



Agenda Item 3: Implementation of the Air Traffic Flow Management (ATFM)

Monitoring the ATFM implementation in the Peruvian State

(Presented by Peru)

SUMMARY	
The purpose of this working paper is to present the Action Plan for the ATFM implementation in the Lima FIR and to update the progress of implementation of same in the Peruvian State.	
REFERENCES:	
- SAM/IG Meetings	
ICAO strategic objectives:	<i>A - Safety</i> <i>B - Air navigation capacity and efficiency</i> <i>E - Environmental protection</i>

1. Background

1.1 During the RAAC/13 meeting (Colombia, December 2013), the Civil Aviation Authorities of the Region committed through the Bogota Declaration, to achieve the goal of having at least one FMU or FMP at the ACCs by 2016. Accordingly, utmost efforts should be made for timely compliance with this goal.

1.2 In accordance with the Action Plan for ATFM implementation in the SAM Region, as an initial action, the Peruvian State presented at the SAM/IG/14 meeting the calculation of runway capacity for Jorge Chavez International Airport.

1.3 During the current year 2015, the Peruvian State has developed a series of activities to count with a FMU by the established deadline and continue with the Action Plan for ATFM implementation

2. Discussion

2.1 According to studies carried out, projected increase in demand would lead to a work overload in ATC units, mainly the ACC, and Lima TWR, in the absence of a management unit – FMU to mitigate an imbalance between capacity and demand. This would have a detrimental effect since it would generate delays and resulting losses to the industry and users.

2.2 According to capacity calculations made for Platform, runway and ATC sectors in Lima and Cusco, there is a tendency for congestion -even to saturation- of traffic levels at certain hours, which requires of due actions to improve the airport infrastructure, in order to be able to satisfy the projected demand.

2.3 In this sense, the Peruvian State developed an Action Plan for ATFM implementation in the Lima FIR and is undertaking a series of activities to achieve the goal to have at least one FMU in Lima ACC by 2016.

2.4 Likewise, the Peruvian State is working jointly with stakeholders, by creating working committees to promote de implementation of CDM and A-CDM.

2.5 **Appendix A** details the Action Plan for ATFM implementation in the Lima FIR, as well as the tasks performed and those which are pending, including deadlines for compliance.

3. **Suggested action**

3.1 The Meeting is invited to take note of the information presented.

APPENDIX A

ACTION PLAN FOR ATFM IMPLEMENTATION THE LIMA FIR

Description of tasks	Date	State	Responsible (person or organization in charge)	Observations
1. Calculation of runway capacity, airspace capacity and platform				
1.1. The calculation of runway capacity of major airport. a) Calculation of runway capacity AIJCH (Lima) b) Calculation of runway capacity AIVA (Cusco)	Jul/2014 Feb/2015	Accomplished Accomplished	DGAC – Peru DGAC – Peru	All calculation results must be updated if a significant increase is observed in demand.
1.2. The calculation of airspace capacity. a) ATC sector capacity ACC Lima b) ATC sector capacity TMA Cusco.	Sep/2014 Feb/2015	Accomplished Accomplished	CORPAC S.A. DGAC – Peru	
1.3. The calculation of platform capacity of major airport. a) AIJCH (Lima) platform capacity b) AIVA (Cusco) platform capacity	- Feb/2015	Pending Accomplished	LAP DGAC – Peru	
1.4. Presenting the findings of the capacity of runways and airspace.	Sep/2014 Apr/2015	Accomplished	DGAC/CORPAC	
2. Determination of projected demand				
2.1. Studies of airspace demand by users for the next ten years.	Oct/2014	Accomplished	DGAC – Peru	LAP and LAN made demand projections until 2040, studies presented at the ACC Meeting (Airport Consultive Collaborative).
2.2. Determine operational factors affecting demand and airport capacity of Lima to optimize the use of existing capacity including simulations if necessary.		Pending	LAP/CORPAC S.A.	LAP and CORPAC should work together to optimize capacity issues and management platform
3. Actions to implement a FMU in ACC				
3.1. Develop an ATFM basic operational concept. a) Development of CONOPS for FIR Lima ATFM b) Development of ATFM manual for FIR Lima	Sep/2014	In progress	DGAC-Peru	Deadline for submission of both documents Jun/2015
3.2. Identify constraints which make that capacity is reduced.	- Apr/2015	Accomplished	DGAC-Peru	

3.3. Identify and implement methods to assess climate impacts on the system.		Pending	DGAC-Peru	Sep 2015
3.4. Develop a data base for analyzing the demand for arrivals and departures at major airports and airspace, for the increase of it, in the following period: monthly, annual, daily and for hours.		Pending	DGAC-Peru	Dec 2015
3.5. Training of personnel for the implementation of ATFM		Pending	DGAC-Peru	Deadline for carrying on courses Jun 2015
a) Replicate the courses and workshops for implementation ATFM by staff previously trained by ICAO.		Pending	CORPAC S.A. DGAC-Peru	Sep 2016
b) Replicate and adapt successful ATFM systems in the region		Pending	CORPAC S.A. DGAC-Peru	Deadline for this tasks depends on training given to personnel
3.6. Identify periods when demand exceeds the capacity of both current and projected capacity, then balance demand/capacity in all three phases ATFM: strategic, pre-tactical and tactical.		Pending	CORPAC S.A. DGAC-Peru	Deadline for unit implementation Jul 2016
3.7. Implementation of the ATFM unit (FMU).		Pending	CORPAC S.A. DGAC-Peru	First phase will be a trial stage of 3 months beginning in Aug 2016
a) Radar display.				
b) Radio communication equipment. (monitoring frequency)				
c) Communication equipment for coordination with adjacent FIR.				
d) Coordination NOTAM.				
e) Meteorology coordination				
f) Military data link.				
3.8. FMU Start of operations		Pending	CORPAC S.A. DGAC-Peru	
a) Pre-operational phase				
b) Operational phase				
4. CDM Implementation				
4.1. Involve stakeholders.	Oct/2014	Accomplished	DGAC – Peru	A-CDM committee was formed for AIJCH chaired by LAP.
4.2. Appointment of staff to perform this task.	Oct/2014	Accomplished	DGAC – Peru	
4.3. CDM implementation office to conduct daily meetings.				
4.4. Establish CDM dependence with designated and trained personnel, of all involved.				
4.5. Establish rules and procedures for participation in the CDM.		(4.3 - 4.7) Pending	CORPAC S.A.	Feb/2016
4.6. Implement software that meets the needs of users for participation in the CDM.				
4.7. Identify the personnel and operational phone numbers that will serve as contact point for				

ATFM issues at each ACC, TMA, TWR, airlines CCO, airports COO, meteorology, military, general aviation and others.				
5. Post-Operational analysis and System Feedback				
Once implemented the FMU, staff will be required for analysis and feedback system continuously to correct possible failures. a) Develop performance indicators according to the CDM manual. b) Track performance indicators		Pending	DGAC – Peru CORPAC S.A.	Estimated deadlines met, the first time feedback system will take place in Feb/2017