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| US |  | Introduction |  |  | More precise wording is needed. | Replace “coordination of space traffic”  With “coordination of spaceflight traffic” or “coordination of astronauntical traffic” |  |
| US |  | Introduction.  And  Section 1 (Scope) |  | te, ed. | Overall, it’s unclear if this document is talking about what a national STC framework (and STC systems) would look like, and/or what an international STC framework would look like.  For example, each nation may have its own STC or STM framework which then may coordinate with others.  Or there may also be a neutral international STC/STM framework that coordinates with those of each nation. | ADD a sentence or two that may clarify this. |  |
| US |  | Section 1 Scope | 1 | Ed. | To improve readability | REPLACE “accomplished by the STC system(s) and STC service providers”  WITH “accomplished by STC system(s) and service providers” |  |
| US |  | Section 1  Scope.  Other sections |  | ed. | The doc mentions both ‘STC framework’ and ‘STC system’. This is a bit unclear, since they are not defined.  Some sentences include both, e.g., in the Scope.  What, if anything, is the difference? | RECOMMEND: we discuss as a team the conceptualization of STC framework vs. STC system, and then explicitly state it in the document for the next version. |  |
| US |  | Section 2 |  | ed. | To improve internal consistency and adhere to any existing ISO NWIP formatting policies, the defined terms should have the same format.  To improve readability, they should follow English grammar and syntax rules.  Currently All sub-sections except 2.1 and 2.9 capitalize each component word in the defined term.  E.g., Space Surveillance and Tracking (2.6)  But ‘Collision risk’ (2.1) does not.  EXAMPLE: in 2.2., ‘Term’ should not be capitalized if adhering to proper English or if matching the UN’s content (UN seems to use lowercase: ‘Long-term […]’  QUESTION: Does ISO NWIP policies have a policy for how the defined terms are formatted/styled? | Make term formats consistent in 2.1 through the last defined term.  RECOMMENDATIONS: 1) Make all terms the same format.  2) Change ‘Term’ to ‘term’ in 2.2.  3) When section 2 defined terms are used, in the subsequent sections, they should be used as they are written section 2. |  |
| US |  | Section 2.1 |  | te., ed. | The definition is internally inconsistent, and conceptually problematic, and therefore confusing. And ‘collision risk’ is not frequently defined in the literature, but other related terms are. From a mathematical perspective, one cannot take the product of likelihood (risk) and consequence, because the consequence is here described. Moreover, the term ‘collision risk’ is inherently about a probability and thus about a future event, and therefore it does not make sense to consider it as being the product of things some of which are future events or quantities.  Similarly, from a qualitative perspective, it does not make sense that the risk of collision is the result (a product in the sense of an artifact or some thng) both likelihood (still interpreted as some probability or chance) and the consequence (presumably some event or outcome). | Either…   1. Replace the term for a more precise term such as ‘probability of collision’ or ‘conjunction […]’ 2. Rephrase the definition   Example rephrase: “the risk of collision between two or more orbiting objects”  (note that this simple definition allows for both single close approaches, and aggregated close approaches) |  |
| US |  | Section 2.2 |  | te, ed. | The term ‘LTS’ expresses a more generic meaning than the intended spaceflight context. Therefore, the term should be changed to reflect that. | Change “Long-Term Sustainability”  To: “Long-term Sustainability of spaceflight” or something similar |  |
| US |  | Section 2.3 |  | te., ed. | Historically the definition is the intended meaning of SSA.  If you compare this definition with that of 2.5, then we see that it is—in fact—a type of SSA. Both are about or require identifying, characterizing and understanding the space environment. (assuming ‘space domain’ in 2.3 means the environment). The ONLY difference is that SDA is described as awareness of those things that may affect a nation. Therefore, SDA is really *national SSA*. | 1. Change ‘SDA” to ‘National SSA’   OR   1. Rephrase the definition   OR   1. Delete 2.3 |  |
| US |  |  | 2.5 | te., ed. | SSA has always, and continues to, involved the identification of the observed objects. | Add “identification,” before “understanding” in the first line. |  |
| US |  |  | 2.5 | te., ed. | The part after the colon “:” is simple listing contents of the space environment, and therefore is more appropriately suited for a definition of ‘space environment’. | 1. ADD “and objects, risks and phenomena therein/thereof.” after “environment:” and DELETE the colon “:” 2. Add a supplemental note to the definition along the lines of: “Examples of phenomena, objects, and risks that are the objects of SSA and often found in the space environment include: […]” and then add the list. |  |
| US |  |  | 2.7 | ed. | Why does the definition of ‘STC’ say “and/or”? | REPLACE “and/or”  WITH “and” |  |
| US |  |  | 2 | ed. | There is no need to repeat the term being defined in the definition paragraph below the term sub-heading. Unless ISO formatting requires it, it’s not necessary. | Delete the term and the word “is” from each sub-section. E.g., delete “Collision risk is”, et al. |  |
| US |  |  | 2 | ed. | Quotation marks are not needed when displaying the definition unless we are displaying a quotation from some source. | Delete the quotes around each definition, unless it is a verbatim copy from some external reference.. |  |
| US |  |  | 2.8 | ed. | There is no need to include numbers in the definition unless they will be referenced later on. | DELETE “(1)” and “(2)” |  |
| US |  |  | 2.9 | ed. | No need to have quotes unless they indicate a quotation from some external reference. | Delete the quotes. |  |
| US |  |  | 2.11 | ed. | Do not need “For the purposes of this space standard”. It’s redundant, and stated at the beginning of section 2 | DELETE “For the purposes of this space standard,” and capitalize the following word.  Also consider adding “legal” before “entity” if the intended meaning is of legal entities, rather than other kinds. |  |
| US |  |  | Annex D, D.1 General | ed. | Grammatical error | CHANGE “A comprehensive”  TO: “Comprehensive |  |
| US |  |  | Annex D, section D.1  Fig.D.1 | ed. | The intended meaning is ‘spacecraft’ | REPLACE “Space Operators”  WITH “Spacecraft Operators” |  |
| US |  |  | 5.15.4 | ed. | As examples of potential advanced approaches, related to the mentioned one of AI, consider adding these two references:  https://ntrs.nasa.gov/citations/20210000030  https://ntrs.nasa.gov/citations/20200000988  a related site is https://tinyurl.com/39wdcwkm | Consider adding bracketed reference after the word “other” for the two links. |  |
| US |  |  | 5.12.3 | ed. | ‘orbits’ may need to be singular.  (grammatical observation) | REPLACE “orbits”  WITH “orbit” |  |
| US |  |  | 5.12.1 | ed. | The reader may not understand “precision assessment overlap”. | Add a note describing what it is. |  |
| US |  |  | 5.11 | ed. |  | REPLACE “&”  WITH “and” |  |
| US |  |  | 5.11 | ed |  | DELETE the single “)” OR ADD a second opening parentheses “(“ |  |
| US |  |  | 5.15 | ed | Ambiguous phrasing in first sentence. | RECOMMEND REPLACING “real-world data”  WITH a more precise phrase.  (If the intended meaning is non-test-data, then some other phrase should express that. |  |
| US |  |  | 5.10.15 | ed. | There’s a single closing parentheses with no opening one. | DELETE first instance of “)” |  |
| US |  |  | 5.8..5 | te., ed. | Isn’t calibration of the sensors and technology, not the observation (which is the result of using the sensor)? | Change section heading to:  “Calibration of SSA sensors” |  |
| US |  |  | 5.4.2 |  | In the sub-header title, ‘space’ is redundant given ‘STC’ | DELETE “space’ in header title ‘STC space data repository’ |  |
| US |  |  | 5.1.7 | te, ed. | Sentence is too long, making it a bit difficult to read. | REPHRASE TO:  “[…] maintain repositories of spacecraft operator and SSA provider contact information. This should facilitate communications and […]” |  |
| US |  |  | 5.1.7  NOTE | te, ed. | The NOTE is unclear.  In what way do they support?  How do they do so?  It is not necessarily the case that those sorts of data repositories will support definition of […], because as a repository, they are simply storing copies of the operator and provider contact details.  If the repositories should include the descriptions of personnel roles as defined in the operator/provider organizations, then state this requirement as such. | RECOMMEND either   1. Rephrase accordingly 2. Delete the note. |  |
| US |  | 5.1.10 |  | ed | Grammatical error in the subsection header title. | CHANGE “sustainable” to sustainability” AND add “of”  OR CHANGE TO: “safe and sustainable” |  |
| US |  | C.11 | Covariance Realism | ed | Grammatical errors. First sentence is ambiguous.  Is it intending to say   1. That all collision threats warrant avoidance maneuvers? (not always true, depending on the risk and threat threshold/criteria) 2. That there are some collision threats warranting avoidance maneuvers, and this is that focus of the sentence   To improve readability. | REPHASE the clause beginning with “which” according to either (a) or (b)  CHANGE” a critical component in efforts to identify”  TO “a critical component in identifying” |  |
| US |  | C  (Annex) |  | ed | First sentences of each subsection of C can be made more succinct. | CONSIDER DELETING “of the informative technical annex” in the first sentences of C.1 …C.n |  |
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