



Agenda Item 2: Implementation of the World Area Forecast System (WAFS)

b) Review of the status of implementation of the ISCS

**PLANNED CHANGES FOR THE INTERNATIONAL SATELLITE
COMMUNICATION SYSTEM**

(Presented by United States of America)

Summary

This paper presents an overview as well as current ISCS operations, while discussing the future changes and upgrades needed by 2009.

1. Introduction

1.1 The United States National Weather Service (NWS) International Satellite Communication System (ISCS) provides timely delivery of aviation-related weather information to over 80 States in support of International Civil Aviation Organization requirements for the World Area Forecast System (WAFS). The NWS in collaboration with the Federal Aviation Administration (FAA), the International Civil Aviation Organization (ICAO), and World Meteorological Organization (WMO) plans to expand and improve the telecommunications service for its area of responsibility. This paper provides an over view of what is being planned for ISCS.

2. Discussion

2.1 ISCS is a satellite data distribution system operated by the NWS, providing support to the World Area Forecast System (WAFS) the Regional IV Meteorological Telecommunications Network (RMTN). A poster depiction of the ISCS operational area can be viewed at <http://www.weather.gov/iscs/Poster02v10.pdf>.

2.2 ISCS support for WAFS is on behalf of the International Civil Aviation Organization (ICAO) and World Meteorological Organization (WMO). ISCS/WAFS provides OPMET data and other meteorological products required for flight planning and efficient air navigation. As a real-time, point to

multi-point service, it operates on a 24-hour/365-day basis. NWS obtains funding support for ISCS/WAFS from the FAA.

2.3 ISCS also supports NWS obligations to the WMO for Region IV Meteorological Telecommunications Network (RMTN) and is part of a cooperative for the Global Telecommunications System (GTS), in WMO Region IV (North and Central America). RMTN allows for a two-way exchange of meteorological information between the United States and nations in the Caribbean and Central America. It replaced a much slower "daisy chain" of terrestrial circuits. Funding support for ISCS/RMTN is from the NWS.

2.4 ISCS broadcasts utilize three commercial geostationary satellites. The broadcasts provide data to over 80 countries (Atlantic Ocean area countries, Pacific Ocean area countries, WMO RMTN affiliated countries). The ISCS satellite uplinks are located in Andover, Maine, and Yacolt, Washington.

2.5 The NWS existing Contract with Verizon (MCI) expires 31 December 2009. The NWS is in the process of transitioning to ISCS-Generation 3 (G3) with a new service contract. There are no plans to provide a dual broadcast service of G2 and G3 once the NWS implements G3. This will be a turn key action and all users of WAFS workstations under the ISCS footprint will be required by 31 December 2009 to receive information using G3.

2.6 The NWS is planning to award a contract for ISCS-G3 by early 2009. The ISCS-G3 will provide improved performance compared to that of the current system. After award of the contract for the ISCS-G3, a detailed transition schedule will be posted on the ISCS web page (<http://www.weather.gov/iscs>). In addition, advisory bulletins will also be posted on this web page to keep ISCS users advised on the progress of the transition. Also, the U.S. will provide States updates to the transition at appropriate ICAO Regional Sub-group planning meetings.

2.7 The NWS is also working with WAFS workstation providers to determine what changes are required to upgrade existing platforms to be compatible with the G3 protocol.

2.8 The group should note that in accordance with the NWS protocol, an implementation notice is issued at least 120 days in advance of making changes to products or data that are provided via the National Weather Service Telecommunication Gateway (NWSTG). The NWSTG is the source of data for the ISCS satellite broadcast. A review is underway to determine if 120 day notification is sufficient or whether a longer lead time is needed for States.

3. **Recommendation**

3.1 With the understanding that the WAFS Provider State is planning to move forward with improvements with the ISCS broadcast the following draft conclusion is proposed to keep States advised of the progress:

DRAFT

CONCLUSION 9/XX

WAFS PROVIDER STATE KEEPS STATES ADVISED OF PROGRESS IN UPDATING THE ISCS BROADCAST

That, the WAFS provider State be invited to provide timely reports to States on planned changes to upgrade the ISCS broadcast to G3, taking into consideration the following:

- a) provision of resources by States that need to be acquired to switch over to G3;
- b) provision of specifications by the WAFC Provider State to what is required

Note: That the WAFC Provider State will use the points of contact listed in the AERMETSG/8 Report as their basis for keeping States informed and that the Secretariat may wish to update the list to ensure the WAFC Provider State has the most current points of contact.

4. **Action**

4.1 The subgroup is invited to note the information in this paper and endorse the recommended course of action.

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