



International Civil Aviation Organization

**THE SEVENTH MEETING OF AERONAUTICAL  
TELECOMMUNICATION NETWORK (ATN)  
TRANSITION TASK FORCE OF APANPIRG**

Shanghai, China, 18-22 April 2005.




---

**Agenda Item 8: Review status of implementation of AFTN Circuits**

**AFTN PERFORMANCE**

(Presented by the Secretariat)

**SUMMARY**

This paper presents the Conclusions of ASIA/PAC/3 Regional Air Navigation Meeting, 1993, relating to AFTN Performance for review by the meeting.

**1. INTRODUCTION**

1.1 The ASIA/PAC/3 RAN Meeting formulated three Conclusions relating to AFTN performance establishing the reliability requirements for the AFTN circuits to achieve and maintain and the need to exchange data on AFTN circuit performance, circuit loading and the AFTN transit times achieved by messages to ascertain if the established requirements are met. States were also required to analyze the data and take appropriate remedial actions.

1.2 In view of the high reliability and capacity of leased circuits currently provided by communication service providers in this region it the requirements established by the three conclusions provided in the following paragraphs it is required to review the need for collection, compilation and exchange of AFTN performance data.

**2. DISCUSSIONS**

**2.1 AFTN circuit Reliability**

2.1.1 While assessing the inadequacy of the AFTN plan the ASIA/PAC /3 RAN meeting noted that the performance of some circuits were not consistently achieving 97% reliability due to poor quality of terrestrial links connecting COM centres to the common carrier terminals and/or the excessive time required to restore operation of the links when outages occur. The meeting also agreed that the circuit performance charts of the LTT circuits that are not achieving reliability of 97% reliability should be exchanged. In view of the above the meeting adopted the following Conclusion.

**Conclusion 10/2- AFTN Circuit Performance**

That,

- a) States operating AFTN circuits which do not function satisfactorily 97% of the time during which the circuit is scheduled to be in operation, should exchange monthly circuit performance charts on the form provided in Appendix A to the report on Agenda Item 10;
- b) where a circuit consistently achieving 97% reliability, the exchange of performance chart may cease;
- c) the circuit performance charts be exchanged directly between the correspondent stations, with a copy to the Administrations concerned and to the ICAO Regional Office; and
- d) States identify the causes of inadequate circuit performance and take necessary remedial measures.

**2.2 Transit Time.**

2.2.1 The meeting noted that the transit times of messages were generally meeting the established criteria. However, messages transit times in some parts of Asia region were not adequately meeting operational requirements. The meeting therefore agreed to continue the periodic evaluation of the efficiency of AFTN and adopted the following Conclusion.

**Conclusion 10/3- Transit Time Statistics**

That ,

- a) States responsible for the operation of AFTN circuits which are not adequately meeting transit time requirements should record transit time statistics on the 23<sup>rd</sup> day of each third month (January, April, July and October) of each year, in accordance with the existing practices, for the AFTN circuits and terminals under their jurisdiction which do not meet the specified transit time criteria; and
- b) The data recorded be exchanged directly between the correspondent stations, with copies to Administrations concerned and to the ICAO Regional Office.

**2.3 AFTN Circuit Loading**

2.3.1 The meeting recognized a significant benefit in carrying out performance evaluation of AFTN circuits on the basis of statistics collected for a period of minimum three days at the interval of six months from 23 to 25 April and October. It was also recognized that AFTN COM centres and stations experiencing problems in taking character count due to system limitations, should continue to record circuits loading in accordance with the criteria specified in para 3.1.71 of the Manual on the Planning

and Engineering of AFTN Doc. 8259. In view of the above, the meeting adopted the following conclusion.

**Conclusion 10/4- AFTN Circuit Loading**

That States operating AFTN Circuits;

- e) Record AFTN statistics in the form contained in Appendix B to the report on Agenda Item 10, from 23 to 25 April and October each year;
- f) Exchange the circuit loading data for each circuit with each correspondent station, provide a copy to the ICAO Regional Office; and
- g) Evaluate circuit loading and take appropriate remedial action when occupancy level exceeds permissible levels specified in the Manual on Planning and Engineering of AFTN, Doc. 8259.

**3. ACTION BY THE MEETING**

3.1 The meeting is expected to review the above Conclusions and ascertain if the performance data needs to be recorded and exchanged in light of the quality, reliability and capacity of the leased circuits and implementation of fully automatic message switching systems at all the COM Centre and also at AFTN stations.

-----