

Last Saved		18/06/2004 09:24:07		By		Keith Holmes		IMHess#Programme/ismim/ISO11152/DGSM/ISO11152/DGSM/Profile.xls																		
<p>Note: BGS-geolDS profile on this sheet is out-of-date            Added DGS Model Discovery Profile - KAH 20 Nov 2003            Error in Vertical extents corrected - KAH 21 Nov 2003            Changed cardinality of Dataset Language &amp; Obligation of Vertical Reference System and other corrections! - KAH 21 Nov 2003            DGS Model Discovery Profile added KAH 27 Nov 2003            Quick addition of differences between implementation and IR/0161/1 initial            Change to Model Discovery (only 1 reference system allowed and dataset association added) KAH 31 Dec 2003            Included Linkage (#17.1.7.3), dataURL (#16.8.1.6.8.1), collectiveTitle (#10.1, #11.6.2.2-3); amended keywords (#107), associationType (#116), constraints (#103-106) KAH 25 Feb 2004            Amended Vertical Extent (#128-132) and putting reference metadata in including #115, everything to do with image #116.3, #116.4; is changed; added data quality in (#116.8-116.8.6), added            presentationForm (#116.8.2.1), added browse graphic (#116.4-116.4.4) KAH 27 Feb 2004            Corrected (added #116.6) KAH 3 Mar 2004            Added in MidW QC KAH 2 Apr 2004            Added in DGS Model ATR 2 Apr 2004            Changed MidW QC from version 3.0 to 3.1 and documented some agreements on DGS Model - put in last saved date KAH 6 Apr 2004            Changed comments after discussions on 8 Apr with JLL (changes can be found by searching for "JLL &amp; Apr 2004") KAH 14 Apr 2004            Added in Workflow numbers ... numbers refer to JLL's DGS Framework Workflow document of 7 Apr 2004 KAH 16 Apr 2004            Technical Changes (display filename) KAH 27 Apr 2004            Incorporated Helen Balton's spreadsheet fields in GLOS columns KAH 26 Apr 2004            Added explanation on datasetURL (#116.6) KAH 18 Jun 2004</p>																										
<p>Dark Yellow background fields here should be implemented            Light yellow background fields need not be implemented            Red text fields are existing DGS Model Discovery Metadata fields</p>																										
<p>Dark Yellow background fields here should be implemented            Light yellow background fields need not be implemented            Blue text fields are existing DGS Model Discovery Metadata fields            Green fields indicate Inference Metadata info</p>																										
<p>Only Background are hidden fields            Yellow Background are visible fields</p>																										
ISO 19115:2003																										
DGS Model Discovery Profile																										
DGS Model Discovery Profile																										
MidW QC (Version 3.1)																										
DGS Model Technical (GLOS) Profile (where appropriate fields)																										
No.	Short Name	Definition	Obligation / Condition	Maximum Occurrence	Data Type	Domain	Name / Role Name	Comments (for detailed description see IR/0161)	Obligation / Condition	Maximum Occurrence	Data Discovery Workflow Number	Name / Role Name	Comments (for detailed description see IR/0161)	Obligation / Condition	Maximum Occurrence	Model Discovery Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	OC Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	GLOS Workflow Number
ISO 19115:2003 Core																										
Dataset Title										Dataset Title																
360	site	resTitle	name by which the cited resource is known	Mandatory	1	CharacterString	Free Text	Title (RESTITLE)	Mandatory	1	8	Title (RESTITLE)	Mandatory	1	9		Dataset Title	Mandatory	1		9	GLOS: Model Title GSP: Surface Name				
Dataset Reference Date										Dataset Reference Date																
364	date	refDate	reference date for the cited resource	Mandatory	N	Class	Date (B.4.2)	Date of Extraction (14) (REFDATE)	Mandatory	1	13	Date of Creation (14) (REFDATE)	Mandatory	1	12		Dataset Reference Date	There are 3 dates in the MidW QC: 'preparation' = creation, 'checking' = new value in DIC_DATETPCD, 'approval' = publication	Mandatory (for creation)	1		12				
Date of Extraction (24) (ADD_REFDATEPRECISION)										Date of Creation (24) (ADD_REFDATEPRECISION)																
365	dateType	refDateType	event used for reference date	Mandatory	N	Class	CL_DateTypeCode <<CodeList>> (B.5.2)	Date of Extraction (44) (REFDATETYPE)	Mandatory	1	13	Date of Creation (44) (REFDATETYPE)	Mandatory	1	12		Date Type	Default values are 'creation', 'check', 'publication'. Constrained by the ISO 19115:2003 (B.5.2) code list (DIC_DATETPCD). The Date of Extraction is the equivalent of 'Creation' - so only one value is allowed here	Mandatory	1		12				
Dataset Responsible Party										Dataset Responsible Party																
375	individualName	rpIndName	name of the responsible person - surname, given name, title separated by a delimiter	Optional	1	CharacterString	Free text	Comment on Project (RPINDNAME)	Mandatory	1	8	Originator (1/3) (RPINDNAME)	C / Organisation and Position not documented?	1	9 & 15		Team Member + Checker + Approver	Mandatory	1		9 & 12 & 15					
376	organisationName	rpOrgName	name of the responsible organization	Optional	1	CharacterString	Free text	Project (RPORGNAME)	Optional	1	8	Originator (2/3) (RPORGNAME)	C / Name and Position not documented?	1	9 & 15		Organisation	Default = 'British Geological Survey'	Optional	1		9 & 12 & 15				
377	positionName	rpPosName	role or position of the responsible person	Optional	1	CharacterString	Free text	Project (RPPOSNAME)	Mandatory	1	8	Originator (3/3) (RPPOSNAME)	C / Name and Organisation not documented?	1	9 & 15		Position + Project	Value = 'Team Member' (preparer), 'Checker' (checker). Hidden for Team Member and Checker	Optional	1		9 & 12 & 15				
408	voice	voiceNum	telephone number by which individuals can speak to the responsible organization or individual	Optional	N	CharacterString	Free text	(VOICENUM)	Optional	Many	8	(VOICENUM)	Optional	Many	9 & 15		Telephone No	Default = '+44 131 667 1000'	Optional	1		9 & 12 & 15				
409	facsimile	faxNum	telephone number of a facsimile machine for the responsible organization or individual	Optional	N	CharacterString	Free text	(FAXNUM)	Optional	Many	8	(FAXNUM)	Optional	Many	9 & 15		FAX No	Default = '+44 131 667 2785'	Optional	1		9 & 12 & 15				
381	deliveryPoint	delPoint	address line for the location (as described in ISO 11180, Annex A)	Optional	N	CharacterString	Free text	(DELPOINT)	Mandatory	1	8	(DELPOINT)	Mandatory	1	9 & 15		Address	Default = 'Murchison House, West Mains Road'	Optional	1		9 & 12 & 15				
382	city	city	city of the location	Optional	1	CharacterString	Free text	(CITY)	Mandatory	1	8	(CITY)	Mandatory	1	9 & 15		City	Default = 'Edinburgh'	Optional	1		9 & 12 & 15				
383	administrativeArea	adminArea	state, province of the location	Optional	1	CharacterString	Free text	(ADMINAREA)	Optional	1	8	(ADMINAREA)	Optional	1	9 & 15		Admin Area		Optional	1		9 & 12 & 15				
384	postalCode	postCode	ZIP or other postal code	Optional	1	CharacterString	Free text	(POSTCODE)	Optional	1	8	(POSTCODE)	Optional	1	9 & 15		Postcode	Default = 'EH9 3JA'	Optional	1		9 & 12 & 15				
385	country	country	country of the physical address	Optional	1	CharacterString	Free text	(COUNTRY)	Mandatory	1	8	(COUNTRY)	Mandatory	1	9 & 15		Country	Default = 'United Kingdom'	Optional	1		9 & 12 & 15				
386	electronicMailAddress	eMailAdd	address of the electronic mailbox of the responsible organization or individual	Optional	1	CharacterString	Free text	(EMAILADD)	Optional	Many	8	(EMAILADD)	Optional	Many	9 & 15		Email		Mandatory	1		9 & 12 & 15				
397	linkage	linkage	address (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme such as http://www.statkart.no/role211	Mandatory	1	Class	URL (BET RFC1738 IETF RFC 2056)	(LINKAGE)	Optional	1	8	(LINKAGE)	Optional	1	9 & 15		Linkage	Default = 'http://www.bgs.ac.uk'	Optional	1		9 & 12 & 15				
379	role	role	function performed by the responsible party	Mandatory	1	Class	CL_RoleCode <<CodeList>> (B.5.5)	(ROLE)	Mandatory	1	8	(ROLE)	Mandatory	1	9 & 15		Role	Default values are 'originator', 'checker', 'pointOfContact'. Constrained by the ISO 19115:2003 (B.5.5) code list (DIC_ROLECD) but code list reduced (and possibly added to) - but it will only contain a few entries: 'originator', 'supplier', 'resourceProvider'	Optional	1		9 & 12 & 15				
Geographic location of the dataset (by four coordinates or by geographic identifier)										Geographic location of the dataset (by four coordinates)																
340	extentTypeCode	exTypeCode	indication of whether the bounding polygon encompasses an area covered by the data or an area where data is not present	Optional	1	Boolean	0 - exclusion 1 - inclusion	(EXTYPECODE)	Mandatory	1	8 & 13	(EXTYPECODE)	0 - exclusion 1 - inclusion	Mandatory	1	9 & 12		Extent Type	Default = '1'; 0 - exclusion 1 - inclusion	Mandatory	1		9 & 12			
344	westBoundLongitude	westBL	western-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east)	Mandatory	1	Class	Angle (B.4.3) -180.0 <= West Bounding Longitude Value <= 180.0	West Bounding Co-ordinate (WESTBL)	Mandatory	1	8 & 13	West Bounding Co-ordinate (WESTBL)	-180.0 <= West Bounding Longitude Value <= 180.0	Mandatory	1	9 & 12		Western Extent		Mandatory	1		9 & 12			
345	eastBoundLongitude	eastBL	eastern-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east)	Mandatory	1	Class	Angle (B.4.3) -180.0 <= East Bounding Longitude Value <= 180.0	East Bounding Co-ordinate (EASTBL)	Mandatory	1	8 & 13	East Bounding Co-ordinate (EASTBL)	-180.0 <= East Bounding Longitude Value <= 180.0	Mandatory	1	9 & 12		Eastern Extent		Mandatory	1		9 & 12			
346	southBoundLatitude	southBL	southern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north)	Mandatory	1	Class	Angle (B.4.3) -90.0 <= South Bounding Latitude Value <= 90.0; South Bounding Latitude Value <= North bounding Latitude Value	South Bounding Co-ordinate (SOUTHBL)	Mandatory	1	8 & 13	South Bounding Co-ordinate (SOUTHBL)	-90.0 <= South Bounding Latitude Value <= 90.0; South Bounding Latitude Value <= North bounding Latitude Value	Mandatory	1	9 & 12		Southern Extent		Mandatory	1		9 & 12			
347	northBoundLatitude	northBL	northern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north)	Mandatory	1	Class	Angle (B.4.3) -90.0 <= North Bounding Latitude Value <= 90.0; North Bounding Latitude Value >= South Bounding Latitude Value	North Bounding Co-ordinate (NORTHBL)	Mandatory	1	8 & 13	North Bounding Co-ordinate (NORTHBL)	-90.0 <= North Bounding Latitude Value <= 90.0; North Bounding Latitude Value >= South Bounding Latitude Value	Mandatory	1	9 & 12		Northern Extent		Mandatory	1		9 & 12			
Geographic location of the dataset (by Areal Extent)										Geographic location of the dataset (by Areal Extent)																
340	extentTypeCode	exTypeCode	indication of whether the bounding polygon encompasses an area covered by the data or an area where data is not present	Optional	1	Boolean	0 - exclusion 1 - inclusion	(EXTYPECODE)	Mandatory	1	8 & 13	(EXTYPECODE)	0 - exclusion 1 - inclusion	Mandatory	1	9 & 12		Extent Type	Default = '1'; 0 - exclusion 1 - inclusion	Mandatory	1		9 & 12			
206	authority	identAuth	person or party responsible for maintenance of the namespace	Optional	1	Class	CL_Citation <<Data Type>> (B.3.2)	TGN Name	Mandatory (when TGN available)	1	8 & 13	TGN Name	Not needed until a TGN is available - then use the CITATION table (RESTITLE and ADD_CITATION_ID) Note: version control will need implementing on the TGN	Mandatory (when TGN available)	1	9 & 12		TGN Name	Default = 'notEntered'	Mandatory	1		9 & 12			
394	date	refDate	reference date for the cited resource	Mandatory	N	Class	Date (B.4.2)	(REFDATE)	Mandatory (when TGN available)	Many		(REFDATE)	Reference Dates for the TGN	Mandatory (when TGN available)	Many											
ADD_REFDATEPRECISION										ADD_REFDATEPRECISION																
ADD_TM_RELATIVEPOSTION										ADD_TM_RELATIVEPOSTION																

ISO 19115-2003								DGSM Data Discovery Profile				DGSM Model Discovery Profile				MidVal QC (Version 3.1)				DGSM Model Technical (SLOS) Profile (wherein spreadsheet fields)				GLOS						
No.	Short Name	Definition	Definition	Definition	Definition	Definition	Definition	Name / Role Name	Comments (for detailed description see IR618/1)	Obligation / Condition	Maximum Occurrence	Data Discovery Workflow Number	Name / Role Name	Comments (for detailed description see IR618/1)	Obligation / Condition	Maximum Occurrence	Model Discovery Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	QC Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	GLOS Workflow Number			
33.4	395	dateType	refDateType	event used for reference date	Mandatory	N	Class	CI_DateTypeCode <<CodeList>> (B.5.2)	(REFDATETYPE) Constrained by the ISO19115-2003 (B.5.2) code list (DIC_DATETYPE) (B.5.2)	Mandatory (when TGN available)	1		(REFDATETYPE) Constrained by the ISO19115-2003 (B.5.2) code list (DIC_DATETYPE) (B.5.2)	Mandatory (when TGN available)	1			(REFDATETYPE) Constrained by the ISO19115-2003 (B.5.2) code list (DIC_DATETYPE) (B.5.2)	Mandatory (when TGN available)	1			(REFDATETYPE) Constrained by the ISO19115-2003 (B.5.2) code list (DIC_DATETYPE) (B.5.2)	Mandatory (when TGN available)	1					
34	207	code	idcode	alphanumeric value identifying an instance in the namespace	Mandatory	1	CharacterString	Free text	Anex Extent (IDENTCODE)	Mandatory	1	8 & 13	Anex Extent (IDENTCODE)	Restricted to list used in DGSM Metadata on 4 Feb 2004	Mandatory	1	9 & 12	Anex Extent	Restricted to list used in DGSM Metadata on 4 Feb 2004	Mandatory	1	9	9 & 12	Anex Extent	Mandatory	1	9 & 12			
35		Dataset language			Mandatory	?Many		Dataset language	This section isn't used in DGSM Data Discovery Metadata	Mandatory	1		Dataset language		Mandatory	1		Dataset language		Mandatory	1		Dataset language	Default = 'English'	Mandatory	1				
36	39	language	dataLang	language(s) used within the dataset	Mandatory	N	CharacterString	ISO 639-2, other parts may be used	(DATALANG) Default (and possibly only) value: English. Constrained by a very cut down version of those in ISO 639-2	Mandatory	1	8	(DATALANG)	Default (and possibly only) value: English. Constrained by a very cut down version of those in ISO 639-2	Mandatory	1	9	Dataset Language	Default = 'English'	Mandatory	1	9	Dataset Language	Default = 'English'	Mandatory	1	9			
37		Dataset character set			Mandatory	Many		Dataset character set	This section isn't used in DGSM Data Discovery Metadata	Mandatory	Many		Dataset character set	This section isn't used in DGSM Model Discovery Metadata	Mandatory	Many		Dataset character set		Mandatory	Many		Dataset character set		Mandatory	Many				
38	40	characterSet	dataChar	full name of the character coding standard used for the dataset	Mandatory	N	Class	MD_CharacterSetCode <<CodeList>> (B.5.10)	(DATACHAR) Default Value: Not Available. Constrained by the ISO 19115-2003 (B.5.10) code list (DIC_CHARACTERSET) but code list enhanced to include 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets)	Mandatory	1	8	(DATACHAR)	Default Value: Not Available. Constrained by the ISO 19115-2003 (B.5.10) code list (DIC_CHARACTERSET) but code list enhanced to include 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets), 'Not Available' (for non-digital sets)	Mandatory	1	9	Dataset Character Set	Default = 'notEntered'	Mandatory	1	9	Dataset Character Set	Default = 'notEntered'	Mandatory	1	9			
39		Dataset topic category			Mandatory	Many		Dataset topic category	This section isn't used in DGSM Data Discovery Metadata	Mandatory	Many		Dataset topic category	This section isn't used in DGSM Model Discovery Metadata	Mandatory	Many		Dataset topic category		Mandatory	Many		Dataset topic category		Mandatory	Many				
40	41	topicCategory	tpCat	main theme(s) of the dataset	Optional (if used, either equivalentScale or distance can be given)	N	Class	MD_TopicCategoryCode <<Enumeration>> (B.5.27)	(TPCAT) Default Value: Not Available. Constrained by the ISO 19115-2003 (B.5.27) enumeration (DIC_TOPICCATEGORY) but enumeration (1) enhanced to include subdivisions of 'geoscientificInformation'. Enhancement for internal use only because enumerations cannot be extended and the type of enhancement is better dealt with by keywords and a thesaurus. Only value available should be 'geoscientificInformation' - finer subdivisions should be taken care of by keywords.J.L. 8 Apr 2004	Mandatory	1	8	(TPCAT)	Default Value: Not Available. Constrained by the ISO 19115-2003 (B.5.27) enumeration (DIC_TOPICCATEGORY) but enumeration (1) enhanced to include subdivisions of 'geoscientificInformation'. Enhancement for internal use only because enumerations cannot be extended and the type of enhancement is better dealt with by keywords and a thesaurus. Only value available should be 'geoscientificInformation' - finer subdivisions should be taken care of by keywords.J.L. 8 Apr 2004	Mandatory	1	9	Dataset Topic Category	Default = 'geoscientificInformation' Only value available should be 'geoscientificInformation'.J.L. 8 Apr 2004	Mandatory	1	9	Dataset Topic Category	Default = 'geoscientificInformation' Only value available should be 'geoscientificInformation'.J.L. 8 Apr 2004	Mandatory	1	9			
41		Spatial resolution of the dataset			Mandatory	1		Spatial resolution of the dataset (Scale)	See also Quality Scale Validity	Optional	1		Spatial resolution of the dataset (Scale)	See also Quality Scale Validity	Optional	1		Spatial resolution of the dataset (Scale)		Optional	1		Spatial resolution of the dataset (Scale)		Optional	1				
42	57	denominator	rdenom	the number below the line in a vulgar fraction	Mandatory	1	Integer	Integer > 0	Level of Spatial Detail (1/4) (RFIDENOM) See also abstract	Mandatory	1	8	Level of Spatial Detail (1/4) (RFIDENOM) See also Abstract	Mandatory	1	9	Scale		Mandatory	1	9	Scale		Mandatory	1	9				
43					Mandatory	1		Spatial resolution of the dataset (Distance between data points)		Optional	1		Spatial resolution of the dataset (Distance between data points)		Optional	1		Spatial resolution of the dataset (Distance between data points)		Optional	1		Spatial resolution of the dataset (Distance between data points)		Optional	1				
44	61	distance	scaleDist	ground sample distance	Mandatory	1	Class	Distance (B.4.3)	Level of Spatial Detail (2/4) (SCALEDIST) (SCALEDIST)	Mandatory	1	8	Level of Spatial Detail (2/4) (SCALEDIST) (SCALEDIST)	Mandatory	1	9	Avg. distance between data points		Mandatory	1	9	Avg. distance between data points		Mandatory	1	9				
45					Mandatory	1		Level of Spatial Detail (3/4) (ADD_UOMLENGTH)	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	8	Level of Spatial Detail (3/4) (ADD_UOMLENGTH)	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	9	Units	Default = 'metres'. Other value available is 'kilometres'	Mandatory	1	9	Units	Default = 'metres'. Other value available is 'kilometres'	Mandatory	1	9			
46		Abstract describing the dataset			Mandatory	1		Abstract	Abstract + textual information on Level of Spatial Detail (4/4) + Completeness + Logical Consistency (IDABS)	Mandatory	1	8 & 13	Abstract	Abstract + Completeness + Logical Consistency + Scientific Coverage (IDABS)	Mandatory	1	9 & 12	Description (Abstract)	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12	Description (Abstract)	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12			
47	25	abstract	idAbs	brief narrative summary of the content of the resource(s)	Mandatory	1	CharacterString	Free text	Detailed instructions are needed on what to include in the abstract	Mandatory	1	8 & 13	Detailed instructions are needed on what to include in the abstract	Mandatory	1	9 & 12			Mandatory	1	9 & 12				Mandatory	1	9 & 12			
48	Easy - we need an abstract (but only one) (KMH 1 Jul 2003)																													
49		Distribution format			Optional (if used, both MD_FormatName and MD_FormatVersion must be given)	Many		Distribution format	This section isn't used in DGSM Data Discovery Metadata	Optional	Many		Distribution format		Mandatory	Many		Distribution format	There is a heading for this in the MidVal QC - but it's more aligned to Storage Format (see #118 in this file)	Optional	Many		Model Export		Optional	Many				
50	285	name	formatName	name of the data transfer format(s)	M	1	CharacterString	Free text	(FORMATNAME)	Not Used	1		Delivery Format (1/2) (FORMATNAME)		Mandatory	1	9 & 12 & 17		Export Type (EXPORT_TYPE_CODE)	This is the type of export (VRML, ascii file, pdf etc). This is constrained by the dictionary DIC_EXPORT_TYPE. There is also the facility to have multiple formats for one export type, for example an image may be GIF or JPEG format. These formats are constrained by the dictionary DIC_EXPORT_FORMAT	Optional	Many		Export Type (EXPORT_TYPE_CODE)	This is the type of export (VRML, ascii file, pdf etc). This is constrained by the dictionary DIC_EXPORT_TYPE. There is also the facility to have multiple formats for one export type, for example an image may be GIF or JPEG format. These formats are constrained by the dictionary DIC_EXPORT_FORMAT	Optional	Many	19 & 20 & 21		
51	286	version	formatVer	version of the format (date, number, etc.)	M	1	CharacterString	Free text	(FORMATVER)	Not Used	1		Delivery Format (2/2) (FORMATVER)		Mandatory	1	9 & 12 & 17													
52		Additional extent information for the dataset (vertical and temporal)			Optional (both vertical and temporal extents can given)	1 (but Many may be a requirement)		Additional extent information for the dataset (vertical)		Optional	1 (but Many may be a requirement)		Additional extent information for the dataset (vertical)		Optional	1 (but Many may be a requirement)		Additional extent information for the dataset (vertical)		Optional	1		Additional extent information for the dataset (vertical)		Optional	1				
53	355	minimumValue	vertMinVal	lowest vertical extent contained in the dataset	Mandatory	1	Real	Real	Lowest Point (VERTMINVAL)	Optional (but required to be Mandatory by ISO 19115-2003)	1	8 & 13	Lowest Point (VERTMINVAL)	Optional (but required to be Mandatory by ISO 19115-2003)	1	9 & 12		Lowest Point		Mandatory	1	9 & 12	Lowest Point		Mandatory	1	9 & 12			
54	356	maximumValue	vertMaxVal	highest vertical extent contained in the dataset	Mandatory	1	Real	Real	Highest Point (VERTMAXVAL)	Optional (but required to be Mandatory by ISO 19115-2003)	1	8 & 13	Highest Point (VERTMAXVAL)	Optional (but required to be Mandatory by ISO 19115-2003)	1	9 & 12		Highest Point		Mandatory	1	9 & 12	Highest Point		Mandatory	1	9 & 12			
55	357	unitOfMeasure	vertUoM	vertical units used for vertical extent information Examples: metres, feet, millimetres, hectopascals	Mandatory	1	Class	UomLength (B.4.3)	Bounding Depth Units (VERTUOM)	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	8 & 13	Bounding Depth Units (VERTUOM)	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	9 & 12	Units	Default = 'metres'. Other value available is 'kilometres'	Mandatory	1	9 & 12	Units	Default = 'metres'. Other value available is 'kilometres'	Mandatory	1	9 & 12		
56	358	role name: verticalDatum	vertDatum	provides information about the origin from which the maximum and minimum elevation values are measured	Mandatory	1	Association	SC_VerticalDatum (B.4.9)	System of Vertical Referencing (VERTDATUM)	Constrained by a dictionary of vertical data (DIC_ADD_EPSG) - possibly enhanced by BGS (Note: not all entries in DIC_EPSG are vertical data so additional checks may be needed - or a substituted dictionary) (Note: investigate EPSG dictionary to see if VERTUOM is supplied within it)	Mandatory	1	8 & 13	System of Vertical Referencing (VERTDATUM)	Constrained by a dictionary of vertical data (DIC_ADD_EPSG) - possibly enhanced by BGS (Note: not all entries in DIC_EPSG are vertical data so additional checks may be needed - or a substituted dictionary) (Note: investigate EPSG dictionary to see if VERTUOM is supplied within it)	Mandatory	1	9 & 12	Height System	Default = 'OD Newlyn'. Other value available is 'OD Mean Head'	Mandatory	1	9 & 12	Height System	Default = 'OD Newlyn'. Other value available is 'OD Mean Head'	Mandatory	1	9 & 12		
57		Additional extent information for the dataset (temporal)			Optional	Many (to the geographic location, rather than the dataset)		Additional extent information for the dataset (temporal)	Note: This isn't TW1 - Two way travel time. This section isn't used within DGSM Data Discovery Metadata	Optional	Many (to the geographic location, rather than the dataset)		Additional extent information for the dataset (temporal)	Note: This isn't TW1 - Two way travel time. This section isn't used within DGSM Model Discovery Metadata	Optional	Many (to the geographic location, rather than the dataset)		Additional extent information for the dataset (temporal)		Optional	Many (to the geographic location, rather than the dataset)		Additional extent information for the dataset (temporal)		Optional	Many (to the geographic location, rather than the dataset)				
58					Mandatory	1		(BEGIN_REFDATE)		Mandatory	1		(BEGIN_REFDATE)		Mandatory	1		(BEGIN_REFDATE)		Mandatory	1		(BEGIN_REFDATE)		Mandatory	1				
59					Mandatory	1		(BEGIN_ADD_REFDATEPRECISION)		Mandatory	1		(BEGIN_ADD_REFDATEPRECISION)		Mandatory	1		(BEGIN_ADD_REFDATEPRECISION)		Mandatory	1		(BEGIN_ADD_REFDATEPRECISION)		Mandatory	1				
60					Mandatory	1		(BEGIN_ADD_TM_RELATIVE POSITION)		Mandatory	1		(BEGIN_ADD_TM_RELATIVE POSITION)		Mandatory	1		(BEGIN_ADD_TM_RELATIVE POSITION)		Mandatory	1		(BEGIN_ADD_TM_RELATIVE POSITION)		Mandatory	1				
61					Mandatory	1		(END_REFDATE)		Mandatory	1		(END_REFDATE)		Mandatory	1		(END_REFDATE)		Mandatory	1		(END_REFDATE)		Mandatory	1				
62					Mandatory	1		(END_ADD_REFDATEPRECISION)		Mandatory	1		(END_ADD_REFDATEPRECISION)		Mandatory	1		(END_ADD_REFDATEPRECISION)		Mandatory	1		(END_ADD_REFDATEPRECISION)		Mandatory	1				
63					Mandatory	1		(END_ADD_TM_RELATIVE POSITION)		Mandatory	1		(END_ADD_TM_RELATIVE POSITION)		Mandatory	1		(END_ADD_TM_RELATIVE POSITION)		Mandatory	1		(END_ADD_TM_RELATIVE POSITION)		Mandatory	1				
64		Spatial representation type			Optional	Many		Spatial representation type	This section isn't used within DGSM Data Discovery Metadata	Optional	Many		Spatial representation type	This section isn't used within DGSM Model Discovery Metadata	Optional	Many		Spatial representation type		Optional	Many		Spatial representation type		Optional	Many				
65	37	spatialRepresentationType	spatRptType	method used to spatially represent geographic information	Optional	N	Class	MD_SpatialRepresentationTypeCode <<CodeList>> (B.5.26)	(SPATRPRTYPE)	Mandatory	1		(SPATRPRTYPE)		Mandatory	1		(SPATRPRTYPE)		Mandatory	1		(SPATRPRTYPE)		Mandatory	1				
66		Reference system			Optional	Many		Reference System	This section isn't used within DGSM Data Discovery Metadata (Except for Vertical Reference System) - see later	Optional	Many		Reference System	See also Vertical Reference System	Mandatory	Many (but 1 is probably the requirement)		Reference System		Mandatory	Many		Reference System		Mandatory	Many				
67	207	code	idcode	alphanumeric value identifying an instance in the namespace	Mandatory	1	CharacterString	Free text	(REFSYSID)	Mandatory	1		Spatial Reference System (REFSYSID)	Constrained by a dictionary of reference systems (DIC_ADD_EPSG) - possibly enhanced by BGS	Mandatory	1	9	Spatial Reference System	Default = 'British National Grid'. Other value allowed is 'LatLong'	Mandatory	1	9	Spatial Reference System	Default = 'British National Grid'. Other value allowed is 'LatLong'	Mandatory	1	9			
68		Lineage			Optional	1		Lineage		Mandatory	1		Lineage		Mandatory	1		Lineage		Mandatory	1		Lineage		Mandatory	1				
69	83	statement	statement	general explanation of the data producer's knowledge about the lineage of a dataset	Optional	1	CharacterString	Free text	Lineage (part) (STATEMENT)	Generalised text part of Lineage. For further details see under ISO non-Core	Mandatory	1	8 & 13	Lineage (STATEMENT)		Mandatory	1	9 & 12	Lineage	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12	Lineage	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12		

ISO 19115-2003						DGSIM Data Discovery Profile						DGSIM Model Discovery Profile						MidVal QC (Version 3.1)			DGSIM Model Technical (SLOS) Profile (where spreadsheet fields)			GLOS			
No.	Short Name	Definition	Obligation / Condition	Maximum Occurrence	Data Type	Domain	Name / Role Name	Comments (for detailed description see IR0181)	Obligation / Condition	Maximum Occurrence	Data Discovery Workflow Number	Name / Role Name	Comments (for detailed description see IR0181)	Obligation / Condition	Maximum Occurrence	Model Discovery Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	QC Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	GLOS Workflow Number	
70	On-line resource		Optional				On-line Resource	This section isn't used within DGSIM Data Discovery Metadata - but could well be to refer to additional documentation (such as project or BP reports)	Optional	Many		On-line Resource	This section isn't used within DGSIM Data Discovery Metadata - but could well be to refer to additional documentation (such as project or BP reports)	Optional	Many		On-line Resource		Optional	Many							
71	397	linkage	linkage	location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme such as http://www.starkart.no/iso211	Mandatory	1	Class	URL (IETF RFC1738 IETF RFC 2056)	(LINKAGE)	Mandatory	1	17	(LINKAGE)	Mandatory	1	17		Path for folders and files containing the data	Mandatory	1	9 & 12	Export URL Address (EXPORT_URL_ADDRESS)	This field holding the URL of a visualisation or export file, is the only field within the GLOS metadata which would actually contain a URL, accessible on the internet, and thus may also map to the entry (rather than the DataSetURI field - line 116.8). In the case of the GLOS this would typically be VRML or possibly GIF representation of models, but may also be .pdf files	Optional	Many	19 & 20 & 21	
71.1	400	name	orName	name of the online resource	Optional	1	CharacterString	Free text	(ORNAME)	Optional	1	17	(ORNAME)	Optional	1	17						Export Description (MODEL_EXPORT_DESCRIPTION)	This holds a short description of the export/visualisation (e.g. VRML or NS32 block mode)	Optional (required if URL address entered)	Many	19 & 20 & 21	
71.2	401	description	orDesc	detailed text description of what the online resource is/does	Optional	1	CharacterString	Free text	(ORDESC)	Optional	1	17	(ORDESC)	Optional	1	17		Details	Mandatory	1	9 & 12						
71.3	402	function	orFunc	code for function performed by the online resource	Optional	1	Class	CI_OnLineFunctionCode <<CodeList>> (B.5.3)	(ORFUNCT)	Optional	1	17	(ORFUNCT)	Optional	1	17		Not in MidVal QC but should be constrained by an enhanced version of the ISO 19115-2003 (B.5.3) code list (DIC_ONFUNCTCD); in practice it will only be on value equivalent to 'The Data'	Optional	1	17						
72	Metadata file identifier		Optional				Metadata file identifier	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata file identifier	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata file identifier		Mandatory	1							
73	2	fileIdentifier	mdFileID	unique identifier for this metadata file	Optional	1	CharacterString	Free text	(MDFILEID)	Mandatory	1	8	(MDFILEID)	Mandatory	1	9		Hidden - to be assigned 'automatically' when needed	Mandatory	1	9						
74	Metadata standard name		Optional				Metadata standard name	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata standard name	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata standard name		Mandatory	1							
75	10	metadataStandardName	mdStanName	name of the metadata standard (including profile name) used	Optional	1	CharacterString	Free text	(MDSTANNAME)	Mandatory	1	8	(MDSTANNAME)	Mandatory	1	9		Default value: 'DGSIM Midland Valley'	Mandatory	1	9						
76	Metadata standard version		Optional				Metadata standard version	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata standard version	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata standard version		Mandatory	1							
77	11	metadataStandardVersion	mdStanVer	version (profile) of the metadata standard used	Optional	1	CharacterString	Free text	(MDSTANVER)	Mandatory	1	8	(MDSTANVER)	Mandatory	1	9		Default = '3.0'	Mandatory	1	9						
78	Metadata language		Conditional				Metadata language	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata language	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata language		Mandatory	1							
79	3	language	mdLang	language used for documenting metadata	C / not defined by encoding?	1	CharacterString	ISO 639-2; other parts may be used	(MDLANG)	Mandatory	1	8	(MDLANG)	Mandatory	1	9		Default = 'English'	Mandatory	1	9						
80	Metadata character set		Conditional				Metadata character set	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata character set	This section isn't used in DGSIM Data Discovery Metadata	Mandatory	1		Metadata character set		Mandatory	1							
81	4	characterSet	mdChar	full name of the character coding standard used for the metadata set	C / ISO/IEC 10646-1 not used and not defined by encoding?	1	Class	MD_CharacterSetCode <<CodeList>> (B.5.10)	(MDCHAR)	Mandatory	1	8	(MDCHAR)	Mandatory	1	9		Default = 'iso8859_1'	Mandatory	1	9						
82	Metadata point of contact		Mandatory				Metadata Point of Contact	This wasn't in DGSIM Data Discovery Metadata defined in IR0181 but is needed and appears to be in the implementation. Suggest these are the same as those in Dataset Responsible Party so use these	Mandatory	Many		Metadata Point of Contact		Mandatory	Many		Metadata Point of Contact		Mandatory	1							
83	375	individualName	rpIndName	name of the responsible person - surname, given name, file separated by a delimiter	C / organisationName and positionName not documented?	1	CharacterString	Free text	(RPFINDNAME)	Mandatory	1	8	Authority for Reliability of Metadata (1/3) (RPFINDNAME)	C / Organisation and Position not documented?	1	9		Metadata Point of Contact	Mandatory	1	9						
84	376	organisationName	rpOrgName	name of the responsible organization	C / individualName and positionName not documented?	1	CharacterString	Free text	(RPPORGNAME)	Optional	1	8	Authority for Reliability of Metadata (2/3) (RPPORGNAME)	C / Name and Position not documented?	1	9		Organisation	Default = 'British Geological Survey'	Optional	1	9					
85	377	positionName	rpPosName	role or position of the responsible	C / individualName and organisationName not documented?	1	CharacterString	Free text	(RPPOSNAME)	Mandatory	1	8	Authority for Reliability of Metadata (3/3) (RPPOSNAME)	C / Name and Organisation not documented?	1	9		Position - Project	Default = 'Team Member'	Optional	1	9					
86	408	voice	voiceNum	telephone number by which individuals can speak to the responsible organization or individual	Optional	N	CharacterString	Free text	(VOICENUM)	Optional	Many	8	(VOICENUM)	Optional	Many	9		Telephone No	Default = '+44 131 667 1000'	Optional	1	9					
87	409	facsimile	faxNum	telephone number of a facsimile machine for the responsible organization or individual	Optional	N	CharacterString	Free text	(FAXNUM)	Optional	Many	8	(FAXNUM)	Optional	Many	9		FAX No	Default = '+44 131 667 2785'	Optional	1	9					
88	381	deliveryPoint	delPoint	address line for the location (as described in ISO 11180, Annex A)	Optional	N	CharacterString	Free text	(DELPOINT)	Mandatory	1	8	(DELPOINT)	Mandatory	1	9		Address	Default = 'Murchison House, West Main Road'	Optional	1	9					
89	382	city	city	city of the location	Optional	1	CharacterString	Free text	(CITY)	Mandatory	1	8	(CITY)	Mandatory	1	9		City	Default = 'Edinburgh'	Optional	1	9					
90	383	administrativeArea	adminArea	state, province of the location	Optional	1	CharacterString	Free text	(ADMINAREA)	Optional	1	8	(ADMINAREA)	Optional	1	9		Admin Area	Default = 'Edinburgh'	Optional	1	9					
91	384	postalCode	postCode	ZIP or other postal code	Optional	1	CharacterString	Free text	(POSTCODE)	Optional	1	8	(POSTCODE)	Optional	1	9		Postal Code	Default = 'EH9 3LA'	Optional	1	9					
92	385	country	country	country of the physical address	Optional	1	CharacterString	Free text	(COUNTRY)	Mandatory	1	8	(COUNTRY)	Mandatory	1	9		Country	Default = 'United Kingdom'	Optional	1	9					
93	386	electronicMailAddress	eMailAdd	address of the electronic mailbox of the responsible organization or individual	Optional	1	CharacterString	Free text	(EMALADD)	Optional	Many	8	(EMALADD)	Optional	Many	9		Email		Mandatory	1	9					
94	397	linkage	linkage	location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme such as http://www.starkart.no/iso211	Mandatory	1	Class	URL (IETF RFC1738 IETF RFC 2056)	(LINKAGE)	Optional	1	8	(LINKAGE)	Optional	1	9		Linkage	Default = 'http://www.bgs.ac.uk'	Optional	1	9					
95	379	role	role	function performed by the responsible party	Mandatory	1	Class	CI_RoleCode <<CodeList>> (B.5.5)	(ROLE)	Mandatory	1	8	(ROLE)	Mandatory	1	9		Role	Default = 'jointOfContact'. Constrained by the ISO 19115-2003 (B.5.5) code list (DIC_ROLECD) but code list reduced (and possibly added to) - but it will only contain a few entries. Authority for Reliability of Metadata maybe an extra entry	Optional	1	9					
96	Metadata date stamp		Mandatory				Metadata Date Stamp	This section isn't used in DGSIM Data Discovery	Mandatory	1		Metadata Date Stamp	Note this is the date the metadata were completed - not the date the metadata were entered on the database	Mandatory	1		Metadata Date Stamp		Mandatory	1							
97	9	dateStamp	mdDateSt	date that the metadata was created	Mandatory	1	Class	Date (B.4.2)	(MDDATEST)	Mandatory	1	17	Date of Update of Metadata (MDDATEST)	Mandatory	1	17		Date Metadata were Completed	Mandatory	1	12						
97.01	Dataset Responsible Party		Optional	?Many			(External) Model Access	This follows an identical structure to Dataset Responsible Party but is documented separately for clarity. It's just another role within Dataset Responsible Party.	Mandatory	Many		(External) Model Access		Mandatory	Many		(External) Model Access		Mandatory	1	17						
97.02	375	individualName	rpIndName	name of the responsible person - surname, given name, file separated by a delimiter	C / organisationName and positionName not documented?	1	CharacterString	Free text	(RPFINDNAME)	Mandatory	1	17	Contact Name (1/2) (RPFINDNAME)	C / Position not documented?	1	17					1	17					
97.03	376	organisationName	rpOrgName	name of the responsible organization	C / individualName and positionName not documented?	1	CharacterString	Free text	(RPPORGNAME)	Mandatory	1	17	Supplier (RPPORGNAME)	C / Name not documented?	1	17					1	17					
97.04	377	positionName	rpPosName	role or position of the responsible	C / individualName and organisationName not documented?	1	CharacterString	Free text	(RPPOSNAME)	Mandatory	1	17	Contact Name (2/2) (RPPOSNAME)	C / Name not documented?	1	17					1	17					
97.05	408	voice	voiceNum	telephone number by which individuals can speak to the responsible organization or individual	Optional	N	CharacterString	Free text	(VOICENUM)	Optional	1	17	Telephone Number (VOICENUM)	Optional	1	17					1	17					
97.06	409	facsimile	faxNum	telephone number of a facsimile machine for the responsible organization or individual	Optional	N	CharacterString	Free text	(FAXNUM)	Optional	1	17	Facsimile Number (FAXNUM)	Optional	1	17					1	17					
97.07	381	deliveryPoint	delPoint	address line for the location (as described in ISO 11180, Annex A)	Optional	N	CharacterString	Free text	(DELPOINT)	Mandatory	1	17	Postal Address (1/4) (DELPOINT)	Mandatory	1	17					1	17					
97.08	382	city	city	city of the location	Optional	1	CharacterString	Free text	(CITY)	Mandatory	1	17	Postal Address (2/4) (CITY)	Mandatory	1	17					1	17					
97.09	383	administrativeArea	adminArea	state, province of the location	Optional	1	CharacterString	Free text	(ADMINAREA)	Optional	1	17	Postal Address (3/4) (ADMINAREA)	Optional	1	17					1	17					
97.10	384	postalCode	postCode	ZIP or other postal code	Optional	1	CharacterString	Free text	(POSTCODE)	Optional	1	17	Postal Address (4/4) (POSTCODE)	Optional	1	17					1	17					
97.11	385	country	country	country of the physical address	Optional	1	CharacterString	Free text	(COUNTRY)	Mandatory	1	17	Postal Address (4/4) (COUNTRY)	Mandatory	1	17					1	17					
97.12	386	electronicMailAddress	eMailAdd	address of the electronic mailbox of the responsible organization or individual	Optional	1	CharacterString	Free text	(EMALADD)	Optional	1	17	Email Address (EMALADD)	Optional	1	17					1	17					
97.13	397	linkage	linkage	location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme such as http://www.starkart.no/iso211	Mandatory	1	Class	URL (IETF RFC1738 IETF RFC 2056)	(LINKAGE)	Optional	1	17	Web Address (LINKAGE)	Optional	1	17					1	17					
97.14	379	role	role	function performed by the responsible party	Mandatory	1	Class	CI_RoleCode <<CodeList>> (B.5.5)	(ROLE)	Mandatory	1	17	(ROLE)	Mandatory	1	17					1	17					
98	ISO 19115-2003 Non-Core						ISO 19115-2003 Non-Core						ISO 19115-2003 Non-Core			ISO 19115-2003 Non-Core											
99	142	MD_MaintenanceInformation	MaintInfo	information about the scope and frequency of updating	Use obligation from referencing object		Aggregated Class (MD_Metadata and MD_Identifier)	Lines 143-148, 1																			
100	143	maintenanceAndUpdateFrequency	maintFreq	frequency with which changes and additions are made to the resource after the initial resource is completed	Mandatory	1	Class	MD_MaintenanceFrequencyCode <<CodeList>> (B.5.18)																			

ISO 19115:2003							DGSM Data Discovery Profile				DGSM Model Discovery Profile				Model Discovery Workflow Number		MidVal QC (Version 3.1)				DGSM Model Technical (SLOS) Profile (where's spreadsheet fields)				GLoS Workflow Number		
No.	Short Name	Definition	Use obligation from referencing object	Maximum Occurrence	Data Type	Domain	Name / Role Name	Comments (for detailed description see IR61/61)	Obligation / Condition	Maximum Occurrence	Data Discovery Workflow Number	Name / Role Name	Comments (for detailed description see IR61/61)	Obligation / Condition	Maximum Occurrence	Model Discovery Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	QC Workflow Number	Name / Role Name	Comments	Obligation / Condition	Maximum Occurrence	GLoS Workflow Number	
101							Supplementary Information	Publications and Publications codes are included in the implementation but not IR61/61. Can these be dealt with as just extra free text? Agreed JLL 8 Apr 2004	Optional	1		Supplementary Information		Optional	1		Supplementary Information		Mandatory	1							
102	46	supplementalInformation	suppInfo	any other descriptive information about the dataset	Optional	1	CharacterString	Free text	Additional Information Source	Mandatory	1	8 & 13 & 17	This info could be fitted in elsewhere into ISO - but it's over the top to do so (KAH)	Mandatory	1 (many for Additional Information Source but is in reality 1)	9 & 12 & 17	Any Additional Information	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12						
103	67	MD_Constraints	Consts	restrictions on the access and use of a resource or metadata	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Metadata and MD_Identifier)	Line 68	Constraint Information	Optional	Many		No constraint information needs to be provided. Access Constraints (can be provided without Use Constraints) and vice versa. (The 'mandatory' requirement for 'Access Constraint' and 'Use Constraint' is just to follow conventions for the rest of the document, where fields are grouped together). Maximum Occurrence should be 'Many' JLL 8 Apr 2004	Optional	1 (but probably should be Many)		Constraint Information		Optional	Many (there can be many access constraints, many use constraints but only one other constraint on the metadata)							
104	70	accessConstraints	accessConsts	access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource or metadata	Optional	N	Class	MD_RestrictionCode <<CodeLab>> (B.5.24)	Access Constraint	Mandatory	Many	8 & 13 & 17	Constrained by the ISO 19115:2003 (B.5.24) codetlist. A dictionary (DIC_RESTRICTCD) needs creating for this	Mandatory	1 (but probably should be Many)	9 & 12 & 17	Access Constraint	Constrained by the ISO 19115:2003 (B.5.24) codetlist.	Optional	Many	9 & 12						
105	71	useConstraints	useConsts	constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations or warnings on using the resource or metadata	Optional	N	Class	MD_RestrictionCode <<CodeLab>> (B.5.24)	Use Constraint	Mandatory	Many	8 & 13 & 17	Constrained by the ISO 19115:2003 (B.5.24) codetlist. A dictionary (DIC_RESTRICTCD) needs creating for this	Mandatory	1 (but probably should be Many)	9 & 12 & 17	Use Constraint	Constrained by the ISO 19115:2003 (B.5.24) codetlist.	Optional	Many	9 & 12						
106	72	otherConstraints	othConsts	other restrictions and legal prerequisites for accessing and using the resource or metadata	C/ accessConstraints or useConstraints equal "otherRestrictions"?	N	CharacterString	Free text	Comment on Access and Use Constraints	Optional	1	8 & 13 & 17	Free text field. It can only be populated if 'Use Constraint' or 'Access Constraint' has a value of 'otherRestrictions'	Optional	1	9 & 12 & 17	Other Constraint Information		Optional	1	9 & 12						
107	52	MD_Keywords	Keywords	keywords, their type and reference source	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Identifier)	Lines 53-55	Keywords	Mandatory	Many		Each Thesaurus can have several dates (of different types) - but must have at least one. <del>Free-to-give-dates--each-keyword-must-be-the-same--once-at-the-same-thesaurus</del>	Mandatory	Many		Keywords	(Removed from MidVal QC 3.1 - KAH 6 Apr 2004)	Optional	Many							
108	53	keyword	keyword	commonly used word(s) or phrase(s) used to describe the subject	Mandatory	N	CharacterString	Free text	Keyword	Mandatory	Many	17 (By Helen)	Each Keyword must be from a specified thesaurus. Each Thesaurus can have several dates (of different types) - but must have at least one. <del>Free-to-give-dates--each-keyword-must-be-the-same--once-at-the-same-thesaurus</del>	Mandatory	Many	17 (By Helen)	Keyword		Optional	Many							
109	360	title	resTitle	name by which the cited resource is known	Mandatory	1	CharacterString	Free text	Thesaurus Name	Mandatory	1		This should be a default value - the current version of the AMF, and ADD_CITATION_ID. Note: version control will need implementing on the Thesaurus.	Mandatory	1		Thesaurus Name		Mandatory	1							
109.1	371	collectiveTitle	collTitle	common title with holdings note NOTE: title identifies elements of a series collectively, combined with information about what volumes are available at the source cited	Optional	1	CharacterString	Free text	Collective Title	Mandatory	1		Should be always "Thesaurus"	Mandatory	1		Collective Title		Mandatory	1							
110	384	date	refDate	reference date for the cited resource	Mandatory	N	Class	Date (B.4.2)	Date (REFDATE)	Mandatory	Many		Reference Dates for the Thesaurus	Mandatory	Many		Date (REFDATE)		Mandatory	Many							
111									Date Precision (ADD_REFDATEPRECISION)	Mandatory	1		Constrained by a dictionary (DIC_ADD_DATEPREC) for relational implementation. Dictionary consists of 'Century', 'Year', 'Minute', etc.	Mandatory	1		Date Precision (ADD_REFDATEPRECISION)		Mandatory	1							
112									Date Relation (ADD_TM_RELATIVEPOSITION)	Mandatory	1		Constrained by a dictionary (DIC_ADD_TM_RELATIVEPOSITION) for relational implementation. Dictionary consists of 'Before', 'After' and 'Equals'. Default value should be 'Equals'	Mandatory	1		Date Relation (ADD_TM_RELATIVEPOSITION)		Mandatory	1							
113	395	dateType	refDateType	event used for reference date	Mandatory	N	Class	CI_DateTypeCode <<CodeLab>> (B.5.2)	Date Type (REFDATEYPE)	Mandatory	1		Constrained by the ISO 19115:2003 (B.5.2) codetlist (DIC_DATEYPECD)	Mandatory	1		Date Type (REFDATEYPE)		Mandatory	1							
114	68.1	MD_AggregateInformation	AggregateInfo	aggregate dataset information	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Identifier)	Lines 66.2-66.5	Dataset Association	Optional	1 (but Many may be a requirement)		Maximum Occurrence should be "1" because a DGSIM dataset can only be derived from one other dataset JLL 8 Apr 2004	Optional	1 (but Many may be a requirement)		Dataset Association	Many because a DGSIM model can be derived from many other data/subsets and models JLL 8 Apr 2004	Optional	Many							
115	68.3	aggregateDataSetIdentifier	aggrDSetIdent	identification information about aggregate dataset	C/ I/ aggregatedDataSetName not documented?	1	Class	MD_Identifier (B.2.7.3) <<DataType>>	Parent Dataset Identifier (or Parent Data Subset Identifier)	Mandatory	1	8 & 13 & 17	This is the identifier of the associated dataset (according to ISO, this is RESTITLE, but better to use ADD_CITATION_ID)	Mandatory	1	9 & 12 & 17	Parent Dataset Identifier (or Parent Data Subset Identifier)	This is the identifier of the associated dataset (according to ISO, this is RESTITLE, but better to use ADD_CITATION_ID)	Mandatory	1	9 & 12 & 17	Associated Data/subset or model	This can be anything - it can't be controlled because the QC is held in a simple spreadsheet. The rules are: 'Enter the title of any associated data(sub)set or Model. This should be the same as the title given on in the QC'.	Mandatory	1	9 & 12	
116	68.4	associationType	assocType	association type of the aggregate dataset	Mandatory	1	Class	DS_AssociationTypeCode (B.5.7) <<CodeList>>	ASSOCTYPE	Mandatory	1	8 & 13 & 17	Constrained by the ISO 19115:2003 (B.5.7) codetlist ( <del>probably reduced to a single value - largerWorkClator</del> ) but extended as needed	Mandatory	1	9 & 12 & 17	ASSOCTYPE	Constrained by the ISO 19115:2003 (B.5.7) codetlist (probably reduced to a single value - largerWorkClator) but extended as needed	Mandatory	1	9 & 12	Type of Association	Constrained by the ISO 19115:2003 (B.5.7) codetlist but cut down to largerWorkClator and 'source'	Mandatory	1	9 & 12	
116.1					Optional				Lineage	Mandatory	1		Some terms in this area ISO Core, some ISO non-Core and some non-ISO. Each is identified in the comments	Mandatory	1		Lineage	Not currently used in DGSM Model Discovery Metadata - probably should be	Optional	1							
116.2	83	statement	statement	general explanation of the data producer's knowledge about the lineage of a dataset	C/ [DO_DataQuality sco pe DO_Scope level = "dataset" or "series"]	1	Lines 87-91	Free text	Lineage (part) (STATEMENT)	Mandatory	1	8 & 13	See details under ISO Core	Mandatory	1	8 & 13	(STATEMENT)	See details under ISO Core	Mandatory	1	9 & 12						
116.3	86	LI_ProcessStep	ProcessStep	Information about an event or transformation in the life of a dataset including the process used to maintain the dataset	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (LI_Lineage and LI_Source)	Lines 87-91	Lineage - Inclusion and Exclusion Details	Mandatory	Many		This has been changed around quite a bit to reflect latest ISO. By including a date/time, it also reflects the order of things. The notes for guidance need to state what should be included. The application <del>aggr</del> have each type of step (see original report) as separate parts so that users <del>aggr</del> complete this into JLL 8 Apr 2004	Mandatory	Many		Process Definition	The application <del>aggr</del> have each type of step (see original report) as separate parts so that users <del>aggr</del> complete this into JLL 8 Apr 2004	Mandatory	Many		Process Definition		Optional	Many		
116.301									Type of Step	Mandatory	1	8 & 13	Controlled by a dictionary.	Mandatory	1	9 & 12	Type of Step	Controlled by a dictionary containing values 'Process Interpretation', 'Process Interpretation', 'Data Item Interpretation', 'Data Item Assumption', 'General'	Mandatory	1	9 & 12						
116.302									Confidence	Mandatory	1	8 & 13	Controlled by a dictionary.	Mandatory	1	9 & 12	Confidence	Controlled by a dictionary.	Mandatory	1	9 & 12						
116.31	87	description	stepDesc	description of the event, including related parameters or tolerances	Mandatory	1	CharacterString	Free text	Inclusion Criteria	Mandatory	1	8 & 13	The description part of 1) Interpretation, 2) Assumptions, 3) Interpretation/modelling process, 4) Data Item Interpretation, 5) Data Item Assumptions, 6) Data Item Interpretation/modelling process	Mandatory	1	9 & 12	ISO non-Core	Detailed Description of each processing step	Mandatory	1	9 & 12						
116.32	88	rationale	stepRat	requirement or purpose for the process step	Optional	1	CharacterString	Free text	Reasons for Inclusion Criteria	Mandatory	1	8 & 13	The rationale part of 1) Interpretation, 2) Assumptions, 3) Interpretation/modelling process, 4) Data Item Interpretation, 5) Data Item Assumptions, 6) Data Item Interpretation/modelling process	Mandatory	1	9 & 12	ISO non-Core	Rationale for the Processing Step	Mandatory	1	9 & 12						
116.33									Inclusion Criteria SQL	Optional	1	8 & 13	Non-ISO. Probably not needed as unlikely to reproduce same data (KAH). Agreed no longer needed - details should be held where practical KAH JLL 8 Apr 2004	Optional	1	8 & 13											
116.4	89	dateTime	stepDateTm	date and time or range of date and time on or over which the process step occurred	Optional	1	Class	DateTime (B.4.2)	STEP_DT	Mandatory	1	8 & 13	ISO non-Core - Time/Date the event occurred	Mandatory	1	9 & 12	STEP_DT	ISO non-Core - Time/Date the event occurred	Mandatory	1	9 & 12	Date of Processing Step	Mandatory	1	9 & 12		
116.41									STEP_DT_PRECISION	Mandatory	1	8 & 13	Constrained by a dictionary (DIC_ADD_DATEPREC) for relational implementation. Dictionary consists of 'Century', 'Year', 'Minute', etc.	Mandatory	1	9 & 12	STEP_DT_PRECISION	Constrained by a dictionary (DIC_ADD_DATEPREC) for relational implementation. Dictionary consists of 'Century', 'Year', 'Minute', etc.	Mandatory	1	9 & 12	Precision of Date	Default = 'day'. Constrained by dictionary consisting of 'minute', 'hour', 'day', 'month', 'year'	Mandatory	1	9 & 12	
116.42									STEP_DT_RELATIVEPOSITION	Mandatory	1	8 & 13	Constrained by a dictionary (DIC_ADD_TM_RELATIVEPOSITION) for relational implementation. Dictionary consists of 'Before', 'After' and 'Equals'. Default value should be 'Equals'	Mandatory	1	9 & 12	STEP_DT_RELATIVEPOSITION	Constrained by a dictionary (DIC_ADD_TM_RELATIVEPOSITION) for relational implementation. Dictionary consists of 'Before', 'After' and 'Equals'. Default value should be 'Equals'	Mandatory	1	9 & 12	Data Relation	Default = '<'. Constrained by dictionary consisting of '<', '<=', '>'	Mandatory	1	9 & 12	
116.43	92	LI_Source	Source	Information about the source data used in creating the data specified by the scope	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (LI_Lineage and LI_ProcessStep)	Lines 93-98	Source Data	Optional	1			Optional	1		Source Data		Optional	1							
116.44	93	description	srcDesc	detailed description of the level of the source data	C/ sourceExtent not provided?	1	CharacterString	Free text	Source Data	Mandatory	1	8 & 13	Description of other 'dataset'. To be automatically populated if ID of Clator supplied from resTitle	Mandatory	1	9 & 12	SRCDesc	Description of other 'dataset'. To be automatically populated if ID of Clator supplied from resTitle	Mandatory	1	9 & 12						
116.45	96	sourceCitation	srcCitation	recommended reference to be used for the source data	Optional	1	Class	CI_Citation <<DataType>> (B.3.2)	Source Data	Optional	1	8 & 13	ID of Citation of source data/subset or model	Optional	1	9 & 12	Source Data		Optional	1	9 & 12	Vertical Reference System	Optional	1			
116.5					Optional				Vertical Reference System	Mandatory	1			Mandatory	1		Vertical Reference System		Optional	1							

No.	ISO 19115:2003							DGSM Data Discovery Profile					DGSM Model Discovery Profile					MidVal QC (Version 3.1)					DGSM Model Technical (GLOS) Profile (shaded spreadsheet fields)				GLOS Workflow Number						
	Short Name	Definition	Usage / Condition	Maximum Occurrence	Data Type	Domain	Name / Role Name	Comments (for detailed description see IR01/01)	Usage / Condition	Maximum Occurrence	Data Discovery Workflow Number	Name / Role Name	Comments (for detailed description see IR01/01)	Usage / Condition	Maximum Occurrence	Model Discovery Workflow Number	Name / Role Name	Comments	Usage / Condition	Maximum Occurrence	QC Workflow Number	Name / Role Name	Comments	Usage / Condition	Maximum Occurrence								
116.51	207	code	idnCode	alphanumeric value identifying an instance in the namespace	Mandatory	1	CharacterString	Free text	Vertical Reference System	Constrained by a dictionary of vertical data (DIC_ADD_EPSG) - possibly enhanced by BGS (Note: not all entries in DIC_EPSG are vertical data so additional checks may be needed - or a sub-setted dictionary) (Note: investigate EPSG dictionary to see if Data Depth Units is supplied within it)	Mandatory	1	8	Vertical Reference System	Constrained by a dictionary of vertical data (DIC_ADD_EPSG) - possibly enhanced by BGS (Note: not all entries in DIC_EPSG are vertical data so additional checks may be needed - or a sub-setted dictionary) (Note: investigate EPSG dictionary to see if Data Depth Units is supplied within it)	Mandatory	1	9	Vertical Reference System	Default = 'OD Newly'; Other value available is 'OD Main Head'	Mandatory	1	9	Vertical Reference System	Default = 'metres'; Other value available is 'kilometres'	Mandatory	1	9					
116.62									Data Depth Units	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	8	Data Depth Units	Constrained by a dictionary of units (DIC_ADD_UOMLENGTH)	Mandatory	1	9	Units of Vertical reference System	Default = 'metres'; Other value available is 'kilometres'	Mandatory	1	9										
116.6	23	MD_Identifier	Ident	basic information required to uniquely identify a resource or resources	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Metadata) <<Abstract>>	Lines 24-35.1					Quality (Quality Usage)					Purpose					Purpose										
116.61	26		purpose	summary of the intentions with which the resource(s) was developed	Optional	1	CharacterString	Free text					Quality Usage					Quality Usage	One mandatory field + 2 (optional) continuation fields	Mandatory	1	9 & 12											
116.62									Quality (Approval Status)	This is not currently in the DGSM Data Discovery Profile but is probably needed (KAH)	Mandatory	1		Quality (Approval Status)				Approval Status					Approval Status										
116.63	28		status	status of the resource(s)	Optional	N	Class	MD_ProgressCode <<CodeList>> (B.5.23)	IDSTATUS	Constrained by an enhanced version of the ISO19115:2003 (B.5.23) codeList (MD_ProgressCode) - it should be changed to 'completed' when model approved JLL 8 Apr 2004	Mandatory	1	8 & 15	Approval Status	Constrained by an enhanced version of the ISO19115:2003 (B.5.23) codeList (MD_ProgressCode) - it should be changed to 'completed' when model approved JLL 8 Apr 2004	Mandatory	1	9 & 15	Approval Status	Constrained by an enhanced version of the ISO19115:2003 (B.5.23) codeList (MD_ProgressCode) containing 'checked', 'observed', 'ongoing'	Mandatory	1	9 & 15 & later										
116.4	31	Role name: graphicOverview	graphOver	provides a graphic that illustrates the resource(s) (should include a legend for the graphic)	Optional	N	Association	MD_BrowseGraphic (B.2.2.2)																									
116.41	48	MD_BrowseGraphic	BrowseGraph	graphic that provides an illustration of the dataset (should include a legend for the graphic)	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Identifier)	Lines 49-51					Browse Graphic					Optional	Many														
116.42	49		fileName	name of the file that contains a graphic that provides an illustration of the dataset	Mandatory	1	CharacterString	Free text					Data Density Graphic	This should be a URI rather than free text				Mandatory	1	17													
116.43	50		fileDescription	best description of the illustration format in which the illustration is encoded Examples: COM_EPS_GIF JPEG_PGM_PS TIFF_XWD	Optional	1	CharacterString	Free text					(BGFLEDESC)					Mandatory	1	17													
116.44	51		fileType	best description of the illustration format in which the illustration is encoded Examples: COM_EPS_GIF JPEG_PGM_PS TIFF_XWD	Optional	1	CharacterString	Free text										Mandatory	1	17													
116.7	67	MD_Constraints	Consts	restrictions on the access and use of a resource or metadata	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (MD_Metadata and MD_Identifier)	Line 68					Access to Metadata	If we keep this section, then we should follow the ISO system for defining constraints. Remove this section in not in BGS-geoIDS profile JLL 8 Apr 2004				Mandatory	1			Access to Metadata	Why, oh why, is this needed? Removed from MidVal QC 3.1 - KAH 9 Apr 2004	Optional	Many								
116.71	70	accessConstraints	accessConsts	access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource or metadata	Optional	N	Class	MD_RestrictionCode <<CodeList>> (B.5.24)					Access to Metadata (1/3)	Constrained by the ISO 19115:2003 (B.5.24) codeList. A dictionary (DIC_RESTRICTCD) needs creating for this				Mandatory	1	17													
116.72	71	useConstraints	useConsts	constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations or warnings on using the resource or metadata	Optional	N	Class	MD_RestrictionCode <<CodeList>> (B.5.24)					Access to Metadata (2/3)	Constrained by the ISO 19115:2003 (B.5.24) codeList. A dictionary (DIC_RESTRICTCD) needs creating for this				Mandatory	1	17													
116.73	72	otherConstraints	othConsts	other restrictions and legal prerequisites for accessing and using the resource or metadata	C / accessConstraints or useConsts equal 'otherRestrictions'?	N	CharacterString	Free text					Access to Metadata (3/3)	Free text field. It can only be populated if 'Use Constraint' or 'Access Constraint' has a value of "other restrictions"				C / (1/3) or (2/3) equal 'otherRestrictions'?	1	17													
116.8	1	MD_Metadata	Metadata	root entity which defines metadata about a resource or resources	Mandatory	1	Class	Lines 2-22	Data Set URI	This is not currently in the DGSM Data Discovery Profile but is needed (KAH). But should it be "many" rather than "1"? (KAH:FS) Minimum Occurrence should definitely be "1" JLL 8 Apr 2004. I think we decided to deal with this as an on-line resource KAH 18 Jun 2004	Optional	1		Data Set URI	This is not currently in the DGSM Data Discovery Profile but is needed (KAH). But should it be "many" rather than "1"? (KAH:FS) Minimum Occurrence should definitely be "1" JLL 8 Apr 2004. I think we decided to deal with this as an on-line resource KAH 18 Jun 2004				Mandatory	1													
116.81	11.1	dataSetURI	dataSetURI	Uniformed Resource Identifier (URI) of the dataset to which the metadata applies	Optional	1	CharacterString	Free text	(DATASETURI)		Mandatory	1	17	(DATASETURI)				Mandatory	1	17		Export URL Address (EXPORT_URL_ADDRESS)	This is the URL for an "export" or more commonly visualisation file (e.g. VRML) representation of a model	Optional	1	19 & 20 & 21		Will be one or more than one for a model					
116.82	359	CI_Citation	Citation	standardized resource reference	Use obligation/condition from referencing object	Use maximum occurrence from referencing object	Class <<DataType>>	Lines 360-363	Citation	Use of collectiveTitle in the CI_Citation class enables us to distinguish whether the citation is a BGS-geoIDS dataset, a DGSM dataset and so on	Mandatory	1		Citation	Use of collectiveTitle in the CI_Citation class enables us to distinguish whether the citation is a BGS-geoIDS dataset, a DGSM dataset and so on				Mandatory	1													
116.821	368	presentationForm	presForm	mode in which the resource is represented	Optional	Many	Class	CI_PresentationFormCode <<CodeList>> (B.5.4)	(PRESFORM)	Constrained by the ISO 19115:2003 (B.5.4) codeList (DIC_PRESENTFORMCD) but enhanced as needed: Maximum occurrence should be "1" JLL 8 Apr 2004	Mandatory	1 (but maybe should be extended to many)	8	(PRESFORM)	Constrained by the ISO 19115:2003 (B.5.4) codeList (DIC_PRESENTFORMCD) but enhanced as needed: Maximum occurrence should be "1" JLL 8 Apr 2004				Mandatory	1 (but maybe should be extended to many)													
116.83	371	collectiveTitle	collTitle	common title with holdings note NOTE: title identifies elements of a series collectively, combined with information about what volumes are available at the source cited	Optional	1	CharacterString	Free text	(COLLTITLE)	A dictionary is needed to control the contents of this field. It will identify whether the dataset is BGS-geoIDS or DGSM or ...	Mandatory	1	8	(COLLTITLE)	A dictionary is needed to control the contents of this field. It will identify whether the dataset is BGS-geoIDS or DGSM or ...				Mandatory	1	9												
116.9	99	DQ_Element	DQElement	aspect of quantitative quality information	Use obligation from referencing object	Use maximum occurrence from referencing object	Aggregated Class (DQ_DataQuality) <<Abstract>>	Lines 100-107	Data Quality	These can all be dealt with as DQ_LogicalConsistency (#111) and treating the results as DQ_QuantitativeResult (#133) rather than DQ_ConformanceResult (#129)	Mandatory	Many		Data Quality	These can all be dealt with as DQ_LogicalConsistency (#111) and treating the results as DQ_QuantitativeResult (#133) rather than DQ_ConformanceResult (#129)				Mandatory	Many			Data Quality		Mandatory	Many							
116.91	100	nameOfMeasure	measName	name of the test applied to the data	Optional	Many	CharacterString	Free text	(MEASNAME)	Controlled by a dictionary containing values: 'Spurious Data Check', 'Data Density', 'Interpolation/Modelling Check', 'Fitness for Purpose'	Mandatory	1	13	(MEASNAME)	Controlled by a dictionary containing values: 'Spurious Data Check', 'Data Density', 'Interpolation/Modelling Check', 'Fitness for Purpose'				Mandatory	1	15												
116.92	102	measureDescription	measDesc	description of the measure	Optional	1	CharacterString	Free text	Spurious Data Check Description		Mandatory	1	13	Data Density (part), Interpolation/Modelling Check (part), Fitness for Purpose (part)				Mandatory	1	15	Spurious Data Check Description		Mandatory	1	15								
116.93	107	result	measResult	value (or set of values) obtained from applying a data quality measure or the outcome of evaluating the obtained value (or set of values) against a specified acceptable conformance quality level	Mandatory	2	Class	DQ_Result <<Abstract>> (B.2.4.4)																									
116.94	133	DQ_QuantitativeResult	QuanResult	the values or information about the value(s) (or set of values) obtained from applying a data quality measure	Use obligation from referencing object	Use maximum occurrence from referencing object	Specified Class (DQ_Result)	Lines 134-137																									
116.95	135	valueUnit	quanValUnit	value unit for reporting a data quality result	Mandatory	1	Class	UnitOfMeasure (B.4.3)	(UONNAME)	I don't know why but it seems to be percent in all the examples. Implement as always being 'percent' (KAH)	Mandatory	1	13	(UONNAME)	I don't know why but it seems to be percent in all the examples. Implement as always being 'percent' (KAH)				Mandatory	1	15												
116.96	137	value	quanVal	quantitative value or values, content determined by the evaluation procedure used	Mandatory	Many	Class	Record (B.4.3)	Spurious Data Check		Mandatory	1	13	Data Density (part), Interpolation/Modelling Check (part), Fitness for Purpose (part)				Mandatory	1	15	Spurious Data Check	Value is either 'Y' or 'N'	Mandatory	1	15								
117	118								Non-ISO19115					Non-ISO19115				Non-ISO19115					Non-ISO19115										
119									Data Format of Model (1/2) (Storage Type)	The type of storage - e.g. Digital, Hardcopy. This should be controlled by a dictionary.	Mandatory	Many		Data Format of Model (1/2) (Storage Type)	The type of storage - e.g. Digital, Hardcopy. This should be controlled by a dictionary.				Mandatory	1	17												
120									Data Format of Model (2/3) (Storage Name)	E.g. EarthVision, GeoCAD, Paper. This should be controlled by a dictionary - and rules (such as a Hardcopy can't have a software name of GeoCAD)	Mandatory	1	17	Data Format of Model (2/3) (Storage Name)	E.g. EarthVision, GeoCAD, Paper. This should be controlled by a dictionary - and rules (such as a Hardcopy can't have a software name of GeoCAD)				Mandatory	1	17	Format					12 & 15	Software Product Code (SOFTWARE_PRODUCT_CODE)	Denotes the type of model and is controlled by a dictionary	Mandatory	1	19 & 20 & 21	
121									Data Format of Model (3/3) (Storage Version)	E.g. v7.3, NotApplicable	Mandatory	1	17	Data Format of Model (3/3) (Storage Version)	E.g. v7.3, NotApplicable				Mandatory	1	17	Format Version				12 & 15	Product Version Number (PRODUCT_VERSION_NO)	The version of the software indicated by the Software product Code	Mandatory	1	19 & 20 & 21		
122																																	
123																																	
124																																	
125									Quality (Quality Scale Validity)		Mandatory	1		Quality (Quality Scale Validity)					Quality Scale Validity		Mandatory	1											
126									Quality scale validity maximum	Although this is not in ISO 19115:2003, it should follow the format of denominator (657) 'the number below the line in a vulgar fraction'. Also Quality scale validity maximum=Quality scale validity minimum	Mandatory	1	15	Quality scale validity maximum	Although this is not in ISO 19115:2003, it should follow the format of denominator (657) 'the number below the line in a vulgar fraction'. Also Quality scale validity maximum=Quality scale validity minimum				Quality Scale Validity Maximum		Mandatory	1	15										

