

## CHANGE NOTICE

<b>Affected Document:</b> ICD-GPS-870 Rev E	<b>IRN/SCN Number</b> IRN-ICD-870E-001	<b>Date:</b> 27-Sep-2023
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<b>Authority:</b> RFC-00477	<b>Proposed Change Notice</b> PCN-ICD-870E RFC477	<b>Date:</b> 14-MAR-2022
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**Document Title:** NAVSTAR Next Generation GPS Control Segment (OCX) to User Support Community Interface

**RFC Title:** OCX XML Products for Civil Users

**Reason For Change (Driver):**

1. The technical baseline does not reflect OCX as built. The five GPS data products distributed in the AEP era are the Notice Advisory to Navstar Users (NANU), the Operational Advisory (OA), the Almanac (SEM & YUMA), the Satellite Outage File (SOF), and the Anti-Spoof (A-S) file. These data products are formatted in plain text and they:
  - a. Are being deprecated i.e. further updates and support are discontinued while ensuring backwards compatibility
  - b. Do not conform to the requisite National Information Exchange Model (NIEM) Naming and Design Rules
2. There is no communication mechanism to alert external stakeholders of changes happening due to the transition from AEP to OCX

Linked Pre-RFCs. 1016: Namespace entries in XML files should look like government URLs and 1152: Public XML for ICD-GPS-870

**Description of Change:**

1. Update the technical baseline to reflect OCX as built. Consolidate the five, plain text data products into four, XML based data products for distribution. The four new data products are the GPS Advisory (NANU), GPS Advisory Collection (SOF), Ops Status (OA), and the Public Common Almanac (SEM, YUMA, and A-S)
  - a. Provide a Validate and Transform Utility (VATU), ensuring backwards compatibility.
  - b. Baseline the NIEM Information Exchange Package Documentation (IEPD) specification which contains schemas, documentation, business rules, metadata, and samples.
2. Notify the external stakeholders of the transition from AEP to OCX so they can implement the necessary changes.

**Authored By: RE: Danny Froerer** **Checked By: RE: Vincent Quan**

AUTHORIZED SIGNATURES	REPRESENTING	DATE
DUNN.MICHAEL L.J.1171235045 <small>Digitally signed by DUNN.MICHAEL.J.1171235045 Date: 2024.03.04 14:17:39 -08'00'</small>	PNT Technical Director, MilComm & PNT Directorate, Space Systems Command (SSC)	<b>04-Mar-2024</b>
	Department of Homeland Security (DHS), United States Coast Guard (USCG) Navigation Center (NAVCEN)	
	Department of Transportation (DOT) Federal Aviation Administration (FAA)	

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THIS DOCUMENT SPECIFIES TECHNICAL REQUIREMENTS AND NOTHING HEREIN CONTAINED SHALL BE DEEMED TO ALTER THE TERMS OF ANY CONTRACT OR PURCHASE ORDER BETWEEN ALL PARTIES AFFECTED.	Interface Control Contractor: SAIC (GPS SE&I) 200 N. Pacific Coast Highway, Suite 1800 El Segundo, CA 90245 CODE IDENT 66RP1
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<b>Authored By:</b> RE: Danny Froerer		<b>Checked By:</b> RE: Vincent Quan
<b>AUTHORIZED SIGNATURES</b>	<b>REPRESENTING</b>	<b>DATE</b>
	PNT Technical Director, MilComm & PNT Directorate, Space Systems Command (SSC)	
<b>CALHOUN.SCOT</b> <b>T.R.1118195147</b>	Department of Homeland Security (DHS), United States Coast Guard (USCG) Navigation Center (NAVCEN)	<b>04JAN2024</b>
	Department of Transportation (DOT) Federal Aviation Administration (FAA)	
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	PNT Technical Director, MilComm & PNT Directorate, Space Systems Command (SSC)	
	Department of Homeland Security (DHS), United States Coast Guard (USCG) Navigation Center (NAVCEN)	
<b>HA ANH NGUYEN</b>  <small>Digitally signed by HA ANH NGUYEN Date: 2024.02.29 20:48:57 -08'00'</small>	Department of Transportation (DOT) Federal Aviation Administration (FAA)	<b>29-Feb-2024</b>
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**ICD870-744:**

Insertion after object ICD870-6

**Section Number:**

1.1.0-7

**WAS:**

<INSERTED OBJECT>

**Redlines:**

GPS developer/sustainer organizations together with developers/sustainers/operators of systems which consume GPS data are collectively referred to herein as the GPS Community.

*Object Type:* Info-Only

**IS:**

GPS developer/sustainer organizations together with developers/sustainers/operators of systems which consume GPS data are collectively referred to herein as the GPS Community.

*Object Type:* Info-Only

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**ICD870-11:**

**Section Number:**

1.3.0-2

**WAS:**

The following signatories must approve this ICD to make it effective.

1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
2. Air Force Space Command (AFSPC), 50<sup>th</sup> Space Wing (50 SW)
3. Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
4. Department of Transportation (DOT), Federal Aviation Administration (FAA)

**Redlines:**

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1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
2. ~~Air Force Space Command (AFSPC), 50th Space Wing (50 SW)~~
- ~~3.~~ Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
- ~~4.~~ Department of Transportation (DOT), Federal Aviation Administration (FAA)

**IS:**

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1. Air Force Space Command (AFSPC), GPS Directorate (GP) Space and Missile Systems Center (SMC)
  2. Department of Homeland Security (DHS), United States Coast Guard (USCG), Navigation Center (NAVCEN)
  3. Department of Transportation (DOT), Federal Aviation Administration (FAA)
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**ICD870-721:**

**Section Number:**

3.1.0-12

**WAS:**

The GPS CS will employ schema versioning whereby new data dissemination data/schema will be made available early in a pre-production form to allow synchronized development of automated ingestion and processing systems by users. In addition, operational data will be available in a production-full support form and in a production-deprecated form to allow graceful transition and retirement of obsolete data/schema.

**Redlines:**

~~The GPS CS will employ schema versioning whereby new data dissemination data/schema will be made available early in a pre-production form to allow synchronized development of automated ingestion and processing systems by users. In addition, operational data will be available in a production full support form and in a production deprecated form to allow graceful transition and retirement of obsolete data/schema.~~

**IS:**

<DELETED OBJECT>

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**ICD870-681:**

**Section Number:**

3.1.0-35

**WAS:**

The CS will employ schema versioning whereby new data/schema will be available in a non-operational pre-production form to support integration, test and transition. In addition, operational data will be available in a production-full support form and in a production-deprecated form to allow graceful transition and retirement of obsolete data/schema.

**Redlines:**

~~The CS will employ schema versioning whereby new data/schema will be available in a non-operational pre-production form to support integration, test and transition. In addition, operational data will be available in a production full support form and in a production deprecated form to allow graceful transition and retirement of obsolete data/schema.~~

**IS:**

<DELETED OBJECT>

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