFT DECISION 3/2: MAEP BOARD TERMS OF REFERENCE

*That, the MAEP Board Terms of Reference be revised as at **Appendix A**.*

2.4 In connection with the above, the MAEP Board/3 meeting agreed that the MAEP Board Conclusion 2/3 related to the MAEP funding mechanism was overtaken by events and subsequently considered cancelled.

2.5 The MAEP Board/3 meeting was apprised of the outcome of the Global Ministerial Aviation (GMA) Summit (Riyadh, Saudi Arabia, 29 - 31 August 2016) related to MAEP. The documentation of the Summit is available at: www.gmasummit-riyadh.net.

2.6 The following regional initiatives/projects, which have been coordinated with States and Regional and International Organizations, considering the priorities identified within the framework of the MIDANPIRG and RASG-MID, as well as the Arab Civil Aviation Commission (ACAC) ongoing initiatives, were supported by the Summit:

- ARNOP (ATS Route Network Optimization Project)
- MID FPP (MID Region Flight Procedure Programme)
- MENA RSOO (Middle East and North Africa Regional Safety Oversight Organization)
- ICAO MID NCLB Activities for 2017
- Agency for Flight Checks and Collection of Air Navigation Charges
- ACAC Regional Training Cooperation Initiative

MID Flight Procedure Programme (MID FPP)

2.7 The GMA Summit supported the MID FPP as reflected in the following Recommendation:

MID FPP Recommendation:

- a. *States are encouraged to sign the MID FPP Project Document; and*
- b. *States and Stakeholders are encouraged to support:*
 - i. *the establishment of MID FPP through the provision of cash and/or in-kind contributions; and*
 - ii. *the MID FPP activities through the assignment of experts to be part of the MID FPP pool of resources*

2.8 The MAEP Board/3 meeting noted that, as a follow-up action to the outcome of the MAEP Board/2 meeting related to the evaluation of the hosting offers of the MID FPP Office, the Evaluation Team established by the MAEP Board/2 meeting reviewed the offers and selected Lebanon as the hosting State for the MID FPP based on the set out hosting criteria.

2.9 The MAEP Board/3 meeting recognized that in order to move forward, an agreement/Project Document (ProDoc) should be signed by Lebanon with ICAO. This is envisaged to be completed by February 2017. Thereafter, States willing to join the Programme should sign the ProDoc with ICAO and meet their obligations as detailed in the ProDoc. Accordingly, the meeting encouraged States to join the MID FPP through the signature of the MID FPP ProDoc once finalized.

2.10 It was highlighted that the establishment of the MID FPP requires the availability of funds to cover the expenses related to the MID FPP Manager at least for the first year to initiate the recruitment process by ICAO. In this respect, the MAEP Board/3 meeting noted that ICAO would endeavour to find and secure voluntary cash-contributions to cover the first year expenses. However, the running cost of the programme for the remaining period should be covered by States through cash-contributions or voluntary contributions from donors or sponsors. The meeting agreed that the funding mechanism of the programme (budget, contribution by Participating States, sponsorship, etc.) would be defined by the MID FPP Steering Committee after the establishment of the programme, taking into consideration the number of active States, confirmed voluntary contributions, etc.

2.11 In connection with the above, the MAEP Board/3 meeting noted with appreciation that the airspace users may be willing to sponsor the MID FPP. Accordingly, the meeting agreed that, AACO and IATA to approach their members and indicate to the ICAO MID Regional Office, by **15 March 2017**, if any of their member(s) is/are willing to provide sponsorship to the MID FPP.

2.12 Considering the time needed for the signature of the ProDoc and the recruitment of the MID FPP Manager, the MAEP Board/3 meeting agreed that the start of operation date of the MID FPP should be **1 September 2017**.

MID ATS Route Network Optimization Project (ARNOP)

2.13 The GMA Summit, supported ARNOP and the Summit agreed to the following Recommendation:

States and Stakeholders are encouraged to support ARNOP and provide political and financial commitment, required to initiate the implementation phase of the project.

2.14 The MAEP Board/3 meeting recalled that ARNOP is composed of two Phases; Study and Implementation. Phase one (the Study) was carried out by Navblue (former Airbus ProSky) under the framework of ACAC. The final draft of the CNS/ATM study was circulated by ACAC and presented to the ACAC Executive Council (Muscat, Oman, 20 December 2016). More details will be presented in a separate WP by ACAC.

2.15 It was highlighted that Phase two (implementation) could not be initiated without analysis of the CNS/ATM study outcomes, including the identification of the CNS infrastructure requirements (VHF and Surveillance coverages, etc.) and agreement on the way forward.

2.16 In addition to the above and considering that, a number of States in the MID Region have initiated airspace redesign projects, constraints impeding the implementation of Flexible Use of Airspace Concept, activities carried out by the ATM and PBN SGs, and the recently established Advanced Inter-regional ATS Routes Development Task Force (AIRARD TF), the MAEP Board/3 meeting agreed that ARNOP implementation should be addressed by the ATM SG.

MID IP Network (Common Aeronautical VPN Network-CRV)

2.17 The MAEP Board/3 meeting recalled that the MAEP Board/2 meeting (Cairo, Egypt, 11-13 April 2016) reviewed the outcome of the MID IP Network workshop and, through MAEP Board Conclusion 2/7, agreed that the procurement framework of the APAC CRV be used for the implementation of the MID IP Network Project; and the MID IP Network be renamed as Common Aeronautical VPN (CRV) in order to represent both Regions. In this respect, it was highlighted that the CRV procurement includes all ICAO MID States as potential users.

2.18 The MAEP Board/3 meeting noted that the CRV Framework accommodates the necessary legal framework for all States, where it is possible to adapt the individual service contract between States and the selected common service provider to the national laws and regulations. Furthermore, the selected common service provider will be responsible for dealing with the national telecommunication service providers in the States and may require standard support letter from the State.

2.19 The MAEP Board/3 meeting reviewed the MID IP Network Focal Points and commitment status table updated by the CNS SG/7 meeting at **Appendix B**. The meeting noted that six (6) States (Bahrain, Iran, Jordan, Kuwait, Lebanon and Sudan) confirmed their commitment and three (3) States (Oman, Saudi Arabia and UAE) confirmed provisional commitment to the project. It was also noted that the CNS SG/7 meeting agreed that the project be pursued and that upon successful completion of the procurement process conducted in the APAC Region (with the support of TCB), States be urged to engage with the recommended supplier to establish individual service contracts.

2.20 The MAEP Board/3 meeting noted that the challenges related to the implementation of the IP Network Project include the cost-benefit analysis and preliminary safety analysis. It was confirmed that the CBAs would help States to decide on the implementation plan of the IP network based on the CRV framework and further negotiate the contract with the selected supplier. The meeting noted that seven (7) States (Bahrain, Egypt, Jordan, Kuwait, Lebanon, Saudi Arabia and UAE) conducted an initial basic local Cost Benefit Analysis (CBA).

2.21 The MAEP Board/3 meeting was apprised of the outcome of the Sixth Meeting of the Common Regional VPN Task Force (CRV TF/6) and the First Meeting of the Common Regional VPN Operations Group (CRV OG/1) of APANPIRG which were held at the ICAO APAC Office, Bangkok, Thailand on 14-15 and 16 December 2016, respectively. The meeting noted that only one (1) State from the MID Region (Kuwait) participated in these meetings.

2.22 The MAEP Board/3 meeting noted that the approval of the evaluation process and report by the ICAO Contracts Board for the CRV Project was notified to the ICAO APAC Regional Office on 28 November 2016. As a follow-up to the approval by the ICAO Contracts Board, an award notification was sent on 7 December 2016. The award notification includes the name of the selected supplier. The final contract(s) will be awarded on an individual basis by States, subject to successful discussions.

2.23 It was highlighted that the final common package would be ready by end of January 2017 and would be available on the ICAO Secure Portal (CRV Group). The meeting agreed that an ICAO State letter would be sent to notify the package to all States in the APAC Region, and urge all States to implement CRV. Coordination will be made with APAC to notify the MID States accordingly.

2.24 The MAEP Board/3 meeting noted that the draft MID IP Network (CRV) Implementation Process, developed by the Secretariat based on the APAC CRV Implementation Plan, at **Appendix C**, might be helpful for States in case they decide to join the CRV.

2.25 The MAEP Board/3 meeting noted that the APAC CRV TF was dissolved and the implementation of the project in APAC will be followed-up by the CRV OG. It was noted that the next meetings of the CRV OG and contract negotiations will be as follows:

- 17-18 January 2017: next meetings for negotiating States
- 2 February 2017 (web conference): CRV OG status meeting#1
- 15-16 May 2017: CRV OG/2 (back-to-back with ACSICG/4)

2.26 The MAEP Board/3 meeting encouraged States to participate in the CRV OG/2 meeting which will be held at the ICAO APAC Office in Bangkok, Thailand from 15 to 16 May 2016, in order to follow-up with the updates and further steps of the CRV Project.

2.27 Based on all of the above, the MAEP Board/3 meeting agreed to the following Draft Conclusion:

Why	To Join the MID CRV
What	State Letter/States to take necessary measures for the joining of the project
Who	ICAO/States
When	March 2017/as soon as possible

DRAFT CONCLUSION 3/3: MID IP NETWORK PROJECT (CRV)

That,

- a) *States that have already committed to join CRV, are invited to engage with the recommended supplier to establish individual service contracts; and*
- b) *States that have not yet done so, are urged to carry out a comprehensive CBA related to the implementation of an IP Network under the CRV framework; and inform the ICAO MID Office, as soon as possible, about their decision related to the joining of CRV.*

MID Integrated Flight Plan Processing System (MID IFPS) Project

2.28 The MAEP Board/3 meeting noted that after the successful completion of Bahrain IFPS, the GCC States have agreed on the execution of the GCC IFPS Zone sub-regional project as an extension of Bahrain IFPS to other participating States (ref. the outcome of the GCC ANC/9). The meeting noted that Bahrain proposed a three-year action plan for the establishment of the MID Region IFPS project starting with the implementation of the GCC IFPS Zone.

2.29 The establishment of the GCC IFPS Zone will be a phased approach, as follows:

Phase One: flight plan validation:

- data collection from the concerned States in terms of addressing the frequent complications and issues associated with the flight plan processing, concerned States to submit these inputs to Bahrain by the second quarter 2017 (not later than June);
- development of Service Level Agreements with the States concerned, to be developed by Bahrain (second quarter 2017);
- flight plan data collection phase under OBBBZEZM for data analysis, AFTN and system load tests (third quarter 2017, a period of 1-3 months);
- configuration phase, a period of 1 month but could be in parallel with the flight plan data collection phase subject to the States configuration inputs;
- Tests and Trial phase, with created virtual (test/dummy) originators followed with selected individual originators (third quarter 2017, a period of 1-2 months depending on the results);
- transition phase, live operational trials with selected originators, flight plan messages being processed and selected originators being automatically addressed/replied to (third-fourth quarter 2017 for a period of 1-2 months subject to the trials outcomes); and
- implementation phase (fourth quarter 2017 within a period of 1-3 months).

Phase Two: the system is capable of additional functions, required routes validation, level restrictions, airspace timing restrictions, black list and billing restrictions can be developed subject to individual State requirements.

2.30 Following the above project phases, the best practices and the outcomes of the GCC IFPS Zone project will be outlined and incorporated in the MID Region IFPS project plan. The plan will be prepared and presented within 18 months to the MAEP Board and/or ATM SG.

2.31 The MAEP Board/3 meeting agreed that Bahrain communicate to the GCC States the required documentation (Concept of Operation, Interface Control Documents, etc.). GCC States should agree with Bahrain on the mechanism to be used for the provision of inputs/data related to the GCC IFPS Zone project. Accordingly, the meeting urged GCC States to provide their inputs and comments to Bahrain in a timely manner in order to expedite the implementation of the project.

MID REGION AIM DATABASE (MIDAD)

2.32 The MAEP Board/3 meeting recalled that, further to the EAD-MIDAD coordination meeting (Cairo, Egypt, 9-10 December 2015) between EUROCONTROL and the ICAO MID Regional Office, the MAEP Board/2 meeting (Cairo, Egypt, 11 - 13 April 2016) received a proposal from EUROCONTROL related to the implementation of an EAD-based MIDAD. The proposal suggested that EUROCONTROL would offer a MIDAD Implementation Plan consisting of the following main steps:

- Step 1: migration of the MID States to EAD.
- Step 2: establishment of an EAD-based MIDAD System.
- Step 3: establishment of a MIDAD Operational Centre in the MID Region (hand-over of the MIDAD operations from EURCONTROL to the MIDAD Service Provider).

2.33 It was highlighted that with this offer from EUROCONTROL, there would not be a need for the "MIDAD Detailed Study" which would save money, effort and time. Nevertheless, a detailed implementation plan (including the transition plan), should be developed based on the EAD experience, in coordination with the MIDAD Support Team, and further reviewed and discussed by the MIDAD TF before presentation to the MAEP Board and/or MIDANPIRG for endorsement.

2.34 The MAEP Board/3 meeting noted that, due to unexpected reasons, EUROCONTROL offer could not be formalized in due time and the MIDAD TF/4 meeting was consequently postponed to 2017. The offer is expected to be provided to the MIDAD TF/4 meeting which is tentatively scheduled to be held on 15 May 2017.

2.35 Based on the above, the MAEP Board/3 meeting agreed that based on the EUROCONTROL proposal, the MIDAD TF/4 meeting should propose a new action plan for the implementation of the MIDAD project.

MID Region Air Traffic Flow Management (ATFM) Project

2.36 The subject was addressed in WP/19.

Call Sign Confusion (CSC) Initiative

2.37 The MAEP Board/3 meeting noted with appreciation the progress achieved with the implementation of the CSC initiative, and that the MID Region experience has been considered by the adjacent ICAO Regions. The meeting commended the work and efforts of the CSC Initiative Team.

2.38 The MAEP Board/3 meeting recalled that the Initiative is implemented in two phases.

- Phase one: assessing the acceptance of the alphanumeric call signs for commercial flights i.e.(UAE20AA) by the ATM systems, aerodromes, authorities providing overflight and landing/departure permissions, etc.
- Phase two: identifying and de-conflicting current and future call sign similarities within the Region.

2.39 The MAEP Board/3 meeting urged States to follow-up with their operators to implement the procedures for the de-conflicting of call sign similarities in coordination with the CSC Initiative Team.

2.40 The MAEP Board/3 meeting noted that additional airlines joined Etihad Airways in the testing of the flight plans starting from this year winter schedule. Accordingly, States were invited to cooperate and report feedback in order to ensure successful implementation.

2.41 The MAEP Board/3 meeting urged States to report call sign similarity/confusion cases to the following email addresses: MIDCSC@icao.int and MENACSSU@iata.org, which will allow the CSC Initiative Team to follow-up with the concerned airline(s) to resolve the issue in a timely manner.

2.42 The progress report is presented in WP/5.

Prioritization of the MAEP Projects

2.43 Taking into consideration the latest developments, the MAEP Board/3 meeting reviewed and updated the prioritization and the associated implementation time frame of the MAEP projects as follows:

Project	Implementation Time frame	Project Manager
MID Flight Procedure Programme (MID FPP)	September 2017-September 2020	Manager
MID ATS Route Network Optimization Project (ARNOP)	Continuous	ATM SG
MID IP Network (CRV)	2017 and beyond	CNS SG
MID Integrated Flight Plan Processing System (MID IFPS)	2017-2020	Bahrain
MIDAD	2017 and beyond	MIDAD TF
MID Region ATFM project	2017 and beyond	ATM SG

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) agree on the proposed Conclusions and Decisions emanating from the MEAP Board/3 meeting;
- b) take necessary measures to expedite the implementation of the MAEP projects; and
- c) encourage States and Stakeholders to support MAEP and its projects.

APPENDIX A

MID Region ATM Enhancement Programme Board (MAEP Board)

TERMS OF REFERENCE

The Terms of Reference of the MAEP Board are:

1. Provide a regional platform for collaborative and harmonized approach towards planning and implementing air navigation projects in support of the MID Air Navigation Strategy and the Global Air Navigation Plan (GANP), taking into consideration previous initiatives and the users' requirements.
2. Carry out initial assessment of new identified projects and propose to MIDANPIRG candidates MAEP projects for implementation in a prioritized manner; for final decision.
3. Coordinate at all levels with States and stakeholders to enhance collaboration and foster the implementation of the MAEP projects.
4. ~~Oversee the MAEP projects and monitor and review their progress of the MAEP projects,~~ including the identification of challenges/risks, and ~~recommend actions to ensure~~ harmonized and effective implementation across projects, as appropriate.
5. Maintain a close and permanent consultation and cooperation with Stakeholders that might contribute to the work of the Board.
- 5.6. ~~Review the recommendations emanating from the MIDANPIRG subsidiary bodies related to the MAEP projects and take appropriate decisions.~~
- 6.7. Provide high level support and guidance to States to ensure harmonization and interoperability in line with the projects deliverables and recommendations.
- 7.8. Provide regular progress reports to MIDANPIRG.

In order to effectively perform its tasks and responsibilities:

1. The MAEP Board shall elect a Chairperson for a cycle of five years unless otherwise re-elected. The Chairperson acts as the contact point and coordinator on behalf of the MAEP Board members to oversee the Programme in coordination with ICAO.
2. The MAEP Board shall meet at least once each 18 Months and/or when deemed necessary.
3. The MAEP Board meetings should be hosted by its members on rotation basis.

Composition:

The MAEP Board is composed of:

- a) High Level (Decision Makers) Members from the MID States;
- b) The MAEP Board Chairperson;
- c) Managers of the MAEP Projects; and
- d) Observers from AACO, ACAC, ACI, AIRBUS, BOEING, CANSO, EUROCONTROL/SESAR JU, FAA-USA, IATA, IFALPA and IFATCA

Other representatives from States and industry may be invited on ad-hoc basis as Observers, when required.

The ICAO MID Regional Office will act as the Secretary of the MAEP Board meetings.

DRAFT

APPENDIX B

MID IP Network Project (CRV) Focal Points and Commitment Status

State	Name/Title	Contact Details (Tel./Fax/Mobile/Email)	IP Network Equipment Room Coordinates	Commitment/ No of Location
Bahrain	Mohamed Ali Saleh <i>Chief Aeronautical Telecomm</i>	Fax: +973 17329966 Tel: +973 17321187 Email: masaleh@caa.gov.bh	Air Navigation Directorate Building: 353, Road: 2408, Block:224, Muharraq, Bahrain Technical Room coordination point: 2616N 05038E	Y (1)
	Yaseen Hassan AlSayed <i>Head Aeronautical Telecomm Network</i>	Fax: +973 17329966 Tel: +973 17321183 Email: y.alsayed@caa.gov.bh		
Egypt	Mr. Mohamed Ramzy Mohamed Abdallah <i>Director of AFTN/AMHS Technical Department</i>	Tel: +202 22657981 +201007736780 Email: Mrma_eg@yahoo.com	Building Name: Cairo Air Navigation Center (CANC) Address: NANSO Company – Cairo 300701.0 N 0312342.4 E	
	Eng. Haitham Mohamed Ahmed Eldosoki <i>Director of AIM Technical Department</i>	Tel: +202 22650781 +201007810781 Email: Haitham.mohamed@nansceg.net		
Iran	Mr. AliAkbar SalehiValojerdi <i>Senior Expert of IRANAFTN/AMHS Training Department</i>	Fax: +98 21 66025101 Tel: +98 21 6102337 Mobile: +989 124 202775 Email: aasalehi@airport.ir		Y (1)
	Mr. Alireza Mahdavisefat <i>Senior Expert of IRANAFTN/AMHS COM Centre</i>	Fax: +98 21 66025101 Tel: +98 21 6314 6432 Mobile: +989 333510320 Email: mahdavi@airport.ir		
Iraq				
Jordan	Ms. Mona Ribhi AlNaddaf	Tel: +9626 4881473 +96279 9876710 Email: m.al-nadaf@carc.gov.jo		Y (1)
Kuwait	Mr. Hassan Alattar <i>Communication Engineer</i>	Fax: +965-2 4721 279 Tel: +965-2 4732 530 Mobile: +965 99449454 Email: ha.alattar@dgca.gov.kw		Y (1)

State	Name/Title	Contact Details (Tel./Fax/Mobile/Email)	IP Network Equipment Room Coordinates	Commitment/ No of Location
Lebanon	Mr. Mohamad Abdallah Saad <i>Head of Telecommunication Equipment</i>	Fax: +961 1 629 031 Tel: +961 1 628 151 Mobile: +961 3 280 299 Email: msaad@beirutairport.gov.lb		Y (1)
Libya				
Oman	Mr. Nasser Salim Al-Suleimani Chief ATM Systems Mr. Ibrahim Said Al-Hajri ATM Systems Engineer	Email: nassers@paca.gov.om alhajri@paca.gov.om		P-Y (1)
Qatar				
Saudi Arabia	Ibrahim bash Senior Systems Engineer Automation Engineering Branch	Fax: +966 12 671 9041 Tel: +966 12 671 7717 Ext 1119 Mobile: +966 50 567 1231 Email: ibasheikh@gaca.gov.sa		(3 sites) (Riyadh, Jeddah and Dammam)
Sudan	Eng. Yasir Eltayeb Sidahmed	Fax: +249 183 770001 Tel: +249 183 782701 Email: yasirts@gmail.com		Y (1)
Syria				
UAE	Greg Kurten A/Director CNS Communication, Navigation and Surveillance Shahzad Chaudhary Senior CNS Engineer Communication, Navigation and Surveillance	Fax: +971 2 599 6872 Tel: +971 2 599 6860 Email: gegkurten@szc.gcaa.ae Fax: +971 2 599 6872 Tel: +971 2 599 6865 Email: shahzad@szc.gcaa.ae	The co-ordinates are as follows: 242641.82 N 0543635.46 E The working number at site is: +971 2 5996900	P-Y (1)
Yemen				

APPENDIX C

MID IP Network (CRV) Implementation Process

	Action Title	Activities	Responsible	Timeline
1	Technical requirements	<ul style="list-style-type: none"> • States/ANSP develop their requirements (specify performance, interface, conversion, operational procedure, acceptance test procedure) • Present to Vendor for comment and response • Finalize requirements 	<ul style="list-style-type: none"> • States/ANSPs (with support of Vendor) • States/ANSPs and Vendor • States/ANSPs 	6 to 9 months
2	Negotiation and agreement between two connecting States/ Administrations	<ul style="list-style-type: none"> • To decide on the type of data or voice to be exchanged via CRV, QoS for each type of applications and the required bandwidth • CRV Contractor to comment and response to the agreed requirements • Agree to implementation schedule 	<ul style="list-style-type: none"> • Two connecting States/ANSPs • Vendor • Two connecting States/ANSPs 	6 to 9 months (concurrent with Action 1)
3	CRV Contractor proposes draft Contract to ANSP/State	<ul style="list-style-type: none"> • Vendor to develop and propose a draft Contract 	<ul style="list-style-type: none"> • Vendor 	3 months
4	Signature of the Contract	<ul style="list-style-type: none"> • Review and finalize the Contract <ul style="list-style-type: none"> ➤ Contractual and Legal review ➤ Technical and operational review ➤ Finalize contract ➤ Establish contract and payment system • Signature of the Contract 	<ul style="list-style-type: none"> • States/ANSPs • States/ANSPs and Vendor 	3 to 6 months
5	Operation, test and evaluation	<ul style="list-style-type: none"> • Implementation and operation • Perform acceptance test with associated applications • Perform acceptance test with respective ANSPs/States 	<ul style="list-style-type: none"> • States/ANSPs and Vendor 	3 to 6 months
6	Service acceptance	<ul style="list-style-type: none"> • Service acceptance 	<ul style="list-style-type: none"> • States/ANSPs 	1 month