



Agenda Item 3: ATS surveillance capability and data sharing

STATUS OF ATS SURVEILLANCE ACTIVITIES IN MONGOLIA

(Presented by Mongolia)

SUMMARY

This paper presents a brief summary of recent Civil Aviation Authority of Mongolia (CAAM) activities in the planning and implementation of surveillance and automatic dependent system in Mongolia.

This paper relates to –

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

C: *Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:

GPI-12 Functional integration of ground systems with airborne systems

GPI-16 Decision support systems and alerting systems

GPI-22 Communication infrastructure

1. INTRODUCTION

1.1 This information paper provides a summary of ATC surveillance system implementation and planning in Mongolia.

1.2 Objective of ATC Surveillance system implementation plan to enhance flight safety and airspace efficiency through modernization of the Mongolian ATM System, its facilities and interacting systems by establishment and development of the Mongolian Air Navigation System based on state-of-the-art equipment and technologies in accordance with ICAO SARPs.

1.3 Today many numbers of surveillance technologies suitable for the delivery of ATC services to separate aircraft currently. Mongolia has chosen SSR Mode S and ADS-B extended squitter technologies for ATC service.

1.4 Planned ADS-B system provides situational awareness and streamlines ATC operations, and in the future it will provide radar-like aircraft separation services.

2. DISCUSSION

Secondary Surveillance Radar Implementation and Planning

2.1 Three SSRs are implemented and operated for ATC separation services for en-route since 23 Aug 2012.

2.2 By 2013, CAAM plans to implement and operate two more SSRs for expanding radar surveillance coverage airspace. These two SSRs are under construction and integration with existing ATM automation system. By end of 2013, Mongolia will be having five operational SSRs for en route ATC separation services (**Figure 1**).

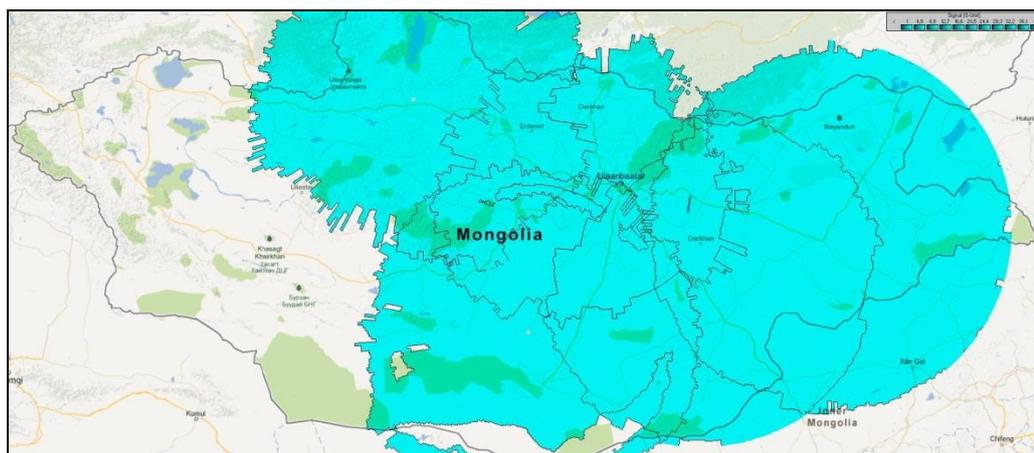


Figure 1: SSR coverage over Mongolian territory

ADS-B Implementation Plan

2.3 ADS-B Mode-S extended squitter technology is one of cost effective and essential technology in enhancing aviation safety and achieving efficiency objectives.

2.4 Mongolia has installed 5 ADS-B ground stations in first quarter of 2013. Service area of these ADS-B ground station is covering area as same as existing SSR coverage.

2.5 Six ADS-B ground stations are planned to install in second half of 2013. Five ADS-B stations will be installed at existing VHF radio communication facilities (**Figure 2**).

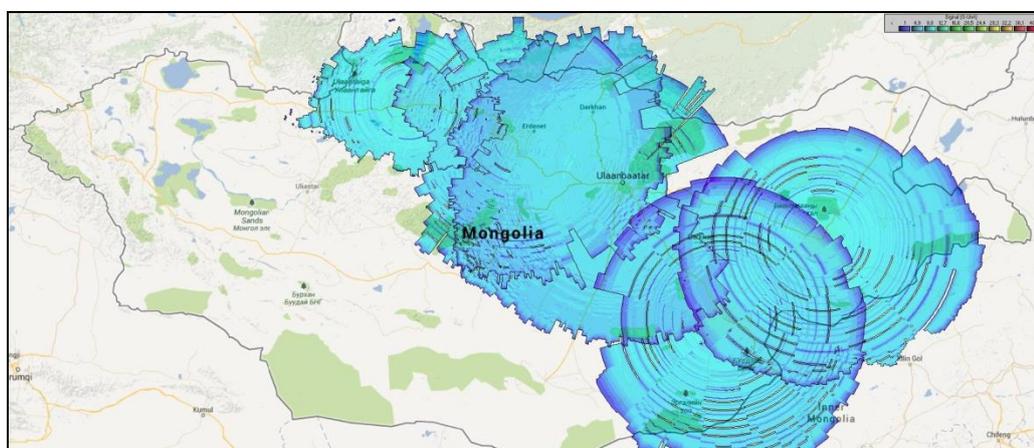


Figure 2: ADS-B coverage over Mongolia

En-route ATS Surveillance Implementation Strategy

	2012	2013 1st half	2013 2nd half	2014	Operational
SSR	3	2			3 of 5
ADS-B		5	6	5	0 of 16

Table 1: ATS Surveillance Implementation Strategy

2.6 **Table 1** shows the overall CAAM ATC surveillance implementation plan for en-route flights.

3. ACTION BY THE MEETING

3.1 The meeting is invited to: note the information contained in this paper.

— END —