



International Civil Aviation Organization and the Directorate General of Air Communication, Indonesia

SIXTH MEETING OF AERONAUTICAL TELECOMMUNICATION NETWORK (ATN) TRANSITION TASK FORCE OF APANPIRG



Bali, Indonesia, 26-30 April 2004

Agenda Item 7: Review status of implementation of AFTN circuits, evaluated circuit capacity and consider timescale for transition to ATN

UPGRADING TOKYO/MOSCOW AFTN CIRCUIT

(Prepared by Japan)

SUMMARY

Japan and Russian Federation agreed, at the CNS/MET/SG/6 meeting held in Bangkok on July 15-19 2002, that both states would make technical adjustments to upgrade the Tokyo/Moscow AFTN circuit from 200bauds to 2400bps by the end of 2003. This paper shows a subsequent adjustment situation between Japan and Russian Federation.

1 INTRODUCTION

1.1 At the CNS/MET/SG/6 meeting in Bangkok, Thailand, 15-19 July 2002, Japan presented that the output loading of Tokyo/Moscow AFTN circuit exceeded 70% in the peak hour, and reported that it was necessary to upgrade the Tokyo/Moscow AFTN circuit. Japan and Russian Federation agreed that both states would make technical adjustments to upgrade the Tokyo/Moscow AFTN circuit from 200bauds to 2400bps by the end of 2003.

1.2 Based on the agreement, Japan and Russian Federation investigated the cost for upgrading Tokyo/Moscow AFTN circuit from 200badus to 2400bps. Russian Federation notified CAB of Japan (JCAB) that the cost for Tokyo/Moscow 2400bps circuit is 7,500 US dollars per month. On the other hand, Japan reported to Russian CAA that the 64kpbs international lease line is a minimum speed that international communication providers provide, that the cost for upgrading Tokyo/Moscow circuit is 3,100 US dollars per month using satellite 64kpbs circuit, and that Tokyo/Moscow circuit can be upgraded from 2400bps to 9600bps at the same cost (3,100 US dollars) by using satellite 64kpbs circuit. As the result, Japan proposed upgrading Tokyo/Moscow circuit by using satellite circuit.

1.3 However, on October 2003, Russian Federation proposed that the improvement of Tokyo/Moscow circuit load be achieved by change of routing between Moscow and Tokyo. Russian CAA mentioned that the estimated loading of the new upgrading circuit would be less than 1% even at peak hours and average daily loading would not exceed 0.5%, and that introduction of extra fees would meet a strong opposition from Russian airspace users.

2 CONSIDERATION

2.1 JCAB reviewed the Russian proposal and has conducted an investigation and analysis of the traffic data about transmitting traffic to Moscow from Tokyo in order to verify the effect of the Russian proposal that the improvement of circuit load be achieved by change of routing between Moscow and Tokyo.

2.2 The change of routing which the Russian Federation has proposed as a load mitigation measure is that only UA, UM, and UU AFSRA transmit to Moscow from Tokyo among U AFSRA which has transmitted to Moscow from Tokyo now, and that the traffic of other AFSRA transmits to Khabarovsk from Tokyo.

2.3 According to the investigation and analysis by JCAB, the traffic concerning UA, UM, and UU AFSRA which has been transmitted to Moscow from Tokyo is around 85% of the whole traffic which has been transmitted to Moscow from Tokyo, and other U traffic is around 15%. This shows that the circuit load will be improved only around 15%. Even though the routing is changed as Russian Federation has proposed, the circuit load of Tokyo/Moscow in the peak hour will be still high level (60%) and it will still exceed the ICAO recommended limit (40%).

2.4 Therefore, JCAB does not think that the Russian proposal about the change of routing is effective as a remedy of the load of Tokyo / Moscow circuit.

2.5 As a result, it is clear that the remedy to improve the load of Tokyo/Moscow circuit is not the change of the routing, but the upgrade of Tokyo/Moscow circuit. Therefore, Japan has proposed to upgrade the circuit to Russian Federation again, based on the agreement at CNS/MET/SG/6 meeting in July 2002.

2.6 However, since there is a possibility of around 15% mitigation, JCAB may accept the routing change of transmitting UA, UM, and UU to Moscow from Tokyo and transmitting all U traffic except UA, UM, and UU to Khabarovsk from Tokyo, which is the Russian proposal, as a tentative mitigation measure pending the upgrade of the circuit. This routing change must be a provisional measure until upgrading the circuit.

2.7 The above-mentioned results of an investigation and the idea of JCAB were conveyed to Russia in March 2004.

3 ACTION BY THE MEETING

The meeting is invited to note the contents of this information paper.
