

1	2	(3)	4	5	(6)	(7)	
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0	2J	4	Table 0-1	ed	New Part 2b – Portrayal Register is not mentioned.	Insert row describing Part 2b.	
0	2J	4.14	1	ed	Text is too general, given that we now have 2 other formats.	Append “encoded in ISO 8211 format” at the end of the sentence.	
0	2J	4.16	1	ge	Text is too general, given that we have 2 other formats.	“This part specifies the structure and constructs required for the implementation of exchange datasets encoded in the Hierarchical Data Format version 5 (HDF5).”	
0	2J	4.16	1	ed	Indentation style is different from other clauses	remove indentation of first line	
1	2J	1-4.5.3.9	Fig 1-6	te	indeterminatePosition values ‘before’ and ‘after’ are both =1	Amend to have after=2	
2	2J			ed	Part 2 is missing from this redline	Restore Part 2	
2a 3 5	2J	2a-4.21 3-5.3 5-A	Fig, 2a-1, 2a-4.2.10, Fig. 3-2, Fig. 5-A-1	te	Differences in the case of some S100_CD_AttributeValueType literals in Part 2a (e.g., “boolean”, “integer”) and the corresponding attribute value types in Part 3 (Figure 3-2). The upper/lower case dichotomy propagates into the GI registry, application schemas, and feature catalogue schemas, causing cross-validation errors in the GI registry, feature catalogues, and GML application schemas for individual products. The errors have to be manually resolved.	Harmonize the value type literals – begin each literal with an upper-case letter.	
2b	2J	4.2		te	UML model of portrayal register should be harmonized with the S-100 register model in Part 2. E.g., inter-item relationships (PR_Symbol – PR_LineStyle) are not allowed by the S-100 register schema of Fig. 2-4; attribute registerItem (in several classes) is redundant; BLOB is not among the S-100 types in Part 1; etc. Descriptions and types for several attributes are not	Revise UML model of portrayal register to make it compatible with the S-100 register model. Review S-100 register schema (in the former Part 2) to ensure that the inter-item relationships used in this portrayal register schema are allowed, and either revise the S-100 register schema or replace it with direct usage of the ISO register model, as appropriate.	

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					provided in the documentation tables.	Add missing descriptions, types, etc. Define an S-100 type for images and binary data (binaryData? BLOB?).	
3	2J	Figure 3-1, 5.2.6	Table 3-3 and preceding para	te	Text states that a feature must have properties and the multiplicity of carrierOfCharacteristics role is 1..*, this means that even abstract features need properties, and therefore it would not be possible to create an abstract solely for the purpose of defining associations for its subtypes.	Consider amending GFM to change lower bound of multiplicity to 0, which will also bring the model closer to ISO 19109.	
3	2J	5.2.6		ed	the 4 paragraphs after "...following ways": should be a list	change text style of the 4 paras in question to numbered list	
3	2J	5.2.9	Table 3-6	ed	For attribute multiplicity in the table "...objects the may be..."	"...objects that may be..."	
3	2J	6.5.2	item 3)	ed	Last sentence of item (3) refers to a non-existent "Table 1".	Change sentence to "The value types of spatial attributes must be the types described in Part 7, or their subtypes." (The corresponding text in ISO 19109 explicitly allows the use of subtypes.)	
4a	2J	All		te	ISO 19115-3 was recently published by ISO.	Schedule for updating S-100 for 19115-1 & 19115-3 is TBD.	
4A	US	4A	S100_Datas etDiscovery Metadata		The field for updateNumber is a mandatory attribute. It should be noted that not all Product Specifications will utilize the update mechanism. This should be optional	Change the multiplicity on updateNumber to 0..1 Also add clause numbers to this annex.	
4a	2J		Fig. 4a-D-4 and following tables	te	The structure of metadata in Fig. 4a-D-4 is different from the ISO structure of metadata entity sets reproduced in Fig. 4a-1 (and the ISO XML schemas). Restructuring S-100 metadata to conform to ISO will allow S-100 to re-use more of the ISO XML schemas, thereby improving interoperability.	Approve ISO-compatible restructuring as part of the update for ISO 19115-1 & 19115-3.	

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4a	2J		Fig. 4a-D-4 & tables	te	ISO 19115 already defines a citation type CI_Citation type which can be used instead of S100_SupportFileSpecification and S100_ProductSpecification. CI_Citation has attributes title, edition, and editionDate, they can substitute for the name/version/date attributes of S100_ProductSpecification.	1) Delete S100_SupportFileProductSpecification and S100_ProductSpecification classes 2) Change the 3 attributes using them as follows: S100_DatasetDiscoveryMetadata.productSpecification: CI_Citation [1] S100_ExchangeCatalogue.productSpecification : CI_Citation [0..1] S100_SupportFileDiscoveryMetadata.supportFileSpecification [0..1] (mandatory if and only if dataType value is not Text).	
4a	2J		Fig. 4a-D-4 & tables	te	No way to indicate language and character set of dataset and support file.	Add attribute <i>locale: PT_Locale [0..1]</i> to S100_SupportFileDiscoveryMetadata and S100_DatasetDiscoveryMetadata to allow indication of language and character set for each dataset and support file. Consider adding it to S100_CatalogueMetadata as well, to indicate catalogue language and character set.	
4a	2J		Fig. 4a-D.4 & tables	te	The multiplicity of S100_DatasetDiscoveryMetadata.dataCoverage, S100_DataCoverage.boundingBox, and S100_DataCoverage.boundingPolygon imply that at least one bounding box and bounding polygon must be encoded. But: (1) there may be S-100 products where a bounding box is not defined, e.g., "Norwegian ports"; (2) the bounding polygon may be the same as the bounding box, in which case <i>boundingPolygon</i> duplicates the bounding box in a more complex	Use the ISO 19115 dataType EX_Extent, which allows use of EX_BoundingPolygon, EX_GeographicBoundingBox and a text attribute called "description". Change S100_DataCoverage replacing attributes boundingBox & boundingPolygon with attribute extent: EX_Extent [0..*] with a constraint requiring at least one of EX_GeographicBoundingBox, EX_BoundingPolygon, or <i>description</i> .	

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					format.		
4a	2J		Fig. 4a-D-4 & tables	te	S100_DatasetDiscoveryMetadata, S100_SupportfileDiscoveryMetadata: checksum and digital signatures are different, a file might have a checksum but not be signed	restore the checksum attribute but make it optional (multiplicity 0..1)	
4a	2J		Fig. 4a-D-4 & tables	te	S100_DatasetDiscoveryMetadata, S100_SupportfileDiscoveryMetadata: attributes relating to digital signatures are different in dataset and support file discovery metadata	Harmonize attributes relating to digital signatures.	
4a	2J			te	S100_CatalogueMetadata is susceptible to human error causing mismatches between the fileName, fileLocation, versionNumber, issueDate, and productSpecification attributes for each catalogue. Also, there is provision for only one digital signature?	Introduce a complex attribute grouping the attributes for each catalogue, or fix it in 4a-D-3. Address this as part of the update for 19115-1.	
4a	2J		Fig. 4a-D-4 & tables	te	S100_CatalogueMetadata: The signature here is presumably for the catalogue, since dataset and support discovery metadata also have attributes for digital signature? Question: Who signs the catalogues – IHB or each producing agency? Will we end up with all producers having to sign all portrayal and feature catalogues? Will an end-user system end up with multiple copies of catalogues differing only in who signed them?	The remarks column should describe what is being signed. Analyse the implications and state any requirements or expectations in the text.	
4a	2J	S100_SupportFileFormat	Fig. 4a-D-4 and table	ed	Literal "ASCII" in table, "Text" in figure. S-100 uses UTF8 character sets.	Harmonize to "Text".	
4a	2J	S100_SupportFileFormat	table	ed	Remarks claim visualisation of PDF in navigation system will impair night vision. Think this is incorrect, as it may impair night vision if a generic PDF viewer is used in systems. A viewer can be created to consider night vision, but at a cost.	Suggest remark is amended to "...system as it may impair night vision"	

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4c	2J	All of 4c 3-5.3.8 4a-1 item (2) in list 4a-5.2 para 2		ge	Part 4c in general, and references to 4c in Parts 3 & 4, should at some point of time be (a) reviewed to verify that the statements about 4c are still accurate; (b) incorporate the results of DQWG's work, and tie it to the elements defined in 4c.	Future task.	
7	2J	5.3.2	item 4	ed	Item 4 refers to figures 7-4 & 7-5, but compare to the actual figure numbers about figures 7-4 & 7-5 in the Word version, in the PDF the old figure 7-4 appears to have been deleted and replaced with a figure depicting intersecting curves instead of the internal boundaries of a surface.	Harmonize text of items 2 & 4 to new figure numbers.	
8	2J	various		ed	Unlike the other Parts, Part 8 does not define classes and attributes using tables but uses narrative descriptions. Some names are formatted differently (e.g., with/without space or underscore) in figures and text (e.g., in clause 8-6.3; headers "8-6.3.1 S100_Discovery Metadata module" & "8-6.3.4 S100_IG_Collection").	Future low-priority task for editorial revision or may be dealt with if someone sponsor a new version of this part.	
8	2J	6.3 7.1.1 7.1.2	Fig. 8-18; Fig. 8-20; Fig. 8-21	ed	Attribute "metadata" appears in several places for imagery/gridded data type or collection classes, but its treatment is inconsistent. In §8-7.1.1, there is no attribute "metadata" in new figure, but the text below the figure mentions it. A mandatory metadata attribute may be redundant in these classes; e.g., S100_IG_Collection there is both a "metadata" attribute and an association to collection metadata (Fig. 8-18).	Make the metadata attribute optional.	
8	2J	8.3	Fig. 8-27	ed	Figure reference S-100 v 2, while this is the redline for v 3.	Amend UML and either remove the version reference or update to v 3.	

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8	2J	8.3	Last paragraph	ed	Entire paragraph talks about an update to ISO 19115 since the first version of Part 8 was finalized. Think this is irrelevant here.	Suggest remove.	
8	2J	8.4	First paragraph	ed	Paragraph is generally speaking of how quality is managed in ISO, and amendment point out that quality elements are moved to 19157, think this is irrelevant here, and that paragraph should reference Part 4C. Part 4C and Appendix 8-C can be reviewed and updated if there is a need.	Suggest revise to "Data quality for imagery and gridded data should follow the principles of Part 4C."	
8	2J	11.1, 11.3, 11.4	figures	ed	Not sure what happened in the PDF here – there are redlined old figures but no new figures.		
8-C	2J	Entire		ge	Should be fleshed out		
10c	2J	2		ed	<p>The conformance clause should state how closely S-100's HDF5 conforms to the "official" HDF5 specification.</p> <p>The cited references in 10c-3 are for release 1.8.8, but as of August 17, the HDF5 home page says the current release is 1.8.17. It also says "earlier releases such as HDF5-1.8 may not be able to read HDF5-1.10 files." This would obviously lead to problems with S-100 data products and applications.</p>	<p>Move current text of 10c-2 to the Introduction (or a new "Overview" clause) and add a conformance statement, e.g.: "The S-100 HDF5 data format conforms to release N.N.N of HDF5."</p> <p>If parts of the HDF5 format are not to be used in S-100 there should be a further statement about which parts of HDF5 are not used in S-100 data products.</p>	

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