



International Civil Aviation Organization

COM CO-ORDINATION MEETING

People's Republic of China, Japan, Mongolia and Russian Federation

Shanghai, People's Republic of China. 18 – 20 October 2011



Agenda Item 2: Review the current implementation and operational status of AFS communications between States and discuss alternate routing arrangement for Fukuoka/Moscow circuit

REVIEW OF OPERATIONAL STATUS OF AFS COMMUNICATION BETWEEN BEIJING/ FUKUOKA, Khabarovsk AND DISCUSS ALTERNATE AFTN ROUTING ARRANGEMENT FOR FUKUOKA/MOSCOW CIRCUIT

(Presented by China)

SUMMARY

This paper discusses current arrangement for relevant circuits and proposes review the requirement for alternate routing for circuit between Fukuoka and Moscow via Beijing/Khabarovsk circuit.

1. INTRODUCTION

1.1 Based on a proposal from Japan to close the circuit between Fukuoka and Khabarovsk, Fukuoka - Beijing – Khabarovsk was expected to provide alternate routing in order to implement the r change. This paper discusses impact of such change and review the alternate routing requirement and related issues of the proposed technical solution.

1.2 Current Status of Beijing/ Fukuoka AFTN Circuit

Point to point Ground line is employed for the Beijing/Fukuoka Circuit
Telecommunication protocol used: X.25 synchronous protocol
Signal Speed: Upgraded from 2400bps to 64 Kbps in 2010
Alternate Routing: Beijing (ZBBB)/Guangzhou (ZGGG)/Hong Kong (VHHH)/Fukuoka (RJJJ)

1.3 Current Status of Beijing- Khabarovsk AFTN circuit

Link: VSAT TES satellite communication
Signal Speed: f 2400 bps.
Type of Synchronization: Asynchronous
Alternate Routing: via Beijing (ZBBB) / Fukuoka (RJJJ) – Moscow (UUUU)

2. DISCUSSIONS

Necessary Conditions for Alternate Routing Arrangement

- 2.1 Consideration should be given to upgrade signal speed for the VSAT TES circuit between China and Russia (Beijing and Khabarovsk)
- 2.2 To establish a new landline circuit between China and Russia (the link will be provided and supported by China Telecommunication as public telecommunication service provider at Chinese side)
- 2.3 To upgrade the link transmission control for the AFTN circuit between China - Russia from asynchronous to synchronous transmission.

Technical Proposal proposed to be considered

- 2.4 To upgrade the link speed of Khabarovsk/Beijing VSAT TES channel from 2400 bps to 64 Kbps.
- 2.5 To lease a new DDN landline data circuit between Khabarovsk and Beijing to improve the performance reliability.
- 2.6 To change the transmission control type from asynchronous to synchronous transmission using X.25 communication protocol for Beijing/Khabarovsk circuit.
- 2.7 Selective Virtual Circuit will be established for Khabarovsk/Beijing channel for AFTN messages transmission.
- 2.8 To discuss and agree arrangement for the alternate routing for both directions.
- 2.9 Also consider to add an alternate routing for Beijing-Khabarovsk AFTN circuit via Beijing-Fukuoka-Moscow circuit. When the landline AFTN circuit is implemented between Beijing and Khabarovsk, it can be serviced as alternate routing for the traffic between Moscow and Fukuoka and v.v. in this connection, an action plan is required to be developed by the meeting.

4. ACTION BY THE MEETING

- 4.1 The meeting is invited to discuss proposed as provided in the Section three and discuss a way forward and develop an action plan.
