

STIWG Meeting Minutes
December 18-19, 2001
Wallops

Prior to the opening of the official meeting, John Thompson from Signal Engineering gave a presentation on the high data rate and what he believes to be a potential for loss of data (signal degradation) when the system is fully loaded. As baud rate is increased to approximately 2400, the forward error correction and power will decrease resulting in errors received over GOES.

The meeting was opened by STIWG Chair, USDI-BLM Representative Phil Sielaff.

The following STIWG representatives were absent: Bureau of Reclamation and National Weather Service.

Although the minutes of the last meeting were completed and mailed, a copy was not available and members felt they had not seen the email. As soon as USDI/BLM computer systems are brought back online, they will be redistributed for approval.

Vendor Certifications – We currently have three companies with certified 300/1200 baud transmitters with an additional vendor having submitted their request for certification. Phil Whaley stated that he knew of a couple of other companies that have expressed interest in certification.

Certified Manufacturer

Seimac

Signal Engineering

Sutron

Known Resellers

Forest Technology Systems

Campbell Scientific, Inc.

Design Analysis

Vaisala

None known

High Data Rate Plan - There is a need for a document that describes NOAA/NESDIS high data rate operating plan. A document needs to be available that defines how NESDIS intends to provide assets to the user community and how they plan to administer the resource. Members expressed a need for a document that they can take back to their agency management that says that the required resources will be available to support program needs. This is necessary before a significant capital investment can be made toward moving to high data rate.

Kay indicated that she does have a short term plan that displays where she intends to put each user. Everything is waiting on the delivery of the demodulators. Delivery is expected soon. Kay distributed a channel allocation table she has come up with.

Members are asking for something more, a document that addresses:

- Dedicated channels – will we have them or not?
 - o Not right now as we only have so many demodulators available.
- Who can be a user? A user can be a Government Agency – ANY Govt. agency. Applications for membership can be found at <http://noaasis.noaa.gov/DCS> under “How to Become a User”

The Chair assigned a task group to work with NOAA/NESDIS to develop this plan, define problems, develop solutions to moving to HDR. He also asked that the group address the shortage of HDR demodulators. Task group members are: Kay Metcalf, Peter Lessing, Kolleen Shelley, David Wingerd, Earnest Dreyer and Al McMath. Users are encouraged to provide a channel utilization report for the GOES channels their organization administers or utilizes.

New ID Assignments – Phil expressed concern that there are some folks having problems getting new assignments because we are waiting for demodulators to be delivered, and because some of the existing demodulators are being used by vendors for certification. Wallops personnel indicated that all of the demodulators are now back at the station. Kay indicated that she believes all outstanding assignment requests have been filled. She also noted that requests should be sent to goes.dcs@noaa.gov for the fastest turnaround.

High Data Rate Demodulator Requirements – All of the options on the contract with Vitel have been purchased. Eventually, there will be 30 NESDIS owned demodulators. We are currently waiting for delivery of 9 demodulators from Vitel. But the users are reminded that just because we have the equipment doesn't necessarily mean that it will be ready for use immediately. We also need to have free channels converted from 100 to 300 or 1200 baud. Kay shared her list of current channel distribution.

Data Distribution Policy –

Kay Metcalf NESDIS – policy is completely open right now. Anyone with a DRGS can receive data. Kay briefed the group on this further. Phil Sielaff asked the newly appointed task force to address the data distribution policy as part of the High Data Rate transition plan they produce.

Doc Carver reported for OFCM – He has been attending discussions on free and open data. Other countries generally charge a few for the service. But for now, in the US, data is free. Currently, the US policy is still that the data is free and open when paid for at the Federal level. There are hopes that this will apply to the states in the future. Bonnie Wyatt reminded the group that the responsibility for quality control (QC) lies with the agency where the data is captured.

DSP Demodulator Testing – Warren was unable to address this in detail due to constraints of the contract. However, it was noted that Vitel isn't the only vendor having trouble building the demodulators. No 1200 baud testing has occurred at Wallops except by Vitel. There may be delivery in January or February of 2002, but there are still problems with 1200 baud, in that signal is being lost.

Al McMath – 2 vendors tested or demonstrated DSP demods at Wallops last week. The 100 baud is working good, 300 baud is working marginally ok.

DOMSAT II Contract – The contract is in place and we expect GE to come to Wallops in January to update the terminal uplink equipment. We went from 99.5% reliability to 99.9% reliability with this new equipment. This will also involve a switch of the DQM antenna. This will be followed by a 30-day evaluation/testing period. If everything tests okay, then we will make the switch to the new service including a new satellite. NESDIS will let everyone know when to make the switch. There will be a 30-day dual data stream, and the receive terminals we have now will be compatible with the new system. The new satellite has a larger footprint. In the contract specs, we asked for everything we currently have. It appears that we received what we asked for and more. The new satellite is AMC-4 and will be located at 101w. The current DOMSAT is at 105w. Phil requested costing information so that the group can be sure to plan funding needs accordingly.

DAPS II Contract – The schedule is on track as of today. There will be more integration of management functions online. The entire PDT will be required before an ID is generated. Then the PDT will go to Kay for approval. There will be replies by email, including a daily system error report. Users will have more tools, including a GUI interface, better query capabilities, reporting, mapping, and global updates. There will be 5 Mb disk space allowed for owner generated script files.

DAPS II should be delivered in July but the demodulators may push this back as they are not a part of the contract. There will be a 6-month phase over period between current DAPS and the new system. Once we have the system in place and fully operational, we may be able to offer 5-second windows within a year.

PLEASE NOTE: When the current database is migrated to the new DAPS II database, the existing ERRORS will be transferred over as well. Kay made a plea to users to PLEASE CLEAN UP YOUR PDT's. She reminded us that if things are not current in a PDT, the new system will not allow you to have certain functions. For instance, if the latitude/longitude plots the station in New Mexico and the state field says Arizona, there will be a "do not disseminate data" flag activated.

POST SEPTEMBER 11 ACTIVITIES – There was a question/discussion period where agencies were asked how their operations changed (if at all) following the 9/11 attacks. Phil asked that if anyone does come up with support issues, to please advise the chair.

- USGS – Said they have had more inquiries about the types of things they monitor and the locations of those resources rather than the data.
- Doc Carver stated that questions might be asked how agencies would support the Homeland Security efforts.
 - o Real time data may be needed by FEMA to assist in their response to an event, and perhaps predict the area of affect.
 - o Historical data may be of use to assess events that trigger other consequences.
- CORPS – Homeland Security requested that data, mostly intelligence regarding gates, water flow, etc., be pulled off of the web.
- BLM – Crews parked a vehicle in a place near a dam where they normally park. When they returned to their vehicle, security personnel were there to meet them.

GOES CAPACITY FOR OUT YEARS – Kay mentioned that a query tool will be available on the new system to facilitate locating available time slots on each channel.

WALLOPS CDA BACKUP PLAN – A discussion was held regarding a backup plan for the system. We've seen hurricanes threaten the station, and now with the 9/11 attacks we are clearly aware of the potential for new threats. Is there another place on the east coast that could serve should Wallops become inoperable? It was mentioned that NESDIS no longer stows the antenna during hurricanes. However, NOAA is looking at DCS and other direct readout ground systems for backup purposes. There probably won't be anything in place until after DAPS II is operational. Users were reminded that we must still have a pilot signal or nothing will be operational.

TERMS OF REFERENCE – Bonnie Wyatt, Dave Wingerd, Doc Carver and Sam Williamson are going to review this. We need to look at how the STIWG fits into the OFCM reorganization. Bonnie stated that she would have something to the group by mid-January. Phil promised to send a copy of the document to everyone electronically.

STIWG OFFICERS – The Chair is scheduled to rotate to the USFS, with NOS as secretary. Bonnie Wyatt stated that the USFS will serve as chair as scheduled. She is the USFS representative, with Thomas McClelland as the alternate. She will send out a copy of the existing rotation schedule. It is unclear who the current NOS representative is. Outgoing Chair, Phil Sielaff will send a report on STIWG activities through 2001 (including ongoing projects) to OFCM with input from the group.

TREASURER'S REPORT – Doc Carver provided a written treasurer's report and stated that the DOMSAT II contract and 1st two-month extension of the old DOMSAT contract have been paid for which leaves \$83,000 available in the account. It was noted that NOAA gave \$50k toward the DOMSAT II contract. Phil requested that Doc keep the chair informed as money is collected and spent. Doc says he receives reports about every two months and will provide updates.

Ernst Dryer – Offered up a batch program which facilitates uploads of channel assignment information to NESDIS (Kay Metcalf).

FUTURE STIWG MEETINGS – There was a discussion about the various locations of the STIWG meetings and concern expressed for the travel expense and perception of the various places meetings are being held. Several members expressed concern that we must look at travel budgets, attendance, and travel time. Wallops personnel have been informed that they cannot attend meetings away from the station that requires airline travel more than once a year. Kay expressed that the St. Petersburg folks want to host a meeting and proposed that we schedule the May meeting there. (The original St. Petersburg meeting was cancelled due to the 9/11 attacks). Other attendees suggested that we return to the pattern of Wallops/DC Area and one meeting in the West each year. The next meeting will be **February 20th & 21st in Tucson, AZ**. USGS (Ernest Dreyer) will set up meeting facilities and Kay will notify the group of dates and details. The October 2002 meeting will be held at Wallops. The location of the May/June 2002 meeting will be discussed and finalized at the Tucson meeting.

STIWG FUNDING – FY 02/03 – The group was asked what their respective agencies can contribute to future projects? Some members find it easier to contribute small amounts annually than try to find larger dollar amounts all at once. Right now there are no other new projects identified. When projects are identified:

- We need to address how we, each agency, will be assessed for the necessary project funding. This information needs to be shared with OFCM. We need to be sure to identify any shortfalls and share this information with Samuel P. Williamson.
- STIWG usually funds enhancements that are not NOAA requirements, the user driven requests.

The STIWG would like to formally recognize and thank NOAA for their participation and funding. NOAA purchased the remaining high data rate demodulators in support of the project.

CDMA – There have been ongoing tests by the Navy on the GOES system with no negative impact to users. The testing is going well and some prototype transmitters may be soon to come. This testing has gone to phase 2.

BINARY MESSAGES – Because the certification allows for binary messages, then DAPS must be able to handle it. However, we are not necessarily encouraging the use of binary. Larry Cedrone discussed how this might impact secondary users downstream. Phil Whaley stated that right now no specification for binary certification exists. Therefore, if a manufacturer wants to provide this capability, they must also suggest a way to certify it.

OTHER BUSINESS

- Meeting Minutes - It was requested that meeting minutes be made available and posted to the web site no more than 30 days after a meeting is held.
- Meeting Agenda – A request was made for meeting agendas to be made available prior to the meeting so that attendees could prepare as necessary.
- David Benner - Wants agency & representative information sent to Kay Metcalf so it can be posted to the website.

BUREAU OF LAND MANAGEMENT SUPPORT OF WORLD TRADE CENTER RECOVERY EFFORTS – Bob McCormick gave a slide show presentation and narrative of the Bureau's involvement in assisting the EPA with monitoring air quality around the WTC recovery area. GOES telemetered portable "Fire RAWS" have been specially configured to support this application. BLM personnel also assisted the EPA with maintenance of their own monitoring devices. He closed the presentation with very few dry eyes in the room and a final slide that simply states:

"WE WILL NEVER FORGET"