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OGC WCS 2.0.1 Corrigendum Release Notes

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This document is an approved corrigendum to an existing OGC Standard. A corrigendum corrects known deficiencies in the normative sections of the standards document and/or errors in the associated schema.

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Contents

Page

1	Overview.....	1
2	List of Changes	1

i. Preface

This document represents the release notes for the OGC Web Coverage Service (WCS) Interface Standard corrigendum 2.0.1. This corrigendum for WCS supersedes previous WCS versions.

ii. Document terms and definitions

This document uses the specification terms defined in Subclause 5.3 of [OGC 06-121r3]. In particular, the word “shall” (not “must”) is the verb form used to indicate a requirement to be strictly followed to conform to this standard.

iii. Document contributor contact points

All questions regarding this document should be directed to the editor or the contributors:

Name	Organization
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iv. Revision history

Date	Release	Editor	Primary clauses modified	Description
2012-04-27	12-017	Peter Baumann	All	Initial version

Foreword

This document represents the revision notes for the OGC Web Coverage Service (WCS) Interface Standard version 2.0.1. This WCS corrigendum supersedes previous WCS versions.

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Introduction

This document represents the release notes for the OGC Web Coverage Service (WCS) Interface Standard Corrigendum 2.0.1.

OGC Web Coverage Service Revision Notes

1 Overview

These release notes has been compiled from the OGC WCS.SWG Corrigendum Matrix available on:

<https://portal.opengeospatial.org/twiki/bin/view/WCS2x0swg/WCS20Corrigenda> .

2 List of Changes

No.	Version	Status	Priority	Severity	Section	Description	Comments
1	2.0.1	included	normal	trivial	8.4.1	Requirement 26 and 27: id should be coverageId -- StephanMeissl - 29 Oct 2010	
2	2.0.1	included	normal	trivial	7.2	Table 6 column "definition" should read "version number", column "multiplicity" should read "one (mandatory)" -- Dimitar Misev, Jacobs U - 14 Nov 2010	
						Table 6: version has the wrong definition -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
3	2.0.1	included	normal	major	8.2.3	incoherent service identification -- StephanMeissl - 01 Dec 2010	See also schemas issue no. 1.
4	2.0.1	included	high	major	?	CoverageSubtype should be redefined to contain the derivation (subtyping) path to allow introducing new coverage types in an interoperable manner -- PeterBaumann - 29 Dec 2010	Maybe simply use names of elements in the substitutionGroup of a certain coverage type -- StephanMeissl - 10 Jun 2011
5	2.0.1	included	normal	normal	6.3, ATS	Requirement 2 and 3: Reqs and ATS are inconsistent. Reqs on gml:boundedBy/gml:Envelope, but ATSS on gml:domainSet. -- JinsongdiYu - 08 Feb 2011	
6	2.0.1	included	normal	normal	8.4.2.1	Requirement 33: add reqs on specifying encoding format in request structure? --	See CR https://portal.opengeospatial.org

						JinsongdiYu - 08 Feb 2011	/files/?artifact_id=44193 and also issue no. 19 discussion about subsetting
7	2.0.1	included	?	?	8.4.2.3	Requirement 35: Testing on overlapping area does not 100% guarantee the content, such as an off-by-one error. Need to be improved. Also, testing pixel by pixel for loss compression format is dangerous.-- JinsongdiYu - 08 Feb 2011	See also issue no. 18 discussion about subsetting; format issue does not affect
8	2.0.1	included	normal	normal	Foreword	Foreword: "This version 2.0 of the Web Coverage Service (WCS) Interface Standard improves (but does not supersede) previous version 1.1.2 [1]." ...What does the 'not supersede' mean? -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
9	2.0.1	included DRAFT-01	low	trivial	1	Scope: "while GML constitutes the canonical format for the definition of WCS, it is not required by this core that a WCS implements the GML coverage format." This seems to be unclear, think about improved phrasing. -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
10	2.0.1	included	low	trivial	2	Conformance: "Requirements and conformance test URIs defined in this document are relative to http://www.opengis.net/spec/WCS/2.0/ ." -> Chapter 5, rephrase: "Requirements and conformance test URIs defined in this document are relative paths to be appended to http://www.opengis.net/spec/WCS/2.0/ ." -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
11	2.0.1	included	low	trivial	6.2	Figure 1: Table 3 states that ServiceParameters have multiplicity zero or more, Figure~1 has '1'. I presume the figure is in error. -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	According to me the table is in error. Otherwise the schemas need changes too. -- StephanMeissl - 12 Jun 2011
12	-	invalid	-	-	6.5	Figure 1: No Table for ServiceMetadata. --	Isn't it table 5? - - StephanMeissl

						PeterBaumann - 04 Jun 2011	- 12 Jun 2011
13	2.0.1	included	normal	normal	6.2	Section 6.2 first sentence: "An OfferedCoverage is a coverage as specified in the GML Application Schema for Coverages [OGC 09-146r1] and the further standards referenced therein." but this is confusing when looking at the UML which shows an OfferedCoverage containing an accessor to a coverage rather than being a coverage. -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
14	2.0.1	included	low	trivial	6.3	Section 6.3: The requirements refer to gmlcov:OfferedCoverage, which is wrong -> delete prefix. -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
15	2.0.1	included	normal	minor	6.3	Are the gml:Envelopes in Reqs 2 and 3 in the OfferedCoverage or in the Coverage within the OfferedCoverage? -- PeterBaumann - 12 Apr 2011 (hint by Adrian Custer)	
16	2.0.1	included	normal	trivial	8.2.2	Typo in Figure 7: WCS84BoundingBox -> WGS84BoundingBox -- StephanMeissl - 04 May 2011	
17	2.0.1	included	high	critical	7.2	Requirement 11 contradicts the schemas: 2.0 vs. 2.0.0 -- StephanMeissl	See also schemas issue no. 8.
18	2.0.1	included	high	blocker	8.4	discussion about subsetting -- PeterBaumann - 08 Jun 2011 and 09 Aug 2011, in discussion with Mar Martinze and Wenli Yang	resolved: constrain subsetting to coverage extent in Core, envisage nil value extension to allow bboxes larger than coverage
70	2.1	under discussion	high	major	8.4.3	Add further exception codes: * TooManyAxes - result coverage contains more axes than the requested output format supports * TooManyComponentsInRangeType - result coverage has more components than the requested output format can represent * UnsupportedRangeComponentType - at least one range type	

						<p>component of the result coverage is of a type which the requested output format cannot represent *</p> <p>UnsupportedDimension - result coverage has a number of dimensions which the requested output format cannot represent *</p> <p>UndefinedParameter - request contains a parameter that is not supported by any extension or the requested output format -- StephanMeissl - 23 Jun 2011</p>	
71						<p>what about these names: TooManyAxesForEncoding, TooManyRangeComponentsForEncoding, RangeComponentTypeIllegalForEncoding, UndefinedParameter. Reason: Similar errors occur in WCPS (and probably other extensions), but with operations other than format encoding, and then the naming gets ambiguous. Further, I'd like to reinterpret UnsupportedDimension as AxisIllegalForEncoding meaning that "at least one axis is not supported by the format chosen", such as z/t for GeoTIFF? . -- PeterBaumann - 27 Jun 2011</p>	
72	2.0.1	included	high	major	-	<p>Add format encoding parameters (CR 11-050) -- PeterBaumann - 21 Nov 2011</p>	

more comments from Adrian Custer:

No.	Version	Status	Priority	Severity	Section	Description	Comments
19	2.0.1	included	normal	normal	?	<p>Requirement 9 Since 'request type' is not defined term in the standard, this requirement probably needs to be rephrased to something like: All WCS requests must use a data structure which is a subtype of RequestBase? .</p>	
20	2.0.1	included	normal	normal	?	<p>Section 8.1, second sentence Is not a sentence. "The definition is based..."? "Their definitions are based..."? "All three operations use the GML..."? </p>	

21	2.0.1	included	normal	normal	?	Section 8.2 The first sentence "A GetCapabilities? operation ... allows a WCS client to retrieve ... and coverages..." probably needs to be re-written.	
22	2.0.1	included	normal	normal	?	Requirement 12 violates Requirement 9 Since, as shown in figure 5, wcs:GetCaps does not extend RequestBase? . Either an exception needs to be made in Req. 9 or the root of Fig 5 should be RequestBase? .	
23	2.0.1	included	normal	normal	?	<p>Figure 6 and Table 8 seem wrong It seems that you are intentionally making a departure from the OWS Common design in Figure~6 without sufficient explanation. You have your Contents next to your ServiceMetadata? whereas ows:ServiceMetadata is supposed to contain the contents section (see OWS Common, Fig~3, p24). The reasons for this need to be explained and you need to state how WCS services are to handle the ows:Contents (wcs:Capabilities.ows:ServiceMetadata.ows:Contents) defined in the UML diagrams but left out of the XSD Schema. (I presume you must be aware that the planned mechanism for doing this is to use directly the inherited elements of wcs:Capabilities rather than duplicating those elements in a second element, wcs:ServiceMetadata, which also inherits from ows:CapabilitiesBaseType. I am unclear what you are working around in using your duplication mechanism.)</p> <p>Also, since the ServiceMetadata? element should be a wcs:Capabilities element directly since it contains the 'extension' element. I do not know how, in UML, you indicate that this element extends the abstract ows:ServiceMetadata element; it is really the type that extends the ows type.</p> <p>Similarly, the Contents element is really a wcs:Contents element and it needs to show the</p>	IMHO this mixes Metadata and ServiceMetadata? ; WCS Core Fig 6 uses Metadata, for which OWS Common Fig 7 (p 35) applies. UML class "Contents" indeed is in the (default) namespace of WCS, as requested by you.

						<p>extension addition of wcs:CoverageSummary (and show the dependence of the type of wcs:Contents on the ows:ContentsBaseType which, again, I do not know how to do in UML).</p> <p>Note, in passing, an erratum in the XML Schema annotation: "COverage" line~57, wcsGetCapabilities.xsd.</p> <p>Also, since wcs:Contents extends ows:ContentsBaseType which has an ows:DatasetDescriptionSummary element but you want servers to use your wcs:CoverageSummary element instead, you have to enjoin what happens to the existing ows:DatasetDescriptionSummary element (i.e. do not use it). Would it not have been possible to put your wcs:CoverageSummary into a substitution group for ows:DatasetDescriptionSummary?</p>	
24	2.0.1	rejected	normal	normal	?	<p>last paragraph on page 12, and sub-clauses (a), (b), and (c) p13 (a) "is renamed" seems to indicate a relation but there is no formal relation; perhaps you are trying to say that there is a semantic parallel between the roles of the two. Really, wcs:Contents has: wcs:Contents ows:DatasetDescriptionSummary ows:otherSource wcs:CoverageSummary rather than having wcs:CoverageSummary substitute for ows:DatasetDescriptionSummary. (b) "CoverageSummary" is extended (over DatasetSummary?)" but it does not really 'extend' rather it follows a somewhat similar structure (notably lacking the recursion mechanism) (c) since wcs:CoverageSummary is totally independent from the ows:DatasetDescriptionSummary and there is no inherited 'identifier', I do not understand why this sub-clause is needed; it seems to confuse more than aid.</p>	<p>what is described in said text portion follows what is stated in OWS Common.</p>

25	2.0.1	included	normal	normal	?	the UML in Figure~7 probably needs clarification. The wcs:Contents element probably needs an annotation stating what happens to its datasetSummary (i.e. it must be null).	
26	2.0.1	included	normal	normal	?	Note (p14 top), second sentence OWS Common D.9 does not really describe 'proper use of the many *optional elements*' so I am not sure what this sentence is trying to say.	It does not fully describe indeed, so the reference has been generalized to the full scope of OWS Common
27	2.0.1	included	normal	normal	?	Requirement 14 Since you have explicitly defined wcs:Contents to use your wcs:CoverageSummary rather than the ows:DatasetSummary of OWS Common this injunction seems problematic.	phrasing improved to avoid ambiguity.
28	2.0.1	included	normal	normal	?	Section 8.2.4 The reference should probably be to ows-7.4.1 not the huge 7.4	
29	2.0.1	included	normal	normal	?	<p>Section 8.3 Note the style has it using a smaller font than the lower order section 8.2.4 above which seems weird.</p> <p>Also both notes on wcs:CoverageSummary need clarification: since it does not extend DatasetSummary? (UML) or DatasetDescriptionSummary? (XSD) it does not have any @identifier and the note at the bottom says 'is cloned from' but that seems too strong a relationship for merely being inspired by.</p> <p>"A DescribeCoverage? request ... returns ... a description" needs cleanup since grammatically this suggests the request that is returning something.</p> <p>The NOTE is fine but observe that it directly contradicts the earlier comment discussed in</p>	

						my point 16 above.	
30	2.0.1	included	normal	normal	?	Requirement~17 Would it be better to replace "shall consist of a structure" with something like "shall contain the semantic elements defined in"?	ok, but different solution adopted
31	2.0.1	rejected	normal	normal	?	Requirement~18 (also 17, 12, and other referring to request) This highlights issues with the formulation of injunctions on client requests, we need to think about flexible handling of such requests. This injunction seems more about the 'validity' of the request and implicitly about server handling of invalid requests. Based on req.20, it seems that this is really stating that servers receiving a request with an unknown id shall consider the request invalid and, I presume, issue an error of some kind. Through that formulation, we have turned the requirement from a client requirement to a server requirement.	My philosophy is that an interface describes interaction between two parties, hence I find this phrasing more appropriate.
32	2.0.1	included	normal	normal	?	Requirement~19 "of a CoverageDescriptions? *element*" for grammatical coherence.	
34	2.0.1	included	normal	normal	?	Table~10 The Data type of CoverageId? (a list) conflicts with the name (singular) and duplicates the multiplicity of the element. Are you really expecting to get multiple lists of coverageIds? Is version fixed to 2.x.x here? Also compare this injunction to that of Table~6, p10. Also, why repeat the definition of the elements of RequestBase? which were specified in Table~6?	coverageId: fixed. Version string: I find it problematic to hardware versions in manifold places in the spec. Version def in Table 6: fixed.
35	2.0.1	included	normal	normal	?	Requirement~20 Does this imply that a DescribeCoverage? request with 0 coverages is invalid and the server should return an exception rather than an empty list?	yes, coverage ids are considered invalid. Have added exception code for clarification.

36	2.0.1	included	normal	normal	?	Note p17 Why are we talking about figure~4 here?	corrected
37a	2.0.1	under discussion	normal	normal	?	Figure~9 I am not competent to evaluate this data structure. However, from a naive perspective, I am surprised to see a Description extend a Feature. It might be worth providing a sentence to explaining this here (even if you explain this in detail in the documents you have explaining the model, which I have not yet read).	corrected in 37a1
37a1	2.0.1	included	normal	normal	?	Figure~9 shall be adajusted from stereotype "Data Type" to Feature Type"	
37b	2.0.1	rejected	normal	normal	?	Figure~9: Any reason Cov.Desc..metadata is of type any and not ows:Metadata?	Metadata: this is not about OWS metadata, but about any kind of user/host-provided metadata.
37c	2.0.1	rejected	normal	normal	?	Figure~9: Also, would you not want to leave yourselves an extension element in Cov.Desc.?	no. Extensions are (i) for addl request parameters or (ii) user-provided structures, and as such available in a coverage.
37d	2.0.1	rejected	normal	normal	?	Figure~9: Finally, this confirms that I have no idea what Fig 1 was about. I saw serviceMetdata in figure~6 and see ServiceParameters? here so I do not know what they were doing in Fig~1. (see comment~9)	serviceMetadata are associated with service descriptions = Capabilities, serviceParameters (sorry, bad naming - historical reasons) with coverages = CoverageDescriptions?
38a	2.0.1	included	normal	normal	?	Requirement~21 The requirement that the order be the same in the request and the response is unnecessary since the coverageId will be present.	changed accordingly
38b	2.0.1	included	normal	normal	?	Requirement~21 Why are we talking about wcs:CoverageOfferings all of a	sentence clarified

						<p>sudden? (Now I REALLY don't get the relation of Fig~1 to this spec.)</p> <p>could this not state "...a wcs:coverageDescription with information appropriate for the identified coverage.?" If not, this sentence is too long and needs to be split into more understandable pieces.</p>	
39	2.0.1	rejected	normal	normal	?	<p>NOTE p19 Is this true of the domainSet element in particular or can all elements be included by reference? Also, this probably needs a better explanation about how the resolution mechanism would work, something like: 1. the href would be a, presumably full not relative, HTTP URL, 2. a request for an xml document could be made to that URL, 3. the response to that request would be an XML document with a GML domainSet as the root element (not sure if this is allowed).</p>	<p>Detail description is part of the XML coverage structure definition = GML spec.</p>
40	2.0.1	included	normal	normal	?	<p>Example Errata, the example says it is going to talk about "with id C0001" but the wcs:CoverageId is "C0002"</p> <p>I don't understand the 5x3 matrix comment.</p>	<p>id corrected; comment seems ok</p>
41a	2.0.1	rejected	normal	normal	?	<p>Requirement 23 Since table 13 contains only one error, the middle condition of this requirement should probably be made explicit.</p>	<p>see #41c - there are no clear rules in the core/extension spec how to model error descriptions.</p>
41b	2.0.1	included	normal	normal	?	<p>Requirement 23 The last sentence seems like it belongs to the middle condition not to the requirement as a whole.</p>	<p>adjusted.</p>
41c	2.0.1	rejected	normal	normal	?	<p>Requirement 23 I suspect it would be better to separate out (1) invalid requests (2) valid requests with invalid contents and (3) processing errors but that probably needs cleanup in OWS Common as well so this</p>	<p>right.</p>

						probably works for now.	
42	2.0.1	under discussion	normal	normal	?	<p>Last paragraph, p20 This states that trim must have bounds "which both must lie inside the coverage's domain" but the first paragraph of section 8.4 ends by talking about "intersection of the request envelope with the coverage envelope": which behaviour is supported? Req.30 and 31 suggests it must be inside. (Same goes for slice at top of p.21) I guess it is the introductory paragraph to section~8.4 which should be corrected.</p> <p>Last sentence should start "The dimension of the result*ing* coverage..." (although 'returned', 'derived', or 'delivered' might be better than 'resulting').</p>	
43	2.0.1	included	normal	normal	?	First paragraph, p21 "the operand coverage" is a poor formulation, use 'offered' instead?	
44	2.0.1	rejected	normal	normal	?	<p>Figure~10 The "{readOnly}" is probably implicit, would be better called 'fixed' and probably belongs in a UML note.</p> <p>DimensionTrim might need a note stating that at least one of the two is required.</p>	readOnly: EA does it this way. Trim: no, none is required.
45	2.0.1	rejected	normal	normal	?	<p>Table~14 Is version fixed to 2.x.x here? Also compare this injunction to that of Table~6, p10.</p> <p>Also, why repeat the definition of the elements of RequestBase? which were specified in Table~6?</p>	T 14: no, is the same as with others (following adjustment)
46	2.0.1	rejected	normal	normal	?	Requirement~26 See comment~30 above for turning this injunction to a server injunction and stating what a server does when it is violated.	violation -> exception
47	2.0.1	included	normal	normal	?	Requirement~27 This needs to be reworded to apply only to servers which implement core without any extension which allows subsetting on other types. As worded, it would	changed accordingly, and requirement removed

						block those extensions.	
48	2.0.1	included	normal	normal	?	Paragraph after Req.~27, p22 Where does 'DomainSubset' come from? If this is a typo, then it can be combined with the next sentence.	correct
49	2.0.1	included	normal	normal	?	Last paragraph, p22 The "of a coverage' in the first sentence needs to be more specific. Is this the CoverageDescription? :BoundedBy element? Or is that boundedBy element merely the same as that of another BoundedBy? element in the offered coverage? Short of asking for the coverage without subsetting, the client only knows about the BBox in the CoverageSummary? of the Caps doc or the CoverageDescription? :BoundedBy of the describeCoverage operation.	phasing improved
50	2.0.1	rejected	normal	normal	?	Top paragraph, p23 This needs to specify how the client has gotten this information? does it come from a Caps response, a DescribeCoverage? response or some other way?	that should be clear from the model and DescribeCoverage? description; detailed explanations (many possible) need to go into a separate - highly necessary - document "WCS for Dummies"
51	2.0.1	rejected	normal	normal	?	Requirement~28 Same as above, how has the client obtained this?	
52	2.0.1	included	normal	normal	?	Requirements 30 and 31 Why do these not use the same formulation prior to the shall?	
53	2.0.1	rejected	normal	normal	?	Top NOTE, p24 should this read 'the former'?	cannot find / understand this in the spec text
54	2.0.1	obsoleted	normal	normal	?	Requirement~33 This seems poorly constructed. The requirement seems to be that the encoding of the coverage follow some formal specification, possibly only in extensions but I suspect this could be done in a	

						profile as well.	
55	2.0.1	rejected	normal	normal	?	Second NOTE, p24 Has this not already been stated above in the second paragraph of Clause 1 'Scope' p1?	yes, for better understanding; NOTES are informal explanations.
56	2.0.1	included	normal	normal	?	Requirement 34 change to "...shall consist of the coverage component of the OfferedCoverage? identified by that id...?"	
57	2.0.1	rejected	normal	normal	?	Section 8.4.2.2 example It would be better to have an example with realistic values in the TuleList? such as 22 23 22 25 18 25 22 23 19 19 20 21 24 12 20 than the 1 2 3 4 ... in the example.	IMHO the values chosen allow to better understand the principle.
58	2.0.1	rejected	normal	normal	?	Requirement 35 The definitions probably need to be part of the requirement, starting from the 'Let' at the top of the page. (same for Req. 36).	not possible due to word processor constraints
59	2.0.1	included	normal	normal	?	Requirement 36 Should end with "dimensions of c minus 1"	
60	2.0.1	included	normal	normal	?	Requirement~38 Again, the last sentence probably belongs as part of the middle condition rather than being applied, at the end, apparently to all exceptions.	
61	2.0.1	rejected	normal	normal	?	Table~18 The HTTP code is probably not the good one. These are invalid requests not unknown endpoints. 404 would only make sense in the first case 'NoSuchCoverage', but even that is debatable.	I cannot find a more suitable HTTP code. Hm, we may consider 418?
62	2.0.1	moot	normal	normal	?	Section 8.5 Is uniqueness of identifiers ever formally stated as a requirement?	The testable equivalent of this is stated in Req 39.
63	2.0.1	rejected	normal	normal	?	Requirement~39 Since services can be transactional, this implicitly requires that identifiers not be reused else a request on one operation, followed by a transaction, followed by a request on another operation might violate this rule. If this analysis is right, it should be made part formally	UUID is a fixed term, cannot be reused here because semantics is not identical. While not reusing identifiers is best practice it is not

						of the uniqueness requirement discussed in my comment 60. The subsequent NOTE should therefore be dropped, especially so since it conflicts with the paragraph immediately below. I think you need to call CoverageId? values Universally Unique Id's (UUID).	expressible (ie, cannot be tested) in the framework of WCS. Have added a NOTE on this.
64	2.0.1	included	normal	normal	?	Section 9 This should probably read something like: The specification contained in this WCS Core is not sufficient for a concrete WCS implementation. This Clause describes extensions to the core standard which could be combined with the core specification to constitute the full specification of a minimal WCS-conformant implementation. However, given Requirements 41 and 42, this second sentence is actually not true.	suitably adapted
65	2.0.1	included	normal	normal	?	first sentence, p29 erratum: "...can verify the implementation..." but this could be better stated in terms of a client determining that a particular instance implements each extension by finding the relevant URI in one of the Profile elements.	
66	2.0.1	included	normal	normal	?	second paragraph, p29 "in the sequel" means what?	
67	2.0.1	obsoleted	normal	normal	?	requirement 40 This does not appear to be an extension but to be part of core.	requirement deleted
68	2.0.1	included	normal	normal	?	second NOTE, p29 This might mention that the role of Profiles could be to specify mandatory bindings.	
69	2.0.1	obsoleted	normal	normal	?	Requirement 42 Why does the form of this requirement not follow that of the similar requirement 41? Also what is "the Coverage Format Extension"? I suspect the URI is a root rather than a full URI. Ah, the NOTE seems to indicate that (1) there is a document where this is specified and (2) all servers must implement this. If so, then	requirement removed altogether

						(a) we need the full reference to that spec and (b) this is not an extension.	
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Conformance test

No.	Version	Status	Priority	Severity	Section	Description	Comments
1	1.0.1	included in DRAFT-01	normal	trivial	09-110r3 A.1.2, A.1.3	"gml:domainSet" changed to "gml:Envelope" according to its requirement. -- JinsongdiYu - 20 Nov 2011	see: core issue NO.5
2	1.0.1	included in DRAFT-01	normal	trivial	09-110r3 A.1.3	Correct erroneous " srsName" to "axisLabels" according to its requirement. -- JinsongdiYu - 20 Nov 2011	
3	1.0.1	included in DRAFT-01	normal	trivial	09-110r3 A.1.14	"Test the referenced conformance class of OWS Common [OGC 06-121r9]. Test passes if the conformance test passes in completeness.", the test suite on the referenced conformance class of OWS Common is not available. Changed to "Send a valid GetCapabilities request to the server under test, check the result consists of an XML document of type wcs:ContentsType." . -- JinsongdiYu - 20 Nov 2011	
2	1.0.1	included in DRAFT-01	normal	trivial	09-110r3 A.1.26, A.1.27	Correct erroneous " id" to "coverageid" according to its requirement. -- JinsongdiYu - 20 Nov 2011	see core issue NO.1
3	1.0.1	included in DRAFT-01	normal	trivial	09-110r3 A.1.11	Update "...version parameter shall have a fixed value of '2.0'" to "...version parameter shall have a three digit number as specified in OWS Common" . -- JinsongdiYu - 20 Nov 2011	see core issue NO.17