|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **US**  **-001** | **P1** |  |  |  | This paragraph is attempting to establish the data-driven nature of principled decision-making, and the fact that a lack of interoperability limits our ability to do this at scale. | The language could use a little tightening to make this clear. | Accepted. The language has been modified accordingly. |
| **US-002** |  | 1.1 (2) | 2 | ed | The acronym FMIS has not been defined yet at this point in the document | Replace FMIS by “farm management information system (FMIS)” | Accepted, and included a cross-reference to the corresponding definition (4.8) |
| **US-003** |  | 1.1.2 |  | GE | would it make sense to call this a desired/specific field operation to differentiate a little from a recommendation's desired course of action? |  | Accepted. The text was changed to “ordered course of action”. |
| **US-004** |  | 1.2.3 |  | TE | Applies to all irrigation controllers, not just pivots | delete pivot from controller type | Accepted. Replaced with: “Irrigation work orders for irrigation systems” |
| **US-005** |  | 2 |  | ge | Is Conformance not relevant for just ISO 7673-1? | Clarify scope, I would expect Conformance to be or to become relevant for ISO 7673-2 and ISO 7673-3 | Accepted. We have replaced the clause with the following text:  ISO 7673 defines an abstract object model. Applications intending to use the ISO 7673 object model will need an implementation of the object model that is appropriate for the particular application development platform. Future parts of the standard (or versions thereof) will include reference serialization implementations.  A particular implementation of the object model, whether it is for serialization or application development, would need to demonstrate some conformance to the business rules and constraints defined in 7673.  Conformance testing is essential for the expectation that two separate implementations can interoperate successfully. Given the large size and scope of ISO 7673, specification of conformance requirements and associated tests, will be covered in a separate part of the 7673 series. |
| **US-006** |  | 4.2 |  | TE | Does not cover growth regulators | Add growth regulator to description | Accepted. While this definition is taken directly from ISO/IWA 20, we added a NOTE specifically including growth regulators. |
| **US-007** |  | 4.4 |  | TE | Pivot specific or all system types? | Remove pivot | Accepted. Replaced “a microprocessor-based pivot control system” with “an irrigation control system” |
| **US-008** |  | 4.5 |  | TE | Pivot specific or all system types? | Change pivot to pressurized irrigation system | Accepted with modification. We adopted the existing definition in ISO 11545:2009 |
| **US-009** |  | 4.6 |  | ed | Define “end gun” in singular form | Replace “end guns” by “end gun”, update definition accordingly | Accepted with modification. We moved the definition to Part 3 and adopted the existing definition in ISO 11545:2009(en)  [Note: this comment references 4.6 which was the definition for evapotranspiration. The comment text appears to refer to definition 4.5 which, in the original document, was the definition “end gun”] |
| **US**  **-010** |  | 4.17 |  | TE | Applies to pivot and linear | Add linear to description | Accepted |
| **US-011** |  | 4.18 |  | ED | Cariable misspelled | Variable | Accepted and corrected |
| **US-012** |  | 4.20 |  | ed | Update terminology | Replace “given piece” by “specified area” | Accepted and corrected |
| **US-013** |  | 7.1 Table 1 |  | ED | Other descriptions are paragraph form where Data Provider is bullets, should this also be paragraph for consistency? | rewrite in paragraph form | Accepted. Expressing the five somewhat disjointed bullet points in paragraph form was awkward and wordy, so we prepended “A data provider:” to it to be consistent with the other entries as requested. |
| **US-014** |  | 7.2 |  | ge | Should the term “Document” in e.g. “Core Document” be replaced by Entity or Data Entity in order to make this standard less XML data exchange format dependent? | Review objective of the standard and direction regarding applications using the ISO 7673 parts to determine what terminology supports implementations best | Accepted. We added to the section, and de-emphasized “Core Document” as a concept, rather emphasizing document as defined by ISO 5127. We clarified this and the XML ambiguity concern by adding the following note:  [NOTE: the use of the word “document” in this context is not intended to refer to XML documents, JSON files, or any serialization method in particular. It refers to the ISO 5127 definition of a document as recorded information that can be treated as a unit in a documentation process (4.7).] |
| **US-015** |  | 7.2 Table 2 |  | GE | Strategic is a long term and tactical is a relatively short term? | Add a description of the meaning of “Strategic”, “Tactical/Predictive”, and “Tactical/Historical”. | Accepted. We renamed the “Type” column to “Role” and added the following after the table: [NOTE: The “Role” column qualifies the documents in terms of their timeliness, or time interval in which they are actionable: ‘Strategic’ refers to longer (e.g., crop season) time scales and ‘Tactical’ refers to short time scales (e.g., one field scouting mediated decision cycle).] |
| **US-016** |  | 7.2.2 Figure 3 |  | GE | Rec request means recommendation request, what does ack stand for in "WO ack"? | Clarify/remove acronyms from figure | Accepted. |
| **US-017** |  | 7.2.2 Figure 3 |  | GE | It would be better if we can get better high resolution of this image. | Insert higher resolution image | Accepted |
| **US-018** |  | 8.1 |  | ED | Okay to delete "to do this"? Without it, the sentence could be much clear as I am not really sure about what "this" points to.. | Remove *to do this* | Accepted; replaced with “mechanism used by this Standard to manage identifiers and references thereto.” |
| **US-019** |  | 8.1 |  | TE | Note from August 2022. Feedback from ADAPT team and attempts to make this model API-friendly have returned the idea that referenceIds being integers (which initially came from ADAPT 1.0) is not a good idea because it is not API-friendly. We propose immediately changing this to strings (thus enabling UUIDs and URIs). | Change integers to strings | Accepted. Data type was changed in the figure and the text.  [Note: this change applies to all clauses where reference IDs are used] |
| **US-020** |  | 8.1 Figure 4 |  | TE | Note from August 2022. Feedback from ADAPT team and attempts to make this model API-friendly have returned the idea that referenceIds being integers (which initially came from ADAPT 1.0) is not a good idea because it is not API-friendly. We propose immediately changing this to strings (thus enabling UUIDs and URIs). | Change integers to strings | Accepted. Figure 5 was replaced with a modified version. |
| **US-021** |  | 8.1.2 |  | TE | Per Aug 2022 ADAPT comment, the reference to locally scoped integer likely need to be updated to a string as well | Change to string | Accepted. The second paragraph of 8.1.2 was modified. |
| **US-022** |  | 8.1.2 Table 5 |  | TE | Should CIType be "IdType"? The name does not match with the one in the diagram. | Modify the text and table 5 to use consistent name for IdType/CIType | Accepted. The name was modified to IdText. |
| JISC-01  -023 |  | 8.1.1 | Table 4 | ed | Words “unique ID” are used in the description of the ReferenceId, which can confuse readers and make it difficult to understand the difference between ReferenceId and UniqueId. | Rewrite the description of the ReferenceId without using the phrase “unique ID”.  e.g., the description in Annex A.2.1.1 is more comprehensible. We can use it: " ‘shorthand’ id to be used in the local scope of the XML file to refer to the object being described. This value must be unique within the scope of an instance document”. | Accepted. Changed the wording and added additional text to Table 4. |
| JISC-02  -024 |  | 8.1.2 |  | te | It is hard to imagine how to use CompoundIdentifier in an irrigation operation. For example, who can add a new UniqueId and associate it with an existing ReferenceId? | Add a timeline diagram like Figure 2 or 3 where different actors or entities connect their UniqueIds with the ReferenceId(s) as they share documents. | Accepted. We have prepared new figures for your consideration, now in 8.1.3. |
| **US-025** |  | 8.2.1 |  | te | Between the attributes “Stamp1, Stamp2 and Description” it seems at least one of those has to be present. | Clarify “optionality” and the dependency between the attributes. | Accepted.  We have added two additional columns to Table 6. These columns show when the start and end properties are required or not. |
| **US-026** |  | 8.2.1 |  | te | Can timestamps contain timezone information? | Refer to ISO 8601 for the time data format and attribute definitions? | Accepted. This is a natural consequence of the use of ISO8601. That being said, we recommend using UTC.  We modified the clause as follows: “The W3C XML schema supports ISO8601 for any data type that has date or time semantics. ISO8601 shall be used for serializing the start and end properties, regardless of which serialization technology is used.” |
| **US-027** |  | 8.2.2 Table 7 |  | TE | I believe RequestedStart should be for a WorkOrder, not Recommendation | Change Recommendation to Work Order | Accepted. This was confusing. In consultation with the AgGateway ADAPT team we removed dual start/end context codes, instead simplifying all things that can be expressed as time intervals (e.g., PROPOSED, REQUESTED, ACTUAL) so they use the start and end stamps within the same Timescope. |
| **US-028** |  | 8.3.2 |  | ED | For consistency with lat/lon explanations could say that Elev is positive for meters above geoid and negative for areas below sealevel | Add negative for below the geoid | Accepted.  We have modified the text to:” Assumed to be meters above the WGS84 geoid. Negative values indicate meters below the WGS84 geoid.” |
| **US-029** |  | 8.3.2 |  | ED | WGS-84 is used a couple times before this section, should the acronym explanation occur with the first usage? | Explain WGS84 acronym at first use in 8.3.1 | Accepted. Added a reference for WGS 84 in the References section. An explanation of the WGS 84 geoid is outside the scope of this standard. |
| **US-030** |  | 8.3.4 |  | te | What is the reference for the StartDeg and EndDeg in RadialSpatialScope? | Define 0.0 degrees as True North under the WGS 84 model? | Accepted. Added text accordingly. |
| **US-031** |  | 8.3.7 Table 8 |  | TE | Differential GNSS is a broad category, suggest changing to RTK, implying a low latency base station correction providing higher accuracy than a SBAS correction using a direct (line of sight) radio or cellular signal to deliver the correction | RTKGNSS Geographic position data is being derived from a set of two GNSS units: one mobile, one fixed and communicating via a terrestrial based signal with the mobile unit. | Accepted, the existing enumeration is insufficient to simultaneously support the broad categories needed for some applications and the specificity needed for others. We have modified the enumeration accordingly. |
| **US-032** |  | 8.3.7 Table 8 |  | TE | Should remove WAAS from enum to represent a category, not a specific signal. WAAS is US specific SBAS (Satellite based augmentation system) correction for GPS satellites. EGNOS is similar signal for Europe, assume others exist as well. There are also proprietary (paid) signals available globally that provide a similar level of positioning accuracy | Change SingleGNSSWAAS, SingleGNSSSBAS | Accepted, the existing enumeration is insufficient to simultaneously support the broad categories needed for some applications and the specificity needed for others. We have modified the enumeration accordingly, with a simple hierarchical notation. |
| **US-033** |  | 8.3.8 |  | ED | is there a reason gazetteer in second to last sentence use of gazetteer is not capitalized but all the other usages are from what I see? | Capitalize Gazetteer | Accepted. We have made sure to capitalize the term when we refer to a class, but not when we are talking about a concept. |
| **US-034** |  | 8.3.8 |  | ED | Missing “a” | ...not **a** widely... | Accepted |
| **US-035** |  | 8.3.8 |  | ED | Missing “an” | …contain ***an*** implementation... | Accepted |
| **US-036** |  | 8.4 |  | TE |  | Please add links or references to each of the UoM specifications | Accepted |
| **US-037** |  | 8.4 |  | TE | Should be specific about which ADAPT representation system is being utilized | Refer to ADAPT Toolkit representation system or ADAPT Standard representation system | Accepted. Removed the ambiguous reference to a representation system, replaced it with a reference to a unit of measure system, and added a bibliographic reference including a link to the file in question. |
| **US-038** |  | 8.4 | 1 | ed | In ISO 11783, the unit of measure is statically defined for each variable of interest. The term “implicit” seems incorrect as the unit of measure definition is an explicit definition in the standard. If what is meant in this paragraph to be the presence of the unit of measure in a data transfer document or in a transferred data entity then update the text accordingly. | Correct use of “standard” versus “data transfer document/message” in this paragraph. | Accepted. Paragraphs 1 and 2 in Clause 8.4 were both updated |
| **US-039** |  | 8.4 | 2 | te | Is the supported systems list provided in this paragraph complete and closed? The international system of units is missing even though it is the basis of data definitions in e.g. ISO 11783 on board communication. | Include or provide a reason why to exclude the international system of units. | Accepted. Paragraph 2 was updated to indicate that all of these systems support SI |
| **US-040** |  | 8.4 | 2 | ed | John Deere is a trade name, may not be relevant for the scope of this standard to be listed in this paragraph | Discuss whether this reference is necessary, update text. | Accepted. The reference to John Deere was removed. |
| **US-041** |  | 8.4.1 |  | TE | References to S632 are inaccurate should be to this standard | Replace S632 with this standard | Accepted. The reference was replaced with ISO 7673 references. |
| **US-042** |  | 8.5.1 |  | GE | I believe ISOXML is the trademark name for ISO11783 implementation managed by AEF, should refer to 11783-10, or Annex E which ever fits were ISOXML is mentioned | Change ISOXML to ISO11783-10, or ISO11783 Annex E | Accepted. The references have been modified. |
| **US**  **-043** |  | 8.5.1 |  | ED | Typo, a should be as | …such as identification… | Accepted. |
| **US-044** |  | 8.5.2 |  | TE | The ContextItem data model references a ModelScope class but this class is not fully specified in the object model | Add a specification for the ModelScope class | Added a clause for ModelScope |
| **US-045** |  | 8.5.2 |  | TE | The ContextItem data model references a Lexicalization class but this class is not fully specified in the object model | Add a specification for the Lexicalization class | Accepted. Renamed the class to Label and added a clause accordingly.pr |
| **US-046** |  | 8.5.2 Table 10 |  | TE | Type for Language class missing, Enum or Object? | Add type to table | Accepted. We also edited the text for clarity. |
| **US-047** |  | 8.5.2 Table 10 |  | ED | GeoPoliticalContext end of description seems to be missing | Add *is applicable to* at end of description | Accepted. |
| **US-048** |  | 8.5.2 Table 10 |  | ed | Typo in “CompundIdentifier” | Fix typo | Accepted. |
| **US-049** |  | 8.5.4 |  | TE | how does a TimeScope capture who and where something was tagged with a context item? | Explain or remove statement about what the TimeScope does relating to identify who and where it was created/attached to an object | Accepted. We have removed the geographical reference and added specific instructions about the codes to use to denote validity range and creation date. |
| **US-050** |  | 8.5.4 |  | TE | UoM says UN Rec. 20 is assumed but following parameter allows for all 4 UoM systems supported in section 8.4 | Change to say taken from the supported UoM code lists specified in UoMAuthority | Accepted. The reference to UN Rec 20 was removed. |
| **US-051** |  | 8.5.4 |  | TE | Above several UoM systems are said to be supported, does that apply to ContextItems too? | Clarify if other UoM systems are supporting in ContextItems or just UNRec20 | Accepted. The text was changed to:” The unit of measure code, expressed according to the units of measure authority identified by UnitOfMeasureAuthority” |
| **US-052** |  | 8.5.5 |  | ED | Bullet list use seems inconsistent. Other sections have element in bold without bullet followed by explanation. | Remove bullets | Accepted. The properties have been reformatted. |
| **US-053** |  | 8.5.6 |  | GE | Does DefaultUOM have a UOM system referenced or how is that known? Is UoM Authority missing in the diagram | Clarify UOMAuthority in diagram and for DefaultUOM | Accepted. The text for defaultUOM was changed to:” An optional string describing the expected unit of measure. When an instance of ContextItem does not contain a value for ContextItem.unitOfMeasure, the defaultUOM property shall be used as the default unit of measure for the ContextItem.value property. The value of deafultUOM shall be a code compliant with the unit of measure authority identified by UnitOfMeasureAuthority.” |
| **US-054** |  | 8.5.7.1 |  | ED | Not the following should be *Comments:* to align with other examples | Change to Comments: | Accepted |
| **US-055** |  | 8.5.7.1 Table 11 |  | ED | ]} missing after USA in GPCIds example | Add ]} after USA | Accepted. This table was thoroughly reformatted. |
| **US-056** |  | 8.5.7.2 |  | GE | Subsequent example being about PLSS does not exist. | Either remove statement about PLSS example or add PLSS example of nested ContextItems | Accepted. The statement was removed. |
| **US-057** |  | 8.5.7.2 Table 12 |  | ED | } missing after Keyword and Default UoM examples | Add }’s | Accepted. This table has been thoroughly reformatted. |
| **US-058** |  | 9.1 & 9.02 |  | ed | The enumeration of the terms “Reference, Setup and Configuration” does not line up with the definition in these paragraphs. Configuration data is defined as a subset of Setup data in parallel to the unlisted Grower data under Setup data. | Reorganize 9.1 and 9.2 in 3 paragraphs: 1) reference data, 2) grower setup data, 3) configuration data. Possibly remove the term setup data from configuration data to avoid any confusion between Grower level setup data and Equipment level configuration data | Accepted. This was unclear; we have moved Figure 13 up to Clause 9, and removed the ambiguity surrounding the meaning of setup data. |
| **US-059** |  | 9.2.4 |  | TE | Description of Person class seems to be incorrect | Remove “or business entity” | Accepted. The text was replaced with “This type represents the human that the document is associated with.” |
| **US-060** |  | 9.2.5 |  | TE | other explanations said in the context of a document. Prefer that terminology over XML file | Replace XML file with document | Accepted. References to XML were removed. |
| **US-061** |  | 9.2.8 |  | TE | Says UN rec 20 UoM code, should support all 4 UoM Options | Add ability to specific UoM code system used | Accepted. References to UN Rec 20 were removed. Use of UnitOfMeasureAuthority is implied throughout the document. |
| **US-062** |  | 9.2.8 |  | ED | B at the end of TimeScope | Remove the b | Accepted. |
| **US-063** |  | 9.2.8 |  | TE | other explanations said in the context of a document. Prefer that terminology over XML file | Replace XML file with document | Accepted. |
| **US-064** |  | 9.2.9 |  | TE | other explanations said in the context of a document. Prefer that terminology over XML file | Replace XML file with document | Accepted. |
| **US-065** |  | 9.2.10 |  | ED | Example one should be different crop, not same crop | Change same to different in () | Accepted. |
| **US-066** |  | 9.2.10 |  | ED | Spacing between section number and title | Add space between 9.2.10 and Cropzone | Accepted. |
| **US-067** |  | 9.2.x |  | TE | Multiple ID’s in 9.2.x section refer to “Shorthand” integer. Want to clarify if these are the same integers that need to be strings per ADAPT feedback in section 8.1 to be more PAI friendly | Change to strings if they are the same ID’s mentioned in the comment | Accepted. See response to US-019 |
| **US-068** |  | 9.3 example 1 |  | ED | Last line, date not data may result | Change data to date | Accepted. |
| **US-069** |  | A.2.1.1, and others |  | TE | Integer reference id values, while convenient in a document centric schema, are more difficult to use in an API centric schema. | Change the ReferenceID to use the string data type. NOTE: this comment applies to all of the instances where a reference ID is used, not just the CompoundIdentifierType | Accepted. The referenceId property is now a string. That being said, Annex A has been removed (see US-074). |
| **US-070** |  | A.2.2.3 |  | te | ContextItemType/UoM is defined here as the unit to be from the list of UN Rec.20 only whereas in paragraph 8.4 multiple units systems were defined as being supported. Is the UN Rec.20 reference here just an example or is it the only mandatory definition? | Align definition of ContextItemType/UoM with paragraph 8.4 | Accepted, in that multiple unit of measure authorities are allowed for ContextItem also. That being said, Annex A has been removed (see US-074). |
| **US-071** |  | All parts |  | GE | More examples would be helpful | Please add more examples | Accepted. We have endeavoured to add examples where possible, especially in clause 8. |
| **US-072** |  | All parts |  | GE | This document does not consistently use the should/shall/may language specified by ISO | Modify the document so that it uses the should/shall/may language | Accepted. We have endeavoured adopt the should/shall/may language throughout the document. We will continue to make changes as they are identified. |
| **US-073** |  | All parts |  | GE | It would be helpful to have a class diagram (sans property names) that shows all of the classes defined in this standard (similar to Figure 14). |  | This is a good idea, but most of these classes are used in the context of more complex structures defined in parts 2 & 3. As such, the relationships among them are few and the page would be crowded and therefore possibly confusing. |
| **US-074** |  | Annex A | All parts | GE | Please consider adding a JSON Schema | Please consider adding a JSON Schema | Accepted. We did consider adding a JSON schema. We agree that it is very important and therefore are pulling the schemas out of 7673 parts 1, 2, & 3, and will place them in separate deliverable(s). |
| **US-075** |  | Annex A | All parts | GE | Annex A requires additional clarification of its relevance and interpretation. The same object model can be expressed in many forms. XML is widely accepted and others are also (e.g., JSON Schema, UML). UML is used in the normative portions of the body of the standard. | Add an introduction to Annex A that explains why an XML schema is included and how it should be used or interpreted. | Accepted. We agree that the annex requires additional consideration given the importance of the schema. As describe in US-074, we are pulling the schemas out of 7673 parts 1, 2, & 3, and will place them in separate deliverable(s). |
| **US-076** |  | Annex A | All parts | ED | Many of the figures need to be reformatted. Several are clipped or cropped such that portions are not visible | Adjust the scaling of the figures so that they are completely visible | N/A. See note in US-074 |
| **US-077** |  | Annex A | All parts | GE | It would be helpful if the source code for this XML Schema were available somewhere. | Add a statement indicating where the schema may be found | N/A. See note in US-074 |
| **US-078** |  | Annex A, 7.02 |  | GE | XML is document centric as is this standard. While document exchange is a common mode of interoperation between systems, more modern API based approaches do not always us a document centric approach. | It would be helpful to add some additional clauses that enable using the object model outside the context of document centric data exchange. For example: the selection of units authority, and the UoMAuthority instance, is declared at the document level. An API, based on a JSON Schema, would likely exchange objects rather than entire documents. How, in the JSON situation, would the objects reference the UoMAuthority instance? | Accepted. This is a good point that will be taken into account when the standard regarding API definitions for these data is developed. |
| **US-079** |  | Annex A.2 | All Parts | GE | There are several questions and suggested changes in the section prior to Annex A, if those are accepted there needs to be alignment with the material in Annex A to ensure the schema reflects any changes | Update diagrams in Annex A as needed based on changes in previous sections. | N/A. See note in US-074 |

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CD 7673-1 ISO Commenting JvB.doc: Collation successful

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Collation of files was successful. Number of collated files: 2

SELECTED (number of files): 2

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ISO\_CD 7673-1\_JISC.docx: Collation successful

Collation of files was successful. Number of collated files: 2

SELECTED (number of files): 2

PASSED TEST (number of files conformed to CCT table model): 2

FAILED TEST (number of files conformed to CCT table model): 0

ISO\_CD 7673-1\_ANSI.doc: Collation successful

PASSED OTHER FILES (number of files to be collated at the end of the result file not conformed to CCT table model): 1

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