



International Civil Aviation Organization

Third Meeting of the MID Region ATM Enhancement Programme Board

**(MAEP Board/3)
(Cairo, Egypt, 16 – 18 January 2017)**

Agenda Item 3: MAEP Projects

MID REGION INTEGRATED FLIGHT PLAN PROCESSING SYSTEM PROJECT

(Presented by the Kingdom of Bahrain)

SUMMARY

This paper presents a planning document for the MID Region States and an action plan for the concerned States with the concept of extending Bahrain IFPS to other participating States.

Action by the Meeting is at paragraph 4.

REFERENCES

- MIDANPIRG/15 Report
- GCC ANC 9
- MAEP Board/2 Report
- ICAO Doc. 4444

1. INTRODUCTION

1.1 Acknowledging the necessity of regional ATS systems infrastructure developments, in line with the global systems harmonization and regional systems interoperability, for the purpose of coping with the aviation industry advanced avionics systems, and supported by the ICAO Global Air Navigation Plan together with the MID Region Air Navigation Strategy to safely, efficiently and effectively accommodate the growth of global air traffic movement.

1.2 As a step forward towards the above and based on States/industry operational needs to cope with the traffic growth, supported by the outcome of the MIDANPIRG/15 meeting (paragraph 5.2.2.93) and the outcome of the Second Meeting of the MAEP SC/2 (paragraph 2.12) and the MAEP Board/2 report; upon 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).

1.3 The GCC IFPS Zone is an elementary sub-regional project that will support the establishment of the MID Region IFPS project. Bahrain is proposing a three-year action plan starting with the GCC States followed with the MID Region States.

1.4 The progress; the system upgrade arrangements including software configurations/changes have faced side delays due to a few technical difficulties such as system developer's patch releases timelines etc. However, the GCC IFPS Zone project (Phase One) is expected to begin as per the below revised action plan in paragraph 2.2 of this document.

2. DISCUSSION

2.1 The establishment of the GCC IFPS Zone will be a phased approach; the first phase will be flight plan validation in accordance with ICAO requirements for the purpose of raising flight plans quality:

Ref. ICAO Doc. 4444, 4.4.3 Acceptance of a flight plan

The first ATS unit receiving a flight plan, or change thereto, shall:

- a) Check it for compliance with the format and data conventions;*
- b) Check it for completeness and, to the extent possible, for accuracy;*
- c) Take action, if necessary, to make it acceptable to the air traffic services; and*
- d) Indicate acceptance of the flight plan or change thereto, to the originator.*

2.2 **Phase One;** at this phase of the project, the following stages will take place:

- 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)
- The 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)
- Implementation phase (fourth quarter 2017 within a period of 1-3 months with due consideration to the preparation of SUPs, NOTAMs and AIRAC cycles schedules)

2.3 The validation management of the flight plans will be achieved through three format processes and actions as follows:

- A) The first process checks the State defined configuration (States ATS systems acceptance)
- B) The second process checks for the ICAO requirements as described in paragraph 2.1
- C) The third process is an action through an automated reply message with acknowledge, acceptance or rejection message (including a recommendation message).

GCC IFPS (Phase One) Operational Concept

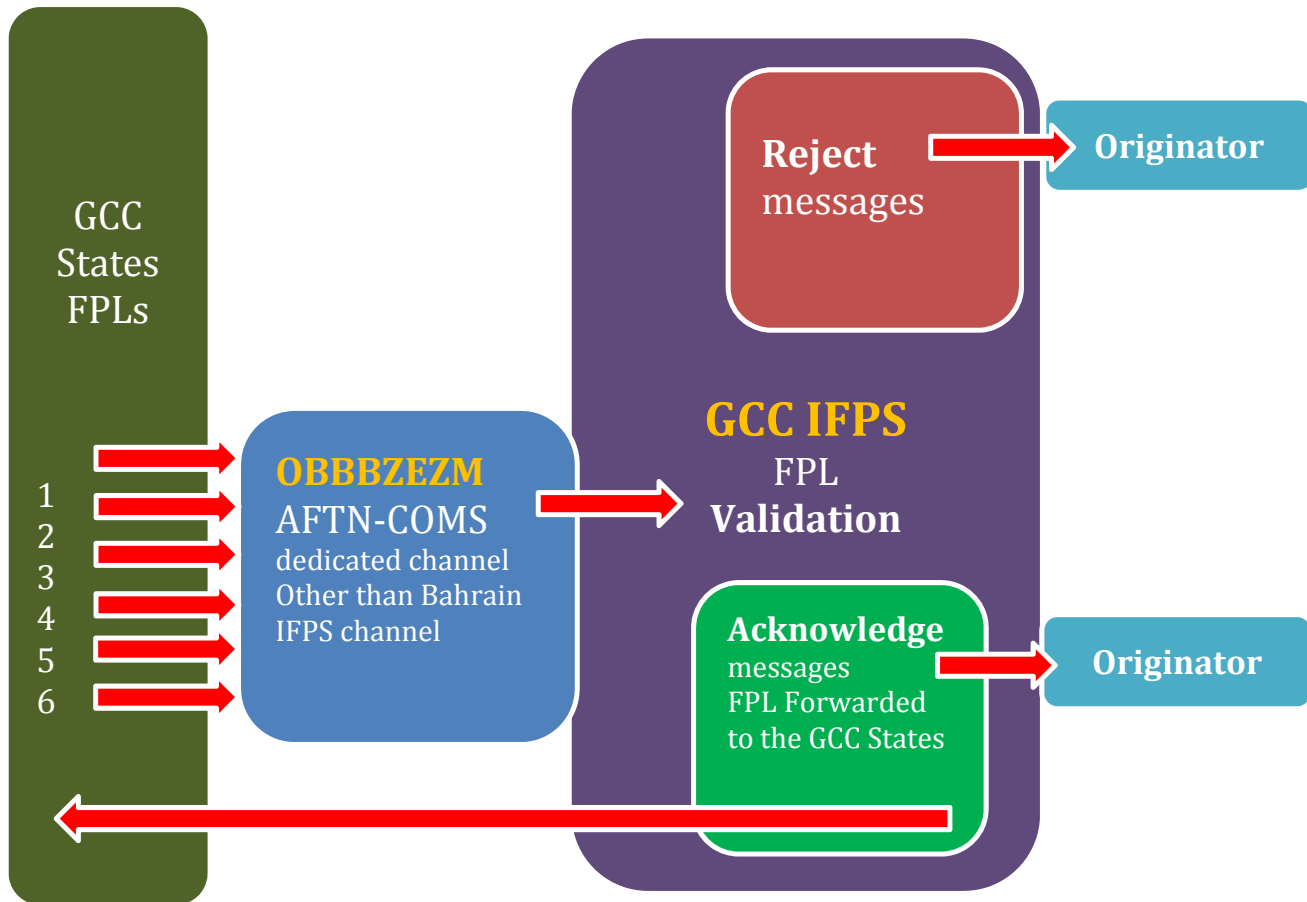


Diagram-1

At this phase, the GCC IFPS System will function as a frontline net to assure correct flight Plans are delivered to the GCC States AIM Systems in accordance with the ICAO flight plan validation requirements.

2.4 **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.

GCC IFPS (Phase Two) Operational Concept

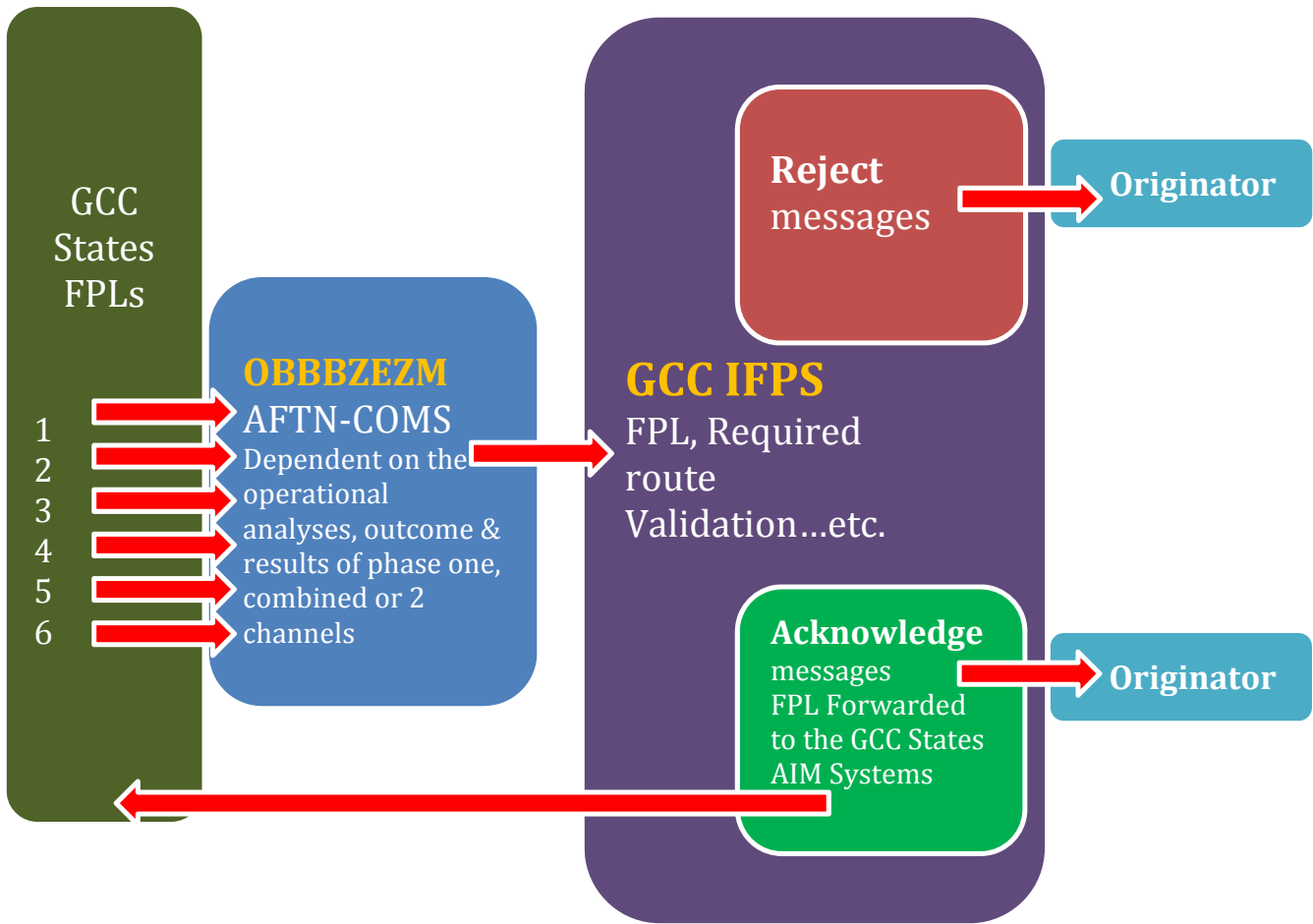


Diagram-2

At this phase, the GCC IFPS System will serve flight plan validation and required route validation functions, thus assure correct flight plans are delivered to the GCC States AIM Systems in accordance with ICAO flight plan validation requirements and State’s required route criteria.

2.5 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.

2.6 System interface; the system is quite flexible in terms future software interface capabilities (IP based FFICE and/or SWIM), but will potentially involve future workflow debates and possible limitations.

3. CONCLUSION

3.1 The flight plan messages within the MID Region FIRs suffer from complications and difficulties with impacts on ATS and flight operations, such impacts involve unnecessary delays, extensive rerouting, flight plan processing complications and in some cases safety issues, the MID Region States inputs in this regard is vital as to define and provide a solid fundamental base for the operational functionality of this project, it is critical and important that all States address flight plan processing problems to the meeting (forwarded to Bahrain) such as but not limited to:

- Delays in the exchange of the flight plan messages.
- Loss of flight plan messages.
- Duplication of flight plan messages.
- Errors in the flight plan messages due to non-adherence to the ICAO standard flight plan format.
- Miss-addressed flight plans

3.2 The successful establishment of the MID Region IFPS Zone is an optimum solution for the above challenges which will subsequently be an advanced development of the ATS systems upgrades within the region, this establishment relies heavily on the inputs, the accuracy of the provided data and the progressive support of the participating States.

4. Action by the Meeting

4.1 The meeting is invited to:

- a) note the contents of this working paper,
- b) provide comments and guidance relevant to the establishment of the GCC IFPS Zone thus the establishment of the MID Region IFPS Zone;
- c) encourage all States to provide their inputs/comments to Bahrain;
- d) urge GCC States to:
 - i. provide the required inputs and data in paragraph 2.2 to Bahrain; and
 - ii. review and update as deemed necessary the GCC IFPS Zone Project Focal Points at **Appendix A**.

APPENDIX A

GCC IFPS Focal Points

State	GCC IFPS Focal Point Name	Email & contact
Bahrain	Abdulla Al Qadhi	aalqadhi@mtt.gov.bh 0097317321180
UAE	Hama Al Blooshi	hbelushi@szc.gcaa.ae
KSA	Ali Al Dhahri	adahri@gaca.gov.sa
Qatar	Noof Al Sheebi	noof.alsheebi@caa.gov.qa
Kuwait	S. Al Mushity	sh.almushity@dgca.gov.kw
Oman	Jaffar A.Al Ameer	jaffer@paca.gov.om

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