



**International Civil Aviation Organization
UNDP/ICAO Regional Project RLA/98/003
Transition to CNS/ATM Systems in the CAR and SAM Regions**

**Tenth Meeting/Workshop of ATM Authorities and Planners in the CAR/SAM Regions
(AP/ATM/10)**

(Lima, Perú, from 10 to 14 May 2005)

Agenda Item 2: Evaluation of RNP 10 Pre-Operational Implementation in the Santiago de Chile-Lima segment of parallel routes UL 780 and UL 302

**Analysis of feasibility for the application of a minimum longitudinal separation of 50 NM
In the segment Santiago de Chile – Lima of routes UL 780 and UL 302**

(Presented by Chile)

Summary

This working paper informs about the preparation of an Action Plan for the implementation of a longitudinal separation of 50 NM on RNAV parallel routes UL780 and UL302.

1. Introduction.

1.1 During AP/ATM/9 Meeting, Lima, Peru, November, 2004, by means of conclusion AP/ATM/9/15, the meeting deemed it convenient that Chile and Peru should prepare an action plan for the implementation of a longitudinal separation of 50 NM in the Santiago de Chile/Lima segment on parallel routes UL302 y UL780.

1.2 Implementation of RNP 10 on routes RNAV UL780 y UL302 makes it possible for Santiago and Lima ACC to use both routes independently, as a result of a lateral separation of 50 NM between the routes, and also to analyze the feasibility of reducing longitudinal separation from 80 to 50 NM between aircraft flying at the same flight level.

2. Discussion

2.1 An analysis of the operational reality of parallel routes UL780 and UL302 shows that operators of international flights to Caribbean and North American regions mainly, flying at the same flight level, use any of these RNAV routes, thus facilitating an efficient management during the first flight stages and up to Lima.

2.2 In these parallel routes use of airspace is maximized obtaining the advantages anticipated with the implementation of said routes. Beyond Lima this modality of use of such routes changes abruptly and above advantages of implementation of longitudinal separation of 50 NM are reduced since the two routes occupied

equally by aircraft conducting flights to the Caribbean and North America become after Lima one route, posing a problem for the application of conventional longitudinal separations.

2.3 So, the independent and exclusive use of this separation, in any of the parallel routes would result in delays for users and a higher work load for Air Traffic Controllers.

3. Conclusion

3.1 Bearing in mind the limited benefits of the reduction of the 50 NM longitudinal separation in the Santiago de Chile/Lima segments in parallel routes UL302 and/or UL780, the development of an action plan for the use of this separation should be included in a regional scope program. This requires, among other aspects, analyzing the existing structure of RNAV routes for preparing an action plan for RNP implementation on more used routes. Thus, we will be attaining the greatest and best benefits from the use of systems already available in aircraft that currently operate RNAV routes in the region.

4. Suggested Action

4.1 On the basis of above conclusion the meeting is invited to discuss the subject and make a decision on it.