



**TENTH WORKING GROUP MEETING OF
AERONAUTICAL TELECOMMUNICATION NETWORK
IMPLEMENTATION CO-ORDINATION GROUP
(ATNICG WG/10)**



Jaipur, India, 26 - 29 September 2011

Agenda Item 8: Any other business

**THE COMPOSITION OF BYPASS ROUTE FOR
INTERNATIONAL AERONAUTICAL COMMUNICATION NETWORK IN
THE REPUBLIC OF KOREA**

(Presented by Republic of Korea)

SUMMARY

This information paper provides the composition of bypass route for the ROK's ATN/AMHS operation in International Aeronautical Communication Network.

This paper relates to:

Strategic Objectives:

A – Safety

C – Environmental Protection and Sustainable Development of Air Transport

Global Plan Initiatives:

GPI 22 – Communication Infrastructure

1. Introduction

1.1 According to the ICAO ATN implementation plan, the ROK and China had completed the connection test and ATN/AMHS service was started on June 2011. Accordingly, related to the ATN/AMHS operation, the ROK needs to review the international aeronautical communication network for the composition of bypass route.

1.2 This information paper introduces to the composition of bypass route for the ROK's international aeronautical communication network.

2. The Composition of International Aeronautical Communication Network in the ROK

2.1 The composition of international aeronautical communication network among the ROK, China, and Japan is shown on Figure 1.

2.2 Before the ATN/AMHS service, AFTN service was operated using the satellite network between Gimpo and Beijing. If there was a network failure, according to the ICAO AFTN Routing, the network would be switched to the Gimpo-Fukuoka-Beijing (RK-RJ-ZB) route as an alternative network.

2.3 In addition, if there was a network failure between Gimpo and Fukuoka, the network would be switched to the Gimpo-Beijing-Fukuoka (RK-ZB-RJ) route as an alternative network.

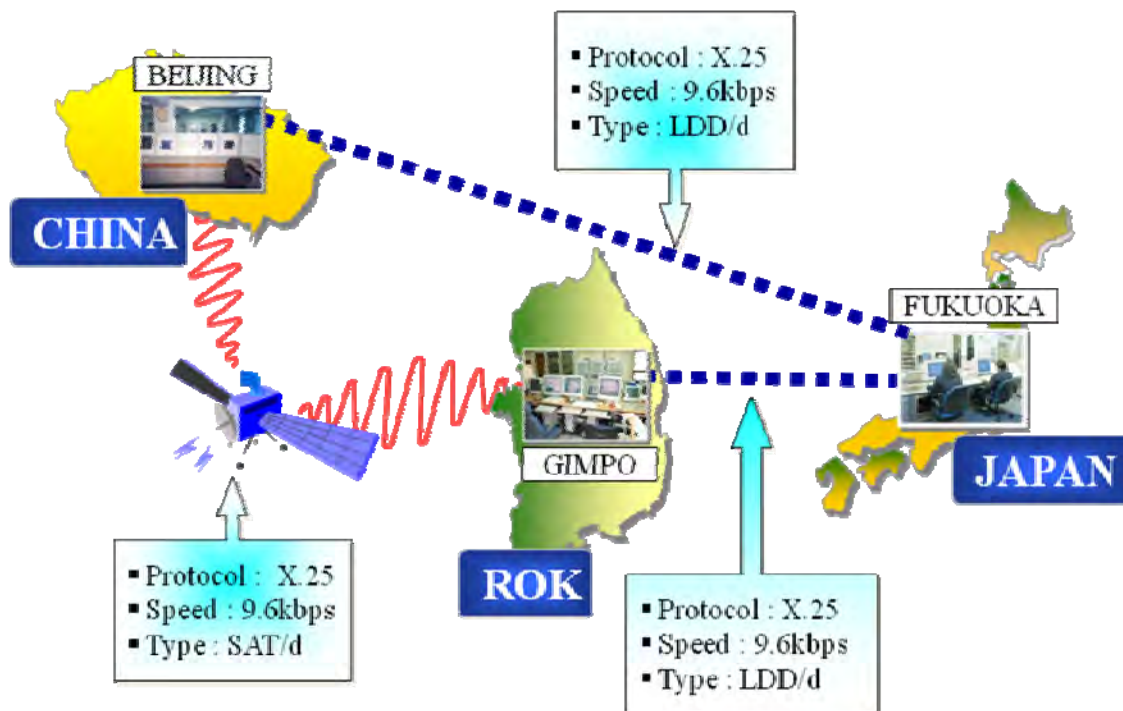


Figure 1 The Composition of International Aeronautical Communication Network in the ROK

2.4 According to commissioning of ATN/AMHS service between Gimpo and Beijing, the ROK needed to review the composition of the bypass route against a network failure.

3. The Composition of International Bypass Communication Route in the ROK

3.1 International bypass communication route among the ROK, China, and Japan is shown on Figure 2.

3.2 The ROK and China agreed to use the existing satellite network as a bypass route to prepare for an ATN/AMHS network failure between Gimpo and Beijing. In case of ATN/AMHS network failure between Gimpo and Beijing, the network will be switched to the Gimpo – Fukuoka – Beijing (RK-RJ-ZB) route as an AFTN network.

3.3 In addition, if there is a network failure between Gimpo and Fukuoka, the existing bypass network between Gimpo and Beijing will be used as an alternative network. In case of AFTN network failure between Gimpo and Fukuoka, the network will be switched to the Gimpo – Beijing – Fukuoka (RK-ZB-RJ) bypass route as an alternative network.

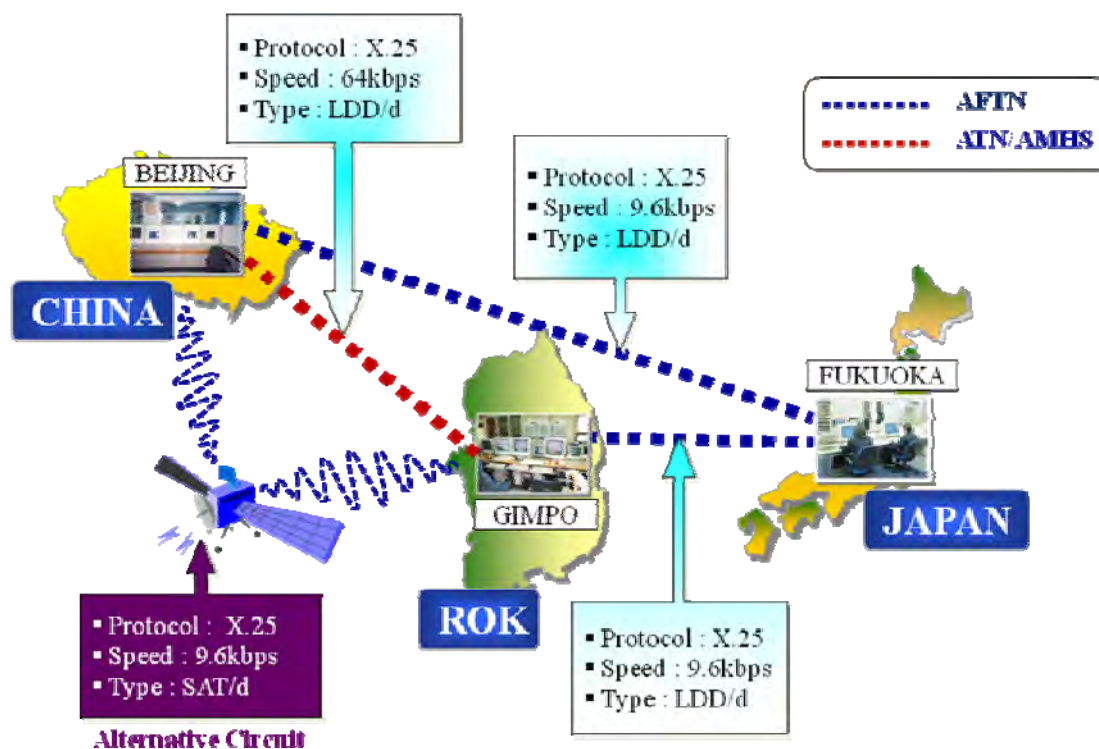


Figure 2 The Composition of International Bypass Route in the ROK

4. Conclusion

4.1 As a mentioned above, the bypass route among the ROK, China, and Japan will be operated temporarily. The composition of bypass communication route will be needed to review and coordinate after three countries complete to transfer from the AFTN to the ATN/AMHS.

5. Action Taken by the Meeting

5.1 This meeting is invited to share and discuss the information contained in this paper.
