COPC Action Items Status

Fall 2015 Action Items

COPC Action Item 2015-2.1: Building on the OPC outage mitigation effort presented at the Fall 2015 COPC, develop a user oriented data source priority list or table per Center.
Purpose: To increase the understanding of mission essential data exchange, single data sources, and data agency interdependencies, with the overall goal to mitigate the impacts on the OPCs when significant data outages occur.
Priority: H
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 03 December 2015**: Develop a template with color coding and critical time frames while focusing on the user's perspective.
- **CSAB 21 January 2016**: CSAB members will work to have a rough draft version available for discussion at the Feb telcon. Only show what you receive and critical time frames can vary relevant to their mission needs.
- **CSAB 18 February 2016**: CSAB members will work to have at least a draft version available for discussion at the CSAB F2F. We will discuss how to make one presentation at COPC.
- **CSAB 07 April 2016**: Tables were submitted by all OPCs, still need the priority column completed by FNMOC and NESDIS. CSAB will recommend closing this action and opening a new action to pursue the next step.

COPC Action Item 2015-2.2: Review and recommend updates to the COPC Terms of Reference.
Purpose: To incorporate the partners' organizational re-structures and validate the COPC purpose.
Priority: L
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 03 December 2015**: OFCM will be updating all TORs to match and address the new structure. Ken will then modify with obvious updates (AFWA -557) and send to the group for comments/changes.
- **CSAB 21 January 2016**: Waiting until after the ICMSSR meeting on Feb 25th.
- **CSAB 18 February 2016**: Create recommended updates for discussion at the CSAB F2F.
- **CSAB 07 April 2016**: Administration changes to membership names and locations, JAG/CCM to change to a Working Group, and no changes to the purpose. With COPC approval, CSAB will recommend closing this action.

Other COPC Action Items Status

COPC Action 2015-1.4: Make a recommendation about the utilization of the 2nd COPC network path (Boulder). [Concurrent usage or regular scheduled failover tests].
Purpose: To make the best utilization of the DOD funding for the leased connection between Boulder and Buckley AFB (DOD and NOAA data exchange).
Priority: L

Advocate: CCM
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 09 July 2015**: Line was run from Buckley to Boulder but NOAA still needs a part to complete the install. The 3 other related circuits are all waiting for this primary circuit to be completed (from Buckley to the 557, NAVO, and FNMOC).
- **CSAB 19 August 2015**: No change. Still waiting for an interface card at the NOAA Boulder site.
- **CSAB 17 September 2015**: No new information.
- **CSAB 07 October 2015**: Utilization recommendation will be made once the 2 point to point connections are established.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: Working to get DISA assistance on configuring the card/MSPP in Boulder.
- **CSAB 18 February 2016**: DISA agreed to support walking the NOAA Boulder technician through how to configure the MSPP.
- **CSAB 07 April 2016**: CCM recommends utilizing as failover path with routine testing. Configure as a protected circuit allowing automatic fallback if primary COPC path suffers an outage. CCM recommends closing this action item.

COPC Action Item 2014-2.1: Determine if data can be exchanged via the DAPE Gateway using secure protocols.
Purpose: To answer information assurance (IA) concerns about security risks using anonymous logins and open FTP connections.
Priority: H
Advocate: WG/OD
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 15 January 2015**: Ken B will work to hold a meeting with leads Jim V and Bill Godfrey and also include Vince, Dennis, Kyle, and Keith Willis.
- **CSAB 19 February 2015**: Check with CNMOC about urgency of this action.
- **CSAB 8 April 2015**: It was agreed that NAVO would test the FTPS exchange with the DAPE Gateway (POCs: Bill Godfrey and Keith Willis.)
- **CSAB 7 May 2015**: NSOF successfully sent two small test data sets to the NAVO FTP server today using FTPS. CSAB recommends keeping this action open.
- **COPC 28 May 2015**: COPC confirmed keeping this action open.
- **CSAB 09 July 2015**: On hold until the Navy funding issue is resolved or determined.
- **CSAB 19 August 2015**: The Navy funding issue has been resolved. Vince Tabor will address this Mr. Godfrey and the WG/OD.
- **CSAB 17 September 2015**: Vince will contact Jim V.
- **CSAB 07 October 2015**: Will be included in the WG/OD satellite update to COPC. Jim V and Vince will work to test FNMOC use of FTPS. This will also need to be addressed in the TR1.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: FNMOC will pursue after DART is implemented. NAVO is ready to change to SFTP when necessary. NCEP is also working to exchange via SFTP by the end of FY16.

- **CSAB 18 February 2016**: No update.
- **CSAB 07 April 2016**: DAPE exchange was successfully tested with NAVO via FTPS. WG/OD recommends closing this action and opening a new action to implement standard secure protocol exchanges. Additionally, there needs to be work to develop a standard method between NOAA (DAPE, NCEP and NCO/TG) and DOD (AF, FNMOC, and NAVO), determine FTPS or SFTP, and update the TR1 (once implemented for DAPE exchange).

COPC Action Item 2013-2.1: Complete a new DAPE agreement for signature.
Purpose: At present, COPC has signed DAPE (30 Sept 2014). However, AF Legal (SAG/GCA) expressed concerns with wording of the MOA.
Priority: L
Advocate: CSAB
Suspense: For the COPC (Spring 2017).
Note(s): [For context] – The DAPE MOA was signed in 9/2013 but with the agreement to redo the memorandum to answer the AF General Council's concerns. AFWA agreed to create the first draft. [Additionally, impact/changes may be necessary for the current annex (ESDA)].
Status as of 07 April 2016: Recommend Closure.
- **CSAB 15 January 2015**: No update.
- **CSAB 19 February 2015**: Still need signature level.
- **CSAB 8 April 2015**: Need to ask at COPC, what/how/if they want this action pursued.
- **CSAB 7 May 2015**: With the AF restructuring, CSAB is concerned with AF signatory level for both documents DAPE and ESDA. Ask at COPC, what/how/if they want this action pursued.
- **COPC 28 May 2015**: COPC confirmed keeping this open and revisiting at the next COPC meeting.
- **CSAB 09 July 2015**: No update.
- **CSAB 19 August 2015**: No update.
- **CSAB 17 September 2015**: No update.
- **CSAB 07 October 2015**: Not pursuing a new DAPE MOA until the 5 years term ends. CSAB recommends closing this action.
- **COPC 05 November 2015**: COPC denied closing this action and would like to keep it open until the new version is completed.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: No update.
- **CSAB 18 February 2016**: No update.
- **CSAB 07 April 2016**: CSAB recommends closing this action and pursuing a new DAPE MOA for the Spring COPC 2017 to be ready for signature on Sept 30th 2018 (when the 5 years term ends).

COPC Action Item 2013-1.2: Review and update the Environmental Satellite Data Annex to the DAPE MOA.
Purpose: This Environmental Satellite Data Annex (ESDA) to the DAPE MOA facilitates cooperative acquisition, processing, and exchange activities among the participants for data derived from DOD, NOAA, NASA, and foreign environmental satellite systems.
Priority: H
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Open.

- **CSAB 15 January 2015**: Plan to review the ESDA Appendix A (Budget portion) at the Feb CSAB telcon. Ken B. will request that Keith update the numbers for the DAPE Gateway section.
- **CSAB 19 February 2015**: Each OPC provide their comments/recommended change by March 12. Discussion on move the Appendix A PDA into Appendix B. Keith is still working to get the update of the DAPE Gateway section. (With the virtualization, remove the Life Cycle replacement row of table 1.a.)
- **CSAB 8 April 2015**: New Appendix A and Appendix B in the draft. Create a separate briefing for COPC discussion.
- **CSAB 7 May 2015**: Updates to ESDA include: Structural changes - 557 and PC/NOPC added to the Roles and Responsibilities section. Signatories levels. Expiration Date: ~5 yr from final signature to end on 30 Sep 20??. Updated App A and new App B - S-NPP/JPSS Data Access for 557 WW. CSAB recommends keeping this action open.
- **COPC 28 May 2015**: COPC confirmed keeping this open. NESDIS uses the DAPE MOA to MIPR money, but Navy wants to confirm the necessity of the Annex.
- **CSAB 09 July 2015**: Navy and AF need to determine if the MOA is enough to MIPR money or do we need to complete the updated Annex.
- **CSAB 19 August 2015**: Distribute the ESDA to CSAB. OPCs need to determine what is needed for MIPRs (just the DAPE MOA or do you need the Annex) and have AF confirm they still want Appendix B.
- **CSAB 17 September 2015**: Distribute the ESDA to CSAB for discussion at the F2F.
- **CSAB 07 October 2015**: Updated version ready for coordination. Recommend keeping this action open.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: ACC and the Air Staff are working to determine who should sign the ESDA.
- **CSAB 18 February 2016**: No update.
- **CSAB 07 April 2016**: Updated version has been completed. Air Staff and ACC are looking into the AF signature level. CSAB recommends a discussion at COPC, because the signed DAPE MOA is a working mechanism for NESDIS money exchange. Additionally, COPC could consider creating just one document for signature.

COPC Action Item 2013-1.5: Implement an end-to-end latency test exchange using representative proxy data from NOAA (NESDIS, TOC, and NCEP) through NFG to both Navy OPCs.
Purpose: To make sure the NIPRNet Federated Gateway does not introduce data latency that causes the short life environmental data to miss the necessary timing for incorporation into the OPC's NWP capabilities.
Priority: L
Advocate: CCM
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Open.
- **CSAB 15 January 2015**: No update.
- **CSAB 19 February 2015**: No update.
- **CSAB 8 April 2015**: CCM needs the 2nd connection in place to allow testing. At the CSAB meeting there was concern about testing with realistic capacity from other services on the NFG (like VOIP, video conferencing, streaming..).
- **CSAB 7 May 2015**: No update.

- **COPC 28 May 2015**: COPC confirmed keeping this open.
- **CSAB 09 July 2015**: No update.
- **CSAB 19 August 2015**: No update.
- **CSAB 17 September 2015**: No update.
- **CSAB 07 October 2015**: (Part of Decision Point 2 from the CCM process flow chart). Still working to establish a NFG connection. CCM recommends keeping this action open.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: No update.
- **CSAB 18 February 2016**: No update.
- **CSAB 07 April 2016**: Overall concept: Establish the 2nd connection, establish a connection to a NFG, and test latency with a large data set over a long period of time (to not impact the operational path). CCM recommends keeping this action open.

COPC Action Item 2013-1.9: Review and update the Federal Plan for Cooperative Support and Backup Among Operational Processing Centers (FCM-P14-2012).
Purpose: Documents an interagency coordinated approach to backup support and cooperative sharing of data, technology, and products among the national major meteorology, oceanography, and satellite operational processing centers (OPC) to assist in fulfilling their mission requirements.
Priority: L
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Open.
- **CSAB 15 January 2015**: Jim V will submit his changes to Ken B.
- **CSAB 19 February 2015**: No update, Ken B. needs to incorporate FNMOC changes and make changes to the communications network section.
- **CSAB 8 April 2015**: Jim V. and Ken S. will work to incorporate COOP plans between FNMOC and the 557th. Once updated, check with A3W about whether a COOP MOA is necessary or can the P14 stand in for the ATO.
- **CSAB 7 May 2015**: Ken B. needs to incorporate the FNMOC updates and the networking changes. CSAB needs to make changes based on the AF and NWS reorganizations. FNMOC and the 557 WW in discussion to add specific COOP capabilities with the document. CSAB recommends keeping this action open.
- **COPC 28 May 2015**: COPC confirmed keeping this open.
- **CSAB 09 July 2015**: No update.
- **CSAB 19 August 2015**: Needs to be totally looked over to address the organizational changes.
- **CSAB 17 September 2015**: Ken B will make a 1st draft for the CSAB F2F.
- **CSAB 07 October 2015**: OFCM needs to incorporate all updates and the networking changes. CSAB will then coordinate/review based on recent reorganizations (557WW, IDFOR, NWS, and NESDIS (OSGS). Recommend keeping this action open.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: No update.
- **CSAB 18 February 2016**: No update.

- **CSAB 07 April 2016**: OFCM and CCM are updating the COPC network section. OPCs are reviewing the document to update the organizational changes. CSAB recommends keeping this action open.

COPC Action Item 2012-2.7: Each OPC to provide anticipated GOES-R implementation strategy; expressly addressing data receipt mechanism/methodology and impacts to processing infrastructure.
Purpose: To understand how each OPC will receive the important new satellite data.
Priority: L
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Open.
- **CSAB 15 January 2015**: From AMS – launch March 2016 and operations March 2017. NAVO has requested FY15 funding for new equipment from PMW120 via the acquisitions arm in PMW170.
- **CSAB 19 February 2015**: All DOD sites are still working to have downlink capabilities.
- **CSAB 8 April 2015**: Bullet from each DOD Center for a slide on the CSAB to COPC briefing. Cover any comments during the transition (3rd antenna) and any COOP scenarios.
- **CSAB 7 May 2015**: Air Force will modify existing GOES infrastructure at Offutt AFB for direct readout. NAVO and FNMOC are continuing to pursue GOES-R Direct Read-out capability, using the Navy ESRP Program. (Plan to use PDA delivery until DRO capability is established.) CSAB recommends keeping this action open.
- **COPC 28 May 2015**: COPC confirmed keeping this open.
- **CSAB 09 July 2015**: No update.
- **CSAB 19 August 2015**: No update.
- **CSAB 17 September 2015**: Each Center will submit their update for a combined slide or two within the CSAB briefing. Ken B will send out the slides used last COPC. Keith will work to get a date of launch, but right now no sooner than Oct 2016.
- **CSAB 07 October 2015**: GOES-R is scheduled to launch in Fall 2016. Air Force will modify existing GOES infrastructure at Offutt AFB for direct readout. NAVO and FNMOC are continuing to pursue GOES-R Direct Read-out capability, using the Navy ESRP Program (POM18 planning). Via the GRB/H8RB project, NCEP Centers (NCWCP, SPC, NHC, AWC, SWPC) will be receiving antenna dishes in support of operational data feeds. Dishes will also be installed in AK, HI, and Guam. CSAB recommends keeping this action open.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: GOES-R still scheduled to launch on October 14, 2016.
- **CSAB 18 February 2016**: CSAB will update the slide to present to COPC.
- **CSAB 07 April 2016**: GOES-R is scheduled to launch in Oct 14, 2016. AF is working on contracts for DRO receipt, processing, and assimilation of GOES-R at Offutt AFB. NAVO and FNMOC are continuing to pursue GOES-R Direct Read-out capability, using the Navy ESRP Program and plan to use PDA "Operational" delivery until DRO capability is established. CSAB recommends keeping this action open.

COPC Action Item 2012-2.8: NCEP (in particular NCO) will host a teleconference meeting/s with the DOD OPCs to develop the way forward with NOMADS. 1) Investigate alternative

paths (besides Internet) for the operational use by the OPCs. 2) Discuss architecture and backup capabilities. 3) Solve getting the DOD data flows on the NOMADS server for distribution.
Purpose: To fully utilize the NOMADS capabilities for the OPCs and other external data users.
Priority: L
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 15 January 2015**: Jim Y sent an email to Becky but did hear back yet, so he will update the group at the next meeting.
- **CSAB 19 February 2015**: Jim Y software wise things are ready for the AFWA data, but the bandwidth capacity is currently a hold up.
- **CSAB 8 April 2015**: Jim Y software wise things are ready for the AFWA data, but the bandwidth capacity is currently a hold up.
- **CSAB 7 May 2015**: Parts 1 and 2 will be covered by the 2nd DOD/NOAA connection and IDP at Boulder. PDA (and NOMADS) is functioning in College Park. 557 WW needs to make modifications to their GRIB to meet the WMO standard table definitions for dissemination of 557WW ensemble products from the CP NOMADS. CSAB recommends keeping this action opened.
- **COPC 28 May 2015**: COPC confirmed keeping this open.
- **CSAB 09 July 2015**: 557WW will look into whether they will pursue the necessary changes to the GRIB format for NOMADS posting.
- **CSAB 19 August 2015**: 557WW does want to make the necessary changes to the GRIB format for NOMADS posting and are looking into whether they can move this up in the development schedule.
- **CSAB 17 September 2015**: 557WW will add the schedule for the CSAB briefing.
- **CSAB 07 October 2015**: 557 WW scheduled to make the modifications by the end of 2015. CSAB recommends keeping this action opened.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: GRIB2 adjustments were completed by the 557 and verified by NCEP. NCO working to implement and make available on NOMADS. Michelle will share a link to the NOMADS service. CSAB will work to develop slides with an update/recommendation and example for COPC.
- **CSAB 18 February 2016**: NCO will work to make this available (without GRIB filtering) in April.
- **CSAB 07 April 2016**: 557 WW made the necessary modifications to their GRIB to meet the WMO standard table definitions. NCEP is working to make the products fully NOMADS distributable. Scheduled implementation on April 26th, backup for critical weather April 28th. CSAB recommends closing this action.

COPC Action Item 2012-2.9: NESDIS to track and share JMA rebroadcast and HRIT downsampled product offerings. WG/OD to assess mutual center needs for obtaining Himawari via cooperative share relationship with JMA.
Purpose: To understand and coordinate the exchange of the H8 data for use by the OPCs.
Priority: L
Advocate: CSAB
Suspense: At the next COPC (Spring 2016).
Status as of 07 April 2016: Recommend Closure.

- **CSAB 15 January 2015**: NESDIS is holding weekly meetings and the plan is still for DOD to get the (16 channels) data through NOAA STAR.
- **CSAB 19 February 2015**: NESDIS only has Sandy supplemental funding for H8 data until JPSS1 launch.
- **CSAB 8 April 2015**: Have a separate briefing at COPC review the status of the 16 channel effort at NOAA Star and the 5 channel (14 channel) DRO. Additionally have a small CSAB briefing about the status of DOD acquiring this data and other impacts (Kaena Pt.).
- **CSAB 7 May 2015**: CSAB recommends keeping this action open.
- **COPC 28 May 2015**: COPC confirmed keeping this open.
- **CSAB 09 July 2015**: Still moving forward with testing from NOAA STAR.
- **CSAB 19 August 2015**: NAVO data exchange with NOAA STAR is very robust, they are receiving all 16 channels and 10 sectors in a timely manner. NAVO then repackages it and provides it to Monterey NRL. Starting software development to generate SST products. This COPC we would like to present what the Centers are doing and what they expect to get once PDA distribution. (Make sure everyone is in agreement about the future operational requirement [raw HSD files?]).
- **CSAB 17 September 2015**: Each Center will create bullets on their path forward with using H8 data (via STAR, future PDA, and MARK IVB).
- **CSAB 07 October 2015**: Keith will collect the OPC inputs to create one update briefing for COPC. CSAB recommends keeping this action open.
- **COPC 05 November 2015**: COPC confirmed keeping this action open.
- **CSAB 03 December 2015**: Added the purpose and changed the suspense.
- **CSAB 21 January 2016**: CSAB will recommend closure and recommend a new action to determine how and when the H8 data will be operationally available via PDA.
- **CSAB 18 February 2016**: New action discussion during the CSAB F2F.
- **CSAB 07 April 2016**: H8 data (16 channel) flowing from NOAA STAR to NCEP and NAVO. Himawaricast used for NWS and AF (via the MARK IVB). 557 currently getting the 5 channel feed from MARK IVB (and sending to FNMOC).AF is working to get 2 additional channels using MARK IVB (potential exists to obtain all 14). CSAB recommends closing this action and opening two new action items. One to track the effort of the OPCs to receive the H8 data operationally from PDA and one to request getting this data from NCEP via the COPC network until supported on PDA.

Note: With the older Action Items, previous year updates have been made into hidden text. The information is still there and can be viewed/printed by toggling the hidden text option.