

**FOC HazCollect Operational Test & Evaluation (OT&E)  
Wrap-Up Meeting Minutes  
April 1, 2010**

**Attendees:**

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Eastern Region: John Koch  
WFO Pittsburgh, PA: Rich Kane, Joe Palko  
Southern Region: Mike Mach  
WFO Albuquerque, NM: Kerry Jones  
Central Region: Gregory Noonan  
WFO Paducah KY: Ricky Shanklin  
Western Region: Jeffrey Lorens  
WFO San Francisco: Tom Evans  
Alaska Region: Jeffrey Osiensky  
OPS24: Jae Lee, Bert Vilorio  
OPS32: Susan Murphy  
OPS34: Odon Dario  
OS51: Herb White  
OST11: Steve Pritchett  
OST33: Jeremiah Dewey, Olga Brown-Leigh

Daviess County, KY EM: Walter Atherton  
State of Hawaii EM: Tom Simon  
Prism: Craig Donahue, Jim Buchman, Ashok Chitela

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On Thursday April 1, 2010, the National Weather Service Test & Evaluation Branch (OPS24) hosted the Wrap-up meeting for the Full Operating Capability (FOC) HazCollect Operational Test & Evaluation (OT&E).

The purpose of the meeting was to wrap up and summarize the FOC HazCollect OT&E, adjudicate any outstanding problems/issues, and vote to recommend HazCollect for national deployment.

**I. Test Wrap Up/Summary**

Bert Vilorio summarized the OT&E test dates at each OT&E sites, system configuration (AWIPS OB9.2 installations, emergency manager DMIS accounts, DMIS client v2.3.3 installation) and dissemination of local and/or national public information messages (PNS) prior to the start of the OT&E. Bert then proceeded to verify that all eleven test objectives that were outlined in the OT&E Test Plan were successfully confirmed during the OT&E including:

1. **Confirm setup/configurations – PASS**

The OT&E test team verified OT&E sites have OB9.2 AWIPS installed and their emergency managers (EM) have installed their DMIS client v2.3.3. The DMIS client had to be re-installed at the Anchorage EM office due to problems found with initial install.

2. **Verify operation of HazCollect system – PASS**

There were no reported HazCollect-related OT&E site operational problems for duration of the OT&E.

3. Verify HazCollect products for end-to-end dissemination – **PASS**  
The non-weather emergency messages (NWEM) test administrative (ADR) messages were verified receipt at HazCollect and successfully disseminated to NWSWS, EMWIN, CRS and subsequent broadcast to weather radio.
4. Verify availability of required documentation – **PASS**  
The OT&E Test Plan, Draft of Version Description Document, and Draft of HazCollect Server Administration Guide are available.
5. Verify the HazCollect modes – **PASS**  
Per site dissemination tests and internal testing at NWSHQ (2/23/10, 3/2/10), all HazCollect modes (Active, Training, and Test) in conjunction with DMIS status values (Actual, System, Exercise, and Test) have been successfully verified. Update and correction processing were also been successfully verified.
6. Verify the HazCollect database functionality – **PASS**  
Per internal testing at NWSHQ (3/2/10), the HazCollect system administration website add, update, and delete functionalities for all nine database tables were successfully confirmed.
7. Verify the HazCollect failover functionality – **PASS**  
Per internal testing at NWSHQ (3/23/10), failover testing using Test/Test mode was successfully confirmed for the hazC1 and hazC2 servers at the TG in Silver Spring MD and the hazC1 server at the BTG in Mt Weather, VA. Virtual IP connections were switched off and on for both TG servers and at the BTG. Test messages saved in the database were checked per switched servers.
8. Verify the national message functionality – **PASS**  
The national message test was performed on 3/9/10 for land areas only due to missing marine zones in the HazCollect database (TTR #69). The states of Kansas and Missouri opted out of the test due to tornado drills previously scheduled at the same time. Hawaii received test ADR message but did not disseminate state message as requested due to previous tsunami messages. The test ADR message was received at HazCollect and all 54 WMO messages were correctly confirmed. The reported errors from the field offices were mostly NWRWaves state code “XXX000” setup.

After the missing/incorrect marine zones have been successfully included in the HazCollect production database, the test team performed the all-marine zone test on 3/22/10. Errors were reported by DMIS client when one ADR message was sent for all marine zones. When two ADR messages were sent (one for WFO Miami and one for the rest of the country), these messages were successfully sent and confirmed at server.

Prism’s initial conclusion was that commas in marine zone descriptions caused the problems. After the commas were removed, marine zones were internally retested at NWSHQ on 3/23/10 (Active/Test) and all marine zones were verified at server. TTR #73 was generated to track marine zone results from the 47 affected WFOs. TTR #76 was generated to track ongoing investigation by Prism as to why two messages were successful even with the existing commas. Both TTRs 73 and 76 has since been re-adjudicated by the TRG (see Section II Test Trouble Reports).

9. Verify COG/user registration and file upload – **PASS**

Herb White (OS51) successfully performed Collaborative Operations Group (COG) registration and upload file generation for two actual COGs (WI Brown County EM and IN Spencer County EMA). On 3/23/10, the upload functionality verification was performed by the OT&E test team but an error was found for the incorrect data lengths for the 2 fields (JUSTIFICATION and STATEMENTOFREQUIREMENTS).

After shortening data values from 304 to 206 characters, the upload was successfully performed. Prism attributed the error to an existing Sybase problem and noted that the two fields can hold up to 255 characters and not the required 2000 characters. TTR #74 was generated to track Prism for providing a fix to the database field lengths issue and re-adjudicated by the TRG (see Section II Test Trouble Reports).

10. Demonstrate DMIS OPEN NWEM API end-to-end functionality – **PASS**

On March 2, 2010, a test ADR message (using only FIPS code) was successfully sent to HazCollect via the Alerting Solutions 'CapConHC' software. Test message was generated by Katherine Hern (Contra Costa County, CA EM) and was broadcasted and confirmed at WFO Sacramento and WFO San Francisco/Monterey CA.

11. Verify HazCollect performance-based test procedures

*Single NWEM message to dissemination systems within 2 minutes (2/18/10)* – **PASS**

During the WFO PAH testing, the test message from HazCollect message queue input @ **16:15:39** and up to the AWIPS *logStreamExpect* via the Product Availability Monitoring System (PAMS) log @ **16:16:13**, had a total dissemination time of **74** seconds.

*NWEM processing for multiple simultaneous users (3/1/10)* – **PASS**

Two separate messages sent at the same exact time (16:00:09) – one from Walter Atherton, and one from NWSHQ. Two separate messages were correctly generated but only one test ADR was received as the duplicate ADR was correctly flagged as an error. When 2 mins apart (16:08:43 and 16:10:45), both messages were correctly received at WFO PAH and each were broadcasted successfully.

*EM authentication into HazCollect within 5 seconds (2/17/10)* – **PASS**

During WFO PBZ testing, per visual verification, authentication via "New NWEM" display, after selecting message from the Alerts List, was instantaneous - within 1 or 2 seconds.

## **II. Test Trouble Reports (TTRs)**

There were a total of four closed TTRs from the OT&E (TTR# 69, 70, 71, and 72). The TRG adjudicate the following OPEN TTRs from the OT&E:

1. **TTR #73** (All-Marine Zone Test Results) – **THIS TTR HAS BEEN CONDITIONALLY CLOSED** pending responses from 6 field offices (CLE, SJU, TAE, AJK, GUM, and PPG) by COB Friday April 2, 2010. To date, confirmations from two offices (GUM and PPG) are still pending.
2. **TTR #74** (COG upload issue) – Prism indicated that a fixed has been tested and will be provided after deployment. The TRG decided to keep the TTR Impact to **3** (less critical) and the **Priority to 3** (Include in the next build after deployment). **OPEN**.

3. **TTR #75** (Formal process to update HazCollect database is not established) – The TOC will work on a plan on how the data will be updated in HazCollect. The TRG decided to keep the **Impact to 3** (less critical) and update the **Priority to 3** (Include in the next build after deployment). **OPEN**.
4. **TTR #76** (Cannot create one NWEM message for all marine zones) – Prism will work with DHS, regarding the reported client problems for the all-marine zones testing, after deployment. There is a tested work-around (send messages from one into two messages), including commas that have already been removed from the HazCollect production database. The TRG decided to keep the **Impact to 4** (Watch Item) and update the **Priority to 4** (Include in a future build). **OPEN**.

Additionally, the TRG decided to re-adjudicate the following older OPEN TTRs from previous OT&Es:

5. **TTR #55** (HazCollect server mode changes are not saved in all servers) - The TRG decided to change the **Priority to 3** (Include in the next build after deployment) and keep the **Impact to 2** (malfunction of required functionality, reasonable workaround) because there is a reasonable workaround of manually changing the server modes. **OPEN**.
6. **TTR #62** (HazCollect automatically creates state code (HIC000) for individually selected counties – The TRG decided to set the **Priority to 4** (Include in a future build) and the **Impact to 3** (less critical). **OPEN**.
7. **TTR #66** (FOTE National Test issues with WFO Guam) – there is on-going effort from OCWWS and Bill Ward/Duane Carpenter from Pacific Region regarding this problem. The TRG decided to set the **Priority to 4** (Include in a future build) and the **Impact to 3** (less critical). **OPEN**.

**In summary, all OPEN TTRs were categorized as non-critical TTRs which should be fixed after the deployment. A previously OPEN TTR #55 has a reasonable and acceptable workaround and so the TRG kept its Impact to 2.**

### III. Voting

**The TRG voting members voted unanimously to recommend the FOC HazCollect system for national deployment.**

<b>Organization</b>	<b>Representative</b>	<b>Vote to recommend HazCollect for national deployment</b>
Eastern Region	John Koch	Yes
Southern Region	Mike Mach	Yes
Central Region	Gregory Noonan	Yes
Western Region	Jeffrey Lorens	Yes
Alaska Region	Jeffrey Osiensky	Yes
Pacific Region	Bill Ward	Yes (via phone call after meeting)
NWSEO Representative	Michael Dion	Yes (via email vote)

<b>Organization</b>	<b>Representative</b>	<b>Vote to recommend HazCollect for national deployment</b>
OST33 (Information Technology Security Officer)	Jeremiah Dewey	Yes
OPS24 (OT&E Director)	Bert Vioria	Yes