| **Page** | **Section** | **Line** | **Type** | **Comment/ Rationale** | **Source of Comment (Name/Agency)** | **Suggested Disposition** | | **Disposition**  **(completed by**  **principal editor)** | | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| General |  |  |  | There is a small bit of inconsistency in the use of the phrase "mnemonic keyword" and the capitalization:  "mnemonic": 46 instances total  "mnemonic keyword": 42 instances (so 4 without "keyword" associated)  Mnemonic Keyword: 34 instances  Mnemonic keyword: 0 instances  mnemonic Keyword: 0 instances  mnemonic keyword: 2 instances  MNEMONIC KEYWORD: 6 instances (in titles, so OK) | David S. Berry / NASA | Add "Keyword" where missing, capitalize first character in 2 instances. |  |
| General |  |  |  | Based on CESG review comments on the PRM (that caused us to fail the CESG Poll for starting the Agency Review), we should add something early in the document that explains the virtual **requirement** for an ICD to be used in conjunction with the NHM (best examples are diversity of units issue with instruments measuring similar phenomena, potentially huge variety of "data group" field names since they are arbitrary and not defined by the standard and not listed in SANA, instrument specifics as exemplified in Annex E) | David S. Berry / NASA | Suggest that this be in Section 1.2 of the document where the ICD is first mentioned. This may head off some nasty comments from the CESG. [Note: should we consider having data group field values also registered with SANA?] |  |
| 1-1 | 1.3 | 2 | ed | subject/verb consistency between first and second standards | David S. Berry / NASA | From: "... does not address that standard"  To: "...does not address those standards" |  |
| 2-1 | 2.1 | 1-4 | ed | The first four lines are pretty much a run-on sentence. It would be better to revise it to be more readable. | David S. Berry / NASA | Consider revising |  |
| 2-1 | 2.1 |  | te | I think it might be a good idea to add a sentence or two about the types of spacecraft hardware to which the NHM applies, since this is a general overview section. | David S. Berry / NASA | Consider adding specified information |  |
| 3-1 | 3.1.3 | 1 | ed | This sentence should be moved into the "General" section 3.1. | David S. Berry / NASA | Move the statement to be either the second or third sentence in section 3.1 |  |
| 3-1 | 3.1.1 | 2 | ed | Lacks a period at end | David S. Berry / NASA | Add period at end. |  |
| 3-1 | 3.1.6 | 1 | ed | Word choice | David S. Berry / NASA | From: "... Sections shall be in the order..."  To: "... Sections shall appear in the order..." |  |
| 3-1 | 3.1.6 | 2 | ed | The second line (regarding syntax description) is redundant. (see existing 3.1.3) | David S. Berry / NASA | Delete the second sentence. |  |
| 3-1 | 3.1.8  3.1.9 | all | ed | Section order of these 2 sections should be reversed... existing 3.1.7 and 3.1.9 deal specifically with exchange; existing 3.1.8 logically follows existing 3.1.9 | David S. Berry / NASA | Consider swapping the order of these 2 sections. |  |
| 3-2 | 3.3.2 | N/A | te | It is not clear why the "stop time" was made optional. | David S. Berry / NASA | Restore the stop time in the "shall" section or make the start time optinal too. This would be consistent with other Nav WG standards (either both mandatory or both optional). If you feel this is a problem, let's discuss at Darmstadt. |  |
| 3-2 | 3.3.2 | All | ed, te | The structure of the Metadata Section is not clear from this revised exposition. Specifically, it is not clear where the optional elements will go in the metadata. I'm not sure this is an improvement over the Tables we used in prior versions. | David S. Berry / NASA | Consider revising sections 3.3.2 and 3.3.4 |  |
| 3-2 | 3.3.3 | 1 | ed | I think this statement should be combined with 3.3.2 | David S. Berry / NASA | From (in 3.3.2): "The Metadata Section shall include:"  To (in 3.3.2): "The Metadata Section shall include data elements in the following order:" In each of the subsidiary items you can indicate which of the lines are mandatory and which are optional. |  |
| 3-2 | 3.3.4 | 1 | te | States that a single comment may appear after META\_START, but we have always said before that an unlimited number of comments can appear there. | David S. Berry / NASA | Revise statement to allow multiple comments at the originator's discretion. |  |
| 3-3 | 3.3.5 (Note) | 1-2 | te | Data from the same hardware (the "group" you have defined) cannot all have the same time tag. The sampling frequency is really irrelevant to the NHM I think. | David S. Berry / NASA | Remove the phrase "and have a common time tag and sampling frequency". |  |
| 3-3 and others | 3.3.5 (Note)  and others | 3 | ed | I note a great deal of inconsistency with respect to the capitalization of the words "keyword" and "value" in this version of the document. | David S. Berry / NASA | Consider consistent approach since current approach seems haphazard (though I guess we could ignore and let the CCSDS editor deal with it...) |  |
| 3-3 | 3.4.3 | All | ed, te | The structure of the Data Section is not clear from this revised exposition. I'm not sure this is an improvement over the Tables we used in prior versions. | David S. Berry / NASA | Consider combining sections 3.4.2 and 3.4.3 |  |
| 3-3 | 3.4.3 (a) | 1 | te | States that a single comment may appear after DATA\_START, but we have always said before that an unlimited number of comments can appear there. | David S. Berry / NASA | Revise statement to allow multiple comments at the originator's discretion. |  |
| 3-3 | 3.4.3 (b) | 1 | te | The rationale for changing DATA\_STOP from mandatory to optional is not clear. | David S. Berry / NASA | Restore mandatory DATA\_STOP. Alternatively, we should discuss the rationale at Darmstadt. |  |
| 4-2 | 4.3.1 | 1 | ed | Typo | David S. Berry / NASA | From: "uppercase"  To: "upper case" (add space) |  |
| 4-2 | 4.3.1 | 1 | ed, te | Because of the way section 3 has been restructured, Section 4 leaves the reader guessing about KVN keywords... they haven't been discussed yet. | David S. Berry / NASA | Not sure how to address this. Discuss at Darmstadt. |  |
| 4-3 | 4.4.4.3 (NOTE) | 1 | ed | Refers to Table 3-1, which no longer exists in this document. | David S. Berry / NASA | Correct reference. |  |
| 4-3 | 4.4.4.3 | 1 | ed | Word choice | David S. Berry / NASA | From: "The header would..."  To: "A completed header would..." |  |
| 4-4 | 4.4.6.2 | 2 | ed | Refers to Table 3-2, which no longer exists in this document. | David S. Berry / NASA | Correct reference. |  |
| 4-4 | 4.4.6.2 | All | ed, te | Because of the way section 3 has been restructured, Section 4 leaves the reader guessing about keywords in general and the META\_START and META\_STOP in particular. | David S. Berry / NASA | Not sure how to address this. Discuss at Darmstadt. |  |
| 4-4 | 4.4.6.4 | 4 | ed | In the example <DEFINE> or <COMMENT> line, maybe refer the reader to the appropriate section in the document. | David S. Berry / NASA | From: "<DEFINE>Mnemonic Keyword here</DEFINE>"  To: "<DEFINE>Mnemonic Keyword here... see section 5.x.x</DEFINE>"  OR  From: "<COMMENT>...</COMMENT>"  To: "<COMMENT>See Sec 5.x.x</COMMENT> |  |
| 4-4 | 4.4.7 | All | ed | The "shall" statements are not numbrered. | David S. Berry / NASA | Number them 4.4.7.1, 4.4.7.2, 4.4.7.3 respectively. |  |
| 4-5 | Fig 4-2 | All | te | This figure may no longer be intelligible to a reader given the restructuring of Section 3. | David S. Berry / NASA | Not sure how to address this. Discuss at Darmstadt. |  |
| 4-5 | Fig 4-2 | Sec 2 | ed | Data Group fields reflect old convention (lower case) | David S. Berry / NASA | From: lower case data group fields  To: upper case data group fields |  |
| 4-5 | Fig 4-2 | Sec 1, Sec 3 | te | We (I) have used "<timetag>" as a "special" XML tag in the NHM, but use of "<EPOCH>" would be consistent with other Nav WG standards. Note that "EPOCH" is not an NHM keyword, so there is a fundamental inconsistency we need to discuss (see for example TDM/XML) | David S. Berry / NASA | Discuss at Darmstadt. |  |
| 5-1 | 5.2 | All | ed | I think the sections "Format Version", "Creation Date", "Message Originator", etc. should be numbered 5.2.1, 5.2.2, 5.2.3, etc. | David S. Berry / NASA | Consider... there are several other places in the document with similar numbering |  |
| 5-1 | 5.2.1  5.2.2 |  | ed | Based on previous comment, these would be numbered 5.2.1.1 and 5.2.1.2 respectively. Carry on in similar fashion in this section. | David S. Berry / NASA | Consider... there are several other places in the document with similar numbering. This would put all of the keyword relative requirements with the same node number. |  |
| 5-2 | 5.2.5 | 1 | ed | Capitalization | David S. Berry / NASA | From: "Message originator"  To: "Message Originator" |  |
| 5-2 | 5.2.5 | 1 | ed | extra word | David S. Berry / NASA | From: "...shall have be..."  To: "...shall be..." |  |
| 5-2 | 5.2.6 | 2 | ed, te | States that the value of the "ORIGINATOR" keyword should be specified in an ICD. Based on CESG review comments on the PRM (that caused us to fail the CESG Poll for starting the Agency Review), we should change this to a SANA registry. | David S. Berry / NASA | From: "...should be specified in an ICD"  To: "... should be drawn from http://sanaregistry.org/r/organizations/organizations.html" |  |
| 5-2 | 5.2.6 | 3 (Note) | ed, te | Suggested re-wording | David S. Berry / NASA | From: existing  To: "An example of the NHM Header is provided in Table 5-1" |  |
| 5-2 | Table 2 (aka 5-1) | Header | ed, te | Based on CESG review comments on the PRM, we should change the word "Obligatory" to "Mandatory" | David S. Berry / NASA | From: "Obligatory"  To: "Mandatory" (do also in other tables in doc) |  |
| 5-2 | Table 2 (aka 5-1) | All | ed, te | I think we should avoid repeating what has been stated elsewhere. | David S. Berry / NASA | I suggest removing the description text and replacing it with references to the applicable text sections |  |
| 5-2 | Table 2 (aka 5-1) | Desc | ed, te | Substitute repetition of requirement with references to the requirement | David S. Berry / NASA | From: existing  To: For CCSDS\_NHM\_VERS, "See 5.2.1, 5.2.2" (or suggested revised numbers. Continue with other table entries in this fashion. |  |
| 5-3 | 5.3.6 | 3 | ed | Inconsistent usage: "Object Name" at beginning of paragraph, "Object name" within. | David S. Berry / NASA | Consistent use of upper/lower case. |  |
| 5-3 | 5.3.6  5.3.7 | N/A | ed, te | Based on CESG review comments on the PRM (that caused us to fail the CESG Poll for starting the Agency Review), we may need to change the source of OBJECT\_NAME and OBJECT\_ID to a SANA registry. | David S. Berry / NASA | We may need to refer to http://sanaregistry.org/r/spacecraftid/spacecraftid.html ... but that does NOT presently contain the international designator. Let's discuss at Darmstadt. |  |
| 5-3 | Between 5.3.6, 5.3.7 | 1 | ed | Is "Object Identifier" better? | David S. Berry / NASA | Consider... |  |
| 5-3 | 5.3.8 | 5 | ed | The line that should start with "--NNN" needs a line break prior. | David S. Berry / NASA | Add line break. |  |
| 5-3 | 5.3.9 | 1 | ed, te | Implies that the Start Time Line is optional. However, 3.3.2 (e) states it is mandatory. | David S. Berry / NASA | Resolve inconsistency. Optional would be consistent with TDM. Mandatory would be consistent with OEM and AEM. |  |
| 5-4 | 5.3.11 | 1 | ed, te | As noted previously, the STOP\_TIME should have the same attributes as START\_TIME, i.e., either both mandatory or both optional. | David S. Berry / NASA | Resolve inconsistency |  |
| 5-5 | 5.3.16.2 | 2 | te | Specifies "an integer" to follow the 3 character Hardware Type. All examples have assumed the integer is less than 10 (i.e., single digit). Can the integer be greater than 9? (e.g., some spacecraft may have more than 9 thrusters) | David S. Berry / NASA | Clarify the range of integer values allowed. |  |
| 5-5 | 5.3.16.3 | Note | ed, te | Better clarity should be provided. | David S. Berry / NASA | From: "This string should..."  To: "The set of Data Group Fields for a mission should..." |  |
| 5-6 | Table 5-2 | Most | ed, te | I think we should avoid repeating what has been stated elsewhere. Substitute repetition of requirement with references to the requirement | David S. Berry / NASA | I suggest removing the description text and replacing it with references to the applicable text sections. For example, for the "SYSTEM" field, just say "see 5.3.16.1" in the "Description" column. |  |
| 5-6 | Table 5-2 |  | ed, te | "Measurement Type" could list the detailed data types, but does not. It refers to an annex, or SANA, or ICD. | David S. Berry / NASA | I think the last 5 rows of the example in Annex D should be moved into the main text. It is difficult to believe that the nature of the data types is an unstable and growing set (compared to say the instrument types) |  |
| 5-7 | Table 5-3 |  | ed, te | I think we should avoid repeating what has been stated elsewhere. Substitute repetition of requirement with references to the requirement | David S. Berry / NASA | I suggest removing the description text and replacing it with references to the applicable text sections. For example, for the "META\_START" keyword, just say "see 5.3.1, 5.3.2" in the "Description" column. |  |
| 5-7 | Table 5-3 |  |  | For OBJECT\_NAME, if the "Description Text" is repeated from 5.3.6 (which I don't recommend), we will need to refer to a SANA registry. | David S. Berry / NASA | If the Description persists, instead of a reference to 5.3.6, change to the applicable SANA registry. |  |
| 5-8 | Table 5-3 |  |  | For OBJECT\_ID, if the "Description Text" is repeated from 5.3.8 (which I don't recommend), we will need to refer to a SANA registry. | David S. Berry / NASA | If the Description persists, instead of a reference to 5.3.8, change to the applicable SANA registry. See previous comments on OBJECT\_ID. |  |
| 5-9 | Table 5-3 |  |  | In the second comment of the "ACS.OBC1...." example, the "F4" in the measurement type field is characterized as "Floating point", but that should be "Fixed point" per Annex D. | David S. Berry / NASA | Change comment to "Fixed point" or change the applicable part of the measurement type field to "E4" |  |
| 5-9 | Table 5-3 |  |  | In the first comment of the "ACS.STA2...." example, it says "Star tracker 1", but based on the notation I think this should be "Star tracker 2" | David S. Berry / NASA | Confirm and correct as applicable. |  |
| 5-9 | 5.4 | All | ed | I think the sections "Start Line", "Comment Line", "Data Line, etc. should be numbered 5.4.1, 5.4.2, 5.4.3, etc. | David S. Berry / NASA | Consider... there are several other places in the document with similar numbering |  |
| 5-9 | 5.4 | Data Line | ed, te | The terms "Data Line" and "Hardware Data Record" are used approximately equinumerously. | David S. Berry / NASA | Pick one of the terms and stick with it. "Hardware Data Record" would be approximately symmetric with the TDM's "Tracking Data Record" |  |
| 5-10 | 5.4.4, 5.4.5, 5.4.5.1 | 1 | ed, te | Not sure why the term "timetag" was changed to "Time" in the document. Creates inconsistency with TDM | David S. Berry / NASA | Consider reverting to "timetag". |  |
| 5-10 | 5.4.5.3 | 4 | ed, te | Refers reader to Annex D for the data types, but they are so small in number that I think we should just have them in line in the document in a table. | David S. Berry / NASA | Consider moving the data types out of Annex D and the SANA registry, and just putting them in an in line Table in the document. |  |
| 5-10 | 5.4.5.4 | 2 | ed | Typo | David S. Berry / NASA | From: "If they do than..."  To: "If they do then..." |  |
| 5-10 | Table 5-4 |  | ed, te | I think we should avoid repeating what has been stated elsewhere. Substitute repetition of requirement with references to the requirement | David S. Berry / NASA | See prior related suggestions |  |
| 5-11 | Table 5-4 |  | te | DATA\_STOP is shown as optional. This is inconsistent with TDM. | David S. Berry / NASA | Change DATA\_STOP to mandatory. |  |
| 6-2 | 6.3.5 | All | te | Question: it occurs to me that it may be desirable/required to present the text values from telemetry in an NHM Hardware Data Record exactly as they came from the spacecraft, i.e., we may not be able to make the restriction stated here. Note that there is no restriction on text case in the revised section 3 or section 5. | David S. Berry / NASA | Discuss at Darmstadt (?). We could either eliminate the restriction on case for text values, or relax it in the Data Section only, or keep the restriction. Relaxing in the Data Section seems the best approach to me. |  |
| A-2 | A1.2 | 3, 4 | ed | Collapsed text starting with "Keyword Column" | David S. Berry / NASA | "Keyword Column" is meant to be a heading, followed by the explanatory text that starts with "The keyword column contains...". See CDM ICS p. A-2 for formatting suggestion. |  |
| A-2 | A1.2 | 8 | ed | Typo | David S. Berry / NASA | From: "Message(CCSDS 510.0"  To: "Message (CCSDS 510.0" (add space) |  |
| A-2 | A1.2 | 10 | ed | Collapsed text starting with "The status column uses..." | David S. Berry / NASA | See CDM ICS p. A-2 for formatting suggestion. |  |
| A-2 | A1.2 | 12-14 | ed | Collapsed text starting with "The support column is to be used..." | David S. Berry / NASA | See CDM ICS p. A-2 for formatting suggestion. |  |
| A-2 | A2 | Header | ed | Refers to Conjunction Data Message | David S. Berry / NASA | From: "Conjunction"  To: "Navigation Hardware" |  |
| A-3 | A2.1.4 | 2 | ed | Vestigial text | David S. Berry / NASA | From: 508.0  To: 510.0 |  |
| A-5  A-6 | All | All | ed, te | You've done a great job filling in the ICS!!! However, due to the fact that significant changes are still being added (e.g., re-write of sec 3 and sec 5) I think filling in the "Reference" column at this point will become both (a) a maintenance chore, and (b) error prone. If a single section is added somewhere, it could totally throw off this table. For example, I suspect that 3.3.1 was added after the ICS was filled out because there are a number of references to 3.3.1 (a), (b), etc. that do not exist; rather they are now 3.3.2 (a), (b), respectively. | David S. Berry / NASA | Suggest waiting until the "final" version to update the Reference column in the ICS. |  |
| A-5 | Line 2.5 |  | te | The "Status" column and section 3.3.2(e) indicate that the START\_TIME is mandatory, but the text in 5.3.9 implies it is optional. | David S. Berry / NASA | Resolve inconsistency. See prior comments on START/STOP\_TIME. |  |
| A-6 | Header |  | ed | Typo | David S. Berry / NASA | Repeat the Table Headings on page 2 of the ICS (use "Heading Rows Repeat" feature in MS Word) |  |
| A-6 | Line 3.4 |  | te | Typo | David S. Berry / NASA | From: "DATA\_END"  To: "DATA\_STOP" |  |
| A-6 | Line 3.4 |  | te | Status Mis-classification | David S. Berry / NASA | From: "O"  To: "M" (see previous comments on DATA\_STOP) |  |
| B-1 | Table B-3 |  | te | There are several time systems in the table that are "missing" with respect to other Nav WG standards (e.g., MRT, TCB, TDB, TCG). Not sure if this is an issue or not. | David S. Berry / NASA | No action for this document necessarily. Discuss at Darmstadt whether any of the "missing" This makes me think that instead of having an Annex with TIME\_SYSTEM values, we should have a small, normative TIME\_SYSTEMS Blue Book to which we can refer. |  |
| C-2 | C2 | 2-3 | te | Based on CESG review comments on the PRM (that caused us to fail the CESG Poll for starting the Agency Review), we need to change the "registration rule" for SANA change requests. | David S. Berry / NASA | From: "The registration rule for new entries in the registry is the approval of new requests by the CCSDS Navigation Working Group chair"  To: "... approval of new requests by the CCSDS Area or Working Group responsible for the maintenance of the NHM at the time of the request. New requests should be sent to info@sanaregistry.org ." |  |
| C-2 | C2.x (new) | N/A | te | Based on CESG review comments on the PRM (that caused us to fail the CESG Poll for starting the Agency Review), we need to change the source of the values for some of our keywords. | David S. Berry / NASA | Reflect that values for OBJECT\_NAME should be drawn from the SANA <http://sanaregistry.org/r/spacecraftid/spacecraftid.html> registry. We may need to add "OBJECT\_ID" as well, but that is an issue I need to discuss with Peter Shames. Also state that the value of <ORIGINATOR> "should" be from the SANA <http://sanaregistry.org/r/organizations/organizations.html> (it has been pointed out that this "in progress" registry is not nearly complete enough). |  |
| C-2 | C2.1 | Sec  Title | ed | Clarify... | David S. Berry / NASA | From: "XML"  To: "XML Schema" |  |
| C-2 | C2.2 | 1 | ed | Word choice | David S. Berry / NASA | From: "Registered values"  To: "Approved values" |  |
| D-1 | N/A | 3 | te | Specificity | David S. Berry / NASA | From: "... contained in a SANA registry"  To: "...contained in the SANA registry http://sanaregistry.org/r/nhm\_define\_keyword\_values/nhm\_define\_keyword\_values.html ". [NOTE to Joe: this name isn't fixed... if you want a different name, we can request it] |  |
| D-1 | N/A | 5 | ed | Verb tense  [Note to Joe... difficult to refer to specific parts of this Annex due to no section numbering, so I numbered all the lines of text sequentially for these comments.] | David S. Berry / NASA | From: "Each entry... will contain..."  To: "Each entry... contains..." |  |
| D-1 | N/A | 7 | ed, te | Text agreement with Table. The text refers to a column that has a different heading in the table. They should be the same. | David S. Berry / NASA | From: "Type and Field Within Value of DEFINE Lines"  To: "Mnemonic Keyword Field" |  |
| D-1 | N/A | 8 | ed | Typo | David S. Berry / NASA | From: "The types or fields are:"  To: "The types of fields are:" [replace "or" with "of"] |  |
| D-1 | N/A | 12-13 | ed | In discussion of System Field, there is a sentence that is difficult to understand due to awkward phrasing. | David S. Berry / NASA | From: "... concerned with the same hardware the same data, in different messages"  To: "... concerned with the same hardware, the same data (in different messages)" |  |
| D-1 | N/A | 25 | ed, te | There are a few instances where "mnemonic" is used without "keyword" (i.e., "mnemonic" is used as a noun instead of a qualifier). This is one of them. | David S. Berry / NASA | From: "... a Mnemonic defined..."  To: "... a Mnemonic Keyword defined..." |  |
| D-2 | Table D-1 | N/A | ed, te | I think maybe the organizing principle behind this table (and the SANA registry) should be the "Mnemonic Keyword Field" rather than the "Value". | David S. Berry / NASA | Suggest switching column order |  |
| D-2 | Table D-1 | CSS | te | Question more than anything... not clear to me how milliamps (mA) converts to angle from the sun... but you are the expert here. | David S. Berry / NASA | None... just a question. |  |
| D-2 | Table D-1 | THR | te | "counts" are the only unit specified, but it seems that there should be an example of some pressure related unit (if applicable). | David S. Berry / NASA | Consider whether Pascal (Pa) or hectoPascal (hPa) should be added as potential unit for pressure |  |
| D-2  D-3 | Bottom |  |  | As noted previously, I think the measurement types are not so numerous, and we should add them to an inline table rather than referring someone to SANA. | David S. Berry / NASA | Consider moving these to an inline table in 5.3.16.6 for example. |  |
| D-3 | "E" |  | ed, te | Missing sign info. | David S. Berry / NASA | Add "(+ or -)" as was used for "F" |  |
| D-3 | "C" |  | ed, te | Word choice (but this could also be a philosophical question too... can "character" data be considered a "measurement"?) | David S. Berry / NASA | From: "measurement"  To: "character data" |  |
| E-1 | Table E-1 |  |  | There is a column "Required". This raises the question "required by who?" | David S. Berry / NASA | Clarify the intent of this column. |  |
| E-1 | N/A | N/A | te | In the explanation of EYECURRENT... it's not clear to me how the data could be used without the mounting vector and conversion factors (they are stated as not required in the Table E-1). | David S. Berry / NASA | Sorry... more ignorance here on my part. |  |
| I-1 | Paragraphs 1-5 | All | ed, te | I think all of the introductory material here (down to the paragraph that starts "A specification of requirements agreed to by all parties...") should be moved into Section 2 of the document. By the time a reader gets to this Annex, this information is no longer necessary. It would be better for the reader to get this up front. | David S. Berry / NASA | Move cited paragraphs into Section 2 of document. |  |
| I-1 | Paragraph 3 | last | ed | Typo. | David S. Berry / NASA | From: "mission operations Team"  To: "mission operations team" (case consistency) |  |
| I-2 | NHM-P02 | 2 | ed | Since NHM-P01 refers to both streams and files, I think "(e.g., files)" could be deleted. | David S. Berry / NASA | Remove "(e.g., files)". On the other hand, this same bit appears in CDM. |  |
| I-2 | NHM-P04 |  | te | Improve trace. | David S. Berry / NASA | Add "Annex B" to the trace |  |
| I-3 | NHM-P08 |  | te | Rationale merely restates the requirement. | David S. Berry / NASA | In the Rationale column  From: "Identifies the spacecraft..."  To: "In order to be useful to an operations team, it is necessary to know the spacecraft..." |  |
| I-3 | NHM-P09 |  | te | Rationale merely restates the requirement. | David S. Berry / NASA | In the Rationale column  From: "Identifies the subsystem..."  To: "In order to be useful to an operations team, it is necessary to know the subsystem..." |  |
| I-3 | NHM-P09 |  | te | Cited trace is inaccurate | David S. Berry / NASA | From: 3.3.2(e)  To: 3.3.5, 5.3.16 |  |
| I-3 | NHM-P11 |  | te | Clarity: It is not clear what is meant by "dynamically configure the input". | David S. Berry / NASA | I think this is meant to be the requirement that is satisfied by the mnemonic keyword concept. If so, I think the requirement should be stated more convincingly... maybe "dynamically respond to a wide variety of input data". |  |
| I-3 | NHM-P11 |  | te | Cited trace is inaccurate | David S. Berry / NASA | From: 3.3.2(e)  To: 3.3.5, 5.3.16 |  |
| I-3 | NHM-P12 |  | te | Rationale could be improved. | David S. Berry / NASA | From: existing (which in some ways argues against having software to process an NHM)  To: Maybe something like: "Humans can rapidly transform small amounts of data to actionable information. Computers can perform such transformation on huge volumes of data." |  |
| I-3 | NHM-D01 |  | N/A | The Rationale here could be good to include in the general discussion of why an ICD is necessary for use with the NHM. | David S. Berry / NASA | Consider... |  |
| I-4 | NHM-D02 |  | te | Cited trace is inaccurate | David S. Berry / NASA | From: 3.2.1(a)  To: 3.2.2 |  |