International Civil Aviation Organization
CAR/SAM REGIONAL PLANNING IMPLEMENTATION GROUP (GREPECAS)
First Meeting of the Communications, Navigation and Surveillance / Air Traffic Management Subgroup (CNS/ATM/SG/1)
(Lima, Peru, 15-19 March 2010)

Agenda Item 4 : **Review of the of the pending matters of ATM/CNS/SG, ATM and CNS Committees with their Task Forces aimed at considering this matters in the working programme of the CNS/ATM Subgroup**

PLANS FOR FEDERAL AVIATION ADMINISTRATION PACKET SWITCHED NETWORK (X.25) DECOMMISSIONING

(Presented by the United States)

SUMMARY

This working paper advises States of Federal Aviation Administration plans to decommission its domestic NADIN PSN (X.25) data network, and asks for cooperation during this process.

ICAO strategic objectives:	*A - Safety* *D - Efficiency*

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 AFTN and 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 outmoded 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 becomes 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. Aeronautical Fixed Telecommunication Network (AFTN) message switching centers and are being enhanced to offer Aeronautical Message Handling System (AMHS) services for both Open System Interconnection (OSI) and Internet Protocol Suite (IPS) transports. They are also the primary locations for the FAA's National Enterprise Management Center (NEMC), which provides 24x7 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 the X.25 functionality at the NEMC locations provides concentrated expertise and streamlined troubleshooting.

2.5 For efficient rerouting of MEVA II satellite data connections, the FAA plans to commission a new MEVA II ground station at Atlanta, GA to be colocated with the KATL center. MEVA II AFTN connections currently landed at Miami will be reconfigured to land at the new Atlanta ground station. Affected States requires no changes. AFTN and X.25 link configuration parameters will remain the same. Existing MEVA satellite voice connection routing will be unaffected.

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

3. Actions

3.1 The meeting is invited to:

a) Take note of the information presented in this Working paper;

b) Agree that a new connection for both AFTN and AMHS message traffic should be routed to the Atlanta, GA (KTAL) Center and Salt Lake City, UT (KSLA) Center accordingly; and

c) Communicate the information presented to the respective Operation Centers.

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