International Civil Aviation Organization

FOURTEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND METEOROLOGY SUB-GROUP OF APANPIRG (CNS/MET SG/14)

Jakarta, Indonesia, 19 – 22 July 2010

Agenda Item 3: **Aeronautical Fixed Service**

2) discuss other AFS related issues

FAA PLANNED PACKET SWITCHING NETWORK (X.25) DECOMISSION

(Presented by the United States of America)

SUMMARY

The Federal Aviation Administration is advising States of its plans to decommission the domestic X.25 NADIN-II data network, and requests cooperation during this process.

1. Introduction

1.1 In an effort to improve the sustainability of its data communications, the Federal Aviation Administration (FAA) has made the decision to decommission its internal National Airspace Data Interchange Network (NADIN) X.25 Packet Switched Network (PSN) and is actively transitioning domestic users to a private Internet Protocol (IP) network.

1.2 The FAA will continue to support X.25 links for international Aeronautical Fixed Telecommunications Network (AFTN) and Air Traffic Service Message Handling System (AMHS) message traffic, but access will be concentrated at the KATL (Atlanta, GA) and KSLC (Salt Lake City, UT) centers. Existing international connections will be re-routed and new connections for both X.25 and IP message transports are requested to be directed to these centers.

2. Discussion

2.1 Although the NADIN PSN has been a highly reliable communications network for many critical FAA applications since its commissioning in 1995, the technology is quickly becoming obsolete and the implemented network hardware and software has reached the end of its service life. Additionally, many user systems are facing X.25 maintenance issues as hardware and software become increasingly unavailable.

2.2 The FAA has deployed an operational IP network as part of its telecommunications infrastructure in line with the trend toward IP technology. Domestic users, where possible, are transitioning to this network for their operational connectivity.

2.3 KATL and KSLC serve as the primary U.S. AFTN message switching centers and are being enhanced to offer AMHS services for both Open System Interface (OSI) and Internet Protocol Suite (IPS) transports. These are also the primary locations for the FAA's National Enterprise Management Center (NEMC) which provides 24 hours a day, seven days a week, monitoring and control of critical network and application functions.

2.4 As the NADIN PSN network is reduced, international X.25 links will be rerouted to nodes at these centers which will eventually be replaced with X.25 to IP conversion functionality. Centralization of this functionality at the NEMC locations provides concentrated expertise and streamlined troubleshooting.

2.5 In line with these plans, States are requested to route new AFTN and AMHS connections to KATL or KSLC, and are asked to assist during the rerouting of existing connections to these locations.

3. Recommendations

3.1 Cooperation of adjacent States is requested as the FAA reroutes connections to KSLC and KATL, and that the information contained in this paper is communicated to operations centers.

3.2 States are advised that new connections should be routed to the KATL or KSLC centers for both AFTN and AMHS message traffic.

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Attachment/Presentation: NADIN-II Decommissioning Project Summary