*International Civil Aviation Organization*

**Seventh Meeting of CNS/MET Sub-Group of APANPIRG and Tenth Meeting of CNS/ATM IC Sub-Group of APANPIRG**

Bangkok, Thailand, 15 – 21 July 2003

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**Agenda Item 6:** **Surveillance**
**1) review report of ADS-B study and Implementation Task Force**

**Agenda Item 13:** **Review developments, research, trial and demonstration relating to CNS/ATM**

# UPDATE OF ADS-B ACTIVITIES IN MONGOLIA

(Presented by Mongolia)

**SUMMARY**

This Information Paper is an update on the on-going ADS-B activities in Mongolia.

## 1 Background

The main goal of the project regarding ADS-B in Mongolia is to assist in the implementation of ADS-B services in Mongolian airspace for both domestic and international traffic services.

Since Mongolia is a strategic country in terms of international flights between Asia, US and Europe and a foreseen increase of traffic using the existing air routes in combination with limited radar coverage there will be a need for increased surveillance capability. Also the domestic traffic throughout the domestic network of airports has a need for surveillance coverage to ease up constrains between them and international traffic. In addition there is a need to enhance the national SAR (search and rescue) capability.

FANS/ADS-C was introduced a couple of years ago with a good coverage in the international air routes.

A trials infrastructure comprising of two CNS ground stations and 5 airborne units is due to be installed in August to help in the validation process and to provide input to the implementation planning.

## 2 Steps taken

A demonstration in Mongolia 2001, using an ADS-B/ VDL Mode 4 ground station and 2 equipped aircraft, showed clearly the capability of the system to the international audience.

In November 2002 a major simulation was carried out at the Swedish ATS Academy (SATSA) where different scenarios (6) was tested with Mongolian air traffic controllers participating as in real life.

The different scenarios used today's level of technology as well as different combinations using radar, ADS-C and ADS-B. This was the first time such simulation has been done for all airspace in one country at the same time.

## 3 Next steps

To help in the validation process and to provide input to the implementation planning, Mongolia have invested in two CNS/VDL 4 Ground Stations and 5 Airborne units with CDTI´s (cockpit diplays). The equipment will be installed on board domestic flying MIAT AN 24´s and the ground stations will be placed in UB and Muren. Both ground stations will be connected to the UB ATC center.

The outcome of this first stage of implementing ADS-B will, in coordination with neighbouring states, form the outline for a future implementation of ADS-B for a nation wide coverage.

## 4 Action by the Meeting

The meeting is invited to note the information provided in this paper.