|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| \*\*-001 |  |  | Many figures |  | Text not readable. | We require readable text, in that when the figure is presented at the scale of the document page, text is ideally at a size of 10pt, and certainly no smaller than 8pt.  Please reconfigure the figure to enable a larger text size, or remove some text to allow more space for the remaining text. Figures should also be language neutral. Please remove all language text from the figure and replace it with an item reference or footnote. Add the removed text to the key below the figure.  Please contact Jay Last ( [last@iso.org](mailto:last@iso.org) ) for any figure related questions. |  | |
| \*\*-002 |  |  | Many figures |  | Colour indicates meaning. | We require that colour should not be used to indicate meaning in the figure, for reasons of accessibility for all users of the document.  Please find another way of differentiating lines, groups or stages, for example using differently dashed lines and containing rectangles, using clearly discernible shades of grey instead of colours, or using footnotes to indicate meaning. Figures should not simply be made into greyscale as this does not help with regard to meaning. When possible the figures should be drawn in simple black and white for the best clarity.  Please contact Jay Last ( [last@iso.org](mailto:last@iso.org) ) for any figure related questions. |  | |
| \*\*-003 |  | Foreword |  | Ed | The main changes are as follows: | Note that the information provided in the list of main changes compared to the previous version is quite vague. It could be helpful to the user to give a clearer indication of what has been improved/how improvements have been made, i.e. has the text been restructured? has additional detail been added? has the wording been clarified? etc.  Adding a cross-reference to Annex C could perhaps help with this. |  | |
| \*\*-004 |  | General |  | Ed. | ISOCS has provided an edited, tracked changes (watermarked) Word file for this document to align the content with the drafting rules in ISO/IEC Directives Part 2. The comments provided summarize the main editorial changes required but may not be exhaustive. Additional changes and comments may be contained in the edited Word file. | The watermarked Word file shall be used when preparing the next submission of this document. For questions about the drafting rules or the editing provided, contact Alison Reid-Jamond: [reid-jamond@iso.org](mailto:reid-jamond@iso.org) |  | |
| \*\*-005 |  | Introduction |  | Ed | This new version of the Observations and Measurements Standard | Is this a reference to the current and previous edition of ISO 19156? If so, please use the specific ISO document numbers, i.e. This second edition of ISO 19156 (now renamed...) |  | |
| \*\*-006 |  | Introduction |  | Ed | This International Standard | Please refer to this document as "this document" throughout, rather than "this International Standard". |  | |
| FR-007 |  | Whole document |  | ed | Abstract Observation core | Abstract Observation Core |  | |
| \*\*-008 |  | 2 |  | Ed | ISO 19109:2015, Geographic information — Rules for application schema | In order to be considered a normative reference, a document has to be the subject of a requirement. ISO 19109 does not seem to be the subject of any requirements within this document. Please move it to the Bibliography as an informative reference. |  | |
| DK-009 |  | 3 |  | Ed/te | The term “observation result” is used at several places in this document. In our opinion this term is a very important term in this standard (given the title of this standard), but not defined in clause 3. The term was defined in ISO 19156:2011. | Include the term and definition of “observation result” in clause 3. The definition can be found in ISO 19156:2011. |  | |
| DK-010 |  | 3 |  | ge | ISO/TC 211 standards should aim to reuse other standards instead of crafting new definitions when the subject is not geospatial-specific and already standardized in other committees or organisations. For the science of measurement and its application, [JCGM 200:2012] is probably the reference document that should be used.  JOINT COMMITTEE FOR GUIDES IN METROLOGY. JCGM 200:2012, *International vocabulary of metrology – Basic and general concepts and associated terms (VIM)* [online]. 3rd edition ed. Joint Committee for Guides in Metrology, 2012. Available from: <https://www.bipm.org/en/publications/guides> | See other DK-comments for specific places where [JCGM 200:2012] could be used.  Note: as far as we can see, the above standard will be published as ISO/IEC Guide 99, see also <https://www.iso.org/standard/82585.html>. |  | |
| TMG-011 |  | 3.2 | coverage | ge | the authoritative source references ISO DIS 19123-1 | please watch the publication schedule of ISO 19123-1 and revise this definition if there are any last-minute changes in ISO 19123-1 |  | |
| DK-012 |  | 3.3 |  | Te/ed | The examples does not correspond to the example of ISO 19103:2015, 4.14. | Update the examples with the note from ISO 19103:2015 (remove “and SG Point (conversion of data into a series of codes”). |  | |
| DK-013 |  | 3.4 |  | Ed | When reading the standard we think that the term “value domain” much better covers what is meant with the present term (i.e. “domain”). | We suggest deleting the present term and using the term and definition of “value domain” from ISO 19103:2015. This will of course require some adjustment in the document. |  | |
| JRC (EC)-014 |  | 3.6 |  | ge | In Earth Observation (EO) the opposite to ‘in-situ’ would be ‘remote’ and the distinction is rather made to describe the relation (distance) between the sensor and the phenomena, which becomes especially useful if this distance has an influence on the observation result.  The definition given here, however, would render most ‘remote’ observations in EO at the same time ‘in-situ’, as most of the Earth’s surface could be considered being in its ‘natural surrounding’. | Remove Note 1 and define ‘In-situ’ as:  observations performed close to where a phenomenon occurs. The main characteristic of such observations is that distance has no or only negligible (within uncertainty) influence on the value of the property observed.  Note 1 to entry: The effect of the distance on the acquired data is the main distinction criteria between ‘remote’ and ‘in-situ’ observations.  Note 2 to entry: normally without isolating it from surrounding phenomena (its environment) or altering its pre-observation state.  Note 3 to entry: In-situ observations often require either direct physical contact or small distances between the sensor and the observed phenomenon. |  | |
| TMG-015 |  | 3.6 | off-site | ed | the term "in-situ (on-site)" is referenced in Note 1 to entry; however, in-situ is not defined in clause 3.  ISO 19159-1 4.11 defines the term "in situ measurement"; consider if that is suitable. | consider if "in situ" is needed in the document; |  | |
| TMG-016 |  | 3.6 | off-site | ed | the admitted term (off-site) should not be in bold-typeface | un-bold the admitted term |  | |
| JRC (EC)-017 |  | 3.8 |  | Ge | This definition sounds rather circular and does not clarify what a ‘subject’ is (in respect to the ‘object’ other definitions mention, which are defined neither). | Replace ‘feature’ by ‘phenomenon’ (after proper definition, see above) |  | |
| DK-018 |  | 3.10 |  | Ed/te | The source is missing at the present definition. However, if one look into the ISO/TC 211 Multi-Lingual Glossary of Terms (MLGT) and look for the term “measurand” then it appears, so we suggest to reuse the definition for the term as given in MLGT to ensure consistent use of terminology across the standards in the ISO 19100 series. | If the present definition is kept then we suggest adding the source of this definition: [JCGM 200:2012, 2.3].  If the second option in our comment is used (we recommend to do so), the replace the definition with the following “particular quantity subject to measurement  [SOURCE: VIM:1993, 2.6]”. See also https://isotc211.geolexica.org/concepts/559/ |  | |
| TMG-019 |  | 3.10 | measurand | ed | the authoritative source is missing | please add the authoritative source reference as shown below:  [SOURCE: VIM:2007, 2.3] |  | |
| DK-020 |  | 3.11 |  | Ed/te | “measure” is not a term specific to the GML domain. Although reuse is good, the main problem here is probably that measure was not properly defined earlier. Reuse concepts from [JCGM 200:2012] wherever possible. | ”measure” seems to be the same as ”quantity value”, [JCGM 200:2012, 1.19].  Update the term entry accordingly. Keeping ”measure” as preferred term and adding ”quantity value” as accepted term would be ok, given the tradition of using ”measure” in the geospatial domain. |  | |
| JRC (EC)-021 |  | 3.12 |  | Ge | According to this definition a model qualifies as a measurement. This is counter-intuitive and practical use of the terms. | **measurement and measuring**  A measurement is the observation of a quantity.  Note 1 to entry: The process of collecting a measurement is called measuring. |  | |
| TMG-022 |  | 3.13 | observation | ed | "observation" was defined in ISO 19156:2011, 4.11; observation was not in the CD; now the term has been reinstated but the definition is different from that in ISO 19156:2011, 4.11; presently ISO 19170-1 uses observation from 19156:2011 as a defined term; | consider if the definition for observation needs to be revised or if it is possible to retain the original definition from ISO 19156; |  | |
| DK-023 |  | 3.13 & 3.14 |  | Ed/te | The definitions seems to be circular:  **observation** act carried out by an **observer** […]  **observer** identifiable entity that can generate **observations** […] | Consider whether the definitions should be changed. |  | |
| JRC (EC)-024 |  | 3.13, 3.14 |  | ge | The definition given here extends the meaning of the terms ‘observer’ and ‘observation’ also to models and their results. This is in stark contrast to the use of these terms in practical communities like CEOS. In Earth Sciences it is crucial to be able to distinguish between the results of observations (acquired of real world phenomena) and results of models (based on algorithms and assumptions), as one are facts and the other fiction.  Speaking of ‘objects’ is likewise a possible source of confusion as some phenomena, such as e.g. gravity or precipitation, are not easily tied to specific ‘objects’ (which also lack a definition). | **Observation (the process)** is the act of determining the value of a property by interacting with the phenomenon using a sensor. The obtained values are factual (observational) data and are often themselves referred to as **observations (the result of the process).**  Note 1 to entry: the observed value is usually complemented by an uncertainty  Note 2 to entry: an observation (result) by definition represents a sample of a phenomenon (otherwise it would be identical with the phenomenon) but is not necessarily representative of the phenomenon  [Source: [ISO 19156:2011](https://www.iso.org/standard/32574.html), 4.11, modified and extended, Notes added] |  | |
| DK-025 |  | 3.14 |  | Ed/te | This definition seems to be a little lengthy and with some overlap to 3.13 (see previous Danish comment). | In order to make the definition, short and to the point as well as reducing the overlap to 3.13 we suggest deleting the second half of the definition. The result will the following definition: “identifiable entity that can generate observations”. |  | |
| JRC (EC)-026 |  | 3.17 |  | Ge | Not all phenomena that have properties are objects (e.g. the ‘big bang’). | **property**  attribute which is observable  [SOURCE: [ISO 19143:2010](https://www.iso.org/standard/42137.html), modified]  To be complemented by defining  **phenomenon**  A phenomenon is an entity that has at least one property and is referenced by an identifier |  | |
| TMG-027 |  | 3.18 | property type | ed | the order of "EXAMPLE" in the entry is incorrect; | move the EXAMPLE to come after the definition but before the start of the Notes to entry |  | |
| DE-028 |  | 3.20 |  | te | The year of publication shall be indicated if a subclause of a document is referred to. | Please add the publication year of “ISO/DIS 19123-1”. |  |
| TMG-029 |  | 3.20 | range | ge | the authoritative source references ISO DIS 19123-1 | please watch the publication schedule of ISO 19123-1 and revise this definition if there are any last-minute changes in ISO 19123-1 |  | |
| JRC (EC)-030 |  | 3.21 |  | Ge | Opposite to the too wide definition of ‘observation’ and ‘measurement’ this definition is too narrow. Samples are often not ‘objects’ (in the sense of the definition in Geolexica which requires a ‘well defined boundary’)  In many cases in EO nomenclature also ‘samples’ (in the sense of ‘pixels’) are not representative for anything but themselves. | **sample and sampling**  A spatially, temporally or in any other dimension or attribute limited subset of an entity.  Note 1 to entry: The process of obtaining a sample is called sampling. |  | |
| DK-031 |  | 3.23 |  | Ed | Update source | Change the source to the newer [JCGM 200:2012, 3.8]. |  | |
| DK-032 |  | 3.25 |  | Ed | Consider to use the definition of the term as it is defined in [JCGM 200:2012] which contains an entry “measurement unit”. | Change 3.25 to reuse [JCGM 200:2012, 1.9]. Decide what the preferred term should be in 19156 and update the rest of the document consequently. |  | |
| \*\*-033 |  | 4.1 |  | Ed | Abbreviated terms and acronyms | Please ensure all unnecessary capitalization is removed from the full terms in this list. |  | |
| \*\*-034 |  | 4.2 |  | Ed | following the guidance of ISO 19103:2015 | Note that only cross-references to specific parts of a document (e.g. a specific clause, subclause, table, etc.) shall be dated. All more "general" references shall be undated, unless it is necessary to distinguish between different editions of the document. |  | |
| DK-035 |  | 4.2 | 2nd paragraph | Ed | The FeatureType is defined in ISO 19109, not in ISO 19136 (ISO 19136 defines the UML-to-GML encoding rules for an application schema according to ISO 19109). See also Table 17 in ISO 19109:2015. | Update the text so that the source of the FeatureType stereotype is correct. |  | |
| \*\*-036 |  | 4.3 |  | Ed | in some application domains | The idea of "some aplication domains" is quite vague. Is it possible to be more specific about what is meant by "some"? |  | |
| \*\*-037 |  | 4.5 |  | Ed | All requirements in a dependency SHALL also be satisfied by a conforming implementation. | Please do not write verbal forms in capital letters. |  | |
| \*\*-038 |  | 5.1 |  | Ed | schemas for describing Observations | Does "observations" need to be capitalized here? Please check and modify throughout if necessary. |  | |
| \*\*-039 |  | 5.2 |  | Ed | The conformance rules for Models in general are described in ISO 19109:2015. | Unless there is an intention to remove conformance rules for Models in general from the future revision of ISO 19109, there is no reason for it to be dated. |  | |
| \*\*-040 |  | 6.1 |  | Ed | EXAMPLE A provider may only serve information | EXAMPLEs cannot contain the verbal forms "shall", "should" or "may". Please review the verbal forms used in this Example. |  | |
| ZA-041 |  | 6.1 | 1 | ed | Rephrase- This structureenables users to selectively | This allow structureenables users to selectively |  | |
| \*\*-042 |  | 6.2.2 |  | Ed | This International Standard | I think it would be clearer to write the document number here. If this table were to be cross-referenced in another document, for example, it could become confusing or unclear. |  | |
| \*\*-043 |  | 6.2.2 |  | Ed | Table 7 — UML package level dependencies | Note that as all document references are dated here, it is not necessary to add the edition number afterwards. Please remove "(Edition 1)" etc. from all entries.  Please also note that the headings in this table are not very clear. Please see if these can be clarified. An idea could be to relabel the columns "Package 1 // Package 2 // International Standard // Notes" and the add footnotes at the bottom of the table to explain the relationship between package 1 and package 2, and the International Standard listed. |  | |
| \*\*-044 |  | 6.3 |  | Ed | EXAMPLES: | There are a lot of example links contained within this one example. Is it necessary to include this many examples? |  | |
| \*\*-045 |  | 7.1.2 |  | Ed | Observation | "observation" and "measurement" are written in lowercase letters in this subclause, whereas elsewhere in the document they are capitalized. Please check whether or not these terms require a capital letter at the beginning and harmonize throughout. |  | |
| \*\*-046 |  | 7.1.3 |  | Ed | . The diagram below | Please refer to a specific figure number, rather than using a more general reference. |  | |
| \*\*-047 |  | 7.1.4 |  | Ed | may can potentially | Note that "may" denotes permission, whereas "can" denotes possibility. Please review use of "may" and "can" throughout. |  | |
| \*\*-048 |  | 7.1.6 |  | Ed | (e.g. ISO 19115-1:2014). | This cross-reference does not need to be dated. |  | |
| \*\*-049 |  | 7.2.2.3 |  | Ed | remote sensing observation might obtain the reflectance colour | The word "might" is not recommended as it is a little ambiguous. It is suggested to use the verbal form "can" or "can potentially" instead of "might". |  | |
| \*\*-050 |  | 7.2.3 |  | Ed | the “world in the vicinity of the observer/sampler | Is this a direct quotation from another source? If so, please provide the Bibliographical reference for it. |  | |
| \*\*-051 |  | 7.3.1 |  | Ed | The figure below shows | Please refer to the specific figure number, rather than saying "the figure below". |  | |
| \*\*-052 |  | 7.3.2 |  | Ed | Well, Aquifer and FluidBody | Is it necessary for these terms to be written with capital letters here? |  | |
| \*\*-053 |  | 7.3.2 |  | Ed | domain features | Note that at times "domain" is written with a capital letter, and at times not. Please verify which option is correct and harmonize throughout. |  | |
| \*\*-054 |  | 8.2.10 |  | Ed | SHALL | Please convert all uppercase verbal forms into lowercase as shown in previous subclauses. |  | |
| \*\*-055 |  | 8.2.16 |  | Ed | <http://qudt.org/vocab/unit/UNITLESS> | Please move this link to the Bibliography, either to replace the link already present in entry [28] or to be included as a new entry, as appropriate. |  | |
| \*\*-056 |  | 8.2.16 |  | Ed | NOTE In the case where the result of the Observation is a classification, for which no unit exists, the UoM should be declared as unitless | NOTEs cannot contain the verbal forms "may", "should" or "shall". Please rephrase. |  | |
| \*\*-057 |  | 8.2.2 |  | Ed | Interface Observation | The requirement in this section does not contain the verbal form "shall". Instead, it is written as statement of fact. Please verify that this is correct. |  | |
| \*\*-058 |  | 8.2.3 |  | Ed | NOTE 1 The phenomenonTime is often the time at which the Sample has been taken.  NOTE 2 This is often the time of interaction by a sampling Procedure or observation Procedure with a real-world feature. | Suggest combining these two notes. |  | |
| \*\*-059 |  | 8.2.6 |  | Ed | in the Sampling part of section 7 | Please refer to a specific subclause. |  | |
| \*\*-060 |  | 8.2.6 |  | Ed | or is an object created with the intention to sample the real-world object, | Please review wording: "is an object created with the intention of acting as a sample of the real-world obkect" or "is an object created with the intention of sampling the real-world object"? |  | |
| \*\*-061 |  | 8.2.8 |  | Ed | NOTE 1 The result can be of Any type as it may represent the value of any feature property.  NOTE 2 If the observed property is a spatial operation or function, the type of the result may be a coverage. | NOTEs cannot contain the verbal forms "may", "should" or "shall". Please rephrase. |  | |
| \*\*-062 |  | 8.3.2 |  | Ed | On a groundwater well we: | In accordance with the [ISO House Style](https://www.iso.org/ISO-house-style.html), an impersonal tone is to be adopted in ISO documents in which person pronouns ( I, we, you) are to be avoided. Please rephrase this Example accordingly. |  | |
| \*\*-063 |  | 8.4.2 |  | Ed | A description of steps performed. | There is no verbal form used in this sentence. It therefore appears incomplete and cannot be considered a requirement. Please review. |  | |
| \*\*-064 |  | 8.5.2 |  | Ed | NOTES:  1) Depending on the complexity of the use case, the procedure will be more or less explicitly described. Especially pertaining to historical data, there may be very little or no information available - this information should also be provided;  2) The recipe that the observer (cook) follows to generate the observation;  3) The procedure is often referred to as the method;  4) Different observers can follow the same (reusable) procedure for the creation of different observations;  5) The procedure is a workflow, protocol, plan, algorithm, or computational method specifying how to make an observation;  6) The observing procedure cannot describe a sensor instance, but it can describe the sensor type.  NOTE The term process that was used in ISO 19156:2011 has been purposely dropped in this version to avoid unnecessary confusion between the terms procedure and process. | Please list these notes as NOTE 1, NOTE 2, NOTE 3, or else combine to form one single NOTE. |  | |
| \*\*-065 |  | 8.6.2 |  | Ed | Other examples of Sensors include the human eyes. | Does "sensors" need to have a capital letter here? Please check and harmonize throughout the document. |  | |
| \*\*-066 |  | 8.7.2 |  | Ed | NOTES:  a) In many use cases, the Host is the environmental monitoring facility;  b) The Host can be a platform that hosts a set of sensors;  c) An alternative usage could pertain to a biodiversity survey campaign. In this scenario, the team performing the survey would be modelled as observers whereas the entire survey campaign can be represented as a Host. | Please see previous comment on the regrouping of NOTEs. |  | |
| \*\*-067 |  | 8.8.2 |  | Ed | NOTE Examples of deployment are: | Please see previous comment on the regrouping of NOTEs. |  | |
| \*\*-068 |  | 9.1.2 |  | Ed | NOTE Attention should be given not to reinvent semantic that is explicitly modelled in the OMS model. | NOTEs cannot contain the verbal form "should". Please rephrase. |  | |
| \*\*-069 |  | 9.2.1 |  | Ed | Figure 10 — Context diagram for Abstract Observation core — AbstractObservationCharacteristics and AbstractObservation | All figures shall be precited in the document, but Figure 10 does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-070 |  | 9.2.2 |  | Ed | Set of common characteristics used for describing an **Observation** or a collection of Observations. | This section of text is labelled "requirement" but it does not contain the verbal form "shall". Please review. |  | |
| \*\*-071 |  | 9.3.2 |  | Ed | If information on the type of Observation is provided, the constraints defined in the referenced codelist SHALL be used. | Should the word "observation" be written in bold font here? |  | |
| \*\*-072 |  | 9.4.1 |  | Ed | Figure 11 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-073 |  | 9.5.1 |  | Ed | Figure 12 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-074 |  | 9.6.1 |  | Ed | Figure 13 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-075 |  | 9.7.1 |  | Ed | Figure 14 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-076 |  | 9.8.2 |  | Ed | If the reason for the **Deployment** is provided, the property ***deploymentReason:CharacterString*** SHALL be used. | It is not clear why the section of text "deploxmentReason:CharacterString" is written in italic font here. Please review. |  | |
| \*\*-077 |  | 9.8.3 |  | Ed | If the time of the **Deployment** is provided, property ***deploymentTime:TM\_Period*** SHALL be used. | The previous comment concerning the use of italic font also applies here. |  | |
| \*\*-078 |  | 9.9.3 |  | Ed | NOTE The value of the name should be taken from a well-governed source if possible. | NOTEs cannot contain the verbal form "should". Please rephrase. |  | |
| \*\*-079 |  | 9.9.4 |  | Ed | NOTE The type “Any” should be substituted by a suitable concrete type, such as CI\_ResponsibleParty or Measure. | NOTEs cannot contain the verbal form "should". Please rephrase. |  | |
| \*\*-080 |  | 9.10.1 |  | Ed | to firm up semantics of observation types | This phrasing seems quite informal. Please review and consider replacing with more appropriate phrasing, e.g. to clarify, to confirm, etc. |  | |
| \*\*-081 |  | 10.2.1 |  | Ed | Figure 15 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-082 |  | 10.5.1 |  | Ed | Figure 16 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-083 |  | 10.5.2 |  | Ed | EXAMPLE In order to explicitly describe the capabilities of an Environmental Monitoring Facility, one must provide information on what Observable Properties are being measured with which methodology. | EXAMPLEs cannot contain the verbal form "must". Please rephrase by using statement of fact.  Note that in accordance with the ISO House Style, the use of personal pronouns should also be avoided (in this case, "one").  A possible rephrasing of this sentence could be:  "..... information needs to be provided on what Obersable Properties..." |  | |
| \*\*-084 |  | 10.6.1 |  | Ed | Figure 17 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-085 |  | 10.7.1 |  | Ed | Figure 18 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-086 |  | 10.8.1 |  | Ed | Figure 19 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-087 |  | 10.9.1 |  | Ed | Figure 20 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-088 |  | 10.10.1 |  | Ed | Figure 21 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-089 |  | 10.11.1 |  | Ed | Figure 22 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-090 |  | 10.12.1 |  | Ed | to firm up | Please see previous comment in subclause 9.10.1 on this phrasing. |  | |
| \*\*-091 |  | 11.2.2 |  | Ed | (although ‘specimen preservation could be considered a specific activity per se’) | The inverted commas here imply that this text has been quoted from another source. Please provide the SOURCE reference for this quotation and ensure that all necessary permissions have been obtained concerning its reproduction. Alternatively, please delete or rephrase. |  | |
| \*\*-092 |  | 12.2.1 |  | Ed | Figure 24 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-093 |  | 12.2.3 |  | Ed | NOTE Parameter should NOT be utilized to | NOTEs cannot contain the verbal forms "shall", "should" or "may". Please rephrase or convert to body text. |  | |
| \*\*-094 |  | 12.3.1 |  | Ed | Figure 25 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-095 |  | 12.3.4 |  | Ed | NOTE Parameter should NOT | NOTEs cannot contain the verbal forms "shall", "should" or "may". Please rephrase or convert to body text. |  | |
| \*\*-096 |  | 12.4.1 |  | Ed | Figure 26 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-097 |  | 12.5.1 |  | Ed | Figure 27 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-098 |  | 12.6.1 |  | Ed | Figure 28 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-099 |  | 12.8.1 |  | Ed | to firm up | Please see previous comments on this phrasing, e.g. in subclause 9.10.1. |  | |
| \*\*-100 |  | 12.8.2 |  | Ed | to firm up | See previous comment. |  | |
| \*\*-101 |  | 13.2.1 |  | Ed | Figure 29 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-102 |  | 13.5.2 |  | Ed | A **StatisticalSample** is a statistical subset of a feature-of-interest, defined for the purpose of creating **Observation**(s). | This text is marked as a requirement, but the verbal form "shall" is not used. Please check. |  | |
| \*\*-103 |  | 13.6.1 |  | Ed | Figure 30 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-104 |  | 13.7.1 |  | Ed | Figure 31 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-105 |  | 13.8.1 |  | Ed | Figure 32 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-106 |  | 13.9.1 |  | Ed | Figure 33 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-107 |  | 13.10.1 |  | Ed | Figure 34 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-108 |  | 13.11.1 |  | Ed | Figure 35 | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-109 |  | 13.13.2 |  | Ed | A location identified by its name, address, spatial geometry or a combination of any of these three. | This text is marked as a requirement, but the verbal form "shall" is not used. Please check. |  | |
| \*\*-110 |  | B.1 |  | Ed | Observations, measurements and samples | Previously this has been written with each word capitalized. Please harmonize throughout. |  | |
| \*\*-111 |  | B.2 |  | Ed | Table B.1 — Earth Observations (EO) | Please note that all tables shall be precited in the document, but none of the tables in this annex seem to be referenced. Please insert references to each table, explaining the content to the user. |  | |
| \*\*-112 |  | B.2 |  | Ed | Table B.1 — Earth Observations (EO) | Please ensure that references to external webpages or documents in the "Example" column of this table shall be added to the Bibliography. The corresponding bibliographical callout (the bibliography entry number in superscript+square brackets) shall be inserted in the corresponding table cells after the text. |  | |
| \*\*-113 |  | Bibliography |  | Ed | [32] <https://www.w3.org/TR/sdw-bp/> | Please complete this Bibliographical entry. |  | |
| \*\*-114 |  | Bibliography |  | Ed | [2] ISO 19105:2000, Geographic information — Conformance and testing  [3] ISO/DIS 19105, Geographic information — Conformance and testing | Is it necessary to cite both of these documents in the Bibliography? Neither seem to be cited in the document. Consider removing. |  | |
| \*\*-115 |  | Bibliography |  | Ed | Bibliography | Note that references only need to be dated if they refer to a specific part of a document (e.g. specific subclause, table, etc.) |  | |
| \*\*-116 |  | C.4.3 |  | Ed | Refactoring of the domain models may be required to separate the ultimate and proximate features of interest | Please check the verbal form used here ("may" or "can") |  | |
| \*\*-117 |  | C.5.1 |  | Ed | *ex situ* | Note that Latin text shall be written in italic font. |  | |
| \*\*-118 |  | C.5.1 |  | Ed | in Edition 1 | When referring to Edition 1, please specify "ISO 19156:2011" and when referring to Edition 2, please refer to ISO 19156:2022, even if this makes the wording seem repetitive in places. It is important for maintaining clarity (e.g. if a subclause is cited outside of the whole document). |  | |
| FR-119 |  | C.5.1 |  | ed | The Samping Feature concept was modelled as SF\_SamplingFeature class in Edition 1 as follows: | The Sampling Feature concept was modelled as SF\_SamplingFeature class in Edition 1 as follows: |  | |
| FR-120 |  | C.5.3 |  | ed | Note that in Edition 1 the SF\_SampingPoint class is associated with the concept of an environmental monitoring facility by the use of term "station": | Note that in Edition 1 the SF\_SamplingPoint class is associated with the concept of an environmental monitoring facility by the use of term "station": |  | |
| \*\*-121 |  | D.1 |  | Ed | might | Please avoid the use of "might", as it is quite ambiguous in terms of meaning. Please try to use "can" (possibility) or "may" (permission) instead, or "can potentially" in the case of a hypothetical situation. |  | |
| \*\*-122 |  | D.2.4 |  | Ed | (ex : forecast) | "e.g." ? |  | |
| \*\*-123 |  | D.4 |  | Ed | Figure D.5 — Observation as metadata of a Coverage | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-124 |  | D.4 |  | Ed | Figure D.4 — Coverage as a result of an Observation | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-125 |  | D.4 |  | Ed | Figure D.3 — CIS model key elements | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |
| \*\*-126 |  | D.4 |  | Ed | Figure D.2 — OMS model key elements | All figures shall be precited in the document, but this figure does not appear to have been cited. Please introduce a reference to this figure. |  | |