

Fishery



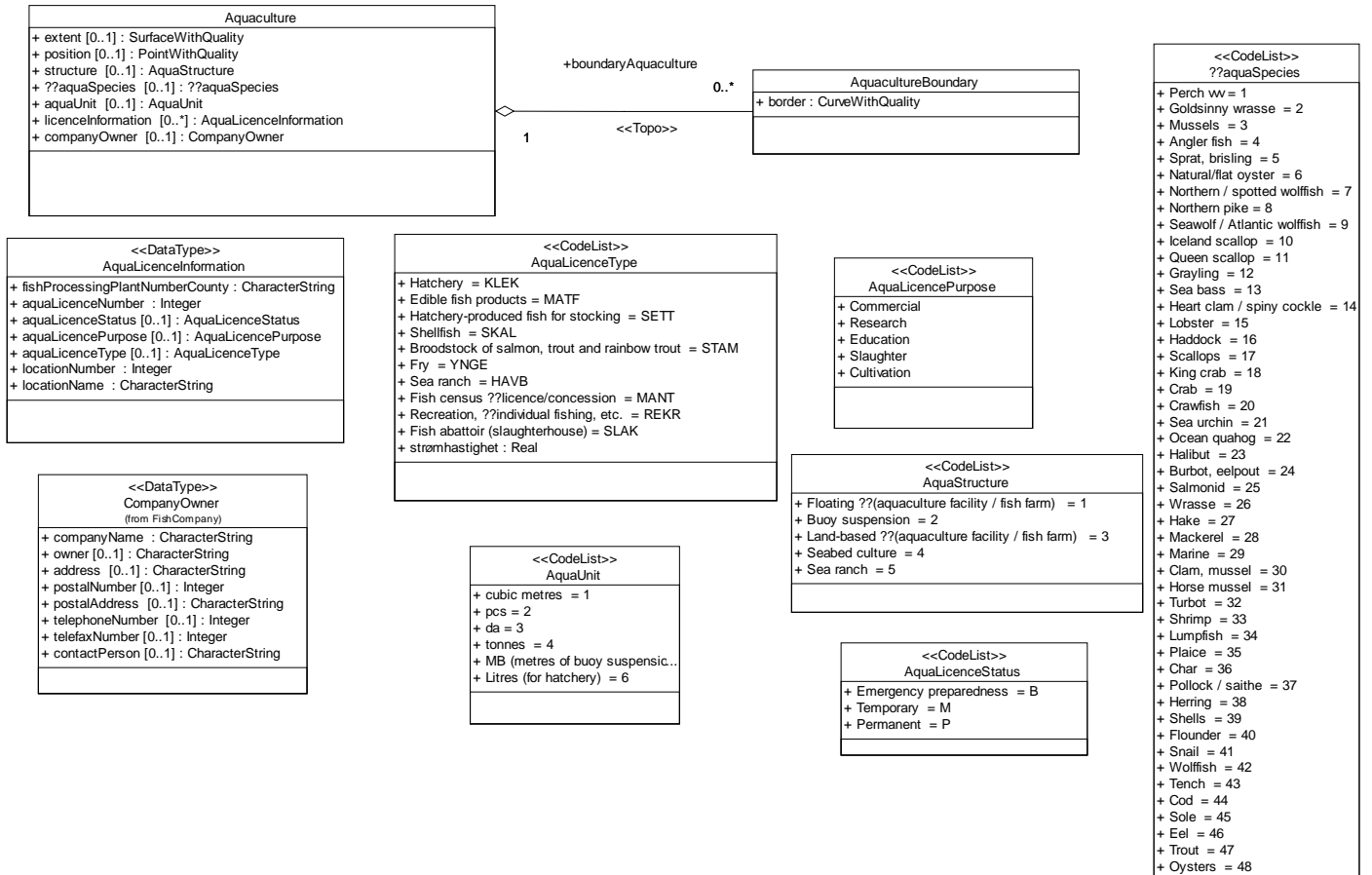
Norwegian Mapping Authority
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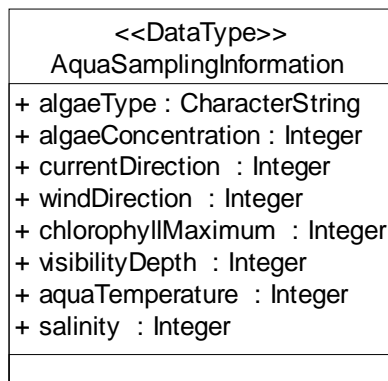
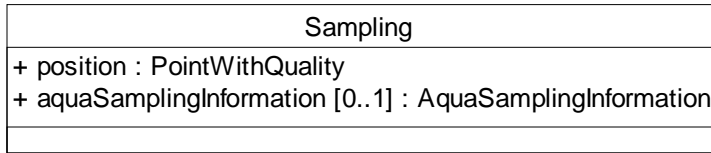
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1.1 Application schema

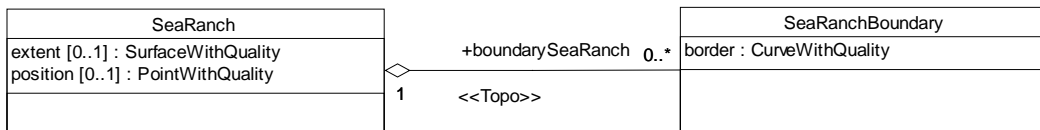
Aquaculture



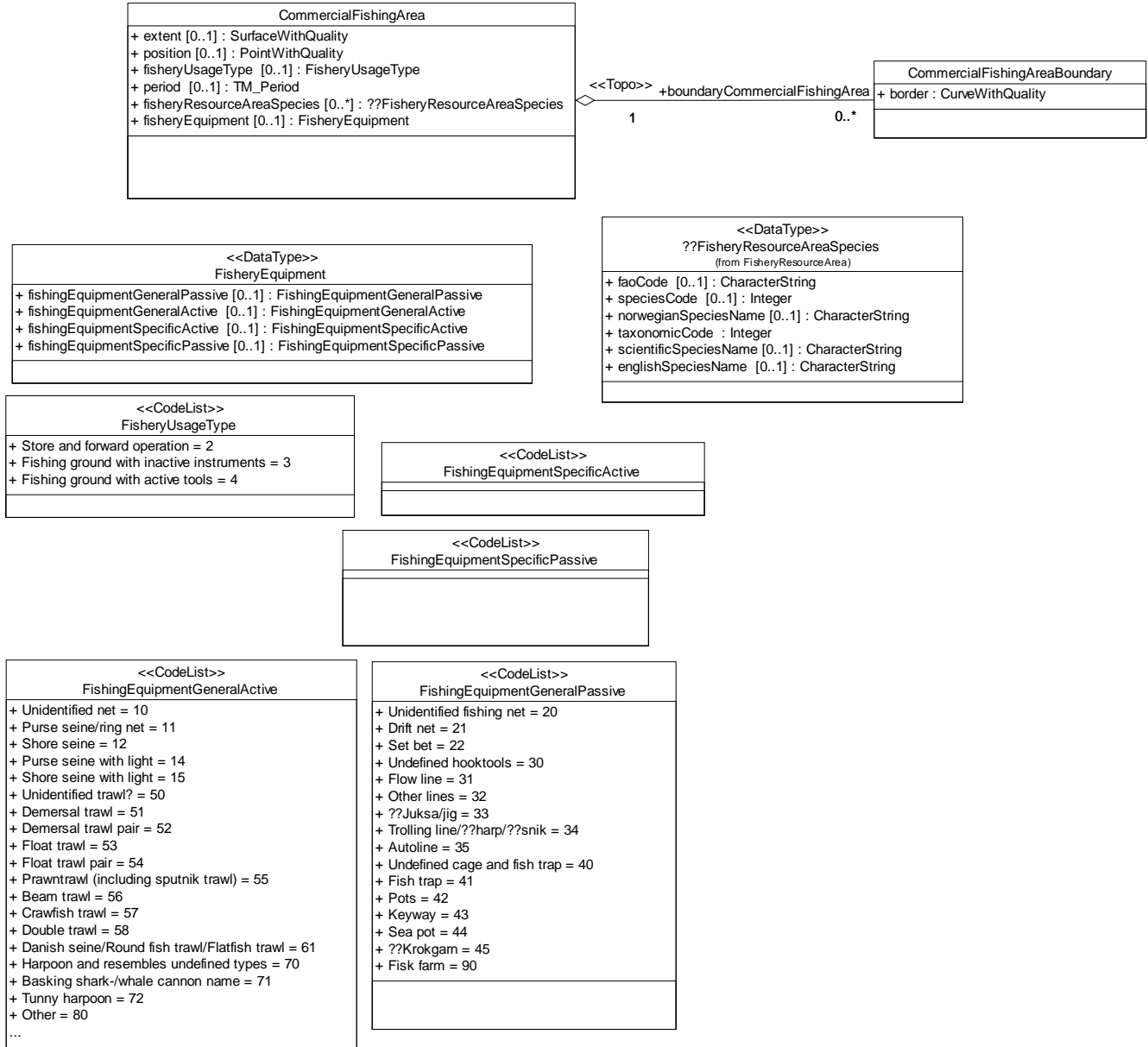
Sampling



SeaRanches



CommercialFishingArea



SalmonGround

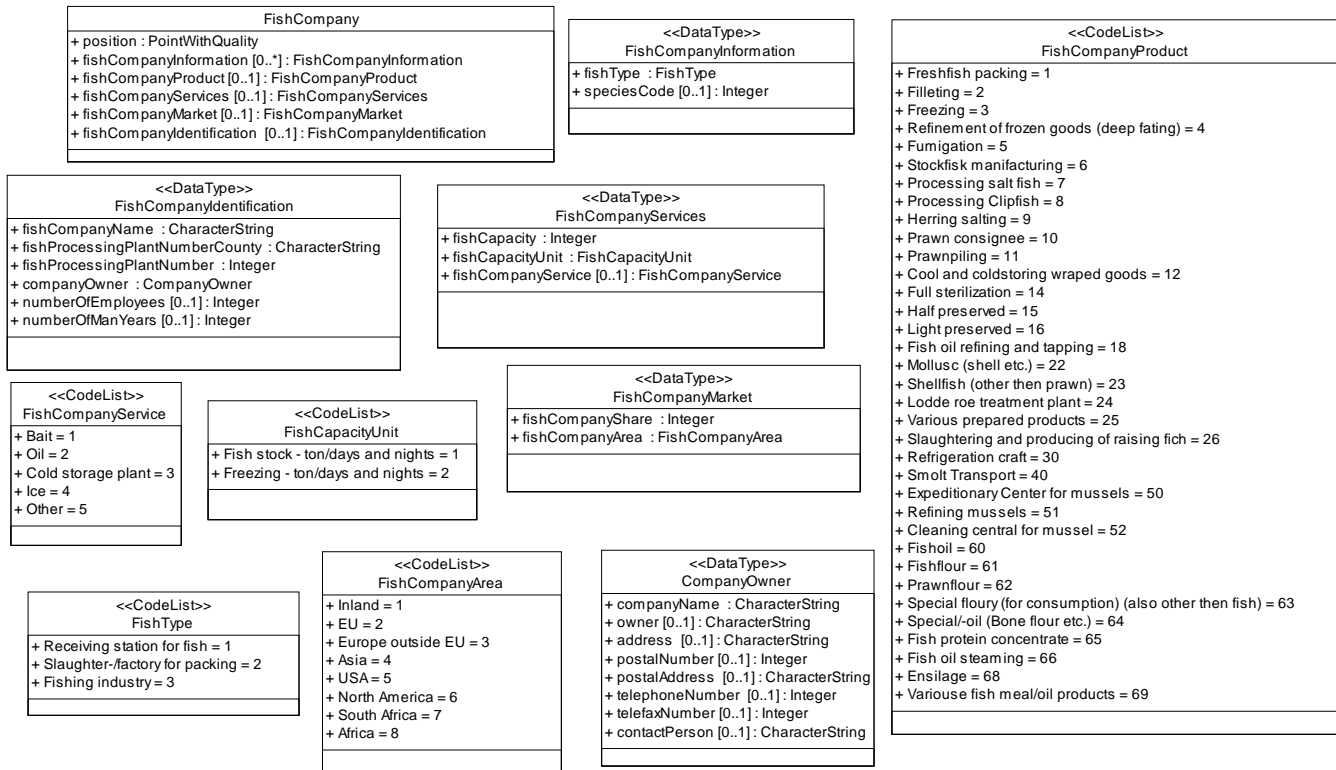
SalmonGround
+ centerline [0..1] : CurveWithQuality + position [0..1] : PointWithQuality + fisheryUsageType [0..*] : FisheryUsageType = 2 + period [0..1] : TM_Period + fisheryResourceAreaSpecies [0..*] : ??FisheryResourceAreaSpecies + fisheryEquipment [0..1] : FisheryEquipment

CourseLine

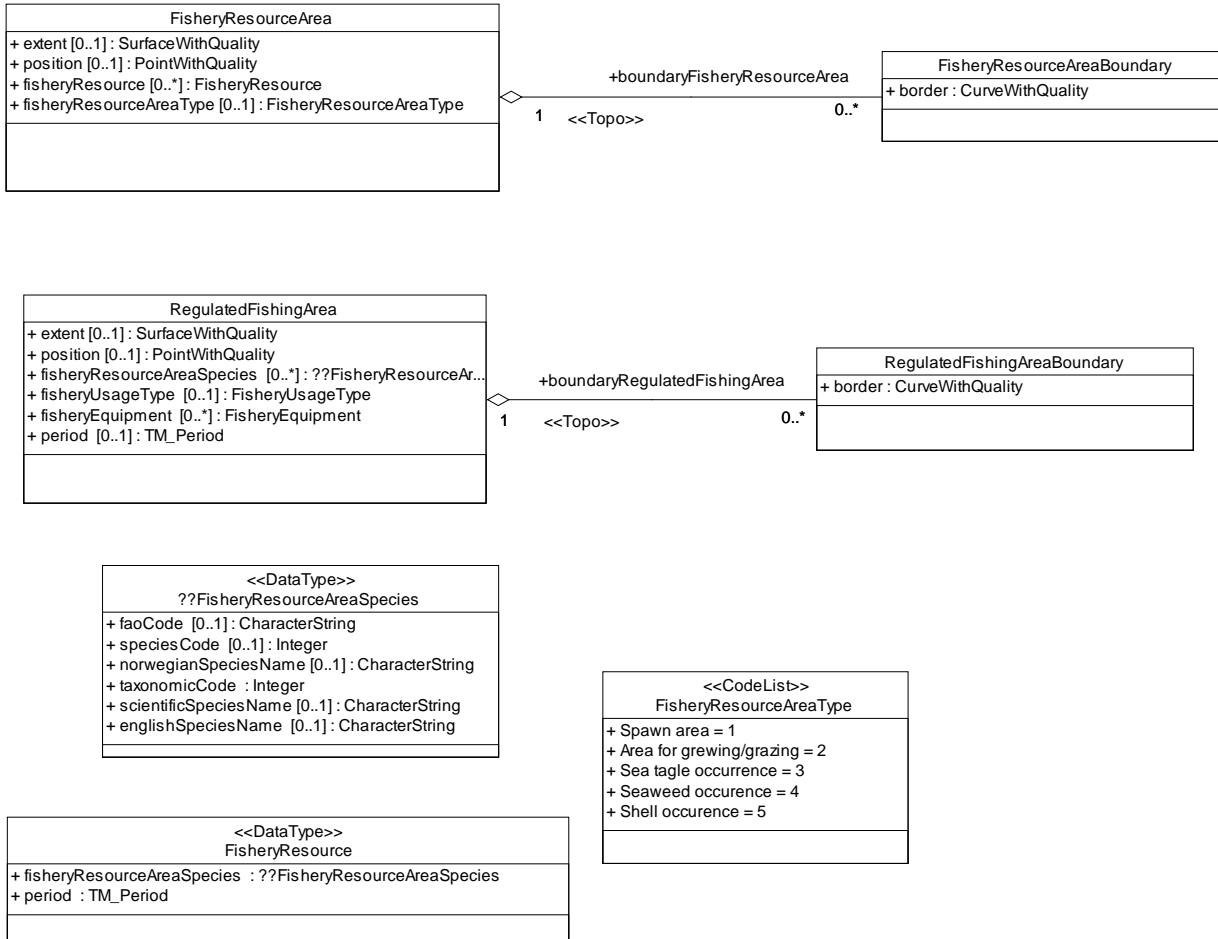
CourseLine
+ centerline : CurveWithQuality + ??bearing/courseLineInformation [0..*] : ??Bearing/CourseLineInformation

<<DataType>> ??Bearing/CourseLineInformation
+ vesselIdentification : CharacterString + satelliteCommunicationId : CharacterString + time : TM_instent + trackingSpeed : Integer

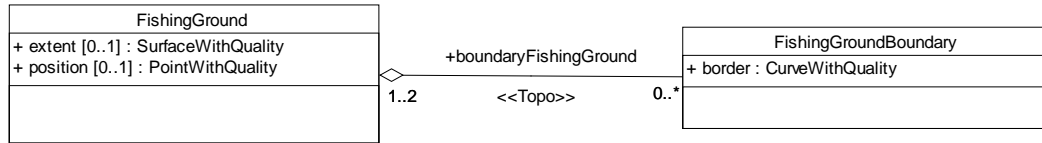
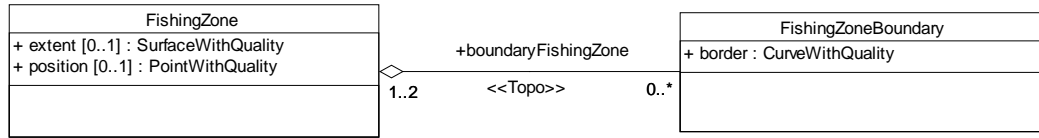
FishCompany



ResourceArea



FishingZone and FishingGround



Datatypes

<<DataType>> AquaLicenceInformation (from Aquaculturearea)
+ fishProcessingPlantNumberCounty : CharacterString + aquaLicenceNumber : Integer + aquaLicenceStatus [0..1] : AquaLicenceStatus + aquaLicencePurpose [0..1] : AquaLicencePurpose + aquaLicenceType [0..1] : AquaLicenceType + locationNumber : Integer + locationName : CharacterString

<<DataType>> AquaSamplingInformation (from Aquaculturearea)
+ algaeType : CharacterString + algaeConcentration : Integer + currentDirection : Integer + windDirection : Integer + chlorophyllMaximum : Integer + visibilityDepth : Integer + aquaTemperature : Integer + salinity : Integer

<<DataType>> FishCompanyIdentification (from FishCompany)
+ fishCompanyName : CharacterString + fishProcessingPlantNumberCounty : CharacterString + fishProcessingPlantNumber : Integer + companyOwner : CompanyOwner + numberOfEmployees [0..1] : Integer + numberOfManYears [0..1] : Integer

<<DataType>> CompanyOwner (from FishCompany)
+ companyName : CharacterString + owner [0..1] : CharacterString + address [0..1] : CharacterString + postalNumber [0..1] : Integer + postalAddress [0..1] : CharacterString + telephoneNumber [0..1] : Integer + telefaxNumber [0..1] : Integer + contactPerson [0..1] : CharacterString

<<DataType>> FishCompanyInformation (from FishCompany)
+ fishType : FishType + speciesCode [0..1] : Integer

<<DataType>> ??FisheryResourceAreaSpecies (from FisheryResourceArea)
+ faoCode [0..1] : CharacterString + speciesCode [0..1] : Integer + norwegianSpeciesName [0..1] : CharacterString + taxonomicCode : Integer + scientificSpeciesName [0..1] : CharacterString + englishSpeciesName [0..1] : CharacterString

<<DataType>> FisheryEquipment (from CommercialFishingArea)
+ fishingEquipmentGeneralPassive [0..1] : FishingEquipmentGeneralPassive + fishingEquipmentGeneralActive [0..1] : FishingEquipmentGeneralActive + fishingEquipmentSpecificActive [0..1] : FishingEquipmentSpecificActive + fishingEquipmentSpecificPassive [0..1] : FishingEquipmentSpecificPassive

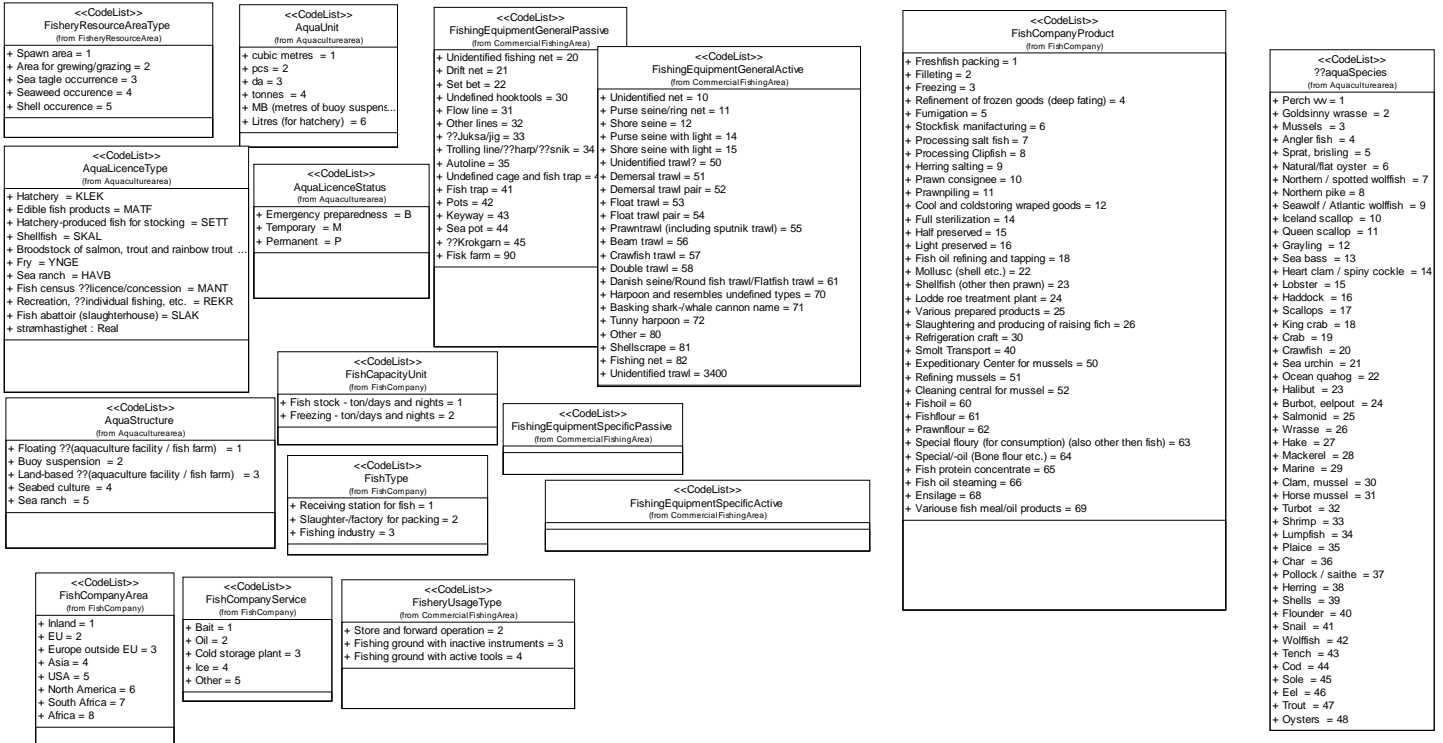
<<DataType>> FishCompanyMarket (from FishCompany)
+ fishCompanyShare : Integer + fishCompanyArea : FishCompanyArea

<<DataType>> ??Bearing/CourseLineInformation (from CourseLine)
+ vesselIdentification : CharacterString + satelliteCommunicationId : CharacterString + time : TM_instant + trackingSpeed : Integer

<<DataType>> Tidspunkt

<<DataType>> FishCompanyServices (from FishCompany)
+ fishCapacity : Integer + fishCapacityUnit : FishCapacityUnit + fishCompanyService [0..1] : FishCompanyService

Codelists



1.2 Description

1.1.1 Aquaculture

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class Aquaculture	facility or area for farming fish and shellfish				
1.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
1.2	position	location where the object exists	0	1	PointWithQuality	
1.3	structure	type of structure in ??(aquaculture facility / fish farm)	0	1	AquaStructure	
1.4	??aquaSpecies		0	1	??aquaSpecies	
1.5	aquaUnit		0	1	AquaUnit	
1.6	licenceInformation	information about licence in connection with ??(aquaculture facility / fish farm)	0	N	AquaLicenceInformation	
1.7	companyOwner		0	1	CompanyOwner	
1.8	Role boundaryAquaculture		0	N	AquacultureBoundary	Aggregation

1.1.1.1 AquacultureBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class AquacultureBoundary	delimitation of facility or area for farming fish and shellfish				
2.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
2.2	Role (unnamed) Aquaculture		1	1	Aquaculture	

1.1.1.2 <<DataType>> AquaLicenceInformation

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Datatype AquaLicenceInformation	information about licence in connection with ??(aquaculture facility / fish farm)				
3.1	fishProcessingPlantNumberCounty	1-2 letter county code	1	1	CharacterString	

3.2	aquaLicenceNumber	1-2 letter county code, 1-2 letter municipality code (aquaMunicipality) plus I4 (four-digit integer) For example: H AV 0001 (H=Hordaland, AV=Austevoll plus subsequent I4)	1	1	Integer	
3.3	aquaLicenceStatus		0	1	AquaLicenceStatus	
3.4	aquaLicencePurpose		0	1	AquaLicencePurpose	
3.5	aquaLicenceType		0	1	AquaLicenceType	
3.6	locationNumber	given location number	1	1	Integer	
3.7	locationName	given location name	1	1	CharacterString	

1.1.1.3 <<DataType>> AquaSamplingInformation

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Datatype AquaSamplingInformation	sampling of algae in the sea				
4.1	algaeType	name of algae species, text of up to 35 characters	1	1	CharacterString	
4.2	algaeConcentration	number of cells per litre	1	1	Integer	
4.3	currentDirection	direction of current in degrees (0-360)	1	1	Integer	
4.4	windDirection	wind direction in degrees (0-360)	1	1	Integer	
4.5	chlorophyllMaximum	depth in metres to greatest chlorophyll concentration	1	1	Integer	
4.6	visibilityDepth	how deep one can see into the sea, stated in metres	1	1	Integer	
4.7	aquaTemperature	water temperature, stated in degrees Centigrade	1	1	Integer	
4.8	salinity	salinity stated in	1	1	Integer	

1.1.1.4 Sampling

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
5	Class Sampling	statement of the result of algae measurement at one point				
5.1	position	location where the object exists	1	1	PointWithQuality	
5.2	aquaSamplingInformation		0	1	AquaSamplingInformation	

1.1.1.5 SeaRanch

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
6	Class SeaRanch	area for putting out and subsequently re-capturing crustaceans, molluscs and echinoderms for commercial purposes.				
6.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
6.2	position	location where the object exists	0	1	PointWithQuality	
6.3	Role boundarySeaRanch		0	N	SeaRanchBoundary	Aggregation

1.1.1.6 SeaRanchBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
7	Class SeaRanchBoundary	delimitation of area for putting out and subsequently re-capturing crustaceans, molluscs and echinoderms for commercial purposes				
7.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
7.2	Role (unnamed) SeaRanch		1	1	SeaRanch	

1.1.2 CodeLists

1.1.2.1 <<CodeList>> AquaUnit

Nr	Code name	Definition/Description	Code
1	CodeList AquaUnit		
1.1	cubic metres	FF-Volume measure m3	1
1.2	pcs	FF-Quantity	2
1.3	da	FF-Surface measure of area stated in 1000 m2	3
1.4	tonnes	FF-Weight stated in 1000 kg	4
1.5	MB (metres of buoy suspension)	FF-Length of suspension strand in shellfish farming	5
1.6	Litres (for hatchery)	FF-Volume measurement in dm3	6

1.1.2.2 <<CodeList>> AquaStructure

Nr	Code name	Definition/Description	Code
2	CodeList AquaStructure	type of structure in aquaculture facility	
2.1	Floating ??(aquaculture facility / fish farm)	FF-Facility for farming fish or shellfish which floats on or under the surface of the water	1
2.2	Buoy suspension	FF-Facility for farming fish and shellfish where each production unit is ??(fastened to a buoy catenary cable / suspended from a buoy)	2
2.3	Land-based ??(aquaculture facility / fish farm)	FF-Facility for farming fish or shellfish in a building or other structure on land	3
2.4	Seabed culture	FF-Area where permission has been granted for cultivation of bottom fauna with a view to increased returns	4
2.5	Sea ranch	FF-Area where permission has been granted to put out and subsequently re-capture crustaceans, molluscs and echinoderms for commercial purposes	5

1.1.2.3 <<CodeList>> AquaLicenceType

Nr	Code name	Definition/Description	Code
3	CodeList AquaLicenceType	licence type for aquaculture facility	
3.1	Hatchery	FF-Site where permission has been granted for hatching out fish.	KLEK
3.2	Edible fish products	FF-Site where permission has been granted to produce edible fish products of salmon, trout	MATF

		and rainbow trout.	
3.3	Hatchery-produced fish for stocking	FF-Site where permission has been granted to operate a salmon, trout, rainbow trout and/or char hatchery	SETT
3.4	Shellfish	FF-Site where permission has been granted for production of shellfish	SKAL
3.5	Broodstock of salmon, trout and rainbow trout	FF-Site where permission has been granted to produce/store broodstock of salmon, trout and rainbow trout	STAM
3.6	Fry	FF-Site where permission has been granted for production of fry	YNGE
3.7	Sea ranch	FF-Site/area where permission has been granted to put out and subsequently re-capture crustaceans, molluscs and echinoderms	HAVB
3.8	Fish census ??licence/concession		MANT
3.9	Recreation, ??individual fishing, etc.		REKR
3.10	Fish abattoir (slaughterhouse)		SLAK
3.11	strøm hastighet	angivelse av hastighet i m/sek	

1.1.2.4 <<CodeList>> AquaLicenceStatus

Nr	Code name	Definition/Description	Code
4	CodeList AquaLicenceStatus	licence status for aquaculture facility	
4.1	Emergency preparedness	FF-Site which is reserved for aquaculture and which can be allocated on short notice as required.	B
4.2	Temporary		M
4.3	Permanent		P

1.1.2.5 <<CodeList>> AquaLicencePurpose

Nr	Code name	Definition/Description	Code
5	CodeList AquaLicencePurpose		
5.1	Commercial		
5.2	Research		
5.3	Education		
5.4	Slaughter		
5.5	Cultivation		

1.1.2.6 <<CodeList>> ??aquaSpecies

Nr	Code name	Definition/Description	Code
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6	CodeList ??aquaSpecies	
6.1	Perch vvv	1
6.2	Goldsinny wrasse	2
6.3	Mussels	3
6.4	Angler fish	4
6.5	Sprat, brisling	5
6.6	Natural/flat oyster	6
6.7	Northern / spotted wolffish	7
6.8	Northern pike	8
6.9	Seawolf / Atlantic wolffish	9
6.10	Iceland scallop	10
6.11	Queen scallop	11
6.12	Grayling	12
6.13	Sea bass	13
6.14	Heart clam / spiny cockle	14
6.15	Lobster	15
6.16	Haddock	16
6.17	Scallops	17
6.18	King crab	18
6.19	Crab	19
6.20	Crawfish	20
6.21	Sea urchin	21
6.22	Ocean quahog	22
6.23	Halibut	23
6.24	Burbot, eelpout	24
6.25	Salmonid	25
6.26	Wrasse	26
6.27	Hake	27
6.28	Mackerel	28
6.29	Marine	29
6.30	Clam, mussel	30
6.31	Horse mussel	31
6.32	Turbot	32
6.33	Shrimp	33

6.34	Lumpfish	34
6.35	Plaice	35
6.36	Char	36
6.37	Pollock / saithe	37
6.38	Herring	38
6.39	Shells	39
6.40	Flounder	40
6.41	Snail	41
6.42	Wolffish	42
6.43	Tench	43
6.44	Cod	44
6.45	Sole	45
6.46	Eel	46
6.47	Trout	47
6.48	Oysters	48

1.1.3 CommercialFishingArea

1.1.3.1 CommercialFishingArea

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class CommercialFishingArea	area relating to fishery interests in connection with resource and area utilization				
1.1	extent	objektets utstrekning	0	1	SurfaceWithQuality	
1.2	position	location where the object exists	0	1	PointWithQuality	
1.3	fisheryUsageType	usage type of fishing equipment area	0	1	FisheryUsageType	
1.4	period		0	1	TM_Period	
1.5	fisheryResourceAreaSpecies	information in accordance with NS-9400: First-hand fish trade. Data elements of the contract note. Terms and codes	0	N	??FisheryResourceAreaSpecies	
1.6	fisheryEquipment	equipment codes have been taken from NS-9400: First-hand fish trade. Data elements of the contract note. Terms and codes.	0	1	FisheryEquipment	
1.7	Role boundaryCommercialFishingArea		0	N	CommercialFishingAreaBoundary	Aggregation

1.1.3.2 CommercialFishingAreaBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class CommercialFishingAreaBoundary	delimitation of area relating to fishery interests in connection with resource and area utilization				
2.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
2.2	Role (unnamed) CommercialFishingArea		1	1	CommercialFishingArea	

1.1.3.3 <<DataType>> FisheryEquipment

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint

3	Datatype FisheryEquipment	equipment codes have been taken from NS-9400 First-Hand Fish Trade, pgs. 17-18				
3.1	fishingEquipmentGeneralPassive	equipment codes are retrieved from NS-9400 First-Hand Fish Trade pgs. 17-18.	0	1	FishingEquipmentGeneralPassive	
3.2	fishingEquipmentGeneralActive		0	1	FishingEquipmentGeneralActive	
3.3	fishingEquipmentSpecificActive	or samples of fish and crustaceans in the Norwegian zone including the protection zone around Svalbard	0	1	FishingEquipmentSpecificActive	
3.4	fishingEquipmentSpecificPassive		0	1	FishingEquipmentSpecificPassive	

1.1.3.4 SalmonGround

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Class SalmonGround	??grounds/banks where salmon nets are deployed Note: Regulated by the Act relating to Salmonids and Fresh-Water Fish, etc. of 15 May 1992, No. 47				
4.1	centerline	course followed by the central part of the Object	0	1	CurveWithQuality	
4.2	position	location where the object exists	0	1	PointWithQuality	
4.3	fisheryUsageType	usage type of fishing equipment area	0	N	FisheryUsageType	Init Value =2
4.4	period	statement of a period of time	0	1	TM_Period	
4.5	fisheryResourceAreaSpecies	fisheryEquipment	0	N	??FisheryResourceAreaSpecies	
4.6	fisheryEquipment	equipment codes have been taken from NS-9400 First-Hand Fish Trade, pgs. 17-18	0	1	FisheryEquipment	

1.1.4 CodeLists

1.1.4.1 <<CodeList>> FisheryUsageType

Nr	Code name	Definition/Description	Code
1	CodeList FisheryUsageType	usage type of fishing equipment area	
1.1	Store and forward operation		2
1.2	Fishing ground with inactive instruments		3
1.3	Fishing ground with active tools		4

1.1.4.2 <<CodeList>> FishingEquipmentGeneralActive

Nr	Code name	Definition/Description	Code
2	CodeList FishingEquipmentGeneralActive		
2.1	Unidentified net		10
2.2	Purse seine/ring net		11
2.3	Shore seine		12
2.4	Purse seine with light		14
2.5	Shore seine with light		15
2.6	Unidentified trawl?		50
2.7	Demersal trawl		51
2.8	Demersal trawl pair		52
2.9	Float trawl		53
2.10	Float trawl pair		54
2.11	Prawntrawl (including sputnik trawl)		55
2.12	Beam trawl		56
2.13	Crawfish trawl		57
2.14	Double trawl		58
2.15	Danish seine/Round fish trawl/Flatfish trawl		61
2.16	Harpoon and resembles undefined types		70
2.17	Basking shark-/whale cannon name		71

2.18	Tunny harpoon		72
2.19	Other		80
2.20	Shellscape	Skrape av jern som dras langs bunn.	81
2.21	Fishing net		82
2.22	Unidentified trawl		3400

1.1.4.3 <<CodeList>> FishingEquipmentGeneralPassive

Nr	Code name	Definition/Description	Code
3	CodeList FishingEquipmentGeneralPassive		
3.1	Unidentified fishing net		20
3.2	Drift net		21
3.3	Set bet		22
3.4	Undefined hooktools		30
3.5	Flow line		31
3.6	Other lines		32
3.7	??Juksa/jig		33
3.8	Trolling line/??harp/??snik		34
3.9	Autoline		35
3.10	Undefined cage and fish trap		40
3.11	Fish trap		41
3.12	Pots		42
3.13	Keyway		43
3.14	Sea pot		44
3.15	??Krokgarn		45
3.16	Fisk farm		90

1.1.4.4 <<CodeList>> FishingEquipmentSpecificActive

Nr	Code name	Definition/Description	Code
4	CodeList FishingEquipmentSpecificActive		
4.1	Bottom trawl unspec.		3100
4.2	Cod trawl unde		3110
4.3	Cod trawl 135+		3111
4.4	Cod trawl 135-		3112

4.5	Consumer trawl 100		3113
4.6	Consume trawl 80		3114
4.7	Consumer trawl 85		3115
4.8	Bottom trawl 135		3116
4.9	Bottom trawl		3117
4.10	Consumer trawl 60		3118
4.11	GOV trawl unspec.		3120
4.12	Cod trawl 135		3121
4.13	Cod trawl 135, 55 millimeter		3122
4.14	Cod trawl 135, 80 millimeter		3123
4.15	Cod trawl 135, 100 millimeter		3124
4.16	Cod trawl 100		3125
4.17	Cod trawl 135, 50 millimeter		3126
4.18	Cod trawl 120		3127
4.19	Industry trawl unspec.		3130
4.20	??Tobis trawl		3131
4.21	Doble trawl		3132
4.22	Triple trawl 70		3133
4.23	Single trawl		3134
4.24	Beam trawl, ??par trawl		3135
4.25	Beam trawl		3136
4.26	Shrimp trawl unspec.		3230
4.27	Schrimp trawler unspec. 70		3231
4.28	Shrimp trawl C18 18/40		3232
4.29	Schrimp trawler 18 30/40		3233
4.30	Schrimp trawler 18 35/20		3234
4.31	Shrimp trawl net C18 35/40		3235
4.32	Schrimp trawler 18 35/40 Rg		3236
4.33	Schrimp trawler 18 35/40 70		3237
4.34	Schrimp trawler 18 35/80		3238
4.35	Schrimp trawler 18 35/80 70		3239
4.36	Shrimp trawl net C18 40/40		3240
4.37	Schrimp trawler 18 45/40		3241
4.38	Schrimp trawler 12 35		3242
4.39	Shrimp trawl net 12 35 70		3243

4.40	Shrimp trawl net 13 35		3244
4.41	Shrimp trawl net 13 35 70		3245
4.42	Shrimp trawl net 14 35		3246
4.43	Shrimp trawl net 14 35 70		3247
4.44	Shrimp trawl net 16 35		3248
4.45	Shrimp trawl net 16 35 70		3249
4.46	Shrimp trawl net 18 35		3250
4.47	Shrimp trawl net 18 35 70		3251
4.48	Shrimp trawl net 20 35		3252
4.49	Shrimp trawl net 20 35 70		3253
4.50	Shrimp trawl net 28 35		3254
4.51	Shrimp trawl net 28 35 70		3255
4.52	Shrimp trawl net 30 35		3256
4.53	Shrimp trawl net 30 35 70		3257
4.54	Shrimp trawl 36 35		3258
4.55	Shrimp trawl 36 35 70		3259
4.56	Shrimp trawl unspec. 19		3260
4.57	Shrimp trawl 12 35 19		3261
4.58	Shrimp trawl 13 35 19		3262
4.59	Shrimp trawl 14 35 19		3263
4.60	Shrimp trawl 16 35 19		3264
4.61	Shrimp trawl 18 35 19		3265
4.62	Shrimp trawl 20 35 19		3266
4.63	Shrimp trawl 28 35 19		3267
4.64	Shrimp trawl 30 35 19		3268
4.65	Shrimp trawl 36 35 19		3269
4.66	Shrimp trawl C18 20/40 Rg		3270
4.67	Shrimp trawl C18 20/40 Rg strapping		3271
4.68	Shrimp trawl 24 35 19		3272
4.69	Shrimp trawl 24 40 19		3273
4.70	Shrimp trawl net		3274
4.71	Shrimp trawl C18/40 Rg		3275
4.72	Shrimp trawl, multi trawl		3276
4.73	Trawl unspec.		3400
4.74	IKMT		3401

4.75	??Semipelagisk trawl		3410
4.76	Pair trawl unspec.		3415
4.77	Floating trawl unspec.		3500
4.78	Carpelin trawl unspec.		3510
4.79	Harstad trawl 10x10 -		3511
4.80	Harstad trawl 10x10 +		3512
4.81	Harstad trawl 16x16 -		3513
4.82	Harstad trawl 16x16 +		3514
4.83	Harstad trawl Rockhg		3515
4.84	Quartet trawl		3516
4.85	0-group trawl		3517
4.86	Harstad trawl, multi trawl		3518
4.87	Floating trawl (Russian)		3519
4.88	Herring trawl unspec.		3520
4.89	Fotø model 80, herring trawl		3521
4.90	Fotø model 80		3522
4.91	Fotø model 90 -		3523
4.92	Fotø model 90 +		3524
4.93	Floating trawl		3525
4.94	Floating trawl 12x12		3526
4.95	??Kolmule trawl unspec.		3530
4.96	??Kolmule trawl		3531
4.97	??Åkra trawl		3532
4.98	Triple trawler		3540
4.99	Multitrawl		3541
4.100	Floating driftnet		3543
4.101	Salmon driftnet		3544
4.102	Fish trawling		3545
4.103	Destrucstion etc. unspec.		6000
4.104	Explosive unspec.		6100
4.105	Electricity unspec.		6200
4.106	Harpoon unspec.		6300
4.107	Tunny harpoon		6301
4.108	Handgun unspec		6400
4.109	Basking shark/whale cannon		6401

4.110	Poison unspec.		6500
4.111	Unspecified		6600

1.1.4.5 <<CodeList>> FishingEquipmentSpecificPassive

Nr	Code name	Definition/Description	Code
5	CodeList FishingEquipmentSpecificPassive		
5.1	Salmon seine		3730
5.2	Keyway		3731
5.3	Fishing net unspec.		4000
5.4	Ground fishing net unspec.		4110
5.5	Bfishing net nylon unspec.		4111
5.6	Bfishing net monofil unspec.		4112
5.7	Bfishing net monofil 6 3/4		4113
5.8	Bfishing net monofil 7		4114
5.9	Bfishing net monofil 10		4115
5.10	Bfishing net monofil 12		4116
5.11	Bfishing net monotwine unspec.		4117
5.12	Bfishing net multimono unspec.		4118
5.13	Bfishing net monofil 32		4119
5.14	Bfishing net multimono 7		4120
5.15	Bgarn multimono 9		4121
5.16	Bfishing net multimono 10.5		4122
5.17	Floating net unspec.		4130
5.18	Ffishing net unspec.		4131
5.19	Ffishing net monofil unspec.		4132
5.20	Ffishing net monotwine unspec.		4134
5.21	Ffishing net multimono unspec.		4135
5.22	Bfishing net unspec. 70 millimeter half mesh		4140
5.23	Bfishing net unspec. 80 millimeter half mesh		4141
5.24	Bbet, undefined, 90 m m halfmesh		4142
5.25	Bfishing net unspec.100 millimeter half mesh		4143

5.26	Bfishing net unspec. 110 millimeter half mesh	4144
5.27	Bfishing net unspec.120 millimeter half mesh	4145
5.28	Bfishing net unspec.130 millimeter half mesh	4146
5.29	Bfishing net unspec.140 millimeter half mesh	4147
5.30	Bfishing net unspec.150 millimeter half mesh	4148
5.31	Bfishing net unspec.180 millimeter half mesh	4149
5.32	Drift net undefined	4150
5.33	Dnet nylon undefined	4151
5.34	Dfishing net	4152
5.35	Dnet monoton wire usp	4153
5.36	Dnet multimono usp	4154
5.37	Trammelnet	4160
5.38	Tbet monofil 30	4161
5.39	Tfishing net monofil 18	4162
5.40	Tfishing net nylon 14	4163
5.41	Tfishing net nylon 10	4164
5.42	Tfishing net nylon 24 6	4165
5.43	Tfishing net nylon 17 3/4 6	4166
5.44	Tfishing net nylon 17 3/4 2	4167
5.45	Tfishing net nylon 26 2	4168
5.46	Tfishing net nylon 28 2	4169
5.47	Tfishing net multimono 1,5x4	4170
5.48	Tfishing net nylon 12	4171
5.49	Trap unspec.	4200
5.50	Sediment trap	4201
5.51	Fish trap unspec.	4300
5.52	Eel trap simple	4311
5.53	Eel trap doble	4312
5.54	Cod ruse simple	4313

5.55	Cod ruse doble		4314
5.56	Danish ruse simple		4315
5.57	Danish ruse doble		4316
5.58	Shellfish scratching unspec.		4400
5.59	??Tiltrek. gir unspec.		5000
5.60	Line unspec.		5100
5.61	Autoline		5101
5.62	Bottom line unspec.		5110
5.63	??lute line unspec.		5120
5.64	??snik unspec.		5130
5.65	Bottom/??lute line unspec.		5140
5.66	Fishline unspec.		5200
5.67	Juksa unspec.		5210
5.68	??Machine juksa		5211
5.69	Hand juksa		5212
5.70	??Harp unspec.		5220
5.71	Trolling line unspec.		5230
5.72	Machine trolling line		5231
5.73	Hand trolling line		5232
5.74	Pot unspec.		5300
5.75	S-pot without kalv		5301
5.76	S-pot with kalv		5302
5.77	R-pot		5303
5.78	F-pot		5304
5.79	Crawfish pot		5305
5.80	Cod pot		5306
5.81	Osean fish pot		5307
5.82	Square pot		5310
5.83	S-pot		5320
5.84	S-pot w/kalv, salmon cut		5330
5.85	S-pot w/kalv, mackerel		5331
5.86	S-pot w/kalv, haddock		5332
5.87	S-pot w/kalv, pollack		5333
5.88	S-pot w/kalv, octopus		5334
5.89	S-pot w/kalv, herring		5335

5.90	S-pot w/kalv, capelin	5336
5.91	S-pot w/kalv, salmon cut + haddock	5337
5.92	S-pot w/kalv, mackerel + pollack	5338
5.93	S-pot w/kalv, haddock + pollack	5339
5.94	S-pot w/kalv, cockshell	5340
5.95	S-pot w/kalv, cod	5341
5.96	S-pot w/kalv, haddock + cod	5342
5.97	S-pot w/kalv, mackerel + haddock	5343
5.98	S-pot w/kalv, salmon cut + haddock + cod	5344
5.99	S-pot w/kalv, pollack, haddock and cod	5345
5.100	S-pot w/kalv, haddock and Norway haddock	5346
5.101	S-pot w/kalv, pollack and Norway haddock	5347
5.102	S-pot w/kalv, salmon and octopus	5348
5.103	S-pot w/kalv, fish cut + unspec.	5349
5.104	S-pot w/kalv, salmon and mackerel	5350
5.105	S-pot w/kalv, catfish	5351
5.106	Breeding	6685
5.107	Mageprøve fisk	6681
5.108	Mageprøve pattedyr	6682
5.109	Handfanget	6683
5.110	Ombord uten hjelp	6684
5.111	Håv	6686
5.112	Not uspes.	3700
5.113	Snurpenot uspes.	3710
5.114	Loddenot	3711
5.115	Nordsjønot	3712
5.116	Seinot	3713
5.117	Snurpenot m/lys	3714
5.118	Landnot	3720
5.119	Strandnot	3721
5.120	Landnot m/lys	3722

1.1.5 CourseLine

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class CourseLine	depicts the movements of a vessel				
1.1	centerline	course followed by the central part of the object	1	1	CurveWithQuality	
1.2	??bearing/courseLineInformation	tracking of vessel	0	N	??Bearing/CourseLineInformation	

<<DataType>> ??Bearing/CourseLineInformation

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Datatype ??Bearing/CourseLineInformation	tracking of vessel				
2.1	vesselIdentification	name/id of vessel - the id of the Norwegian Hydrographic ServiceXzXs vessel Lance was LGKI	1	1	CharacterString	
2.2	satelliteCommunicationId	identification code for satellite communication equipment. 5 characters for ARGOS and EUTELTRACS, but 9 characters for Inmarsat-C/A/M	1	1	CharacterString	
2.3	time	time in accordance with ISO 8601	1	1	TM_instant	
2.4	trackingSpeed	speed in tenths of Knots (1/10 Kts)	1	1	Integer	

1.1.6 FishCompany

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class FishCompany	tar imot fisk og skalldyr eller produkter av disse for bearbeiding og/eller pakking og videre distribusjon				
1.1	position	location where the object exists	1	1	PointWithQuality	
1.2	fishCompanyInformation		0	N	FishCompanyInformation	

1.3	fishCompanyProduct	product for fish company	0	1	FishCompanyProduct	
1.4	fishCompanyServices	statement of capacity and units of measure	0	1	FishCompanyServices	
1.5	fishCompanyMarket	statement of market for fish company	0	1	FishCompanyMarket	
1.6	fishCompanyIdentification	identification in accordance with Director General of FisheriesXzX Register of approved processing facilities for fish and fish products, etc.	0	1	FishCompanyIdentification	

1.1.7 <<DataType>> FishCompanyIdentification

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Datatype FishCompanyIdentification	identification in accordance with Director General of Fisheries' Register of approved processing facilities for fish and fish products, etc.				
2.1	fishCompanyName	name of fish company according to register of approved processing plants for fish and fish products (*)	1	1	CharacterString	
2.2	fishProcessingPlantNumberCounty	1-2 letter county code	1	1	CharacterString	
2.3	fishProcessingPlantNumber	number which along with county code is used to indicate fish processing plant in register of approved processing plants for fish and fish products	1	1	Integer	
2.4	companyOwner	general set of owner information	1	1	CompanyOwner	
2.5	numberOfEmployees	statement of number of employees	0	1	Integer	
2.6	numberOfManYears	statement of the number of man-years	0	1	Integer	

1.1.8 <<DataType>> FishCompanyInformation

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Datatype FishCompanyInformation					
3.1	fishType		1	1	FishType	
3.2	speciesCode	numeric code, particularly	0	1	Integer	

		used by the coast guard for reporting of fish Note: (061103=YzzYmussaYzzY , young herring. Has no FAO code.) (codes from species code list defined in NS 9400!)				
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1.1.9 <<DataType>> FishCompanyServices

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Datatype FishCompanyServices	statement of capacity and units of measure				
4.1	fishCapacity	the number of tonnes in storage	1	1	Integer	
4.2	fishCapacityUnit	statement of units of capacity and measurement	1	1	FishCapacityUnit	
4.3	fishCompanyService	statement of the service the company provides	0	1	FishCompanyService	

1.1.10 <<DataType>> FishCompanyMarket

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
5	Datatype FishCompanyMarket	statement of market for fish company				
5.1	fishCompanyShare	percentage of the companyXzXs production for the indicated market segment	1	1	Integer	
5.2	fishCompanyArea	indication of area for fish companies	1	1	FishCompanyArea	

1.1.11 <<DataType>> CompanyOwner

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
6	Datatype CompanyOwner	general set of owner information				
6.1	companyName		1	1	CharacterString	
6.2	owner		0	1	CharacterString	
6.3	address		0	1	CharacterString	
6.4	postalNumber		0	1	Integer	
6.5	postalAddress		0	1	CharacterString	
6.6	telephoneNumber		0	1	Integer	

6.7	telefaxNumber		0	1	Integer	
6.8	contactPerson	name of contact	0	1	CharacterString	

1.1.12 CodeLists**1.1.12.1 <<CodeList>> FishCompanyService**

Nr	Code name	Definition/Description	Code
1	CodeList FishCompanyService	statement of the service the company provides	
1.1	Bait		1
1.2	Oil		2
1.3	Cold storage plant		3
1.4	Ice		4
1.5	Other		5

1.1.12.2 <<CodeList>> FishCompanyArea

Nr	Code name	Definition/Description	Code
2	CodeList FishCompanyArea	indication of area for fish companies	
2.1	Inland		1
2.2	EU		2
2.3	Europe outside EU		3
2.4	Asia		4
2.5	USA		5
2.6	North America		6
2.7	South Africa		7
2.8	Africa		8

1.1.12.3 <<CodeList>> FishCompanyProduct

Nr	Code name	Definition/Description	Code
3	CodeList FishCompanyProduct	product for fish company	
3.1	Freshfish packing		1
3.2	Filleting		2
3.3	Freezing		3
3.4	Refinement of frozen goods (deep		4

	fating)		
3.5	Fumigation		5
3.6	Stockfisk manufacturing		6
3.7	Processing salt fish		7
3.8	Processing Clipfish		8
3.9	Herring salting		9
3.10	Prawn consigne		10
3.11	Prawnpiling		11
3.12	Cool and coldstoring wrapped goods		12
3.13	Full sterilization	Tilvirking av fisk/fiskeprodukter ved hermetisering og varmebehandling. Tilnærmet ubegrenset holdbarhet.	14
3.14	Half preserved		15
3.15	Light preserved		16
3.16	Fish oil refining and tapping		18
3.17	Mollusc (shell etc.)		22
3.18	Shellfish (other then prawn)		23
3.19	Lodde roe treatment plant		24
3.20	Various prepared products		25
3.21	Slaughtering and producing of raising fish		26
3.22	Refrigeration craft		30
3.23	Smolt Transport		40
3.24	Expeditionary Center for mussels		50
3.25	Refining mussels		51
3.26	Cleaning central for mussel		52
3.27	Fishoil		60
3.28	Fishflour		61
3.29	Prawnflour		62
3.30	Special floury (for consumption) (also other then fish)		63
3.31	Special/-oil (Bone flour etc.)		64
3.32	Fish protein concentrate		65
3.33	Fish oil steaming		66
3.34	Ensilage		68
3.35	Varieuse fish meal/oil products		69

1.1.12.4 <<CodeList>> FishCapacityUnit

Nr	Code name	Definition/Description	Code
4	CodeList FishCapacityUnit	statement of units of capacity and measurement	
4.1	Fish stock - ton/days and nights		1
4.2	Freezing - ton/days and nights		2

1.1.12.5 <<CodeList>> FishType

Nr	Code name	Definition/Description	Code
5	CodeList FishType	statement of the type of fish which the company receives	
5.1	Receiving station for fish		1
5.2	Slaughter-/factory for packing		2
5.3	Fishing industry		3

1.1.13 FisheryResourceArea

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class FisheryResourceArea	information in accordance with NS-9400: First-hand fish trade. Data elements of the ??contract note. Terms and codes.				
1.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
1.2	position	location where the object exists	0	1	PointWithQuality	
1.3	fisheryResource	information in accordance with NS-9400: First-hand fish trade. Data elements of the ??contract note. Terms and codes.	0	N	FisheryResource	
1.4	fisheryResourceAreaType	type of fishery resource area	0	1	FisheryResourceAreaType	
1.5	Role boundaryFisheryResourceArea		0	N	FisheryResourceAreaBoundary	Aggregation

1.1.14 FisheryResourceAreaBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class FisheryResourceAreaBoundary	statement of boundary for particularly valuable areas for recruitment to fish stocks or others				
2.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
2.2	Role (unnamed) FisheryResourceArea		1	1	FisheryResourceArea	

1.1.15 RegulatedFishingArea

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Class RegulatedFishingArea	area which is regulated pursuant to the Act relating to sea-water fisheries, etc. of 3 June 1983, No. 40				
3.1	extent	area over which an object extends	0	1	SurfaceWithQuality	

3.2	position	location where the object exists	0	1	PointWithQuality	
3.3	fisheryResourceAreaSpecies	description of information in accordance with NS-9400: First-hand fish trade. Data elements of the contract note. Terms and codes.	0	N	??FisheryResourceAreaSpecies	
3.4	fisheryUsageType	usage type of fishing equipment area	0	1	FisheryUsageType	
3.5	fisheryEquipment	equipment codes have been taken from NS-9400 First-Hand Fish Trade, pgs. 17-18	0	N	FisheryEquipment	
3.6	period	statement of a period of time	0	1	TM_Period	
3.7	Role boundaryRegulatedFishingArea		0	N	RegulatedFishingAreaBoundary	Aggregation

1.1.16 <<DataType>> ??FisheryResourceAreaSpecies

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Datatype ??FisheryResourceAreaSpecies	description of information in accordance with NS-9400: First-hand fish trade. Data elements of the contract note. Terms and codes.				
4.1	faoCode		0	1	CharacterString	
4.2	speciesCode		0	1	Integer	
4.3	norwegianSpeciesName		0	1	CharacterString	
4.4	taxonomicCode		1	1	Integer	
4.5	scientificSpeciesName		0	1	CharacterString	
4.6	englishSpeciesName		0	1	CharacterString	

1.1.17 <<DataType>> FisheryResource

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
5	Datatype FisheryResource	particularly valuable areas for recruitment to fishing stocks or other				
5.1	fisheryResourceAreaSpecies	description of information in accordance with NS-9400: First-hand fish trade. Data elements of the ??contract/bought note. Terms and codes.	1	1	??FisheryResourceAreaSpecies	

5.2	period		1	1	TM_Period	
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1.1.18 RegulatedFishingAreaBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
6	Class RegulatedFishing AreaBoundary	delimitation of an area which is regulated pursuant to the Act relating to sea-water fisheries, etc. of 3 June 1983, No. 40				
6.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
6.2	Role (unnamed) RegulatedFishing Area		1	1	RegulatedFishingArea	

1.1.19 Association <<Topo>> RegulatedFishingArea - RegulatedFishingAreaBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
7	Association RegulatedFishing Area - RegulatedFishing AreaBoundary					
7.1	Role boundaryRegulatedFishingArea		0	N	RegulatedFishingAreaBoundary	Aggregation
7.2	Role (unnamed) RegulatedFishing Area		1	1	RegulatedFishingArea	

1.1.20 CodeLists

1.1.20.1 <<CodeList>> FisheryResourceAreaType

Nr	Code name	Definition/Description	Code
1	CodeList FisheryResourceAreaType	type of fishery resource area	
1.1	Spawn area		1
1.2	Area for grewing/grazing		2
1.3	Sea tagle occurrence		3
1.4	Seaweed occurence		4
	Shell occurence		5

1.1.21 FishingZone

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class FishingZone	area for fishing				
1.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
1.2	position	location where the object exists	0	1	PointWithQuality	
1.3	Role boundaryFishing Zone		0	N	FishingZoneBoundary	Aggregation

1.1.22 FishingZoneBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class FishingZoneBoundary	indication of fishing area boundary				
2.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
2.2	Role (unnamed) FishingZone		1	2	FishingZone	

1.1.23 FishingGround

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Class FishingGround	statement of area where there is frequent fishing, a fishing ground, natural reef				
3.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
3.2	position	location where the object exists	0	1	PointWithQuality	
3.3	Role boundaryFishing Ground		0	N	FishingGroundBoundary	Aggregation

1.1.24 FishingGroundBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Class FishingGroundBoundary	area where there is frequent fishing, a fishing ground, natural reef				

4.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
4.2	Role (unnamed) FishingGround		1	2	FishingGround	