APPENDIX G

STEP-BY-STEP APPROACH FOR PLANNING ATM REQUIREMENTS AND CNS INFRASTRUCTURE

The step-by-step approach for planning ATM requirements and CNS infrastructure is as follows:

Step 1. Identify homogeneous ATM areas and/or major ~~international~~ traffic flows.

Step 2. List the ICAO region(s), flight information region(s) and State(s) involved in the homogeneous ATM areas and/ or major international traffic flows.

Step 3. Carry out air traffic forecasts and ascertain airspace user needs.

Step 4. ~~Evaluate~~ Perform an operational analysis of the current infrastructure ~~of~~ for the areas identified in Step 2 in terms of, inter alia:

a) ATM limitations and shortcomings;

b) separation standards; and

c) CNS availability.

Step 5. Determine the ATM objectives ~~and requirements~~ for the areas identified in Step 2 ~~(Part I, Chapter 4,Appendices A and B refer).~~ in terms of the required total systems performance (RTSP), using as the basis the guidance material contained in the operational concept document *(operational analysis).*

Step 6. Establish CNS and other technical and automation requirements necessary to support the desired ATM objectives identified in Step 5 *(operational analysis)*.

Step 7. Analyse the benefits/improvements resulting from Steps 5 and 6 in order to establish *(operational analysis)*:

a) costs-benefits;

~~b)~~ relative priority; ~~and~~

c) expected performance improvements; and

~~c~~d) implementation dates of the various ATM objectives and CNS facilities for each of the homogeneous ATM areas and~~/or~~ major ~~international~~ traffic flows/routing areas. (~~Part I,~~ Chapters 5,~~ Appendix A; Part I, Chapter~~ 6, ~~Appendix A; Part I, Chapter~~ 7 and 8,~~ Appendix A~~; and Figures I-3-2 to I-3-5 of this chapter refer).

Step 8. Considering the many technical solutions and implementation options available, repeat as necessary Steps 5, 6 and 7 to determine the most appropriate solution *(operational analysis).*

Step 9. Develop an ATM implementation plan based on the outcome of steps 1 through 8 above using as the basis the guidance material contained in the operational concept document and the results of the operational analysis. A safety assessment should demonstrate that any new systems, or changes to the present systems, will achieve an acceptable level of safety.

Step ~~9~~ 10. Examine the possibilities of funding the implementation of the CNS/ATM systems infrastructure for States requiring financial assistance.

Step ~~10~~ 11. Determine the means and methods of cost-recovery.

Step ~~11~~ 12. Establish a framework to interface with all the CNS/ATM partners on a continuing basis to ensure the harmonious and integrated implementation of CNS/ATM systems in homogeneous areas and/or major international traffic flows.

-END-