

Agenda Item 2: Review the Action Plan for RNP 10 Pre-Operational Implementation in parallel routes UL 780 and UL 302 in the Santiago de Chile-Lima segment

Airspace Safety Assessment by CARSAMMA

2.1 The meeting took note of the preliminary information of the CAR/SAM Monitoring Agency (CARSAMMA) concerning airspace safety assessment for RNP 10 Pre-operational implementation in the Santiago de Chile/Lima segment of routes UL 302 and UL 780, indicating that there were no major problems with the data collected by Chile and Peru. In this respect, the delegates from both administrations informed that, between December 2002 and May 2003, no deviations greater than 10 NM have been observed in routes UL 780 and UL 302.

2.2 According to the Action Plan for RNP 10 Pre-operational Implementation, the CARSAMMA should present the definitive results of the safety assessment during the AP/ATM/6 RVSM-RNAV-RNP meeting, however, considering that Chile and Peru require these results to continue the preparation of the respective AIP and AIC publications, the CARSAMMA offered to send the advance report of the definitive results of such safety assessment to those Administrations. Taking into account the afore mentioned, the meeting approved the following conclusion:

Conclusion AP/ATM/5/24 Submission to Chile and Peru of the airspace safety assessment results for RNP 10 Pre-operational Implementation in the Santiago de Chile-Lima segment of routes UL 302 and UL 780

That, considering that Chile and Peru require continuing the preparation of the respective AIP and AIC publications:

- a) the CARSAMMA sent to such States the advance report of the definitive results of RNP 10 Pre-operational Implementation safety assessment in the Santiago de Chile-Lima segment of routes UL 302 and UL 780, not later than the first week of August 2003; and
- b) this new activity be included in the Action Plan for RNP 10 Pre-operational Implementation in the Santiago de Chile-Lima segment of routes UL 302 and UL 780.

Adoption of the Action Plan for RNP 10 Pre-operational Implementation in the Santiago de Chile/Lima segment of parallel routes UL 7780 and UL 302

2.3 When reviewing the Action Plan for RNP 10 Pre-operational Implementation, Chile and Peru agreed that the finalization date of activity number 8, concerning the establishment of RNP 10 approval procedures for aircraft and operators, should be July 2003.

2.4 Likewise, Chile and Peru agreed to publish the respective AIC related to RNP 10 Contingency Procedures, including such note in the Remarks column corresponding to activity number 13 of the referred Action Plan. For which, the meeting approved the following conclusion:

Conclusion P/ATM/5/25 Adoption of the Action Plan for RNP 10 Pre-operational Implementation in the Santiago de Chile/Lima segment of parallel routes UL 780 and UL302

That, Chile, Peru, IATA/users and CARSAMMA, adopt the updated Action Plan for the execution of the RNP 10 Pre-operational Implementation Programme between Santiago de Chile and Lima in parallel routes UL780 and UL 302 presented in **Appendix A** to this part of the report.

**ACTION PLAN FOR THE IMPLEMENTATION OF A RNP 10 PRE-OPERATIONAL TRIALS PROGRAMME IN
RNAV ROUTES UL 780 AND UL 302**

Activities	Responsible Area	Starting date	Finalization date	Status of application	Remarks
1. Regional Agreement for: - RNAV Route parallel to route UL 780; and - RNP 10	GREPECAS	23.10.01	27.10.01	COMPLETED	During GREPECAS 10 it was achieved a regional agreement in order to implement the RNP 10 programme and the parallel routes.
2. Identification of operational needs.	GREPECAS	23.10.01	27.10.01	COMPLETED	During the AP/ATM/2 Meeting, Lima, Peru, 14 to 18 May 2001, involved States identified the need to establish a pre-operational RNP 10 Implementation Programme in order to acquire experience in such implementation and in related procedures.
3. Establishment of a Monitoring Agency.	GREPECAS	23.10.01	27.10.01	COMPLETED	Conclusion 11/33 of GREPECAS 11 assigned Brazil the CAR/SAM Regional Monitoring Agency.
4. AIC for the dissemination of Information.	States	June 2002	17.04.03	COMPLETED	Most of the information related to the pre-operational implementation plan will ensure the success of the implementation in the target date.
5. Coordination with ATS providers and users.	States	June 2002	Permanent activity		Most of the dissemination of the programme will ensure the success of the implementation in the target date.
6. Study of the impact in the airspace.	States	June 2002	December 2002	COMPLETED	The impact in airspace is essential, especially in the issues regarding the use of prohibited and/or restricted areas as well as geographic issues.

Activities	Responsible Area	Starting date	Finalization date	Status of application	Remarks
7. Cost-benefit analysis considering: - ATS services providers; and - Users.	States/IATA	June 2002	AP/ATM/5	IN PROGRESS	Although economical benefits are expected, the expectations are centered in acquire experience in this type of implementation. IATA will present a cost/benefit analysis at the AP/ATM/6 Meeting.
8. Establishment of procedures to: a) Approve the RNP 10 for aircraft; and b) RNP10 Operational Approval	a) Appropriate Aeronautical Authority; and b) Operator Status.	June 2002	July 2003	IN PROGRESS	The establishment of the procedures will ensure the success of the implementation in its due time. Reference documentation: <ul style="list-style-type: none"> • FAA Order 8400.12 A for RNP 10 operation on the North Pacific route System; • CASA Civil Aviation Advisory Publication CAAP RNP 10-1 (FAA Order 8400.12A); RNP Manual (Doc. 9689).
9. Updated establishment and maintenance of the listed RNP 10 approved aircraft.	CARSAMMA	June 2002	Permanent activity		The timely knowledge of RNP 10 approved aircraft will allow the CARSAMMA to inform the States involved of the progress status of the RNP 10 approval.
10. Establishment of a minimal amount of RNP 10 approved aircraft before initiating the trials.	States	June 2002	July 2002	COMPLETED	A minimum of 90% of the amount of aircraft that operate normally in the airspace that will be designated RNP 10 shall have to be RNP 10 approved before initiating the trials.
11. Programme for airspace safety assessment.	CARSAMMA	January 2003	Permanent activity		a) Considering the goal of 5×10^{-9} (TLS) in fatal accidents by flight hour, safety assessment is a fundamental element to implement the programme.

Activities	Responsible Area	Starting date	Finalization date	Status of application	Remarks
					b) CARSAMMA will present the results of safety assessment in the AP/ATM/6 meeting and send an advance report to Chile and Peru not later than the first week of August 2003.
12. Data collection programme for the evaluation	States and IATA	N/A	Permanent activity		More than 10 NM deviations only will be informed.
13. Publication of an AIC that informs the aeronautical community about the introduction of procedures and requirements.	States	N/A	02.10.03		Includes Flight Contingency Procedures.
14. Publication of an AIP with the applicable procedures and requirements.	States	June 2002	02.10.03		States should include in their corresponding AIPs the minimum requirements and the applicable supplementary procedures.
15. Notification to the Monitor Agency of: a) RNP 10 approved Aircraft; b) RNP10 approved operational operators.	States	June 2002	Permanent activity		Timely notification will ensure the success of the implementation in the planned date.
16. Deadline to have at least, the minimum amount of RNP 10 approved aircraft.	States	N/A	September 2003		If the deadline is not accomplished, the implementation of the programme will be delayed.

Activities	Responsible Area	Starting date	Finalization date	Status of application	Remarks
17. Progress evaluation of the WGS-84 in the involved FIRs.	NACC and SAM Regional Offices	November 2001	January 2003	COMPLETED	To accomplish the success in the implementation programme of the GNSS use, involved States should implement the WGS 84.
18. Establishment and implementation of a training programme.	States and Users	June 2002	November 2003		The establishment of a training programme for ATCs and crew is essential to accomplish the success of the implementation programme.
19. Safety assessment	CARSAMMA	January 2003	AP/ATM/6	IN PROGRESS	
20. Evaluation of the operational availability	CARSAMMA	January 2003	AP/ATM/6	IN PROGRESS	
21. Decision to continue or postpone the pre-operational trials.	States	N/A	AP/ATM/6	IN PROGRESS	The implementation programme will continue as long as all the parties involved have accomplished the tasks specified in the action plan. The evaluation will be carried out through electronic means.
22. Date of the RNP 10 pre-operational implementation	States	N/A	22.01.04	IN PROGRESS	