

Prepared by USA  
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To be discussed in WG I

**STATUS OF THE  
DATA COLLECTION SYSTEM (DCS) AUTOMATED PROCESSING SYSTEM II  
IMPLEMENTATION**

This document provides an overview of the new DCS automated processing system the USA is installing to support the increasing demands of the IDCS and DCS community.

## **STATUS OF THE DATA COLLECTION SYSTEM (DCS) AUTOMATED PROCESSING SYSTEM II IMPLEMENTATION**

### **1. Introduction**

Considering the growth of the DCS community and the importance of remote environmental observations, the USA evaluated the resources necessary to support this growing community as we enter the 21st century. The current GOES Data Collection System's (DCS) computers and interfaces are approaching the end of their service lives. The DCS Automated Processing System (DAPS II) procurement project will replace the current aging DAPS, with modern user friendly hardware and software to maximize effectiveness acquiring and disseminating environmental observations and minimize system failures and administrative backups. The DAPS II will enable the USA to meet its obligations to the domestic and international DCS communities and maintain a high quality satellite data collection service

### **2. DCS Automated Processing system II**

NOAA's current Data Collection System (DCS) Automated Processing System (DAPS), the ingest and data dissemination system of the Data Collection System, has been operating since 1989. In 1999, NOAA determined that the problematic hardware, difficult to maintain software, and a user interface that is far from friendly made it necessary to replace the aging system. A development effort was initiated to provide a secure, reliable, easy to use design using Custom-Off-The-Shelf (COTS) tools and open architecture equipment.

DAPS II will be a distributed system, with the real-time ingest system feeding data into a database server running an Oracle database management system (dbms). The dbms will then manage all messages, all platform information, and all user information. The architecture consists of a network of workstations, with redundant backups, behind a firewall, with a web-based user interface and public web site, and data distribution servers outside the firewall. User tools will include data query and download tools, platform management, online application and processing of System Use Agreements, user request tracking and user report generation.

The development effort was modified last year to include the development of a digital signal processing demodulator for data ingest, which will be controllable by the DAPS II. Another impact has been the rapid technological advances of the last year. Almost every segment of the system has been affected by upgrades in hardware and in software. After making an effort to keep up with the technology changes to avoid obsolescence, the system was finally frozen this year, with any future advances being delayed until after delivery. These, and other impacts, have caused schedule delays, resulting in delivery approximately six months later than planned.

### **3. Conclusion**

The current schedule calls for in-plant testing to begin in mid-November 2002, with approximately six months of in-plant, on-site, and parallel testing to take place before final phase-over. If this schedule holds, final phase-over should occur during the last half of 2003.