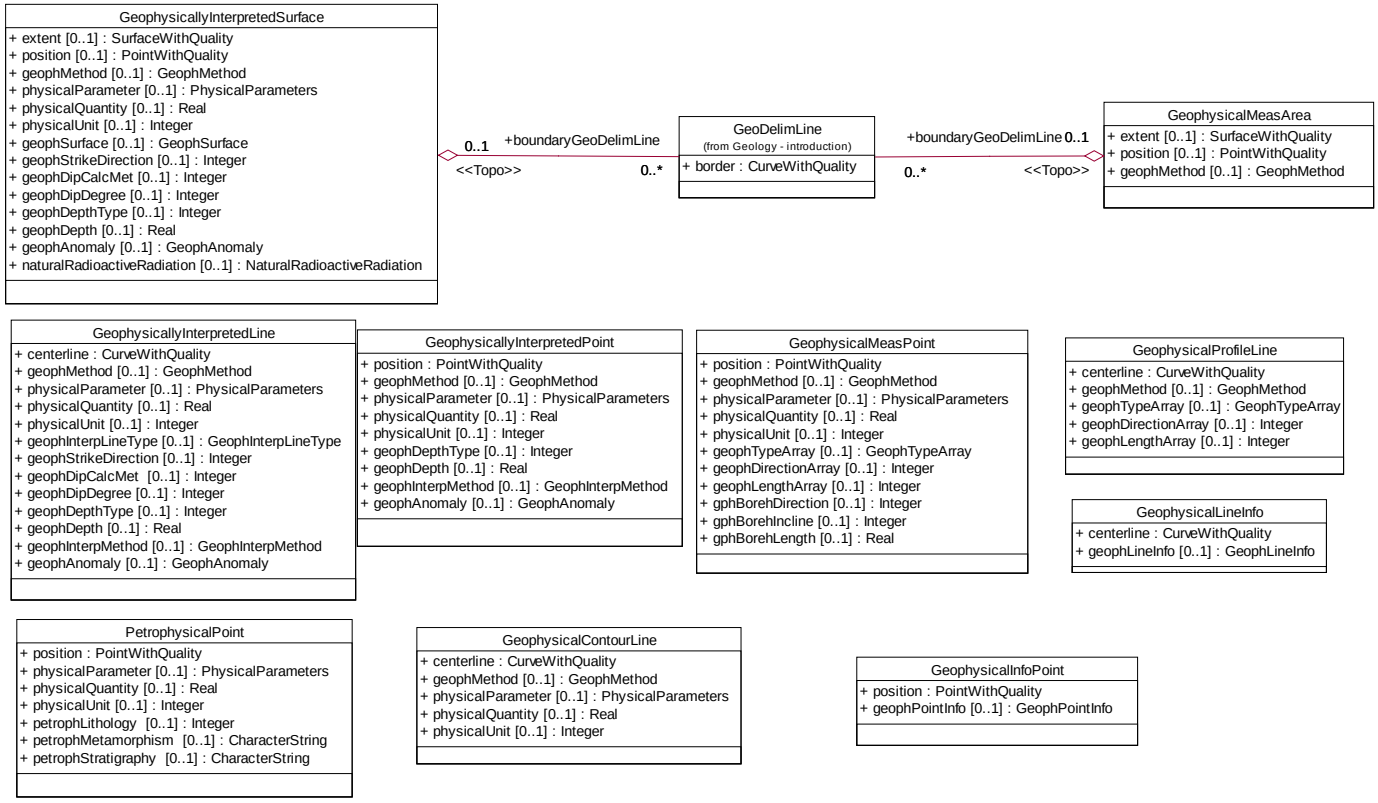
Applied Geophysics

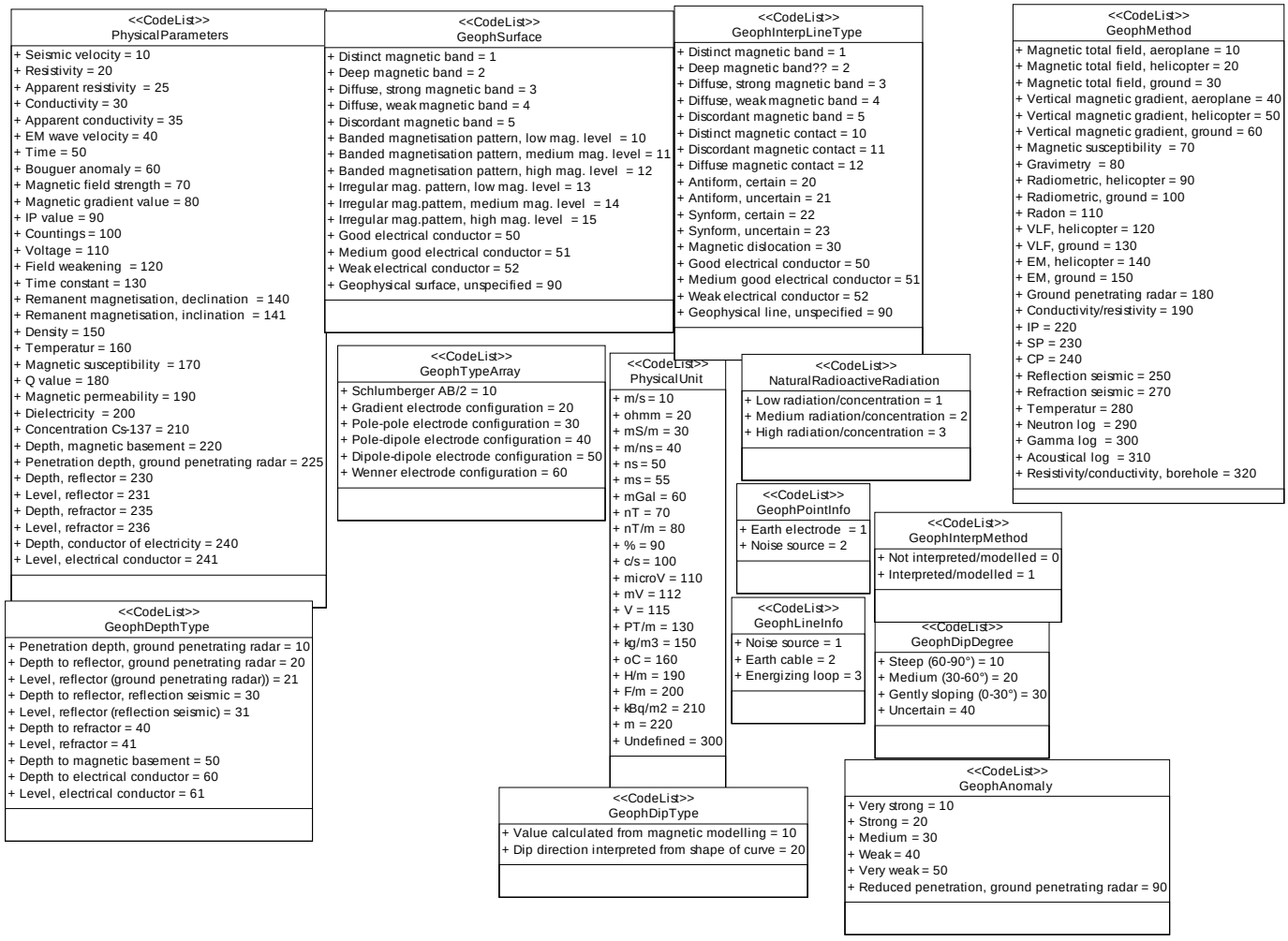
Norwegian Mapping Authority
gerd.mardal@statkart.no

Table of contents

1.1 Application schema 3
1.2 Description 5
1.2.1 GeophysicalInfoPoint 5
1.2.2 GeophysicalContourLine 5
1.2.3 GeophysicalLineInfo 5
1.2.4 GeophysicalMeasArea 6
1.2.5 GeophysicalMeasPoint 6
1.2.6 GeophysicalProfileLine 7
1.2.7 GeophysicallyInterpretedSurface 7
1.2.8 GeophysicallyInterpretedLine 8
1.2.9 GeophysicallyInterpretedPoint 9
1.2.10 PetrophysicalPoint 10
1.2.11 Association <<Topo>> GeophysicallyInterpretedSurface-GeoDelimLine 10
1.2.12 Association <<Topo>> GeophysicalMeasArea-GeoDelimLine 10
1.2.12.1 CodeLists 13
1.2.12.1.1 <<CodeList>> PhysicalUnit 13
1.2.12.1.2 <<CodeList>> PhysicalParameters 13
1.2.12.1.3 <<CodeList>> GeophDipType 15
1.2.12.1.4 <<CodeList>> GeophAnomaly 15
1.2.12.1.5 <<CodeList>> GeophDepthType 15
1.2.12.1.6 <<CodeList>> GeophDipDegree 16
1.2.12.1.7 <<CodeList>> GeophSurface 16
1.2.12.1.8 <<CodeList>> GeophPointInfo 17
1.2.12.1.9 <<CodeList>> GeophInterpLineType 17
1.2.12.1.10 <<CodeList>> GeophLineInfo 17
1.2.12.1.11 <<CodeList>> GeophMethod 18
1.2.12.1.12 <<CodeList>> GeophInterpMethod 19
1.2.12.1.13 <<CodeList>> GeophTypeArray 19
1.2.12.1.14 <<CodeList>> NaturalRadioactiveRadiation 19

1.1 Application schema




<<CodeList>>
PhysicalParameters
+ Seismic velocity = 10
+ Resistivity = 20
+ Apparent resistivity = 25
+ Conductivity = 30
+ Apparent conductivity = 35
+ EM wave velocity = 40
+ Time = 50
+ Bouguer anomaly = 60
+ Magnetic field strength = 70
+ Magnetic gradient value = 80
+ IP value = 90
+ Countings = 100
+ Voltage = 110
+ Field weakening = 120
+ Time constant = 130
+ Remanent magnetisation, declination = 140
+ Remanent magnetisation, inclination = 141
+ Density = 150
+ Temperatur = 160
+ Magnetic susceptibility = 170
+ Q value = 180
+ Magnetic permeability = 190
+ Dielectricity = 200
+ Concentration Cs-137 = 210
+ Depth, magnetic basement = 220
+ Penetration depth, ground penetrating radar = 225
+ Depth, reflector = 230
+ Level, reflector = 231
+ Depth, refractor = 235
+ Level, refractor = 236
+ Depth, conductor of electricity = 240
+ Level, electrical conductor = 241
<<CodeList>>
GeophSurface
+ Distinct magnetic band = 1
+ Deep magnetic band = 2
+ Diffuse, strong magnetic band = 3
+ Diffuse, weak magnetic band = 4
+ Discordant magnetic band = 5
+ Banded magnetisation pattern, low mag. level = 10
+ Banded magnetisation pattern, medium mag. level = 11
+ Banded magnetisation pattern, high mag. level = 12
+ Irregular mag. pattern, low mag. level = 13
+ Irregular mag.pattern, medium mag. level = 14
+ Irregular mag.pattern, high mag. level = 15
+ Good electrical conductor = 50
+ Medium good electrical conductor = 51
+ Weak electrical conductor = 52
+ Geophysical surface, unspecified = 90
<<CodeList>>
GeophInterpLineType
+ Distinct magnetic band = 1
+ Deep magnetic band?? = 2
+ Diffuse, strong magnetic band = 3
+ Diffuse, weak magnetic band = 4
+ Discordant magnetic band = 5
+ Distinct magnetic contact = 10
+ Discordant magnetic contact = 11
+ Diffuse magnetic contact = 12
+ Antiform, certain = 20
+ Antiform, uncertain = 21
+ Synform, certain = 22
+ Synform, uncertain = 23
+ Magnetic dislocation = 30
+ Good electrical conductor = 50
+ Medium good electrical conductor = 51
+ Weak electrical conductor = 52
+ Geophysical line, unspecified = 90
<<CodeList>>
GeophMethod
+ Magnetic total field, aeroplane = 10
+ Magnetic total field, helicopter = 20
+ Magnetic total field, ground = 30
+ Vertical magnetic gradient, aeroplane = 40
+ Vertical magnetic gradient, helicopter = 50
+ Vertical magnetic gradient, ground = 60
+ Magnetic susceptibility = 70
+ Gravimetry = 80
+ Radiometric, helicopter = 90
+ Radiometric, ground = 100
+ Radon = 110
+ VLF, helicopter = 120
+ VLF, ground = 130
+ EM, helicopter = 140
+ EM, ground = 150
+ Ground penetrating radar = 180
+ Conductivity/resistivity = 190
+ IP = 220
+ SP = 230
+ CP = 240
+ Reflection seismic = 250
+ Refraction seismic = 270
+ Temperatur = 280
+ Neutron log = 290
+ Gamma log = 300
+ Acoustical log = 310
+ Resistivity/conductivity, borehole = 320
<<CodeList>>
GeophTypeArray
+ Schlumberger AB/2 = 10
+ Gradient electrode configuration = 20
+ Pole-pole electrode configuration = 30
+ Pole-dipole electrode configuration = 40
+ Dipole-dipole electrode configuration = 50
+ Wenner electrode configuration = 60
<<CodeList>>
PhysicalUnit
+ m/s = 10
+ ohmm = 20
+ mS/m = 30
+ m/ns = 40
+ ns = 50
+ ms = 55
+ mGal = 60
+ nT = 70
+ nT/m = 80
+ % = 90
+ c/s = 100
+ microV = 110
+ mV = 112
+ V = 115
+ PT/m = 130
+ kg/m3 = 150
+ oC = 160
+ H/m = 190
+ F/m = 200
+ kBq/m2 = 210
+ m = 220
+ Undefined = 300
<<CodeList>>
NaturalRadioactiveRadiation
+ Low radiation/concentration = 1
+ Medium radiation/concentration = 2
+ High radiation/concentration = 3
<<CodeList>>
GeophPointInfo
+ Earth electrode = 1
+ Noise source = 2
<<CodeList>>
GeophInterpMethod
+ Not interpreted/modelled = 0
+ Interpreted/modelled = 1
<<CodeList>>
GeophLineInfo
+ Noise source = 1
+ Earth cable = 2
+ Energizing loop = 3
<<CodeList>>
GeophDipDegree
+ Steep (60-90°) = 10
+ Medium (30-60°) = 20
+ Gently sloping (0-30°) = 30
+ Uncertain = 40
<<CodeList>>
GeophDepthType
+ Penetration depth, ground penetrating radar = 10
+ Depth to reflector, ground penetrating radar = 20
+ Level, reflector (ground penetrating radar)) = 21
+ Depth to reflector, reflection seismic = 30
+ Level, reflector (reflection seismic) = 31
+ Depth to refractor = 40
+ Level, refractor = 41
+ Depth to magnetic basement = 50
+ Depth to electrical conductor = 60
+ Level, electrical conductor = 61
<<CodeList>>
GeophDipType
+ Value calculated from magnetic modelling = 10
+ Dip direction interpreted from shape of curve = 20
<<CodeList>>
GeophAnomaly
+ Very strong = 10
+ Strong = 20
+ Medium = 30
+ Weak = 40
+ Very weak = 50
+ Reduced penetration, ground penetrating radar = 90

1.2 Description

1.2.1 GeophysicalInfoPoint

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class GeophysicalInfoPoint	site where bedrock sample has been collected and on which measurements of physical parametres have been carried out in the laboratory.				
1.1	position	location where the object exists	1	1	PointWithQuality	
1.2	geophPointInfo	point objects that are not geophysical objects themselves, but that are important for the interpretation of these	0	1	GeophPointInfo	

1.2.2 GeophysicalContourLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class GeophysicalContourLine	isoline drawn through points with the same geophysical value				
2.1	centerline	course followed by the central part of the object	1	1	CurveWithQuality	
2.2	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
2.3	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
2.4	physicalQuantity	quantitative statement of a physical quantity	0	1	Real	
2.5	physicalUnit	unit in which the physical parameters are given	0	1	Integer	

1.2.3 GeophysicalLineInfo

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Class GeophysicalLineInfo	supplementary information about line types not necessarily related to geophysical measurements				
3.1	centerline	course followed by the central part of the object	1	1	CurveWithQuality	
3.2	geophLineInfo	line objects that are not	0	1	GeophLineInfo	

		geophysical objects themselves, but that are important for the interpretation of these				

1.2.4 GeophysicalMeasArea

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Class GeophysicalMeasArea	area with geophysical measurements				
4.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
4.2	position	location where the object exists	0	1	PointWithQuality	
4.3	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
4.4	Role boundaryGeoDelimLine		0	N	GeoDelimLine	Aggregration

1.2.5 GeophysicalMeasPoint

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
5	Class GeophysicalMeasPoint	site where geophysical measurements have been carried out.				
5.1	position	location where the object exists	1	1	PointWithQuality	
5.2	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
5.3	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
5.4	physicalQuantity	quantitative statement of a physical quantity	0	1	Real	
5.5	physicalUnit	unit in which the physical parameters are given	0	1	Integer	
5.6	geophTypeArray	types of cable array used for geophysical ??survey/measurement	0	1	GeophTypeArray	
5.7	geophDirectionArray	direction of laid cable in degrees	0	1	Integer	
5.8	geophLengthArray	length of laid cable in metres	0	1	Integer	
5.9	gphBorehDirection	measured value for borehole direction in degrees	0	1	Integer	
5.10	gphBorehIncline	measured value for borehole inclination in	0	1	Integer	

		degrees				
5.11	gphBorehLength	measured value for length of borehole in metres	0	1	Real	

1.2.6 GeophysicalProfileLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
6	Class GeophysicalProfileLine	profile along which geophysical measurements have been carried out				
6.1	centerline	course followed by the central part of the object	1	1	CurveWithQuality	
6.2	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
6.3	geophTypeArray	types of cable arrays used for geophysical measurement	0	1	GeophTypeArray	
6.4	geophDirectionArray	direction of laid cable in degrees	0	1	Integer	
6.5	geophLengthArray	length of laid cable in metres	0	1	Integer	

1.2.7 GeophysicallyInterpretedSurface

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
7	Class GeophysicallyInterpretedSurface	area containing classification based on the interpretation of geophysically measured values				
7.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
7.2	position	location where the object exists	0	1	PointWithQuality	
7.3	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
7.4	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
7.5	physicalQuantity	quantitative statement of a physical quantity	0	1	Real	
7.6	physicalUnit	unit in which the physical parameters are given	0	1	Integer	
7.7	geophSurface	classification of various interpreted geophysical surfaces	0	1	GeophSurface	
7.8	geophStrikeDirection	measured value for strike direction	0	1	Integer	
7.9	geophDipCalcMe	method used in qualitative	0	1	Integer	

	t	determination of geophysical dip				
7.10	geophDipDegree	the degree of steepness of geophysical dip	0	1	Integer	
7.11	geophDepthType	designation of type of a geophysical depth, calculated by means of more than one method	0	1	Integer	
7.12	geophDepth	depth value for geophysical depth in metres	0	1	Real	
7.13	geophAnomaly	classification of geophysical anomaly strength	0	1	GeophAnomaly	
7.14	naturalRadioactiveRadiation	graduation of natural of radioactive radiation from subsurface Note: Rough classification based on various radiometric examinations. Example: In the case of cesium (Tsjernobyl) and radon. Radioactive hazard area	0	1	NaturalRadioactiveRadiation	
7.15	Role boundaryGeoDelimLine		0	N	GeoDelimLine	Aggregration

1.2.8 GeophysicallyInterpretedLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
8	Class GeophysicallyInterpretedLine	line containing classification based on the interpretation of geophysically measured values				
8.1	centerline	course followed by the central part of the object	1	1	CurveWithQuality	
8.2	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
8.3	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
8.4	physicalQuantity	quantitative statement of a physical quantity	0	1	Real	
8.5	physicalUnit	unit in which the physical parameters are given	0	1	Integer	
8.6	geophInterpLineType		0	1	GeophInterpLineType	
8.7	geophStrikeDirection	measured value for strike direction	0	1	Integer	
8.8	geophDipCalcMe	method used in qualitative	0	1	Integer	

	t	determination of geophysical fall degree				
8.9	geophDipDegree	the degree of steepness of geophysical dip	0	1	Integer	
8.10	geophDepthType	designation of type of geophysical depth, calculated by means of more than one method	0	1	Integer	
8.11	geophDepth	depth value for geophysical depth in metres	0	1	Real	
8.12	geophInterpMethod	methodology used in interpretation of a geophysical object/signature	0	1	GeophInterpMethod	
8.13	geophAnomaly	classification of geophysical anomaly strength	0	1	GeophAnomaly	

1.2.9 GeophysicallyInterpretedPoint

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
9	Class GeophysicallyInterpretedPoint	site containing classification based on the interpretation of geophysically measured values				
9.1	position	location where the object exists	1	1	PointWithQuality	
9.2	geophMethod	measuring technique for accomplished geophysical measurement	0	1	GeophMethod	
9.3	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
9.4	physicalQuantity	various types of physical and petrophysical parameters	0	1	Real	
9.5	physicalUnit	unit in which the physical parameters are given	0	1	Integer	
9.6	geophDepthType	designation of type of a geophysical depth, calculated by means of more than one method	0	1	Integer	
9.7	geophDepth	depth value for geophysical depth in metres	0	1	Real	
9.8	geophInterpMethod	methodology used in interpretation of a geophysical object/signature	0	1	GeophInterpMethod	
9.9	geophAnomaly	classification of geophysical anomaly	0	1	GeophAnomaly	

		strength				

1.2.10 PetrophysicalPoint

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
10	Class PetrophysicalPoint	site where bedrock samples have been taken and on which measurements of physical parametres have been carried out in the laboratory.				
10.1	position	location where the object exists	1	1	PointWithQuality	
10.2	physicalParameter	various types of physical and petrophysical parameters	0	1	PhysicalParameters	
10.3	physicalQuantity	quantitative statement of a physical quantity	0	1	Real	
10.4	physicalUnit	unit in which the physical parameters are given	0	1	Integer	
10.5	petrophLithology	lithological unit (name of rock type)	0	1	Integer	
10.6	petrophMetamorphism	the degree of conversion of the bedrock	0	1	CharacterString	
10.7	petrophStratigraphy	designation of stratigraphic unit	0	1	CharacterString	

1.2.11 Association <<Topo>> GeophysicallyInterpretedSurface-GeoDelimLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
11	Association GeophysicallyInterpretedSurface-GeoDelimLine					
11.1	Role boundaryGeoDelimLine		0	N	GeoDelimLine	Aggregation
11.2	Role (unnamed) GeophysicallyInterpretedSurface		0	1	GeophysicallyInterpretedSurface	

1.2.12 Association <<Topo>> GeophysicalMeasArea-GeoDelimLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
12	Association GeophysicalMeasArea-GeoDelimLine					

12.1	Role boundaryGeoDelimLine		0	N	GeoDelimLine	Aggregation
12.2	Role (unnamed) GeophysicalMeasArea		0	1	GeophysicalMeasArea	

1.2.12.1 CodeLists

1.2.12.1.1 <<CodeList>> PhysicalUnit

Nr	Code name	Definition/Description	Code
1	CodeList PhysicalUnit	unit in which the physical parameters are given	
1.1	m/s		10
1.2	ohmm		20
1.3	mS/m		30
1.4	m/ns		40
1.5	ns		50
1.6	ms		55
1.7	mGal		60
1.8	nT		70
1.9	nT/m		80
1.10	%		90
1.11	c/s		100
1.12	microV		110
1.13	mV		112
1.14	V		115
1.15	PT/m		130
1.16	kg/m3		150
1.17	oC		160
1.18	H/m		190
1.19	F/m		200
1.20	kBq/m2		210
1.21	m		220
1.22	Undefined		300

1.2.12.1.2 <<CodeList>> PhysicalParameters

Nr	Code name	Definition/Description	Code

2	CodeList PhysicalParameters	various types of physical and petrophysical parameters	
2.1	Seismic velocity		10
2.2	Resistivity		20
2.3	Apparent resistivity		25
2.4	Conductivity		30
2.5	Apparent conductivity		35
2.6	EM wave velocity		40
2.7	Time		50
2.8	Bouguer anomaly		60
2.9	Magnetic field strength		70
2.10	Magnetic gradient value		80
2.11	IP value		90
2.12	Countings		100
2.13	Voltage		110
2.14	Field weakening		120
2.15	Time constant		130
2.16	Remanent magnetisation, declination		140
2.17	Remanent magnetisation, inclination		141
2.18	Density		150
2.19	Temperatur		160
2.20	Magnetic susceptibility		170
2.21	Q value		180
2.22	Magnetic permeability		190
2.23	Dielectricity		200
2.24	Concentration Cs-137		210
2.25	Depth, magnetic basement		220
2.26	Penetration depth, ground penetrating radar		225
2.27	Depth, reflector		230
2.28	Level, reflector		231
2.29	Depth, refractor		235
2.30	Level, refractor		236
2.31	Depth, conductor of electricity		240
2.32	Level, electrical conductor		241

1.2.12.1.3 <<CodeList>> GeophDipType

Nr	Code name	Definition/Description	Code
3	CodeList GeophDipType	method used in qualitative determination of geophysical dip degree	
3.1	Value calculated from magnetic modelling		10
3.2	Dip direction interpreted from shape of curve		20

1.2.12.1.4 <<CodeList>> GeophAnomaly

Nr	Code name	Definition/Description	Code
4	CodeList GeophAnomaly	classification of geophysical anomaly strength Note: Often used for electrical and electromagnetic methods	
4.1	Very strong		10
4.2	Strong		20
4.3	Medium		30
4.4	Weak		40
4.5	Very weak		50
4.6	Reduced penetration, ground penetrating radar		90

1.2.12.1.5 <<CodeList>> GeophDepthType

Nr	Code name	Definition/Description	Code
5	CodeList GeophDepthType	designation of the type of geophysical depth, calculated by means of more than one method	
5.1	Penetration depth, ground penetrating radar		10
5.2	Depth to reflector, ground penetrating radar		20
5.3	Level, reflector (ground penetrating radar))		21
5.4	Depth to reflector, reflection seismic		30
5.5	Level, reflector (reflection seismic)		31
5.6	Depth to refractor		40

5.7	Level, refractor		41
5.8	Depth to magnetic basement		50
5.9	Depth to electrical conductor		60
5.10	Level, electrical conductor		61

1.2.12.1.6 <<CodeList>> GeophDipDegree

Nr	Code name	Definition/Description	Code
6	CodeList GeophDipDegree	the degree of steepness of geophysical dip	
6.1	Steep (60-90°)		10
6.2	Medium (30-60°)		20
6.3	Gently sloping (0-30°)		30
6.4	Uncertain		40

1.2.12.1.7 <<CodeList>> GeophSurface

Nr	Code name	Definition/Description	Code
7	CodeList GeophSurface	classification of various interpreted geophysical surfaces	
7.1	Distinct magnetic band		1
7.2	Deep magnetic band		2
7.3	Diffuse, strong magnetic band		3
7.4	Diffuse, weak magnetic band		4
7.5	Discordant magnetic band		5
7.6	Banded magnetisation pattern, low mag. level		10
7.7	Banded magnetisation pattern, medium mag. level		11
7.8	Banded magnetisation pattern, high mag. level		12
7.9	Irregular mag. pattern, low mag. level		13
7.10	Irregular mag.pattern, medium mag. level		14
7.11	Irregular mag.pattern, high mag. level		15
7.12	Good electrical conductor		50
7.13	Medium good electrical conductor		51

7.14	Weak electrical conductor		52
7.15	Geophysical surface, unspecified		90

1.2.12.1.8 <<CodeList>> GeophPointInfo

Nr	Code name	Definition/Description	Code
8	CodeList GeophPointInfo	point objects that are not geophysical objects themselves, but that are important for the interpretation of these	
8.1	Earth electrode		1
8.2	Noise source		2

1.2.12.1.9 <<CodeList>> GeophInterpLineType

Nr	Code name	Definition/Description	Code
9	CodeList GeophInterpLineType	line types determined on the basis of geophysical interpretation	
9.1	Distinct magnetic band		1
9.2	Deep magnetic band??		2
9.3	Diffuse, strong magnetic band		3
9.4	Diffuse, weak magnetic band		4
9.5	Discordant magnetic band		5
9.6	Distinct magnetic contact		10
9.7	Discordant magnetic contact		11
9.8	Diffuse magnetic contact		12
9.9	Antiform, certain		20
9.10	Antiform, uncertain		21
9.11	Synform, certain		22
9.12	Synform, uncertain		23
9.13	Magnetic dislocation		30
9.14	Good electrical conductor		50
9.15	Medium good electrical conductor		51
9.16	Weak electrical conductor		52
9.17	Geophysical line, unspecified		90

1.2.12.1.10 <<CodeList>> GeophLineInfo

Nr	Code name	Definition/Description	Code

10	CodeList GeophLineInfo	line objects that are not geophysical objects themselves, but that are important for the interpretation of these	
10.1	Noise source		1
10.2	Earth cable		2
10.3	Energizing loop		3

1.2.12.1.11 <<CodeList>> GeophMethod

Nr	Code name	Definition/Description	Code
11	CodeList GeophMethod	measuring technique for accomplished geophysical measurement	
11.1	Magnetic total field, aeroplane		10
11.2	Magnetic total field, helicopter		20
11.3	Magnetic total field, ground		30
11.4	Vertical magnetic gradient, aeroplane		40
11.5	Vertical magnetic gradient, helicopter		50
11.6	Vertical magnetic gradient, ground		60
11.7	Magnetic susceptibility		70
11.8	Gravimetry		80
11.9	Radiometric, helicopter		90
11.10	Radiometric, ground		100
11.11	Radon		110
11.12	VLF, helicopter		120
11.13	VLF, ground		130
11.14	EM, helicopter		140
11.15	EM, ground		150
11.16	Ground penetrating radar		180
11.17	Conductivity/resistivity		190
11.18	IP		220
11.19	SP		230
11.20	CP		240
11.21	Reflection seismic		250
11.22	Refraction seismic		270
11.23	Temperatur		280
11.24	Neutron log		290
11.25	Gamma log		300

11.26	Acoustical log		310
11.27	Resistivity/conductivity, borehole		320

1.2.12.1.12 <<CodeList>> GeophInterpMethod

Nr	Code name	Definition/Description	Code
12	CodeList GeophInterpMethod	methodology used in the interpretation of a geophysical object/signature	
12.1	Not interpreted/modelled		0
12.2	Interpreted/modelled		1

1.2.12.1.13 <<CodeList>> GeophTypeArray

Nr	Code name	Definition/Description	Code
13	CodeList GeophTypeArray	types of cable array used for geophysical measurement Example: For electrical measurements	
13.1	Schlumberger AB/2		10
13.2	Gradient electrode configuration		20
13.3	Pole-pole electrode configuration		30
13.4	Pole-dipole electrode configuration		40
13.5	Dipole-dipole electrode configuration		50
13.6	Wenner electrode configuration		60

1.2.12.1.14 <<CodeList>> NaturalRadioactiveRadiation

Nr	Code name	Definition/Description	Code
14	CodeList NaturalRadioactiveRadiation	??gradation/grading of natural degree of radioactive radiation from subsurface Note: Rough classification based on various radiometric examinations. Example: In the case of cesium (Tsjernobyl) and radon. Radioactive hazard area.	
14.1	Low radiation/concentration		1
14.2	Medium radiation/concentration		2
14.3	High radiation/concentration		3