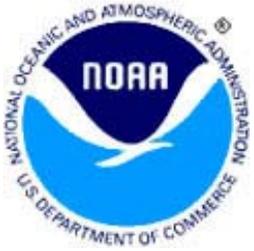




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# **INTERNATIONAL SATELLITE COMMUNICATIONS SYSTEM GENERATION 2 – EXTENDED (ISCS-G2e)**

**IMPLEMENTATION STRATEGY  
for  
World Meteorological Organization  
REGIONAL ASSOCIATION IV  
Regional Meteorological Telecommunications Network**



# Background: Need for Change



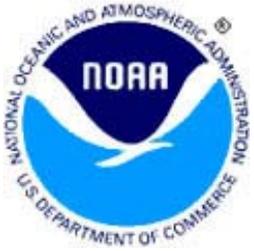
- NOAA's existing ISCS Contract ends on December 31, 2009. Telecommunication services are required to meet on-going operational needs of the WMO Regional Meteorological Telecommunications Network (RMTN)- primarily for RA-IV .
- Existing ISCS RMTN equipment will no longer be supported by Verizon. The satellite modem must be replaced at each site in the RMTN.
- The cost of a future ISCS Generation 3 with 2-way satellite communications is prohibitive for RMTN Member States and NOAA/FAA.



# Strategy



- NOAA National Weather Service (NWS) will extend the current contract through March 31, 2010, and transition services to a sustainable satellite/terrestrial communications architecture.
- The new satellite/terrestrial communications service is referred to as the ISCS Generation 2 Extended, or ISCS-G2e.
- ISCS-G2e will operate from April 2010-June 2012. The Federal Aviation Administration (FAA) will manage the Contract for the satellite broadcast portion of the ISCS-G2e.
- December 2009-March 2010 will be the transition period from ISCS-G2 to the ISCS-G2e when both ISCS-G2 and ISCS-G2e satellite broadcast will be operational and providing data to Member States.
- Performance, requirements, and funding will be reevaluated to determine the System Requirements beyond June 2012.



# What Will Change



- Multiple Protocol Label Switching (MPLS) 64 Kbps digital terrestrial circuit installed for the transmission of RMTN Member State data back to the NOAA National Weather Service Telecommunications Gateway (NWSTG) File Transfer Protocol (FTP) server for distribution on the Global Telecommunications System (GTS).
- Workstations will need to be configured to transmit products using FTP over the MPLS digital terrestrial circuits. Workstation manufacturers may be contacted for assistance to configure workstations.



# What Will Change (continued)



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- ISCS satellite equipment will be updated to state-of-the-art equipment.
    - Replace PES 8000 2-way satellite modem with 1-way Comtech modem and install new IFL cable.
    - Replace other non-serviceable ground satellite equipment as necessary.
  - In the event new MPLS digital terrestrial circuits fail, local site Internet systems may be used to Email data products to NWS Telecommunications Gateway.
  - Member States will no longer pay monthly space segment costs to Verizon.



# What Will Not Change



- The interface between ISCS-G2e satellite receive-only modem and ISCS workstation will not change.
- The PD-Receive software for the workstation will continue to function with the new ISCS-G2e.
- ISCS broadcast data stream to Member States will not change.



# Key Dates



- **October – November 2009:** MPLS digital terrestrial circuits will be installed at each RMTN user site. Each site must be ready for the installation and sign NOAANet User Connection Agreement prior to activation of the MPLS circuit
- **January – March 2010:** Each RMTN site will be coordinated with and will be scheduled for a Technology Refresh installation. Each site must be ready for the installation when it is scheduled or pay costs for the technical team to return to install.
- **March 31, 2010:** All sites transitioned to new ISCS-G2e equipment and the ISCS 2-way Broadcast terminated.
- **April 2010 – June 2012:** ISCS-G2e Fully Operational

*Dates listed above are estimates only. Actual dates will be provided following coordination with Member States.*



# Maintenance of ISCS Sites



- VSAT maintenance will be the responsibility of each RMTN Site. Sites are encouraged to identify local resources to provide maintenance support, including equipment replacement if it becomes necessary.
- The Verizon Help Desk will remain available for limited technical assistance. Should on-site Verizon maintenance support be required, Member States may contact Verizon directly to arrange for the necessary services under the prevailing Verizon rates.



# ISCS-G2e Member State's Responsibilities



- Identify a site single point of contact (POC) and alternate POC for each site:
  - Provide Names, Full site address, Email addresses, telephone numbers, FAX numbers
- Make accommodations to receive, secure, store and account for ISCS-G2e equipment delivered to their site in advance of the installation date
- Secure a maintenance Contract with Verizon, or an in-country third party for satellite equipment and MPLS equipment.
- Resolve all invoice payment discrepancies under the existing ISCS-G2 contract. Any site with past due payments will not transition to ISCS-G2e.
- Sign the NOAANet User Connection Agreement.



# Site POC Responsibilities



- The POC is responsible and accountable for planning and coordinating all transition activities at their site including:
  - Working with Verizon and NOAA to coordinate installation dates.
  - Ensuring installer has access to the site on the scheduled site installation/transition date. A site not ready will be rescheduled after all other sites are completed, and site will pay costs for return visit.
  - Receiving and securely storing the MPLS digital circuit and ISCS-G2e satellite equipment.
  - Witnessing/participating in the site MPLS digital terrestrial circuit and satellite equipment acceptance testing.



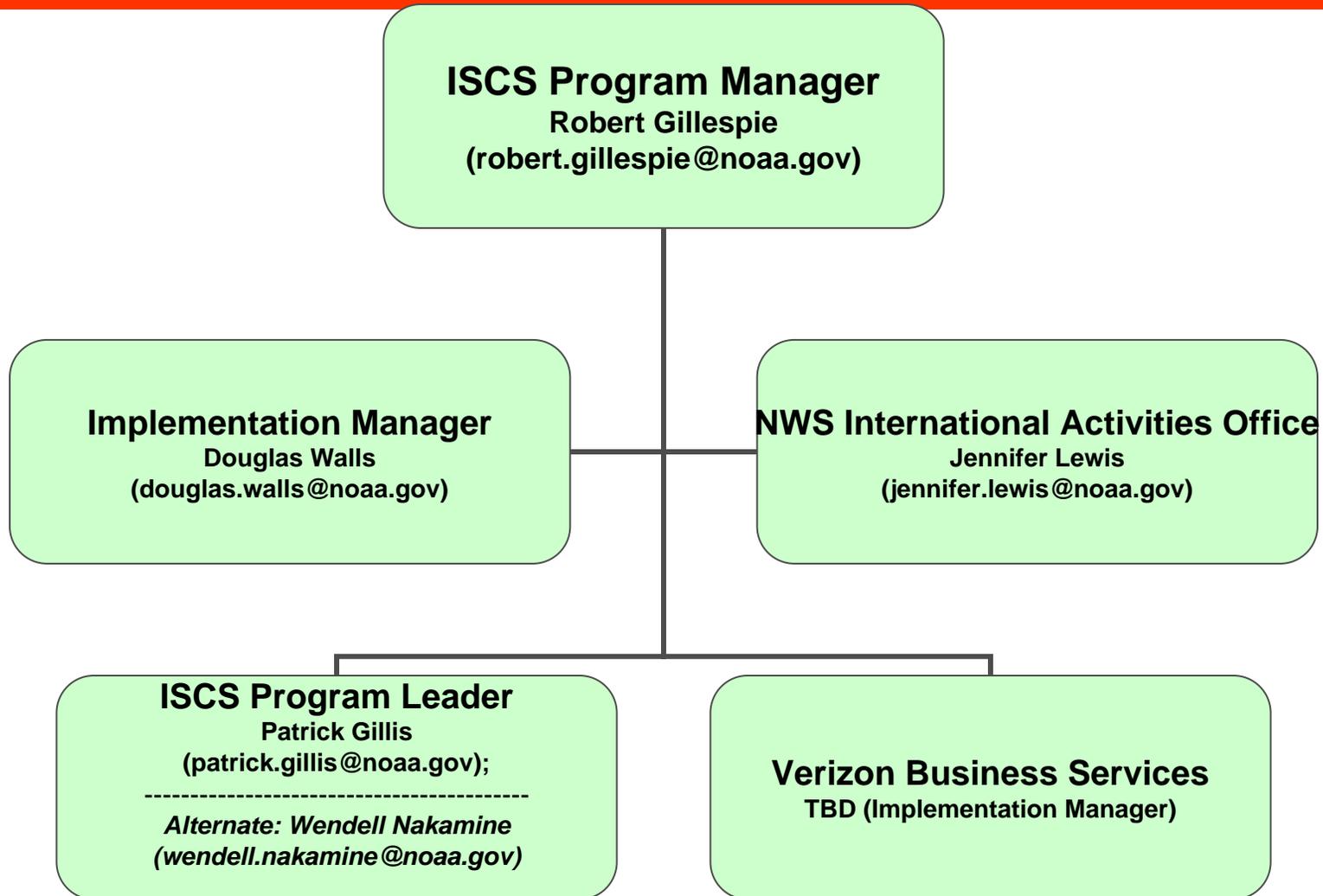
# Benefits of New ISCS-G2e



- ISCS/RMTN space segment cost sharing among all Member States (with exception of special applications/projects) will no longer be needed.
- The only fees associated with this service will be maintenance, as needed, to be paid by the Member States.
- The dedicated 64 kbps MPLS Circuit bandwidth to each site provides a 30x increase in the overall bandwidth available to the RA-IV community and has the capability to provide significant performance improvements, as well as future capabilities growth.



# ISCS-G2 Contacts





# Have Questions about the ISCS-G2e Transition?

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Please Join Us for ISCS-G2e Transition  
Question and Answer Conference Call  
October 22, 2009

2pm- 3pm eastern daylight time

Participant passcode: 4103452

For call in number refer to enclosure



# On-line User Manual Available



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## ISCS RA-IV NOAAnet Interface Control Document (ICD)

Purpose: This document describes the NOAAnet user interface and the associated responsibilities for the operation and maintenance of the interface. The term NOAAnet describes the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS) intranet services employed to support data transport and communication services.

The under construction page for ISCS G2e transition information is now available the link is:

<http://www.nws.noaa.gov/iscs/iscsG2e.htm>