CHANGE NOTICE

Affected Document: IS-GPS-800 Rev J	**IRN/SCN Number** XXX-XXXX-XXX	**Date:** DD-MMM-YYYY
Authority: RFC-000519	**Proposed Change Notice** PCN-IS-800J_RFC519	**Date:** 13-MKAY-2025

Document Title: NAVSTAR GPS Space Segment/Navigation User Segment L1C Interfaces

RFC Title: Civil Integrity Support Message (ISM) Formats

Reason For Change (Driver):
Complete the Civil Integrity Support Message format portion to enable the ARAIM capability in time to meet FAA's needs in support of RTCA/DO-401A and EUROCAE/ED-259B.
(Pre-RFC-1200, Pre-RFC 1269, partial Pre-RFC-1326)

Description of Change:
Expand and update current related requirements to build solid definitions for the civil ISM messages:

1. L2C and L5 CNAV MT-40 (IS-GPS-200, IS-GPS-705)
2. L1C Subframe 3 Page 8 (IS-GPS-800)

Authored By: RE: Tony Anthony **Checked By: RE:** Vincent Quan

AUTHORIZED SIGNATURES	**REPRESENTING**	**DATE**
	PNT Technical Director, MilComm & PNT Directorate, Space Systems Command (SSC)	

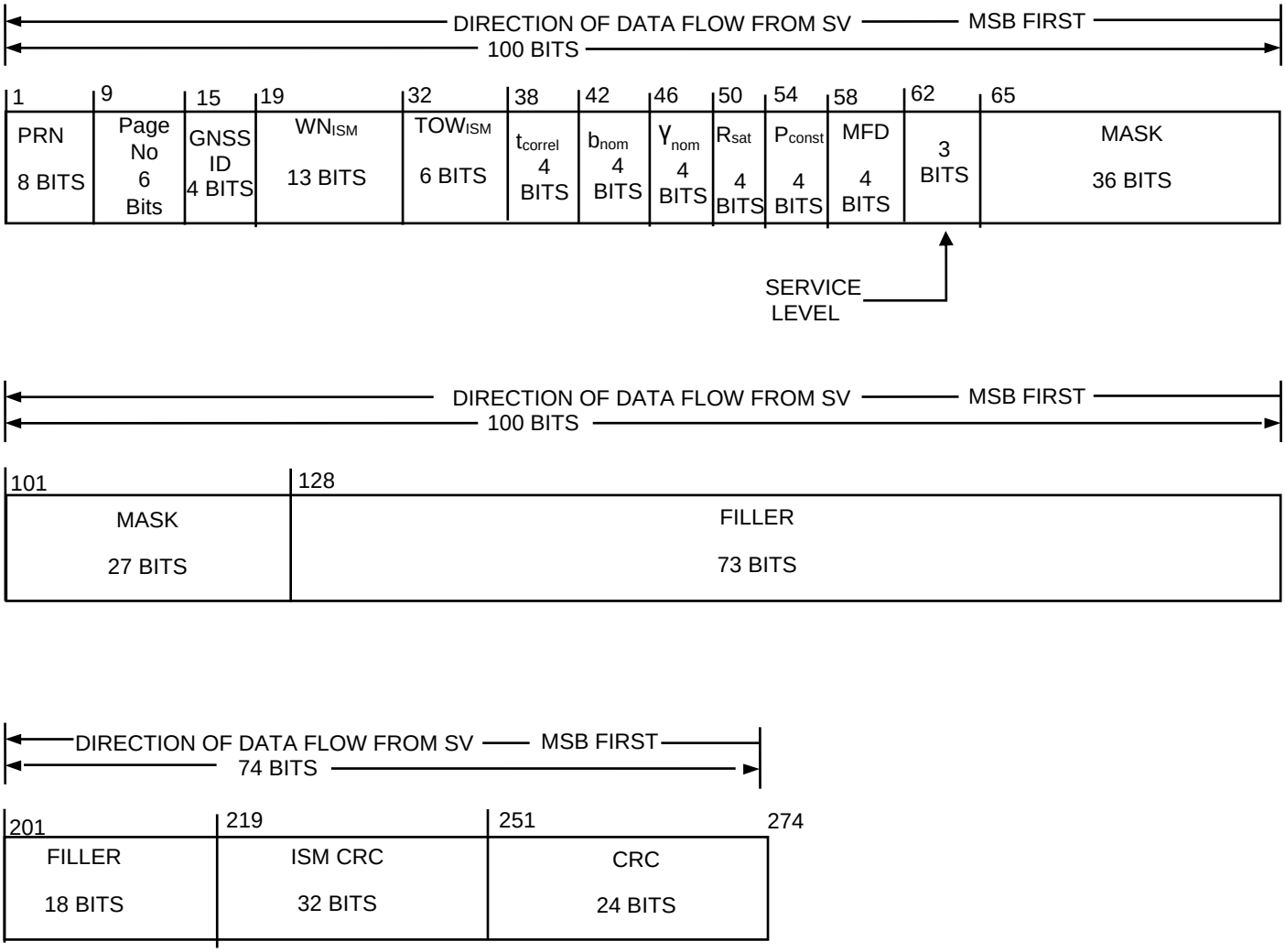
THIS DOCUMENT SPECIFIES TECHNICAL REQUIREMENTS AND NOTHING HEREIN CONTAINED SHALL BE DEEMED TO ALTER THE TERMS OF ANY CONTRACT OR PURCHASE ORDER BETWEEN ALL PARTIES AFFECTED.

Interface Control Contractor:
SAIC (GPS SE&I)
200 N. Pacific Coast Highway, Suite 1800
El Segundo, CA 90245
CODE IDENT 66RP1

IS800-1030:

Section Number:
3.5.2.0-19

WAS:

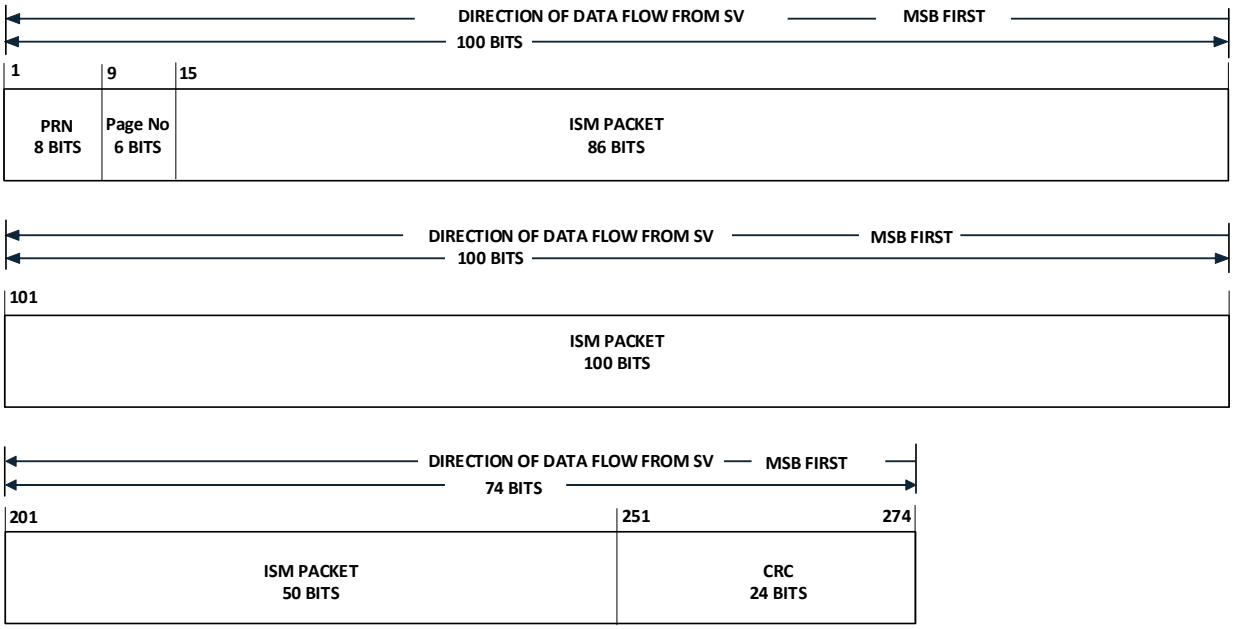


Note: Broadcast sequence of subframe 3 pages is a variable and, as such, users must not expect a fixed pattern of page sequence

Redlines:
<graphic not available>

- Replaced the GNSS ID through ISM CRC with a 236 bit ISM Packet

IS:



Note: Broadcast sequence of subframe 3 is a variable and, as such users must not expect a fixed pattern of page sequence.

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which changed this figure (T. Anthony)

IS800-190:

Section Number:
3.5.3.8.0-4

WAS:
The user shall calculate the NED-related URA with the equation (in meters);
$IAURA_{NED} = URA_{NED0} + URA_{NED1} (t - t_{op} + 604{,}800*(WN - WN_{op}))$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) \leq 93{,}600$ seconds

$IAURA_{NED} = URA_{NED0} + URA_{NED1}*(t - t_{op} + 604{,}800*(WN - WN_{op})) + URA_{NED2}*(t - t_{op} + 604{,}800*(WN - WN_{op}) - 93{,}600)^2$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) > 93{,}600$ seconds

where

t is the GPS system time

Redlines:
The user shall calculate the NED-related URA with the equation (in meters);

nominal URA_{NED} = nominal URA_{NED0}

$IAURA_{NED}$ = Upper Bound $URA_{NED0} + URA_{NED1}*(t - t_{op} + 604{,}800*(WN - WN_{op}))$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) \leq 93{,}600$ seconds

$IAURA_{NED}$ = Upper Bound $URA_{NED0} + URA_{NED1}*(t - t_{op} + 604{,}800*(WN - WN_{op})) + URA_{NED2}*(t - t_{op} + 604{,}800*(WN - WN_{op}) - 93{,}600)^2$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) > 93{,}600$ seconds

where

t is the GPS system time

IS:
The user shall calculate the NED-related URA with the equation (in meters);

nominal URA_{NED} = nominal URA_{NED0}

$IAURA_{NED} = URA_{NED0} + URA_{NED1}*(t - t_{op} + 604{,}800*(WN - WN_{op}))$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) \leq 93{,}600$ seconds

$IAURA_{NED} = URA_{NED0} + URA_{NED1}*(t - t_{op} + 604{,}800*(WN - WN_{op})) + URA_{NED2}*(t - t_{op} + 604{,}800*(WN - WN_{op}) - 93{,}600)^2$

for $t - t_{op} + 604{,}800*(WN - WN_{op}) > 93{,}600$ seconds

where

t is the GPS system time

Rationale:
At PICWG CRM #158 was created to modify all formulae that don't explicitly use "*" as a multiplier symbol to use "*". (T. Anthony)
3/29/2025 CRM #114 Nominal URANED added as requested.. (T. Anthony)

IS800-211:

Section Number:
3.5.3.10.0-1

WAS:
The L1C message will contain information that allows users to operate when integrity is assured. This is accomplished using an integrity assured URA value in conjunction with an integrity status flag. The URA value is the RSS of URA_{ED} and URA_{NED}; URA is integrity assured to the enhanced level only when the integrity status flag is "1".

Redlines:
The L1C ~~message will~~messages contain information that allows users to ~~operate~~take advantage of situations when integrity is assured to the enhanced level. This is accomplished using an integrity assured URA value in conjunction with an ~~integrity~~Integrity ~~status~~Status ~~flag~~Flag (ISF). The ~~URA~~IAURA value is the RSS of URA_{ED} and URA_{NED}; ~~URA~~IAURA is integrity assured to the enhanced level only when the ~~integrity status flag~~ISF is "1".

IS:
The L1C messages contain information that allows users to take advantage of situations when integrity is assured to the enhanced level. This is accomplished using an integrity assured URA value in conjunction with an Integrity Status Flag (ISF). The IAURA value is the RSS of URA_{ED} and URA_{NED}; IAURA is integrity assured to the enhanced level only when the ISF is "1".

Rationale:
5/14/2025 At PICWG, FAA recommended the 1st sentence be normalized to the corresponding wording in IS-GPS-200 and IS-GPS-705. (T. Anthony)
3/27/2025 CRM #115 Redescribed that integrity can be assured to an enhanced level. (T. Anthony)
CRM #38 10/4/2024 Firmed up the description of the use of the Integrity Status Flag and corrected instances of URA to IAURA. (T. Anthony)

IS800-1189:
Insertion after object IS800-211

Section Number:
3.5.3.10.0-2

WAS:
<INSERTED OBJECT>

Redlines:
The nominal URA is a conservative estimate of the pseudorange accuracy and is the RSS of an elevation-dependent nominal value of the URA_{ED} component and the nominal value of the URA_{NED} component.
Object Type: Info-Only

IS:
The nominal URA is a conservative estimate of the pseudorange accuracy and is the RSS of an elevation-dependent nominal value of the URA_{ED} component and the nominal value of the URA_{NED} component.

Object Type: Info-Only

Rationale:
3/29/20205 CRM #113 Add definition for nominal URA (T. Anthony)

IS800-1034:

Section Number:
3.5.4.7.0-1

WAS:
Figure 3.5-8a contains the structure of the Subframe 3, Page 8 message. The contents are defined below, followed by material pertinent to the use of the Integrity Support Message (ISM) data. Users who implement Advanced Receiver Autonomous Integrity Monitoring (ARAIM) may use these parameters for the ARAIM algorithm as referenced in future TSO and MSO.

Redlines:
~~Figure 3.5-8a contains the structure of the Subframe 3, Page 8 message. The contents are defined below, followed by material pertinent to the use of the Integrity Support Message (ISM) data. Users who implement Advanced Receiver Autonomous Integrity Monitoring (ARAIM) may use these parameters for the ARAIM algorithm as referenced in future TSO and MSO.~~

IS:
<DELETED OBJECT>

Rationale:
10/08/2024 CRM #52 Refactoring these documents eliminated the need for this paragraph in IS-GPS-800 (T. Anthony)

IS800-1033:

Section Number:
3.5.4.7.1

WAS:
Object Heading : 3.5.4.7.1 ISM Parameter Content

Redlines:
Object Heading : ~~3.5.4.7.1 ISM Parameter Content~~

IS:
<DELETED OBJECT>

Rationale:
10/08/2024 CRM #52 Refactoring these documents eliminated the need for this heading in IS-GPS-800 (T. Anthony)

IS800-1035:

Section Number:
3.5.4.7.1.0-1

WAS:
Subframe 3, Page 8 shall contain the parameters related to GNSS constellation and satellite integrity parameters used for ARAIM algorithms.
Object Type: <blank>

Redlines:
Subframe 3, Page 8, as depicted in Figure 3.5-8a, shall contain the parameters related to GNSS constellation and satellite integrity parameters used for ARAIM algorithms.
Object Type: ~~<blank>~~Requirement

IS:
Subframe 3, Page 8, as depicted in Figure 3.5-8a, shall contain the parameters related to GNSS constellation and satellite integrity parameters used for ARAIM algorithms.
Object Type: Requirement

Rationale:
10/08/2024 CRM #35, #36, #53 Refactoring these documents consolidated several ideas into this paragraph. (T. Anthony)

IS800-1036:

Section Number:
3.5.4.7.1.0-2

WAS:
The bit lengths, scale factors, ranges, and units of these parameters are given in Table 3.5-9.
Object Type: <blank>

Redlines:
The ~~bit~~ISM ~~lengths,~~specific ~~scale~~parameters ~~factors,~~and ~~ranges,~~fields ~~and~~are ~~units~~contained in the ISM Packet (reference 30.3.3.10 of IS-GPS-200) whose structure is shown in Figure 30-17 of IS-GPS-200.

Users who implement Advanced Receiver Autonomous Integrity Monitoring (ARAIM) may use these parameters ~~are~~for ~~given~~the ARAIM algorithm as referenced in ~~Table~~applicable ~~3~~standards (e.~~5-9~~g. TSO, MSO).
Object Type: ~~<blank>~~Info-Only

IS:
The ISM specific parameters and fields are contained in the ISM Packet (reference 30.3.3.10 of IS-GPS-200) whose structure is shown in Figure 30-17 of IS-GPS-200.

Users who implement Advanced Receiver Autonomous Integrity Monitoring (ARAIM) may use these parameters for the ARAIM algorithm as referenced in applicable standards (e.g. TSO, MSO).
Object Type: Info-Only

Rationale:
5/14/2025 At PICWG reworded the part about the applicable standards (T. Anthony)
3/27/2025 CRM #119 Expanded on the applicable documents for further information. (T. Anthony)
3/19/2025 CRM #109 Figure 3-7 was always intended to be Figure 3-17. This was a typo (T. Anthony)
3/19/2025 CRM #97 No comma needed after (ARAIM) because the clause is restrictive. (T. Anthony)
10/28/2424 CRM #36 Reduced the references to just the main ISM section in IS-GPS-200 and the figure for the ISM Packet. (T. Anthony)
10/08/2024 CRM #35, #36, #53 Refactoring these documents consolidated several ideas into this paragraph. (T. Anthony)
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1037:

Section Number:
3.5.4.7.1.0-3

WAS:
The CS shall upload the current ISM parameters, when necessary, to the SVs.

Redlines:
~~The CS shall upload the current ISM parameters, when necessary, to the SVs.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1116:

Section Number:
3.5.4.7.1.0-4

WAS:
Users should use the ISM parameters with the most recent WN_{ISM} and TOW_{ISM} time stamp. All time stamps should be in the past.

Redlines:
~~Users should use the ISM parameters with the most recent WNISM and TOWISM time stamp. All time stamps should be in the past.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1039:

Section Number:
3.5.4.7.1.0-5

WAS:
Table 3.5-9. ISM Parameters

Redlines:
~~Table 3.5-9. ISM Parameters~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1040:

Section Number:
3.5.4.7.1.0-6

WAS:

Parameter	No. of Bits**	Scale Factor (LSB)	Valid Range***	Units
GNSS ID	4			
WN_{ISM}	13	1		weeks
TOW_{ISM}	6	4	0 to 164	hours
t_{correl}	4		0 to 12	hours
b_{nom}	4		0 to 2	meters
γ_{nom}	4		0 to 2	
R_{sat}	4		$1x10^{-3}$ to $3.16x10^{-10}$	/hours
P_{const}	4		$1x10^{-3}$ to $3.16x10^{-10}$	
MFD	4		0.25 to 24	hours
Service Level*	3			
Mask ****	63			

* See Table 3.5-10 for Service Level Descriptions

** See Figure 3.5-8a for complete bit allocation in Subframe 3, Page 8

*** Unless otherwise indicated in this column, valid range is the maximum range attainable with indicated bit allocation and scale factor

**** See Table 3.5-11 for Mask bit mapping

Redlines:
<DELETED OBJECT>

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1041:

Section Number:
3.5.4.7.1.1

WAS:
Object Heading : 3.5.4.7.1.1 GNSS Constellation ID

Redlines:
Object Heading : ~~3.5.4.7.1.1 GNSS Constellation ID~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1042:

Section Number:
3.5.4.7.1.1.0-1

WAS:
Bits 15 through 18 of Subframe 3, Page 8 shall identify the GNSS service to which the associated ISM parameters apply.

Redlines:
~~Bits 15 through 18 of Subframe 3, Page 8 shall identify the GNSS service to which the associated ISM parameters apply.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1043:

Section Number:
3.5.4.7.1.1.0-2

WAS:
The four bits are defined as follows:
0000 = No Data Available
0001 = Galileo
0010 = GLONASS
0011 = BeiDou
0100 = GPS
0101 = SBAS
0110 = QZSS
0111 = IRNSS
1000 through 1111 = Reserved for other systems

Redlines:
~~The four bits are defined as follows:~~
~~0000 = No Data Available~~
~~0001 = Galileo~~
~~0010 = GLONASS~~
~~0011 = BeiDou~~
~~0100 = GPS~~
~~0101 = SBAS~~
~~0110 = QZSS~~
~~0111 = IRNSS~~
~~1000 through 1111 = Reserved for other systems~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1074:

Section Number:
3.5.4.7.1.1.0-3

WAS:
If users see four bits of '0000', users will ignore the entire ISM.

Redlines:
~~If users see four bits of '0000', users will ignore the entire ISM.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1044:

Section Number:
3.5.4.7.1.2

WAS:
Object Heading : 3.5.4.7.1.2 ISM Effectivity Time Stamp Week Number

Redlines:
Object Heading : ~~3.5.4.7.1.2 ISM Effectivity Time Stamp Week Number~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1045:

Section Number:
3.5.4.7.1.2.0-1

WAS:
Bits 19 through 31 of Subframe 3, Page 8 shall provide the ISM Week Number (WN_{ISM}) applicable to the start of the time of validity for a given ISM data issue.

Redlines:
~~Bits 19 through 31 of Subframe 3, Page 8 shall provide the ISM Week Number (WNISM) applicable to the start of the time of validity for a given ISM data issue.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1075:

Section Number:
3.5.4.7.1.2.0-2

WAS:
This parameter describes the time stamp, in terms of weeks, for the ISM parameters.

Redlines:
~~This parameter describes the time stamp, in terms of weeks, for the ISM parameters.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1046:

Section Number:
3.5.4.7.1.3

WAS:
Object Heading : 3.5.4.7.1.3 ISM Effectivity Time Stamp Time of Week

Redlines:
Object Heading : ~~3.5.4.7.1.3 ISM Effectivity Time Stamp Time of Week~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1047:

Section Number:
3.5.4.7.1.3.0-1

WAS:
Bits 32 through 37 of Subframe 3, Page 8 shall provide the ISM time of week (TOW_{ISM}) applicable to the start of the time of validity for a given ISM data issue.

Redlines:
~~Bits 32 through 37 of Subframe 3, Page 8 shall provide the ISM time of week (TOWISM) applicable to the start of the time of validity for a given ISM data issue.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1076:

Section Number:
3.5.4.7.1.3.0-2

WAS:
This parameter describes the time stamp, in terms of hours, for the ISM parameters.

Redlines:
~~This parameter describes the time stamp, in terms of hours, for the ISM parameters.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1048:

Section Number:
3.5.4.7.1.4

WAS:
Object Heading : 3.5.4.7.1.4 Correlation Time Constant

Redlines:
Object Heading : ~~3.5.4.7.1.4 Correlation Time Constant~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1049:

Section Number:
3.5.4.7.1.4.0-1

WAS:
Bits 38 through 41 of Subframe 3, Page 8 shall provide the assumed Correlation Time Constant (t_{correl}) value for the ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 38 through 41 of Subframe 3, Page 8 shall provide the assumed Correlation Time Constant (tcorrel) value for the ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1050:

Section Number:
3.5.4.7.1.4.0-2

WAS:
The four bits are defined as follows:
0000 = 0.25 hours
0001 = 0.33 hours
0010 = 0.50 hours
0011 = 0.67 hours
0100 = 0.83 hours
0101 = 1.00 hour
0110 = 1.17 hours
0111 = 1.33 hours
1000 = 1.50 hours
1001 = 2.10 hours
1010 = 3.00 hours
1011 = 4.20 hours
1100 = 6.00 hours
1101 = 8.50 hours
1110 = 12.00 hours
1111 = RESERVED

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 0.25 hours~~
~~0001 = 0.33 hours~~
~~0010 = 0.50 hours~~
~~0011 = 0.67 hours~~
~~0100 = 0.83 hours~~
~~0101 = 1.00 hour~~
~~0110 = 1.17 hours~~
~~0111 = 1.33 hours~~
~~1000 = 1.50 hours~~
~~1001 = 2.10 hours~~
~~1010 = 3.00 hours~~
~~1011 = 4.20 hours~~
~~1100 = 6.00 hours~~
~~1101 = 8.50 hours~~
~~1110 = 12.00 hours~~
~~1111 = RESERVED~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1051:

Section Number:
3.5.4.7.1.5

WAS:
Object Heading : 3.5.4.7.1.5 Additive Term for Nominal Pseudorange Error Bias

Redlines:
Object Heading : ~~3.5.4.7.1.5 Additive Term for Nominal Pseudorange Error Bias~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1052:

Section Number:
3.5.4.7.1.5.0-1

WAS:
Bits 42 through 45 of Subframe 3, Page 8 shall provide the assumed Additive Term (b_{nom}) for ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 42 through 45 of Subframe 3, Page 8 shall provide the assumed Additive Term (bnom) for ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1053:

Section Number:
3.5.4.7.1.5.0-2

WAS:
The four bits are defined as follows:
0000 = 0.00 meters
0001 = 0.13 meters
0010 = 0.25 meters
0011 = 0.38 meters
0100 = 0.50 meters
0101 = 0.63 meters
0110 = 0.75 meters
0111 = 0.88 meters
1000 = 1.00 meter
1001 = 1.13 meters
1010 = 1.25 meters
1011 = 1.38 meters
1100 = 1.50 meters
1101 = 1.63 meters
1110 = 1.75 meters
1111 = 2.00 meters

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 0.00 meters~~
~~0001 = 0.13 meters~~
~~0010 = 0.25 meters~~
~~0011 = 0.38 meters~~
~~0100 = 0.50 meters~~
~~0101 = 0.63 meters~~
~~0110 = 0.75 meters~~
~~0111 = 0.88 meters~~
~~1000 = 1.00 meter~~
~~1001 = 1.13 meters~~
~~1010 = 1.25 meters~~
~~1011 = 1.38 meters~~
~~1100 = 1.50 meters~~
~~1101 = 1.63 meters~~
~~1110 = 1.75 meters~~
~~1111 = 2.00 meters~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1054:

Section Number:
3.5.4.7.1.6

WAS:
Object Heading : 3.5.4.7.1.6 Scalar Term for Nominal Pseudorange Error Bias

Redlines:
Object Heading : ~~3.5.4.7.1.6 Scalar Term for Nominal Pseudorange Error Bias~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1055:

Section Number:
3.5.4.7.1.6.0-1

WAS:
Bits 46 through 49 of Subframe 3, Page 8 shall provide the assumed Scalar Term (γ_{nom}) value for ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 46 through 49 of Subframe 3, Page 8 shall provide the assumed Scalar Term (γ_{nom}) value for ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
9/5/2024 The creation of the ISM Packet in IS-GPS-200 deletes all these paragraphs from this document and points to the corresponding section of IS-GPS-200. (T. Anthony)

IS800-1056:

Section Number:
3.5.4.7.1.6.0-2

WAS:
The four bits are defined as follows:
0000 = 0.00
0001 = 0.13
0010 = 0.25
0011 = 0.38
0100 = 0.50
0101 = 0.63
0110 = 0.75
0111 = 0.88
1000 = 1.00
1001 = 1.13
1010 = 1.25
1011 = 1.38
1100 = 1.50
1101 = 1.63
1110 = 1.75
1111 = 2.00

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 0.00~~
~~0001 = 0.13~~
~~0010 = 0.25~~
~~0011 = 0.38~~
~~0100 = 0.50~~
~~0101 = 0.63~~
~~0110 = 0.75~~
~~0111 = 0.88~~
~~1000 = 1.00~~
~~1001 = 1.13~~
~~1010 = 1.25~~
~~1011 = 1.38~~
~~1100 = 1.50~~
~~1101 = 1.63~~
~~1110 = 1.75~~
~~1111 = 2.00~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1057:

Section Number:
3.5.4.7.1.7

WAS:
Object Heading : 3.5.4.7.1.7 Satellite Fault Rate

Redlines:
Object Heading : ~~3.5.4.7.1.7 Satellite Fault Rate~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1058:

Section Number:
3.5.4.7.1.7.0-1

WAS:
Bits 50 through 53 of Subframe 3, Page 8 shall provide the assumed Satellite Fault Rate (R_{sat}) value for ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 50 through 53 of Subframe 3, Page 8 shall provide the assumed Satellite Fault Rate (Rsat) value for ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1059:

Section Number:
3.5.4.7.1.7.0-2

WAS:
The four bits are defined as follows:
0000 = 3.16 x 10^{-3} /hours
0001 = 1 x 10^{-3} /hours
0010 = 3.16 x 10^{-4} /hours
0011 = 1 x 10^{-4} /hours
0100 = 3.16 x 10^{-5} /hours
0101 = 1 x 10^{-5} /hours
0110 = 3.16 x 10^{-6} /hours
0111 = 1 x 10^{-6} /hours
1000 = 3.16 x 10^{-7} /hours
1001 = 1 x 10^{-7} /hours
1010 = 3.16 x 10^{-8} /hours
1011 = 1 x 10^{-8} /hours
1100 = 3.16 x 10^{-9} /hours
1101 = 1 x 10^{-9} /hours
1110 = 3.16 x 10^{-10} /hours
1111 = RESERVED

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 3.16 x 10-3 /hours~~
~~0001 = 1 x 10-3 /hours~~
~~0010 = 3.16 x 10-4 /hours~~
~~0011 = 1 x 10-4 /hours~~
~~0100 = 3.16 x 10-5 /hours~~
~~0101 = 1 x 10-5 /hours~~
~~0110 = 3.16 x 10-6 /hours~~
~~0111 = 1 x 10-6 /hours~~
~~1000 = 3.16 x 10-7 /hours~~
~~1001 = 1 x 10-7 /hours~~
~~1010 = 3.16 x 10-8 /hours~~
~~1011 = 1 x 10-8 /hours~~
~~1100 = 3.16 x 10-9 /hours~~
~~1101 = 1 x 10-9 /hours~~
~~1110 = 3.16 x 10-10 /hours~~
~~1111 = RESERVED~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1063:

Section Number:
3.5.4.7.1.8

WAS:
Object Heading : 3.5.4.7.1.8 Constellation Fault Probability

Redlines:
Object Heading : ~~3.5.4.7.1.8 Constellation Fault Probability~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1064:

Section Number:
3.5.4.7.1.8.0-1

WAS:
Bits 54 through 57 of Subframe 3, Page 8 shall provide the assumed Constellation Fault Probability (P_{const}) value for the ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 54 through 57 of Subframe 3, Page 8 shall provide the assumed Constellation Fault Probability (Pconst) value for the ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1065:

Section Number:
3.5.4.7.1.8.0-2

WAS:
The four bits are defined as follows:
0000 = 3.16×10^{-3}
0001 = 1×10^{-3}
0010 = 3.16×10^{-4}
0011 = 1×10^{-4}
0100 = 3.16×10^{-5}
0101 = 1×10^{-5}
0110 = 3.16×10^{-6}
0111 = 1×10^{-6}
1000 = 3.16×10^{-7}
1001 = 1×10^{-7}
1010 = 3.16×10^{-8}
1011 = 1×10^{-8}
1100 = 3.16×10^{-9}
1101 = 1×10^{-9}
1110 = 3.16×10^{-10}
1111 = RESERVED

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 3.16 x 10-3~~
~~0001 = 1 x 10-3~~
~~0010 = 3.16 x 10-4~~
~~0011 = 1 x 10-4~~
~~0100 = 3.16 x 10-5~~
~~0101 = 1 x 10-5~~
~~0110 = 3.16 x 10-6~~
~~0111 = 1 x 10-6~~
~~1000 = 3.16 x 10-7~~
~~1001 = 1 x 10-7~~
~~1010 = 3.16 x 10-8~~
~~1011 = 1 x 10-8~~
~~1100 = 3.16 x 10-9~~
~~1101 = 1 x 10-9~~
~~1110 = 3.16 x 10-10~~
~~1111 = RESERVED~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1060:

Section Number:
3.5.4.7.1.9

WAS:
Object Heading : 3.5.4.7.1.9 Mean Fault Duration

Redlines:
Object Heading : ~~3.5.4.7.1.9 Mean Fault Duration~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1061:

Section Number:
3.5.4.7.1.9.0-1

WAS:
Bits 58 through 61 of Subframe 3, Page 8 shall provide the assumed Mean Fault Duration (MFD) value for the ARAIM at the current time for the associated GNSS constellation.

Redlines:
~~Bits 58 through 61 of Subframe 3, Page 8 shall provide the assumed Mean Fault Duration (MFD) value for the ARAIM at the current time for the associated GNSS constellation.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1062:

Section Number:
3.5.4.7.1.9.0-2

WAS:
The four bits are defined as follows:
0000 = 0.25 hours
0001 = 0.33 hours
0010 = 0.50 hours
0011 = 0.67 hours
0100 = 0.83 hours
0101 = 1 hour
0110 = 1.25 hours
0111 = 1.50 hours
1000 = 1.75 hours
1001 = 2 hours
1010 = 3 hours
1011 = 4 hours
1100 = 7 hours
1101 = 10 hours
1110 = 17 hours
1111 = 24 hours

Redlines:
~~The four bits are defined as follows:~~
~~0000 = 0.25 hours~~
~~0001 = 0.33 hours~~
~~0010 = 0.50 hours~~
~~0011 = 0.67 hours~~
~~0100 = 0.83 hours~~
~~0101 = 1 hour~~
~~0110 = 1.25 hours~~
~~0111 = 1.50 hours~~
~~1000 = 1.75 hours~~
~~1001 = 2 hours~~
~~1010 = 3 hours~~
~~1011 = 4 hours~~
~~1100 = 7 hours~~
~~1101 = 10 hours~~
~~1110 = 17 hours~~
~~1111 = 24 hours~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1066:

Section Number:
3.5.4.7.1.11

WAS:
Object Heading : 3.5.4.7.1.11 Service Level

Redlines:
Object Heading : ~~3.5.4.7.1.11 Service Level~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1067:

Section Number:
3.5.4.7.1.11.0-1

WAS:
Bits 62 through 64 of Subframe 3, Page 8 shall provide the Service Level, as described in Table 3.5-10, applicable to a given page of the ISM data issue.

Redlines:
~~Bits 62 through 64 of Subframe 3, Page 8 shall provide the Service Level, as described in Table 3.5-10, applicable to a given page of the ISM data issue.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1068:

Section Number:
3.5.4.7.1.11.0-2

WAS:
Three bits are allocated to the four identified service levels as follows:
000 = Level 1
001 = Level 2
010 = Level 3
011 = Level 4
100 to 111 = Reserved for future use

Redlines:
~~Three bits are allocated to the four identified service levels as follows:~~
~~000 = Level 1~~
~~001 = Level 2~~
~~010 = Level 3~~
~~011 = Level 4~~
~~100 to 111 = Reserved for future use~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1069:

Section Number:
3.5.4.7.1.11.0-3

WAS:
Table 3.5-10. Service Level

Redlines:
~~Table 3.5-10. Service Level~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1070:

Section Number:
3.5.4.7.1.11.0-4

WAS:

Service Level	Severity	Description
Level 1	No Data Available	Service Level indicates that users may resort to the Performance Values for integrity solutions instead of this ISM. Users should not use this ISM
Level 2	Non-Safety of Life Use	Service Level indicates that users may only use these parameters for non-safety of life (i.e., uncertified ARAIM) applications.
Level 3	Safety of Life Use (Horizontal)	Service Level indicates that the user should only use these parameters for the applications requiring integrity less than or equivalent to H-ARAIM solutions.
Level 4	Safety of Life Use (Vertical)	Service Level indicates that the user should only use these parameters for the applications requiring integrity less than or equivalent to V-ARAIM solutions.

Redlines:
<DELETED OBJECT>

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1071:

Section Number:
3.5.4.7.1.12

WAS:
Object Heading : 3.5.4.7.1.12 Satellite Mask

Redlines:
Object Heading : ~~3.5.4.7.1.12 Satellite Mask~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1072:

Section Number:
3.5.4.7.1.12.0-1

WAS:
Bits 65 through 127 of Subframe 3, Page 8 shall provide the PRN inclusion mask. Refer to Table 3.5-11 for complete GNSS PRN mapping.

Redlines:
~~Bits 65 through 127 of Subframe 3, Page 8 shall provide the PRN inclusion mask. Refer to Table 3.5-11 for complete GNSS PRN mapping.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1073:

Section Number:
3.5.4.7.1.12.0-2

WAS:
The applicability of each PRN is indicated by:
0 = Information in the current ISM does not apply to this PRN
1 = Information in the current ISM does apply to this PRN

Redlines:
~~The applicability of each PRN is indicated by:~~
~~0 = Information in the current ISM does not apply to this PRN~~
~~1 = Information in the current ISM does apply to this PRN~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1077:

Section Number:
3.5.4.7.1.12.0-3

WAS:
Table 3.5-11. PRN Mapping

Redlines:
~~Table 3.5-11. PRN Mapping~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1078:

Section Number:
3.5.4.7.1.12.0-4

WAS:

Bits	Galileo	GLONASS	BeiDou	GPS	SBAS	QZSS	IRNSS
65	SVID 1	Freq. 1	RCN 1	PRN 1	PRN 120	PRN 183	PRN ID-1
66	SVID 2	Freq. 2	RCN 2	PRN 2	PRN 121	PRN 184	PRN ID-2
67	SVID 3	Freq. 3	RCN 3	PRN 3	PRN 122	PRN 185	PRN ID-3
68	SVID 4	Freq. 4	RCN 4	PRN 4	PRN 123	PRN 186	PRN ID-4
69	SVID 5	Freq. 5	RCN 5	PRN 5	PRN 124	PRN 187	PRN ID-5
70	SVID 6	Freq. 6	RCN 6	PRN 6	PRN 125	PRN 188	PRN ID-6
71	SVID 7	Freq. 7	RCN 7	PRN 7	PRN 126	PRN 189	PRN ID-7
72	SVID 8	Freq. 8	RCN 8	PRN 8	PRN 127	PRN 190	Reserved
73	SVID 9	Freq. 9	RCN 9	PRN 9	PRN 128	PRN 191	Reserved
74	SVID 10	Freq. 10	RCN 10	PRN 10	PRN 129	PRN 192	Reserved
75	SVID 11	Freq. 11	RCN 11	PRN 11	PRN 130	PRN 193	Reserved
76	SVID 12	Freq. 12	RCN 12	PRN 12	PRN 131	PRN 194	Reserved
77	SVID 13	Freq. 13	RCN 13	PRN 13	PRN 132	PRN 195	Reserved
78	SVID 14	Freq. 14	RCN 14	PRN 14	PRN 133	PRN 196	Reserved
79	SVID 15	Freq. 15	RCN 15	PRN 15	PRN 134	PRN 197	Reserved
80	SVID 16	Freq. 16	RCN 16	PRN 16	PRN 135	PRN 198	Reserved
81	SVID 17	Freq. 17	RCN 17	PRN 17	PRN 136	PRN 199	Reserved
82	SVID 18	Freq. 18	RCN 18	PRN 18	PRN 137	PRN 200	Reserved
83	SVID 19	Freq. 19	RCN 19	PRN 19	PRN 138	PRN 201	Reserved
84	SVID 20	Freq. 20	RCN 20	PRN 20	PRN 139	PRN 202	Reserved
85	SVID 21	Freq. 21	RCN 21	PRN 21	PRN 140	Reserved	Reserved
86	SVID 22	Freq. 22	RCN 22	PRN 22	PRN 141	Reserved	Reserved
87	SVID 23	Freq. 23	RCN 23	PRN 23	PRN 142	Reserved	Reserved
88	SVID 24	Freq. 24	RCN 24	PRN 24	PRN 143	Reserved	Reserved
89	SVID 25	Freq. 25	RCN 25	PRN 25	PRN 144	Reserved	Reserved
90	SVID 26	Freq. 26	RCN 26	PRN 26	PRN 145	Reserved	Reserved
91	SVID 27	Freq. 27	RCN 27	PRN 27	PRN 146	Reserved	Reserved
92	SVID 28	Freq. 28	RCN 28	PRN 28	PRN 147	Reserved	Reserved
93	SVID 29	Freq. 29	RCN 29	PRN 29	PRN 148	Reserved	Reserved
94	SVID 30	Freq. 30	RCN 30	PRN 30	PRN 149	Reserved	Reserved
95	SVID 31	Freq. 31	RCN 31	PRN 31	PRN 150	Reserved	Reserved
96	SVID 32	Freq. 32	RCN 32	PRN 32	PRN 151	Reserved	Reserved
97	SVID 33	Reserved	RCN 33	PRN 33	PRN 152	Reserved	Reserved
98	SVID 34	Reserved	RCN 34	PRN 34	PRN 153	Reserved	Reserved
99	SVID 35	Reserved	RCN 35	PRN 35	PRN 154	Reserved	Reserved
100	SVID 36	Reserved	RCN 36	PRN 36	PRN 155	Reserved	Reserved
101	Reserved	Reserved	RCN 37	PRN 37	PRN 156	Reserved	Reserved
102	Reserved	Reserved	Reserved	PRN 38	PRN 157	Reserved	Reserved
103	Reserved	Reserved	Reserved	PRN 39	PRN 158	Reserved	Reserved
104	Reserved	Reserved	Reserved	PRN 40	Reserved	Reserved	Reserved
105	Reserved	Reserved	Reserved	PRN 41	Reserved	Reserved	Reserved
106	Reserved	Reserved	Reserved	PRN 42	Reserved	Reserved	Reserved
107	Reserved	Reserved	Reserved	PRN 43	Reserved	Reserved	Reserved
108	Reserved	Reserved	Reserved	PRN 44	Reserved	Reserved	Reserved
109	Reserved	Reserved	Reserved	PRN 45	Reserved	Reserved	Reserved
110	Reserved	Reserved	Reserved	PRN 46	Reserved	Reserved	Reserved
111	Reserved	Reserved	Reserved	PRN 47	Reserved	Reserved	Reserved

112	Reserved	Reserved	Reserved	PRN 48	Reserved	Reserved	Reserved
113	Reserved	Reserved	Reserved	PRN 49	Reserved	Reserved	Reserved
114	Reserved	Reserved	Reserved	PRN 50	Reserved	Reserved	Reserved
115	Reserved	Reserved	Reserved	PRN 51	Reserved	Reserved	Reserved
116	Reserved	Reserved	Reserved	PRN 52	Reserved	Reserved	Reserved
117	Reserved	Reserved	Reserved	PRN 53	Reserved	Reserved	Reserved
118	Reserved	Reserved	Reserved	PRN 54	Reserved	Reserved	Reserved
119	Reserved	Reserved	Reserved	PRN 55	Reserved	Reserved	Reserved
120	Reserved	Reserved	Reserved	PRN 56	Reserved	Reserved	Reserved
121	Reserved	Reserved	Reserved	PRN 57	Reserved	Reserved	Reserved
122	Reserved	Reserved	Reserved	PRN 58	Reserved	Reserved	Reserved
123	Reserved	Reserved	Reserved	PRN 59	Reserved	Reserved	Reserved
124	Reserved	Reserved	Reserved	PRN 60	Reserved	Reserved	Reserved
125	Reserved	Reserved	Reserved	PRN 61	Reserved	Reserved	Reserved
126	Reserved	Reserved	Reserved	PRN 62	Reserved	Reserved	Reserved
127	Reserved	Reserved	Reserved	PRN 63	Reserved	Reserved	Reserved

SVID = Space Vehicle ID
Freq. = Carrier Frequency Number
RCN = Ranging Code Number
PRN = Pseudorandom Noise Number

Redlines:
<DELETED OBJECT>

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1079:

Section Number:
3.5.4.7.1.14

WAS:
Object Heading : 3.5.4.7.1.14 Integrity Support Message Cyclic Redundancy Check

Redlines:
Object Heading : ~~3.5.4.7.1.14 Integrity Support Message Cyclic Redundancy Check~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1080:

Section Number:
3.5.4.7.1.14.0-1

WAS:
Bits 219 through 250 of Subframe 3, Page 8 are a 32-bit Cyclic Redundancy Check (CRC) specific to the ISM parameters. The ISM CRC will cover only the ISM parameters in Subframe 3, Page 8, (Bits 15 to 218). Refer to DO-246E-Change 1 document for more details on the ISM CRC.

Redlines:
~~Bits 219 through 250 of Subframe 3, Page 8 are a 32-bit Cyclic Redundancy Check (CRC) specific to the ISM parameters. The ISM CRC will cover only the ISM parameters in Subframe 3, Page 8, (Bits 15 to 218). Refer to DO-246E-Change 1 document for more details on the ISM CRC.~~

IS:
<DELETED OBJECT>

Rationale:
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)

IS800-1181:
Insertion after object IS800-1033

Section Number:
3.5.4.7.2

WAS:
<INSERTED OBJECT>

Redlines:
Object Heading 3.5.4.7.2 Use of GPS ISM Data
Object Type: Header

IS:
Object Heading 3.5.4.7.2 Use of GPS ISM Data
Object Type: Header

Rationale:
10/28/2024 Per the AWG, added GPS to indicate the following formula is only relevant to GPS signals. (T. Anthony)
10/10/2022 Create "Use of ISM Data" section to define the formula for bnom. (T. Anthony)

IS800-1182:
Insertion below object IS800-1181

Section Number:
3.5.4.7.2.0-1

WAS:
<INSERTED OBJECT>

Redlines:
The nominal pseudorange error bias (b_{nom}), shall be calculated in accordance with section 30.3.3.10.2 of IS-GPS-200.
Object Type: Requirement

IS:
The nominal pseudorange error bias (b_{nom}), shall be calculated in accordance with section 30.3.3.10.2 of IS-GPS-200.
Object Type: Requirement

Rationale:
3/31/2025 CRM #127, #137 All references to the bnom formula need to have requirements language (i.e., "shall") (T. Anthony)
10/28/24 Per the AWG, change back to referring to the formula in IS-GPS-200. (T. Anthony)
10/9/2024 Per the 10/4 agreement, this section was brought back to the RFC-495 SCN text so we could make references to how IAURA is calculated, which is slightly different for each of the civil signals. Also, using this formula should be a Requirement (T. Anthony)
9/5/2024 replace the beta with "b" in keeping with a correction made back at the 21-Aug TIM to IS-GPS-200 (T. Anthony)
8/21/2024: At TIM, decided to repackage the ISM Parameters into the ISM Packet which references IS-GPS-200 and eliminates duplicate information in IS-GPS-705 and IS-GPS-800. (T. Anthony)
10/10/2022 Create “Use of ISM Data” section to define the formula for bnom. (T. Anthony)
10/10/2022 Redesignated bnom as βnom. (T. Anthony)

IS800-1184:
Insertion after object IS800-1183

Section Number:
3.5.4.7.2.0-3

WAS:
<INSERTED OBJECT>

Redlines:
Where IAURA in that formula is described in sections 3.5.3.10, 3.5.3.5, 3.5.3.8, and 6.2.1.
Object Type: Info-Only

IS:
Where IAURA in that formula is described in sections 3.5.3.10, 3.5.3.5, 3.5.3.8, and 6.2.1.
Object Type: Info-Only

Rationale:
CRM #83 10/10/2022 Create "Use of ISM Data" section to define the formula for bnom. (T. Anthony)

IS800-1185:
Insertion after object IS800-297

Section Number:
6.2.1.0-2

WAS:
<INSERTED OBJECT>

Redlines:
The composite integrity assured URA (IAURA) value is the RSS of an elevation-dependent function of the upper bound value of the URA_{ED} component and the upper bound value of the URA_{NED} component.
Object Type: Info-Only

IS:
The composite integrity assured URA (IAURA) value is the RSS of an elevation-dependent function of the upper bound value of the URA_{ED} component and the upper bound value of the URA_{NED} component.
Object Type: Info-Only

Rationale:
10/10/2022 Create a definition for IAURA to support the formula in the "Use of ISM Data" section to define the formula for bnom. (T. Anthony)

 # CP Status = 'In Review': 56

# of inserted requirements: 1
# of modified requirements: 2
# of deleted requirements: 0
# of TBDs: 0
# of TBRs: 0
of (added/modified) effectivities: 0
of VCRM additions: 1
# of VCRM modifications: 0
# of VCRM deletions: 0
# of descriptive texts: 51
of (added/modified) tables: 3
of (added/modified) figures: 1
