EUROPEAN COMMISSION - DG ENVIRONMENT

TECHNICAL SUPPORT IN RELATION TO THE IMPLEMENTATION OF THE FLOODS DIRECTIVE (2007/60/EC)

A USER GUIDE TO THE FLOODS REPORTING SCHEMAS

Report Ref: V5.0 June 2013

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Document History

Document	Date	Author
V1.0 Release to WG F	19 April 2010	Jon Maidens
V2.0 Release to WG F	11. January 2011	Mette Wolstrup
V3.0 Release to WG F	11. May 2011	Mette Wolstrup
V4.0 Release to WG F	19. April 2013	Mette Wolstrup
V5.0 Release to WG F	02. June 2013	Mette Wolstrup
V6.0 Release to WG F	28. July 2014	Andres Bastholm

CONTENTS

1.	INTRODUCTION	1
1.1	What is in this document	1
2.	FD REPORTING SCHEMAS – GENERAL ISSUES	2
2.1	Background	2
2.2	General issues	2
2.2.1	Stylesheets	2
2.2.2	Namespaces, Schema and Stylesheet Locations	2
2.2.3	Metadata	2
2.2.4	Additional Internet-based information	3
2.2.5	Required Elements	3
2.2.6	Conditional Elements	3
2.2.7	Optional Elements	4
2.2.8	Common Elements	4
3.	THE SCHEMAS	5
3.1	THE COMMON SCHEMA	6
3.2	SCHEMA: ADMINISTRATIVE ARRANGEMENTS (COMPETENT AUTHORITIES AND UNITS OF MANAGEMENT)	24
3.2.1	Competent Authority	27
3.2.2	Unit of Management	31
3.3	SCHEMA: PRELIMINARY FLOOD RISK ASSESSMENT AND IDENTIFICATION OF AREAS OF POTENTIAL SIGNIFICANT FLOOD RISK	35
3.4	SCHEMA: FLOOD HAZARD AND RISK MAPS	109
3.5	SCHEMA: FLOOD RISK MANAGEMENT PLANS	185

1. INTRODUCTION

The purpose of this document is to provide guidance to users on the key issues relating to the schemas for reporting on the Floods Directive.

The reporting requirements for the Floods Directive can be found at the following address in the circa library:

https://circabc.europa.eu/w/browse/91b38042-9cbd-4bff-b0dc-c406f967154e

As reporting sheets are agreed upon they are translated into electronic reporting schemas. The purpose of this document is to provide guidance on the filling out of the schemas and issues to be aware of.

This user guidance document will eventually include information relating to all schemas developed to support Floods reporting. This version covers the reporting of administrative arrangements, the preliminary floods risk assessment, designate the areas of potential significant flood risk and the flood hazard and risk map.

1.1 What is in this document

- Section 2 provides an overview of the general issues in the schemas;
- Section 3.1 describes the Common Schema;
- Section 3.2 describes the key elements for reporting on Administrative Arrangements (Competent Authorities, Units of Management);
- Section 3.3 describes the key elements for reporting the Preliminary Flood Risk Assessment and the Areas of Potential Significant Flood Risk (PFRA and APSFR)
- Section 3.4 describes the key elements for reporting the flood hazard and risk maps (FHRM)

2. FD REPORTING SCHEMAS – GENERAL ISSUES

2.1 Background

The development of the Reporting schemas has followed the following accepted principles:

- *That Reporting sheets do not provide all the technical specifications needed to neither develop the data exchange formats nor provide guidance to the data provider.*
- *These technical specifications may lead, where necessary, to adaptations of reporting requirements in order to facilitate the electronic data exchange.*
- *The technical process will also ensure that data which has been already submitted to WISE do not have to be reported again.*
- *The technical specifications will be developed in cooperation with the Member States.*

The schemas were developed in conjunction with CIS Working Group F and its Drafting Group.

2.2 General issues

2.2.1 Stylesheets

Stylesheets, which convert the corresponding XML files to a more readable HTML format, are provided for each schema.

2.2.2 Namespaces, Schema and Stylesheet Locations

The schemas and stylesheets are located at URL:

http://icm.eionet.europa.eu/schemas/dir200760ec

http://icm.eionet.europa.eu/schemas/dir200760ec/resources

2.2.3 Metadata

As a minimum, the following metadata attributes are required for each XML file.

Attribute Name	**Description**	**Status**
CreationDate	Date the file was created	Required
Creator	Name of organisation	Required
Email	Contact email	Optional
Language	Reporting language	Required

Description	Descriptions of the file	Optional
GeneratedBy	Method used to generate the file e.g. Access tool	Optional

It is possible to provide a link to an associated metadata document for each file using the <METADATA> element which is provided at a number of locations throughout the schemas. This allows up to 2000 characters to be specified or alternatively may be used to provide a hyperlink or description of an associated metadata file. This should be used to define any restrictions on the data.

2.2.4 Additional Internet-based information

A <URL> element is also provided at a number of locations throughout the schemas. This allows a hyperlink to be provided to further information in the Member States own Internet-based systems. This could be, for example:

- A link to on-line relevant national methodology reports and statistics;
- A link to a feature/location in a web-based mapping system.

2.2.5 Required Elements

A large number of fields are **required** in order to ensure that the submission can be processed. Note that the term "mandatory" is no longer used in the context of schemas because of possible confusion with "mandatory" in the sense of legal compliance (i.e. failure to supply mandatory information is legally not in compliance with the directive).

In principle, information is required unless it is stated explicitly that information is optional or should be reported "if possible" or if "available".

2.2.6 Conditional Elements

Other elements are **conditional**, for example <OtherCompetentAuthorities> which allows MS to define any other Competent Authority associated with the RBD/UoM and <InternationalName> which **must** be completed **only** if the answer is **YES** to the question in <International> "Is the RBD part of an international River Basin?" So the general rule is applied: If the answer to Element A is YES, then completion of Element B is required in Conditional Elements.

Conditional elements are not (technically) possible in XML schema. Therefore all these elements have been identified as optional in the schema but with the "If ……then" conditional clause added to the annotation.

2.2.7 Optional Elements

Other elements are **optional**, for example those elements that allow MS to enter a URL or text strings for further information to aid clarity to an answer, or any information qualified in the Reporting sheets as due to be reported “if possible” or “if available”.

2.2.8 Common Elements

Each schema references a number of **common** elements. As with previous reporting, all common definitions and all enumeration lists are defined in the FDCommon schema. As part of the schema development some new common elements have been established.

3. THE SCHEMAS

The following sections provide the "annotations" or descriptive notes for the schema main elements which are intended to help and guide the person completing the schemas.

3.1 THE COMMON SCHEMA

This schema contains the elements common to all schemas including the enumeration lists.

Schema **FDCommon.xsd**

Simple types
CARoleCode
CategoryFloods
CharacteristicsofFlooding
CoordinateType
CountryCode
DataConfidentialityClassificationCode
DateTypeYearType
FeatureUniqueCodeType
FeatureUniqueCodeTypeEX
FeatureUniqueEUCodeType
IED
LanguageCode
MapCategories
MeasureAspect
MeasureType
MechanismofFlooding
NumberDecimalBaseType
NumberDecimalType
NumberExceptionType
NumberNonNegativeIntegerType
NumberPercentageBaseType
NumberPercentageType
PriorityCategories
ProtectedAreaType
ScaleType
SourceofFlooding
Status
String100000Type
String10000Type
String1000Type
String100Type
String20000Type
String2000Type
String250Type
String5000Type
String500Type
String50Type
TotalDamageClass
TypeCulturalHeritage
TypeEconomic
TypeEnvironment
TypeHumanHealth
TypeofLink
WFDAssociationType
YesCode
YesNoCode
YesNoNotApplicableCode
YesNoUnknownCode

simpleType **CARoleCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration A enumeration B enumeration C
annotation	documentation The various possible roles/responsibilities of a competent authority might be discharged at different levels in different Member States. Different competent authorities may also be responsible for different tasks in relation to point A below. This could result in a large number of competent authorities in some Member States. To circumvent any difficulties that this situation may cause, it is important that information on roles and responsibilities is clearly reported. For reporting purposes a competent authority will be defined as having one or both of the following core roles: A. Coordination, Preparation and Production of preliminary flood risk assessment, flood maps and flood risk management plans (FRMPs), including international coordination in transboundary Units of management; B. Reporting C.Other (Any other roles not covered under A or B)

simpleType **CategoryFloods**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration past enumeration future
annotation	documentation Can be past flood (past) or potential future flood (future)

simpleType **CharacteristicsofFlooding**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration A31 enumeration A32 enumeration A33 enumeration A34 enumeration A35 enumeration A36 enumeration A37 enumeration A38 enumeration A39 enumeration A40
annotation	documentation Define relevant characteristics of flooding. The list are in line with table A3 from list of flood types from February 2011 (version 6). One or more options can be selected. A31=Flash Flood: A flood that rises and falls quite rapidly with little or no advance warning, usually the result of intense rainfall over a relatively small area. A32=Snow Melt Flood: Flooding due to rapid snow melt, possibly in combination with rainfall or blockage due to ice jams. A33=Other rapid onset: A flood which develops quickly, other than a flash flood . A34=Medium onset flood: An onset of flooding, that occurs at a slower rate than a flash flood. A35=Slow onset flood: A flood which takes a longer time to develop.

	A36=Debris Flow: A flood conveying a high degree of debris. A37=High Velocity Flow: A flood where the floodwaters are flowing at a high velocity. A38=Deep Flood: A flood where the floodwaters are of significant depth. A39=Other characteristics, or no special characteristics. A40=No data available on the characteristics of flooding.

simpleType **CoordinateType**

type	restriction of **xs:string**
annotation	documentation Format Decimal degrees (-)dd.ddddd

simpleType **CountryCode**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	AT	
	enumeration	BE	
	enumeration	BG	
	enumeration	CH	
	enumeration	CZ	
	enumeration	CY	
	enumeration	DE	
	enumeration	DK	
	enumeration	EE	
	enumeration	EL	
	enumeration	ES	
	enumeration	FI	
	enumeration	FR	
	enumeration	HR	
	enumeration	HU	
	enumeration	IE	
	enumeration	IS	
	enumeration	IT	
	enumeration	LT	
	enumeration	LU	
	enumeration	LV	
	enumeration	MT	
	enumeration	NO	
	enumeration	NL	
	enumeration	PL	
	enumeration	PT	
	enumeration	RO	
	enumeration	SE	
	enumeration	SI	

	enumeration SK enumeration TR enumeration UK
annotation	documentation Unique 2 character ISO Code for the EU Member States

simpleType **DataConfidentialityClassificationCode**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration 001 enumeration 003
annotation	documentation Codes for data security classification: 001 = Unclassified - available for general circulation and public 003 = Confidential - available for EC reporting only

simpleType **DateTypeYearType**

type	union of (**xs:date**, **xs:gYear**, **xs:gYearMonth**, **NumberExceptionType**)
annotation	documentation Both date type yyyy-mm-dd, yyyy-mm and yyyy allowed and the exception types (-9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable)

simpleType **FeatureUniqueCodeType**

type	restriction of **xs:string**
annotation	documentation Type for unique code within the Member State for the feature

simpleType **FeatureUniqueCodeTypeEX**

type	union of (**FeatureUniqueCodeType**, **NumberExceptionType**)
annotation	documentation Type for unique code within the Member State for the feature with options for exceptions. -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable.

simpleType **FeatureUniqueEUCodeType**

type	restriction of **xs:string**
annotation	documentation Type for EU code, allows up to 42 characters (unique code within MS prefixed with country ISO 2 character code

simpleType **IED**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration 1 enumeration 1.1 enumeration 1.2 enumeration 1.3 enumeration 1.4.a

	enumeration 1.4.b enumeration 2 enumeration 2.1 enumeration 2.2 enumeration 2.3.a enumeration 2.3.b enumeration 2.3.c enumeration 2.4 enumeration 2.5.a enumeration 2.5.b enumeration 2.6 enumeration 3 enumeration 3.1.a enumeration 3.1.b enumeration 3.1.c enumeration 3.2 enumeration 3.3 enumeration 3.4 enumeration 3.5 enumeration 4 enumeration 4.1.a enumeration 4.1.b enumeration 4.1.c enumeration 4.1.d enumeration 4.1.e enumeration 4.1.f enumeration 4.1.g enumeration 4.1.h enumeration 4.1.i enumeration 4.1.j enumeration 4.1.k enumeration 4.2.a enumeration 4.2.b enumeration 4.2.c enumeration 4.2.d enumeration 4.2.e enumeration 4.3 enumeration 4.4 enumeration 4.5 enumeration 4.6 enumeration 5 enumeration 5.1.a enumeration 5.1.b enumeration 5.1.c enumeration 5.1.d enumeration 5.1.e enumeration 5.1.f

	enumeration 5.1.g enumeration 5.1.h enumeration 5.1.i enumeration 5.1.j enumeration 5.1.k enumeration 5.2.a enumeration 5.2.b enumeration 5.3.a.i enumeration 5.3.a.ii enumeration 5.3.a.iii enumeration 5.3.a.iv enumeration 5.3.a.v enumeration 5.3.b.i enumeration 5.3.b.ii enumeration 5.3.b.iii enumeration 5.3.b.iv enumeration 5.4 enumeration 5.5 enumeration 5.6 enumeration 6 enumeration 6.1.a enumeration 6.1.b enumeration 6.1.c enumeration 6.2 enumeration 6.3 enumeration 6.4.a enumeration 6.4.b.i enumeration 6.4.b.ii enumeration 6.4.b.iii enumeration 6.4.c enumeration 6.5 enumeration 6.6.a enumeration 6.6.b enumeration 6.6.c enumeration 6.7 enumeration 6.8 enumeration 6.9 enumeration 6.10 enumeration 6.11
annotation	documentation List of activities from Annex I, DIRECTIVE 2010/75/EC of 24 November 2010 (Date of publishing: 17.12.2010): 1. Energy industries 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more 1.2. Refining of mineral oil and gas 1.3. Production of coke 1.4. Gasification or liquefaction of: (a) coal; (b) other fuels in installations with a total rated thermal input of 20 MW or more. 2. Production and processing of metals 2.1. Metal ore (including sulphide ore) roasting or sintering 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour

	2.3. Processing of ferrous metals: (a) operation of hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour; (b) operation of smitheries with hammers the energy of which exceeds 50 kilojoule per hammer, where the calorific power used exceeds 20 MW; (c) application of protective fused metal coats with an input exceeding 2 tonnes of crude steel per hour. 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day 2.5. Processing of non-ferrous metals: (a) production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes; (b) melting, including the alloyage, of non-ferrous metals, including recovered products and operation of non-ferrous metal foundries, with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals. 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3 3. Mineral industry 3.1. Production of cement, lime and magnesium oxide: (a) production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day; (b) production of lime in kilns with a production capacity exceeding 50 tonnes per day; (c) production of magnesium oxide in kilns with a production capacity exceeding 50 tonnes per day. 3.2. Production of asbestos or the manufacture of asbestos-based products 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day 3.5. Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3 4. Chemical industry For the purpose of this section, production within the meaning of the categories of activities contained in this section means the production on an industrial scale by chemical or biological processing of substances or groups of substances listed in points 4.1 to 4.6 4.1. Production of organic chemicals, such as: (a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic); (b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters and mixtures of esters, acetates, ethers, peroxides and epoxy resins; (c) sulphurous hydrocarbons; (d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates; (e) phosphorus-containing hydrocarbons; (f) halogenic hydrocarbons; (g) organometallic compounds; (h) plastic materials (polymers, synthetic fibres and cellulose-based fibres); (i) synthetic rubbers; (j) dyes and pigments; (k) surface-active agents and surfactants. 4.2. Production of inorganic chemicals, such as: (a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride; (b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids; (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide; (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate; (e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide. 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers) 4.4. Production of plant protection products or of biocides 4.5. Production of pharmaceutical products including intermediates 4.6. Production of explosives 5. Waste management 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities: (a) biological treatment; (b) physico-chemical treatment; (c) blending or mixing prior to submission to any of the other activities listed in points 5.1 and 5.2; (d) repackaging prior to submission to any of the other activities listed in points 5.1 and 5.2; (e) solvent reclamation/regeneration; (f) recycling/reclamation of inorganic materials other than metals or metal compounds; (g) regeneration of acids or bases; (h) recovery of components used for pollution abatement; (i) recovery of components from catalysts; (j) oil re-refining or other reuses of oil;

	(k) surface impoundment. 5.2. Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants: (a) for non-hazardous waste with a capacity exceeding 3 tonnes per hour; (b) for hazardous waste with a capacity exceeding 10 tonnes per day. 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40.): (i) biological treatment; (ii) physico-chemical treatment; (iii) pre-treatment of waste for incineration or co-incineration; (iv) treatment of slags and ashes; (v) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC: (i) biological treatment; (ii) pre-treatment of waste for incineration or co-incineration; (iii) treatment of slags and ashes; (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components. When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day. 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1.), receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes 6. Other activities 6.1. Production in industrial installations of: (a) pulp from timber or other fibrous materials; (b) paper or card board with a production capacity exceeding 20 tonnes per day; (c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m3 per day. 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day (b) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from: (i) only animal raw materials (other than exclusively milk) with a finished product production capacity greater than 75 tonnes per day; (ii) only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day or 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year; (iii) animal and vegetable raw materials, both in combined and separate products, with a finished product production capacity in tonnes per day greater than: — 75 if A is equal to 10 or more; or, — [300- (22,5 × A)] in any other case, where 'A' is the portion of animal material (in percent of weight) of the finished product production capacity. Packaging shall not be included in the final weight of the product. This subsection shall not apply where the raw material is milk only. (c) Treatment and processing of milk only, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis). 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day 6.6. Intensive rearing of poultry or pigs: (a) with more than 40 000 places for poultry; (b) with more than 2 000 places for production pigs (over 30 kg), or (c) with more than 750 places for sows. 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year 6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation 6.9. Capture of CO2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II

simpleType **LanguageCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration bg enumeration es enumeration cs enumeration da enumeration de enumeration et enumeration el enumeration en enumeration fr enumeration ga enumeration hr enumeration ic enumeration it enumeration lv enumeration lt enumeration hu enumeration mt enumeration nl enumeration no enumeration pl enumeration pt enumeration ro enumeration sk enumeration sl enumeration sr enumeration tr enumeration fi enumeration sv
annotation	documentation Unique 2 character ISO Code for the EU Member States language (the codes used are the ISO codes 639-1 in force, alpha-2 code) bg=Bulgarian es=Spanish cs=Czech da=Danish de=German et=Estonian el=Greek en=English fr=French ga=Irish hr=Croatian ic=Icelandic it=Italian lv=Latvian lt=Lithuanian hu=Hungarian mt=Maltese nl=Dutch

	no=Norwegian pl=Polish pt=Portuguese ro=Romanian sk=Slovak sl=Slovenian sr=Serbian tr=Tyrkish fi=Finnish sv=Swedish

simpleType **MapCategories**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	LowProbabilityHazard	
	enumeration	MediumProbabilityHazard	
	enumeration	HighProbabilityHazard	
	enumeration	LowProbabilityRisk	
	enumeration	MediumProbabilityRisk	
	enumeration	HighProbabilityRisk	
	enumeration	Other	

simpleType **MeasureAspect**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	Aggregated	
	enumeration	Individual	

simpleType **MeasureType**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	M11	
	enumeration	M21	
	enumeration	M22	
	enumeration	M23	
	enumeration	M24	
	enumeration	M31	
	enumeration	M32	
	enumeration	M33	
	enumeration	M34	
	enumeration	M35	
	enumeration	M41	
	enumeration	M42	
	enumeration	M43	
	enumeration	M44	
	enumeration	M51	
	enumeration	M52	

	enumeration M53 enumeration M61
annotation	documentation M11=No Action, No measure is proposed to reduce the flood risk in the APSFR or other defined area , M21=Prevention, Avoidance, Measure to prevent the location of new or additional receptors in flood prone areas, such as land use planning policies or regulation M22=Prevention, Removal or relocation, Measure to remove receptors from flood prone areas, or to relocate receptors to areas of lower probability of flooding and/or of lower hazard M23=Prevention, Reduction, Measure to adapt receptors to reduce the adverse consequences in the event of a flood actions on buildings, public networks, etc... M24=Prevention, Other prevention, Other measure to enhance flood risk prevention (may include, flood risk modelling and assessment, flood vulnerability assessment, maintenance programmes or policies etc...) M31=Protection Natural flood management / runoff and catchment management, Measures to reduce the flow into natural or artificial drainage systems, such as overland flow interceptors and / or storage, enhancement of infiltration, etc and including in-channel , floodplain works and the reforestation of banks, that restore natural systems to help slow flow and store water. M32=Protection, Water flow regulation, Measures involving physical interventions to regulate flows, such as the construction, modification or removal of water retaining structures (e.g., dams or other on-line storage areas or development of existing flow regulation rules), and which have a significant impact on the hydrological regime. M33=Protection, Channel, Coastal and Floodplain Works, Measures involving physical interventions in freshwater channels, mountain streams, estuaries, coastal waters and flood-prone areas of land, such as the construction, modification or removal of structures or the alteration of channels, sediment dynamics management, dykes, etc. M34=Protection, Surface Water Management, Measures involving physical interventions to reduce surface water flooding, typically, but not exclusively, in an urban environment, such as enhancing artificial drainage capacities or though sustainable drainage systems (SuDS). M35=Protection, Other Protection, Other measure to enhance protection against flooding, which may include flood defence asset maintenance programmes or policies M41=Preparedness, Flood Forecasting and Warning, Measure to establish or enhance a flood forecasting or warning system M42=Preparedness, Emergency Event Response Planning / Contingency planning, Measure to establish or enhance flood event institutional emergency response planning M43=Preparedness, Public Awareness and Preparedness, Measure to establish or enhance the public awareness or preparedness for flood events M44=Preparedness, Other preparedness, Other measure to establish or enhance preparedness for flood events to reduce adverse consequences M51=Recovery and Review (Planning for the recovery and review phase is in principle part of preparedness), Individual and societal recovery, Clean-up and restoration activities (buildings, infrastructure, etc) Health and mental health supporting actions, incl. managing stress Disaster financial assistance (grants, tax), incl. disaster legal assistance, disaster unemployment assistance Temporary or permanent relocation Other M52=Recovery and Review, Environmental recovery, Clean-up and restoration activities (with several sub-topics as mould protection, well-water safety and securing hazardous materials containers) M53=Recovery and Review, Other, Other recovery and review Lessons learnt from flood events Insurance policies M61=Other

simpleType **MechanismofFlooding**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration A21 enumeration A22 enumeration A23 enumeration A24 enumeration A25

	enumeration A26
annotation	documentation Define relevant mechanism of flooding. The list are in line with table A2 from list of flood types from February 2011 (version 6). One or more options can be selected. A21=Natural Exceedance: Flooding of land by waters exceeding the capacity of their carrying channel or the level of adjacent lands. A22=Defence Exceedance: Flooding of land due to floodwaters overtopping flood defences. A23=Defence or Infrastructural Failure:Flooding of land due to the failure of natural or artificial defences or infrastructure. This mechanism of flooding could include the breaching or collapse of a flood defence or retention structure, or the failure in operation of pumping equipment or gates. A24=Blockage / Restriction: Flooding of land due to a natural or artificial blockage or restriction of a conveyance channel or system. This mechanism of flooding could include the blockage of sewerage systems or due to restrictive channel structures such as bridges or culverts or arising from ice jams or land slides. A25=Other: Flooding of land by water due to other mechanisms, for instance windsetup floods. A26=No data available on the mechanism of flooding.

simpleType **NumberDecimalBaseType**

type	restriction of **xs:decimal**

simpleType **NumberDecimalType**

type	union of (**NumberDecimalBaseType**, **NumberExceptionType**)
annotation	documentation Decimal with options for exceptions. -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable.

simpleType **NumberExceptionType**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration -9999 enumeration -8888 enumeration -7777
annotation	documentation Numerical codes for data exceptions: -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable

simpleType **NumberNonNegativeIntegerType**

type	union of (**xs:nonNegativeInteger**, **NumberExceptionType**)
annotation	documentation Non-negative integer with option for exceptions

simpleType **NumberPercentageBaseType**

type	restriction of **xs:decimal**
annotation	documentation Percentage with 3 decimal places

simpleType **NumberPercentageType**

type	union of (**NumberPercentageBaseType**, **NumberExceptionType**)
annotation	documentation Percentage with option for exceptions

simpleType **PriorityCategories**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	Critical	
	enumeration	High	
	enumeration	VeryHigh	
	enumeration	Moderate	
	enumeration	Low	

simpleType **ProtectedAreaType**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	Bathing	
	enumeration	Birds	
	enumeration	Habitats	
	enumeration	Nitrates	
	enumeration	UWWT	
	enumeration	Article 7 Abstraction for drinking water	
	enumeration	WFD_WaterBodies	
	enumeration	EuropeanOther	
	enumeration	National	
	enumeration	Local	
annotation	documentation Defines all Protected Area types for use in the Register of Protected Areas (Article 6)		

simpleType **ScaleType**

type	restriction of **xs:string**
annotation	documentation Format for Scale: 1:nnnnnnnn

simpleType **SourceofFlooding**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	A11	
	enumeration	A12	
	enumeration	A13	
	enumeration	A14	
	enumeration	A15	
	enumeration	A16	

	enumeration A17
annotation	documentation Define relevant source of flooding. The list are in line with table A1 from list of flood types from February 2011 (version 6). One or more options can be selected. A11=Fluvial: Flooding of land by waters originating from part of a natural drainage system, including natural or modified drainage channels. This source could include flooding from rivers, streams, drainage channels, mountain torrents and ephemeral watercourses, lakes and floods arising from snow melt. A12=Pluvial: Flooding of land directly from rainfall water falling on, or flowing over, the land. This source could include urban storm water, rural overland flow or excess water, or overland floods arising from snowmelt. A13=Groundwater: Flooding of land by waters from underground rising to above the land surface. This source could include rising groundwater and underground flow from elevated surface waters. A14=Sea Water: Flooding of land by water from the sea, estuaries or coastal lakes. This source could include flooding from the sea (e.g., extreme tidal level and / or storm surges) or arising from wave action or coastal tsunamis. A15=Artificial Water-Bearing Infrastructure: Flooding of land by water arising from artificial, water-bearing infrastructure or failure of such infrastructure. This source could include flooding arising from sewerage systems (including storm water, combined and foul sewers), water supply and wastewater treatment systems, artificial navigation canals and impoundments (e.g., dams and reservoirs). A16=Other: Flooding of land by water due to other sources, can include other tsunamis. A17=No data available on the source of flooding.

simpleType **Status**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration NS enumeration OG enumeration OGC enumeration COM
annotation	documentation Not started (NS), on-going (OG), on-going construction (OGC) or completed (COM)

simpleType **String100000Type**

type	restriction of **xs:string**
annotation	documentation Type to enter string of 1 to 100000 characters

simpleType **String10000Type**

type	restriction of **xs:string**
annotation	documentation Type to enter string of 1 to 10000 characters

simpleType **String1000Type**

type	restriction of **xs:string**
annotation	documentation

	String of up to 1000 characters

simpleType **String100Type**

type	restriction of **xs:string**
annotation	documentation String of up to 100 characters

simpleType **String20000Type**

type	restriction of **xs:string**
annotation	documentation Type to enter string of 1 to 20000 characters

simpleType **String2000Type**

type	restriction of **xs:string**
annotation	documentation Type to enter string of 1 to 2000 characters

simpleType **String250Type**

type	restriction of **xs:string**
annotation	documentation String of up to 250 characters

simpleType **String5000Type**

type	restriction of **xs:string**
annotation	documentation Type to enter string of 1 to 5000 characters

simpleType **String500Type**

type	restriction of **xs:string**
annotation	documentation String of up to 500 characters

simpleType **String50Type**

type	restriction of **xs:string**
annotation	documentation String of up to 50 characters

simpleType **TotalDamageClass**

type	restriction of **xs:string**		
facets	Kind	Value	annotation
	enumeration	I	
	enumeration	L	
	enumeration	M	
	enumeration	H	

	enumeration VH enumeration NA enumeration U
annotation	documentation For Insignificnt, Low, Medium, High, Very high, Not Applicable, Unknown: U=Unknown NA=Not Applicable I=Insignificnt; L=Low; M=Medium H=High VH=Very high

simpleType **TypeCulturalHeritage**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Define relevant type of Consequences. The list are in line with section B in the 'List of flood types and list of consequences' document from February 2011 (version 6). One or more options can be selected. B31=Cultural Assets: Adverse consequences to cultural heritage, which could include archaeological sites / monuments, architectural sites, museums, spiritual sites and buildings. B32=Landscape: Adverse permanent or long-term consequences on cultural landscapes, that is cultural properties which represents the combinesd works of nature and man, such as relics of traditional landscapes, anchor locations or zones. B33=Other B34=Not applicable

simpleType **TypeEconomic**

type	restriction of **xs:string**
facets	Kind Value annotation enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45 enumeration B46
annotation	documentation Define relevant type of Consequences. The list are in line with section B in the 'List of flood types and list of consequences' document from February 2011 (version 6). One or more options can be selected. B41=Property: Adverse consequences to property, which could include homes.

	B42=Infrastructure: Adverse consequences to infrastructural assets such as utilities, power generation, transport, storage and communication. B43=Rural Land Use: Adverse consequences to uses of the land, such as agricultural activity (livestock, arable and horticulture), forestry, mineral extraction and fishing. B44=Economic Activity: Adverse consequences to sectors of economic activity, such as manufacturing, construction, retail, services and other sources of employment. B45=Other B46=Not applicable

simpleType **TypeEnvironment**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Define relevant type of Consequences. The list are in line with section B in the 'List of flood types and list of consequences' document from February 2011 (version 6). One or more options can be selected. B21=Waterbody Status: Adverse consequences ecological or chemical status of surface water bodies or chemical status of ground water bodies affected, as of concern under the WFD. Such consequences may arise from pollution from various sources (point and diffuse) or due to hydromorphological impacts of flooding. B22=Protected Areas: Adverse consequences to protected areas or waterbodies such as those designated under the Birds and Habitats Directives, bathing waters or drinking water abstraction points. B23=Pollution Sources: Sources of potential pollution in the event of a flood, such as IPPC and Seveso installations, or point or diffuse sources. B24=Other potential adverse environmental impacts, such as those on soil, biodiversity, flora and fauna, etc. B25=Not applicable .

simpleType **TypeHumanHealth**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration B11 enumeration B12 enumeration B13 enumeration B14
annotation	documentation Define relevant type of Consequences. The list are in line with section B in the

	'List of flood types and list of consequences' document from February 2011 (version 6). One or more options can be selected. B11=Human Health: Adverse consequences to human health, either as immediate or consequential impacts, such as might arise from pollution or interruption of services related to water supply and treatment, and would include fatalities. B12=Community: Adverse consequences to the community, such as detrimental impacts on local governance and public administration, emergency response, education, health and social work facilities (such as hospitals). B13=Other B14=Not applicaple

simpleType **TypeofLink**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration WMS enumeration PDF enumeration Portal enumeration Other

simpleType **WFDAssociationType**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration within enumeration overlapping (partly within)
annotation	documentation Defines the type of EURBD (RiverBasinDistrict defined in the WFD (WaterFrameWorkDirective) Association. Options are 'within' and 'overlapping (partly within)'.

simpleType **YesCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration Y enumeration
annotation	documentation Yes Code: Yes=Y

simpleType **YesNoCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration Y enumeration N enumeration
annotation	documentation Yes/No Code: Yes=Y; No=N

simpleType **YesNoNotApplicableCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration Y enumeration N enumeration NA
annotation	documentation For Yes, No or Unknown/Not Applicable: Y=Yes; N=No; NA=Unknown/Not Applicable

simpleType **YesNoUnknownCode**

type	restriction of **xs:string**
facets	Kind / Value / annotation enumeration Y enumeration N enumeration U enumeration NA
annotation	documentation For Yes, No or Unknown: Y=Yes; N=No; U=Unknown

3.2 SCHEMA: ADMINISTRATIVE ARRANGEMENTS (COMPETENT AUTHORITIES AND UNITS OF MANAGEMENT)

Schema **CA_UoM.xsd**

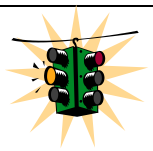
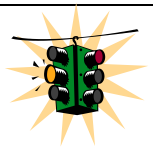
This schema deals with the reporting requirements for competent authorities and units of management. **In principle it is expected that there will only be one file per Member State.**

Article 3.1 of the Floods Directive indicates that Member States may make use of the administrative arrangements made under Article 3 of the Water Framework Directive. The Water Framework Directive requires Member States to ensure the appropriate administrative arrangements, including the identification of the appropriate competent authority, for the application of the rules of the Directive within each river basin district lying within their territory. However, different competent authorities may be appointed by Member States for the Floods Directive. The Floods Directive also allows Member States to identify different units of management from the river basin districts used for the Water Framework Directive. Competent authorities will be required for each national river basin district or unit of management and for the portion of any international river basin district or unit of management lying within a Member State's territory.

In cases where different competent authorities have been appointed the Floods Directive requires Member States to communicate to the Commission by 26 May 2010 the information

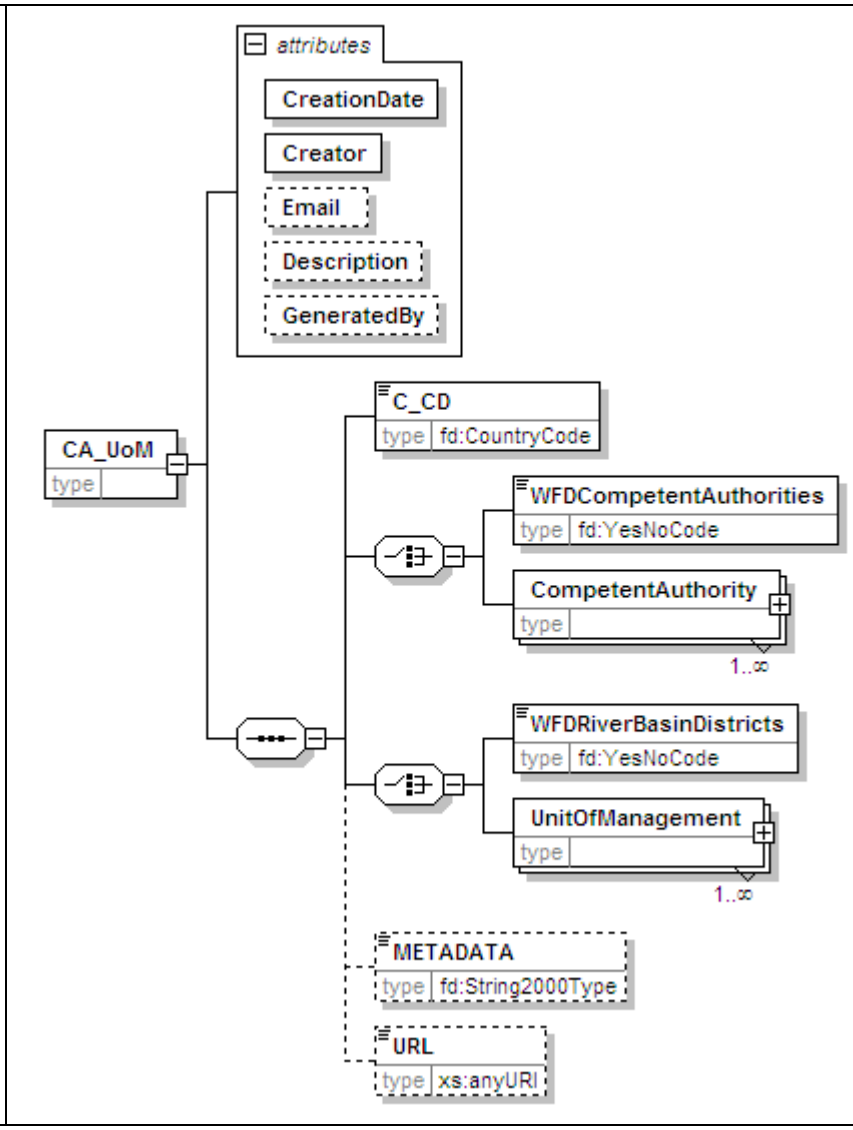
referred to in Annex I of the Water Framework Directive. Any changes in administrative arrangements also need to be communicated within three months of the change coming into effect.

The Floods Directive (Article 3.2) allows Member States to identify units of management different from the river basin districts used for the Water Framework Directive. Units of management may be individual river basins and/or certain coastal areas, and may be entirely within national borders or may be part of an international unit of management or international river basin district. The Floods Directive requires Member States to communicate to the Commission information on the identification of units of management by 26 May 2010.

	**Look Out!** According to the Directive, this information should only be provided if different competent authorities have been appointed and/or different units of management identified from those already reported for the Water Framework Directive. However, if the same competent authority is used for the Floods Directive as for the WFD, but the relevant information in relation to the responsibilities for the Floods Directive was not yet notified to the Commission, such information should now be notified in accordance with this reporting sheet.
	**Look Out!** Data should only be provided if other units of management have been identified for the Floods Directive or if Water Framework Directive RBDs are being used but information was missing from a Member State's submission to WISE or if any of the information has changed.

element **CA_UoM**

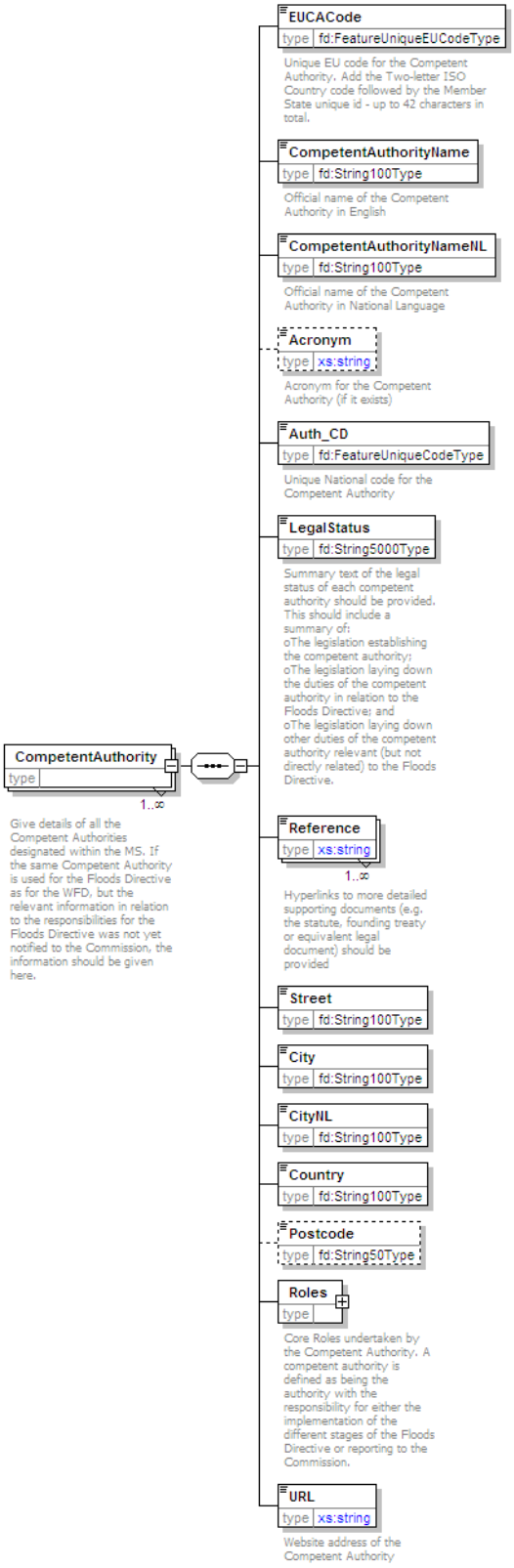
diagram



3.2.1 Competent Authority

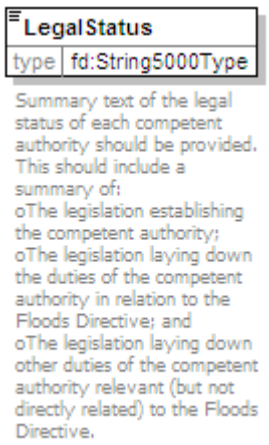
element **CA_UoM/CompetentAuthority**

diagram

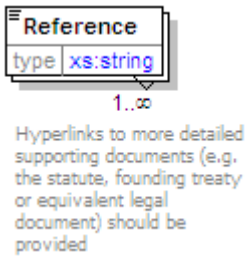


A competent authority may be associated with many RBDs or other units of management, and may have different address and contact details for each association. A general/main address and specific addresses for RBDs and other units of management should be provided if appropriate.

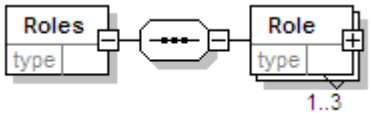
element **CA_UoM/CompetentAuthority/LegalStatus**

diagram	

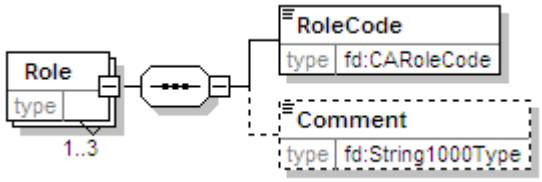
element **CA_UoM/CompetentAuthority/Reference**

diagram	

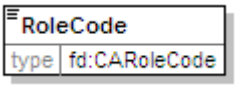
element **CA_UoM/CompetentAuthority/Roles**

diagram	
annotation	documentation Core Roles undertaken by the Competent Authority. A competent authority is defined as being the authority with the responsibility for either the implementation of the different stages of the Floods Directive or reporting to the Commission.

element **CA_UoM/CompetentAuthority/Roles/Role**

diagram	
annotation	documentation A Competent Authority can have a minimum of 1 and maximum of 3 roles under the Floods Directive

element **CA_UoM/CompetentAuthority/Roles/Role/RoleCode**

diagram	
facets	Kind Value annotation enumeration A enumeration B enumeration C
annotation	documentation Codes for the Role: A.Coordination, Preparation and Production of preliminary flood risk assessment, flood maps and flood risk management plans (FRMPs), including international coordination in transboundary Units of management; B.Reporting C.Other

Core responsibilities should be reported in terms of (more than one may apply to a competent authority):

A. Coordination, Preparation and Production and implementation of the different stages of the Floods Directive, including:

- Identification of RBDs/UoMs;
- The Preliminary Flood Risk Assessment, including the identification of areas of potential significant flood risk;
- Preparation of flood hazard and flood risk maps;
- Coordination with competent authorities appointed for the Water Framework Directive;

- Establishment of Flood Risk Management Plans in accordance with article 7 and the Annex;
- Coordination of plans and measures included therein, and coordination with authorities responsible for such measures, at relevant level (e.g. RBD/UoM), including international coordination in transboundary basins;
- Monitoring and evaluation of progress of the implementation of measures in FRMP;
- Public consultation; and,
- Other responsibilities to be defined.

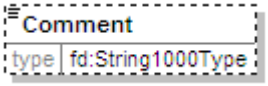
B. Reporting

- Public information and consultation;
- Reporting to Commission; and,
- Other responsibilities to be defined.

C Other

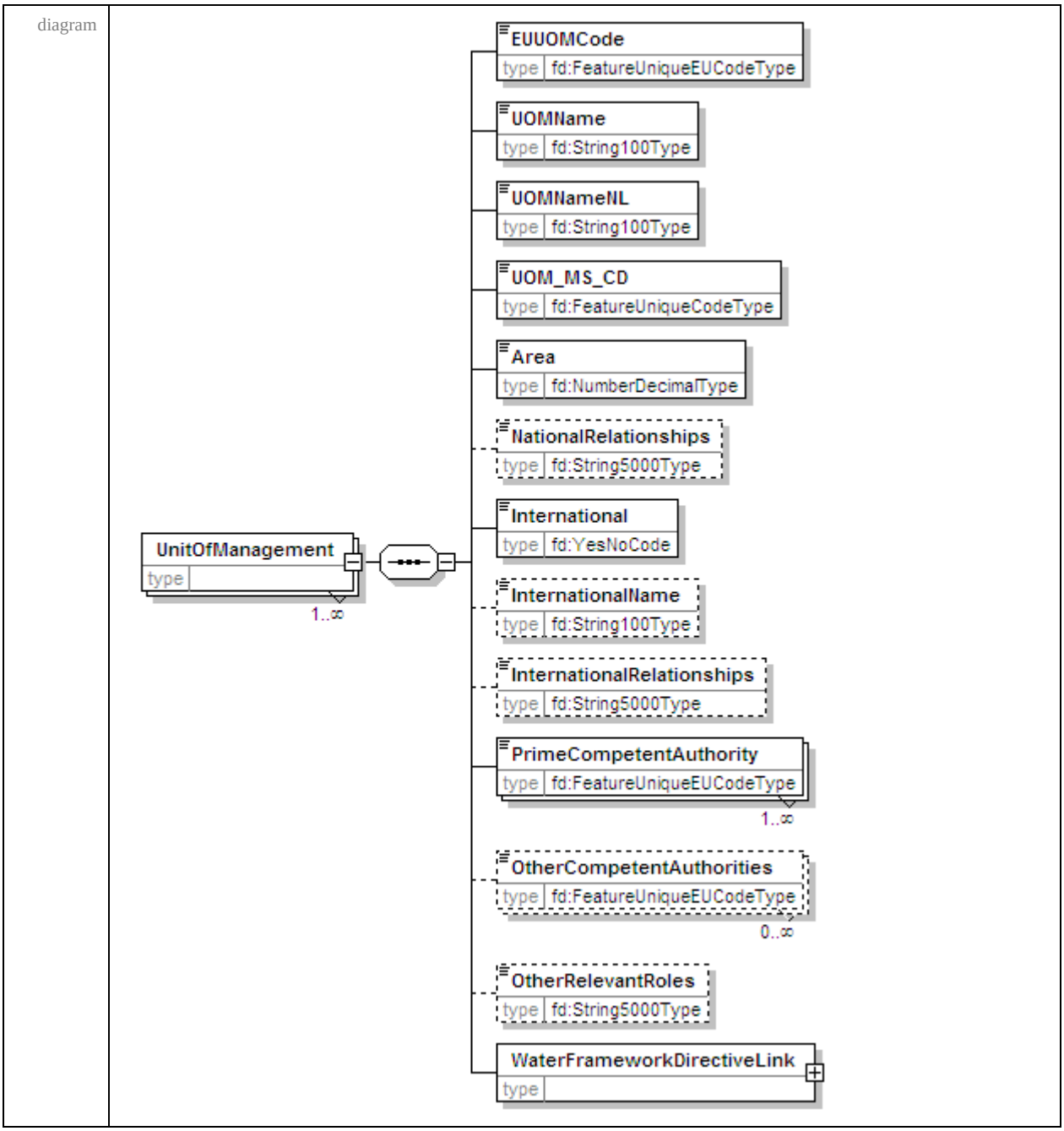
- Any other roles not covered above

element **CA_UoM/CompetentAuthority/Roles/Role/Comment**

diagram	
annotation	documentation Provide the details of the selected role

3.2.2 Unit of Management

element **CA_UoM/UnitOfManagement**

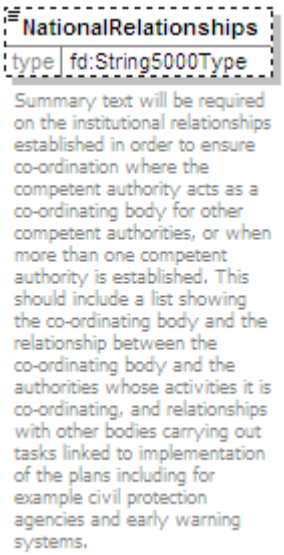


For the element UOMName, if there is no specific name of the UoM in English then use the national language (UOMNameNL) but always using Latin characters.

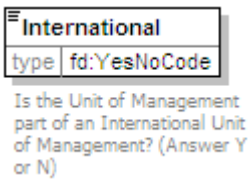
In most cases there will be only one PrimeCompetentAuthority in a UoM, which has a coordination role and the main responsibility over "Coordination, Preparation and Production of preliminary flood risk assessment, flood maps and flood risk management plans (FRMPs),

including international coordination in transboundary Units of management". Other relevant competent authorities can be added as appropriate using the optional element provided. More than one entry in the element PrimeCompetentAuthority is allowed in cases in which it is not possible to define clearly a prime competent authority because the existence of more than one competent authority of the same administrative level, with the same or similar levels of competence over water, covering for instance different geographical areas within the UoM or different water categories, without a clear coordination role attributed to any of them. It is up to the Member State to judge how best to report the situation in each particular UoM using the flexibility provided in the schema.

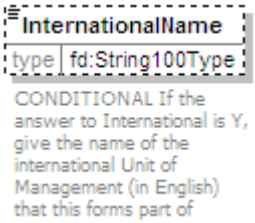
element **CA_UoM/UnitsOfManagement/NationalRelationships**

diagram	

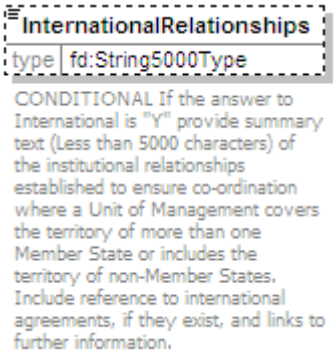
element **CA_UoM/UnitsOfManagement/International**

diagram	
facets	Kind Value enumeration Y enumeration N enumeration

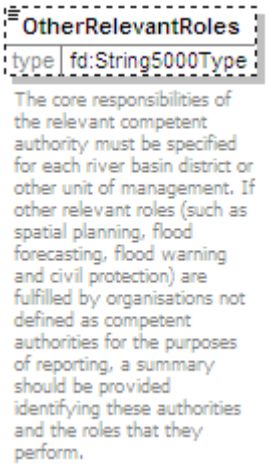
element **CA_UoM/UnitsOfManagement/InternationalName**

diagram	

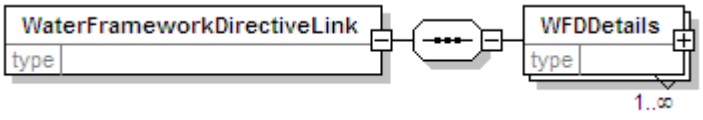
element **CA_UoM/UnitsOfManagement/InternationalRelationships**

diagram	

element **CA_UoM/UnitsOfManagement/OtherRelevantRoles**

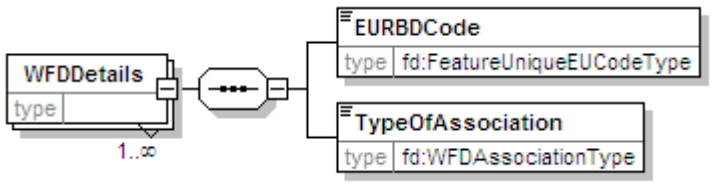
diagram	

element **CA_UoM/UnitOfManagement/WaterFrameworkDirectiveLink**

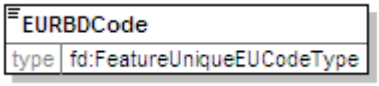
diagram	
annotation	documentation

	Where Units of Management have been defined the linkages to the relevant national River Basin Districts under the Water Framework Directive need to be described.

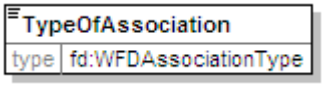
element **CA_UoM/UnitOfManagement/WaterFrameworkDirectiveLink/WFDDetails**

diagram	

element **CA_UoM/UnitOfManagement/WaterFrameworkDirectiveLink/WFDDetails/EURBDCode**

diagram	
annotation	documentation Unique EU code for the WFD River Basin District(s) this Unit Of Management is associated with

element **CA_UoM/UnitOfManagement/WaterFrameworkDirectiveLink/WFDDetails/TypeOfAssociation**

diagram	
facets	Kind Value annotation enumeration Within enumeration Overlapping (partly within)
annotation	documentation Describe the type of Associtation of the UoM to the RBD: - Within - Overlapping (partly within)

3.3 SCHEMA: PRELIMINARY FLOOD RISK ASSESSMENT AND IDENTIFICATION OF AREAS OF POTENTIAL SIGNIFICANT FLOOD RISK

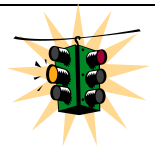
Schema **PFRA.xsd and APSFR.xsd**

These two schemas deals with the reporting requirements for the preliminary flood risk assessment and the identification of areas of potential significant flood risk. **In principle it is expected that there will be one file per UoM/RBD.**

Article 4 of the Floods Directive requires Member States to undertake a Preliminary Flood Risk Assessment (PFRA) for each river basin district, unit of management or the portion of an international river basin district or unit of management lying within their territory. The identification of areas potential significant flood risk (art. 5) will be based on **available or readily derivable** information including the requirements specified in the directive (art. 4).

Exchange of relevant information is required between the competent authorities of Member States sharing international RBDs or units of management (art 4.3) and identification of areas identified as being at potential significant flood risk shall be coordinated between the Member States concerned (art. 5.2).

The Commission will need to know how the assessment has been carried out (e.g. methodology, criteria applied) and what aspects and factors have been excluded in the PFRA and the reasons for their exclusion, in order to check the compliance with articles 4, 5 and 13.1(a). The Commission will also need to be notified, and be provided with the relevant information, when Member States apply article 13.1(b), that is to not carry out a PFRA, but proceed directly to the preparation of maps and plans. In particular in case of areas that are not designated as areas of potential significant flood risk (and therefore will be excluded from the further implementation of the Directive), the Commission will need to know if the various aspects and factors mentioned in article 4 were taken into account by the Member State, and if not, for what reason. At the core of the requirements of article 4 is to use information on past significant floods as the basis for identifying where floods may occur in the future. To avoid increasing the administrative costs in relation to reporting, but still gathering sufficient information to enable the Commission to check compliance with the preliminary flood risk assessment, basic information and geographic location, which either can be identified providing spatial data of the area or if no spatial data available a name of locality where past floods have occurred, should be provided. More detailed information should however be provided for floods that occur in the future during subsequent implementation cycles, and which will be considered as past floods for the review of those cycles.

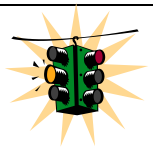
	**Look Out!**
	It is recognised that not all of the data requested in this reporting sheet will be available for reporting for significant floods that have occurred prior to 22 December 2011. However, having recognised this, it is expected that the data set out will be collected, and hence reported, by Member States for significant flood events that occur after 22 December 2011.

It is also recognised that other approaches may be used for identifying Areas of Potential Significant Flood Risk (APSFR), such as predictive modelling. The reporting sheet gives a possibility to explain the different approaches and methodologies applied.

Article 5 requires that the PFRA shall be used as the basis for the identification of areas for which Member States conclude that potential significant flood risk (APSFR) exist or might be considered likely to occur in the future for each river basin district, unit of management or the portion of an international river basin district or unit of management lying within a Member State's territory. Coordination is required between MSs sharing PSFR areas within international RBDs or other international units of management.

The PFRA must be completed by 22 December 2011 and made available to the Commission by 22 March 2012. The PFRA will be used by Member States as the basis for identifying areas where potential significant flood risks might exist, or might be considered likely to occur. The Directive does not specify when the requirements of Art. 5 must be completed, however, the identification must be completed soon after 22 December 2011, and in sufficient time to allow Member States to prepare flood maps by 2013.

Member States may apply article 13.1 (transitional arrangements) in the 1st implementation cycle, and either report on a PFRA carried out before 22 December 2010 (Art. 13.1(a)) or proceed directly to mapping and establishment of flood risk management plans (Art. 13.1(b)). If article 13.1(a) is applied, the result will include the identification of APSFR, but the information provided for the basis of such assessment may differ. This will be taken into account in each reporting stage, and when detailed reporting formats are developed. It is recognised that if article 13.1(b) is applied, APSFR will not be identified, instead maps at the appropriate scale according to article 6 will be prepared, showing where significant flood risk exists in these areas. To ensure transparency for the Commission, as well as the public and other actors, this reporting sheet asks Member States to report which provision has been used in different parts of their territory, the option used will be made transparent in map format to be visualised together with the map of APSFR



Look Out!

Member States may designate relatively large areas of potential significant flood risk (APSFR), compared to the areas that actually might be flooded. Flood risk management (the subject of Article 7) usually requires consideration of much larger areas than the areas that may actually be flooded. The identification of floodable areas is not due under Article 4, but under Article 6 of the Directive, through the production of the flood hazard and flood risk maps for all areas of PSFR.

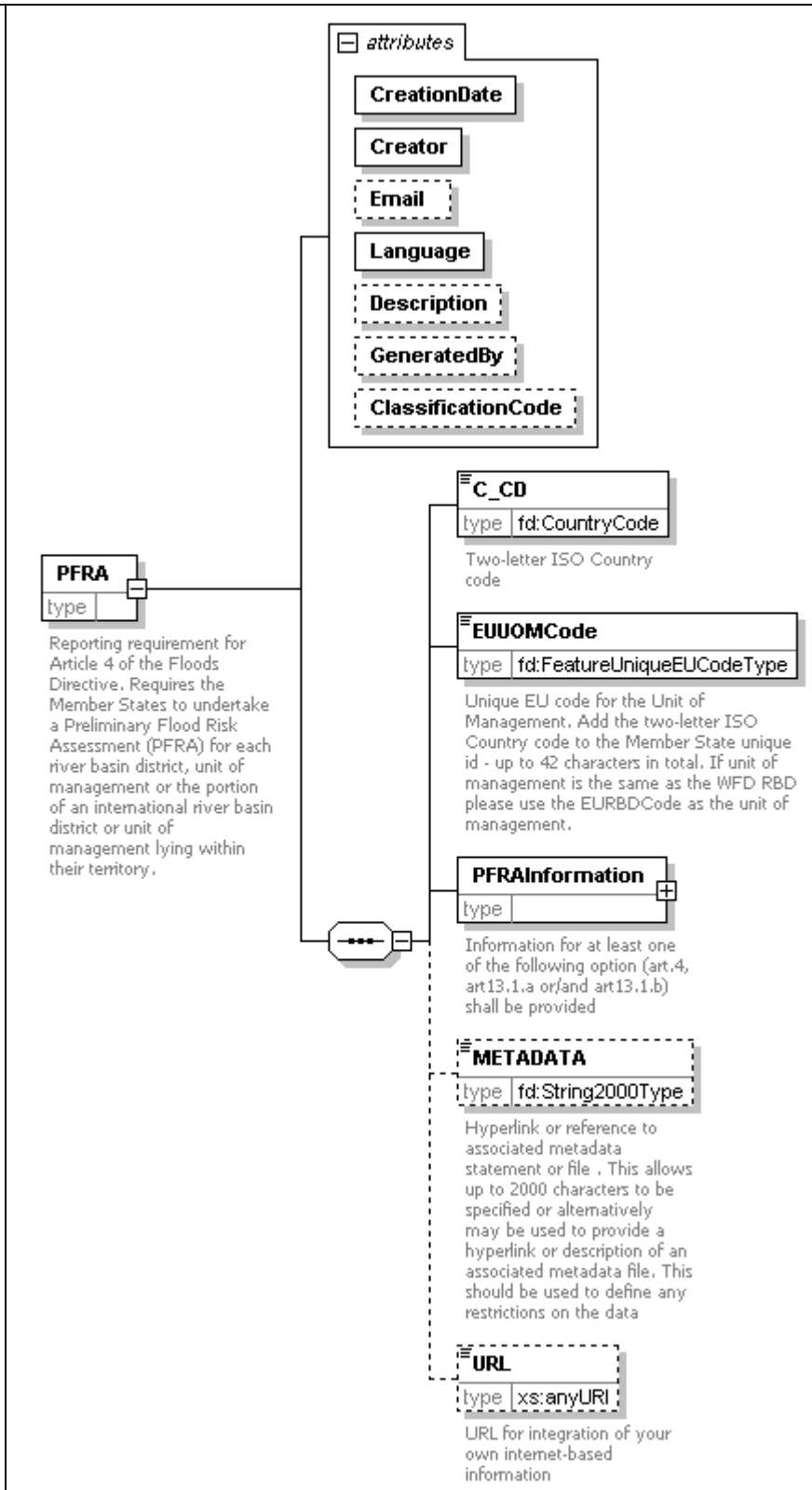
Thus, MSs may for instance choose to designate an area of PSFR as "river basin X except for the sub-basins of the tributaries P, Q and R" (where P, Q and R are tributaries for which no significant adverse impacts are anticipated, as demonstrated through application of the PFRA as set out in Articles 4 and 5).

Schema **PFRA_3p0.xsd**

Elements	Complex types
PFRA	**FloodLocationsType**
	TypeofFloodType
	TypeofPotentialConsequencesType

element **PFRA**

diagram



attributes

Name	Type	Use	Default	Fixed	annotation
CreationDate	**xs:string**	required			
Creator	**xs:string**	required			

	Email	**xs:string**	
	Language	**LanguageCode**	required
	Description	**xs:string**	
	GeneratedBy	**xs:string**	
	ClassificationCode	**DataConfidentialityClassificationCode**	
annotation	documentation Reporting requirement for Article 4 of the Floods Directive. Requires the Member States to undertake a Preliminary Flood Risk Assessment (PFRA) for each river basin district, unit of management or the portion of an international river basin district or unit of management lying within their territory.		

attribute **PFRA/@CreationDate**

attribute **PFRA/@Creator**

attribute **PFRA/@Email**

attribute **PFRA/@Language**

facets	Kind	Value	annotation
	enumeration	bg	
	enumeration	es	
	enumeration	cs	
	enumeration	da	
	enumeration	de	
	enumeration	et	
	enumeration	el	
	enumeration	en	
	enumeration	fr	
	enumeration	ga	
	enumeration	hr	
	enumeration	ic	
	enumeration	it	
	enumeration	lv	
	enumeration	lt	
	enumeration	hu	
	enumeration	mt	
	enumeration	nl	
	enumeration	no	
	enumeration	pl	
	enumeration	pt	
	enumeration	ro	
	enumeration	sk	
	enumeration	sl	
	enumeration	sr	
	enumeration	tr	
	enumeration	fi	
	enumeration	sv	

attribute **PFRA/@Description**

attribute **PFRA/@GeneratedBy**

attribute **PFRA/@ClassificationCode**

facets	Kind	Value	annotation
	enumeration	001	
	enumeration	003	

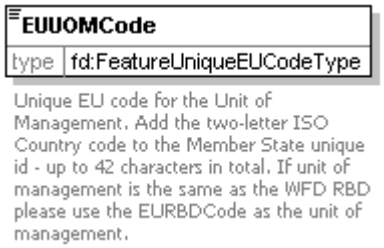
element **PFRA/C_CD**

diagram	

facets	Kind	Value	annotation
	enumeration	AT	
	enumeration	BE	
	enumeration	BG	
	enumeration	CH	
	enumeration	CZ	
	enumeration	CY	
	enumeration	DE	
	enumeration	DK	
	enumeration	EE	
	enumeration	EL	
	enumeration	ES	
	enumeration	FI	
	enumeration	FR	
	enumeration	HR	
	enumeration	HU	
	enumeration	IE	
	enumeration	IS	
	enumeration	IT	
	enumeration	LT	
	enumeration	LU	
	enumeration	LV	
	enumeration	MT	
	enumeration	NO	
	enumeration	NL	
	enumeration	PL	
	enumeration	PT	
	enumeration	RO	
	enumeration	SE	

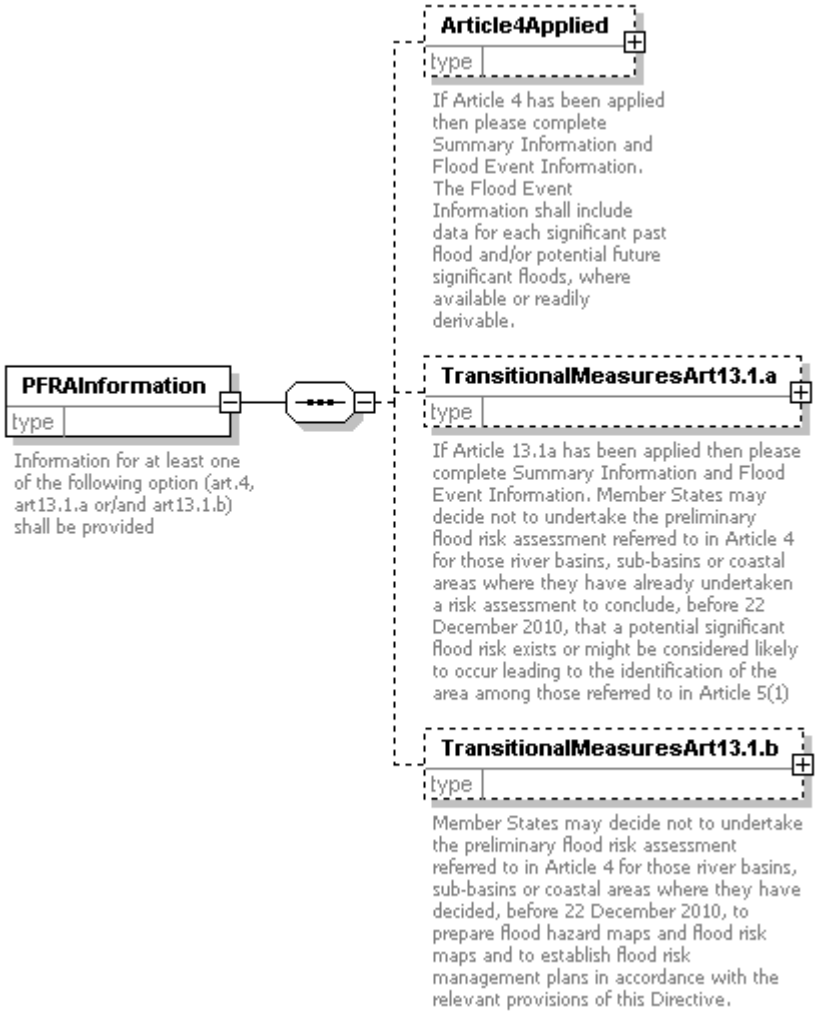
	enumeration SI enumeration SK enumeration TR enumeration UK
annotation	documentation Two-letter ISO Country code

element **PFRA/EUUOMCode**

diagram	
annotation	documentation Unique EU code for the Unit of Management. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total. If unit of management is the same as the WFD RBD please use the EURBDCode as the unit of management.

element **PFRA/PFRAInformation**

diagram

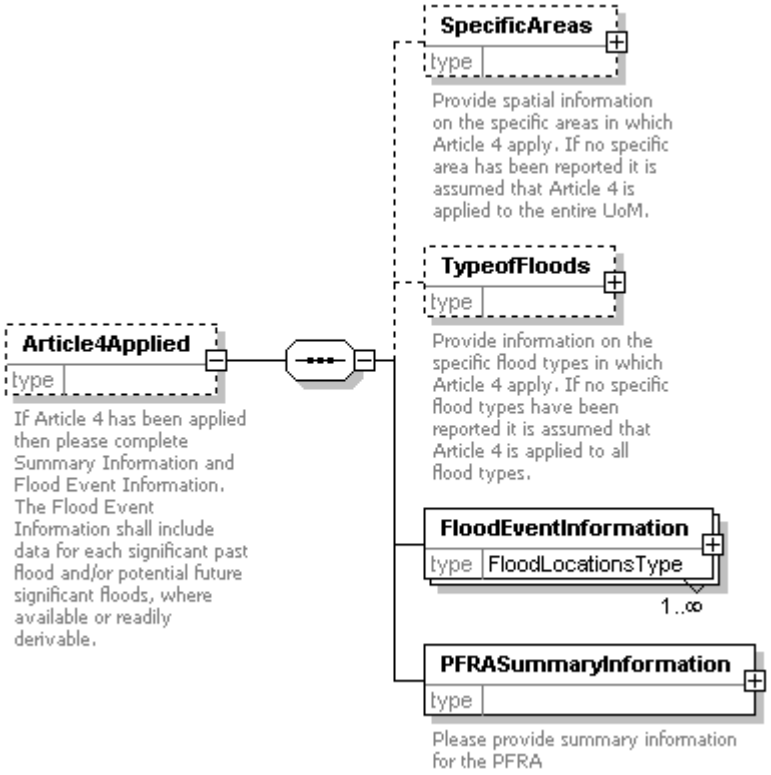


annotation

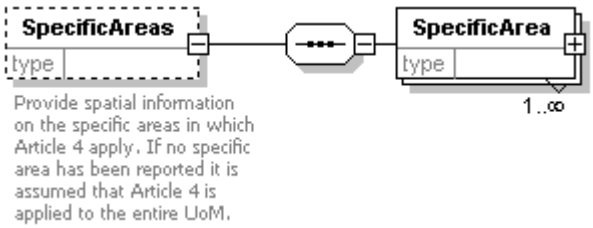
documentation

Information for at least one of the following option (art.4, art13.1.a or/and art13.1.b) shall be provided

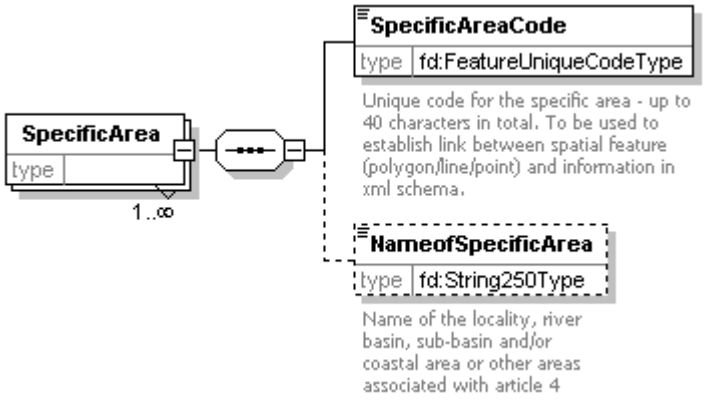
element **PFRA/PFRAInformation/Article4Applied**

diagram	
annotation	documentation If Article 4 has been applied then please complete Summary Information and Flood Event Information. The Flood Event Information shall include data for each significant past flood and/or potential future significant floods, where available or readily derivable.

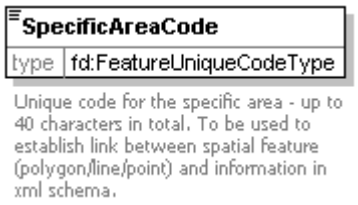
element **PFRA/PFRAInformation/Article4Applied/SpecificAreas**

diagram	
annotation	documentation Provide spatial information on the specific areas in which Article 4 apply. If no specific area has been reported it is assumed that Article 4 is applied to the entire UoM.

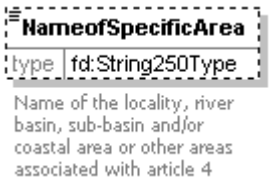
element **PFRA/PFRAInformation/Article4Applied/SpecificAreas/SpecificArea**

diagram	

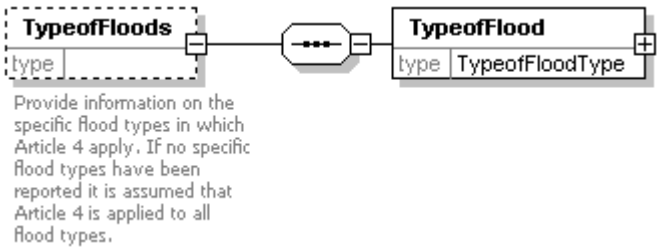
element **PFRA/PFRAInformation/Article4Applied/SpecificAreas/SpecificArea/SpecificAreaCode**

diagram	
annotation	documentation Unique code for the specific area - up to 40 characters in total. To be used to establish link between spatial feature (polygon/line/point) and information in xml schema.

element **PFRA/PFRAInformation/Article4Applied/SpecificAreas/SpecificArea/NameofSpecificArea**

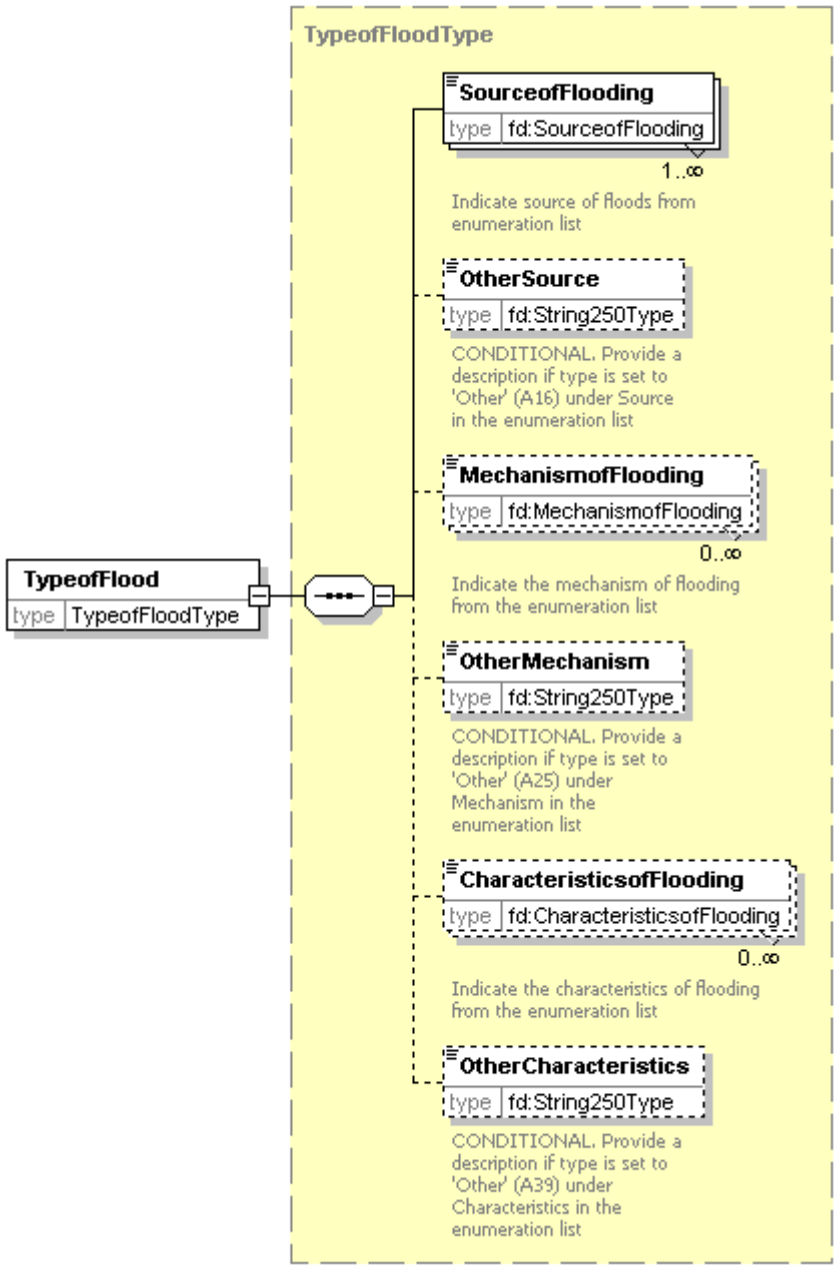
diagram	
annotation	documentation Name of the locality, river basin, sub-basin and/or coastal area or other areas associated with article 4

element **PFRA/PFRAInformation/Article4Applied/TypeofFloods**

diagram	
annotation	documentation Provide information on the specific flood types in which Article 4 apply. If no specific flood types have been reported it is assumed that Article 4 is applied to all flood types.

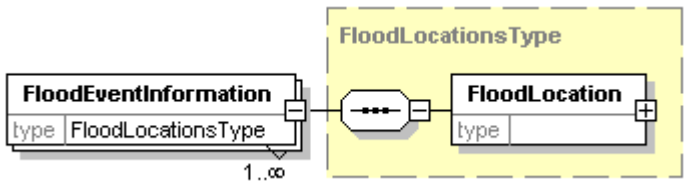
element **PFRA/PFRAInformation/Article4Applied/TypeofFloods/TypeofFlood**

diagram



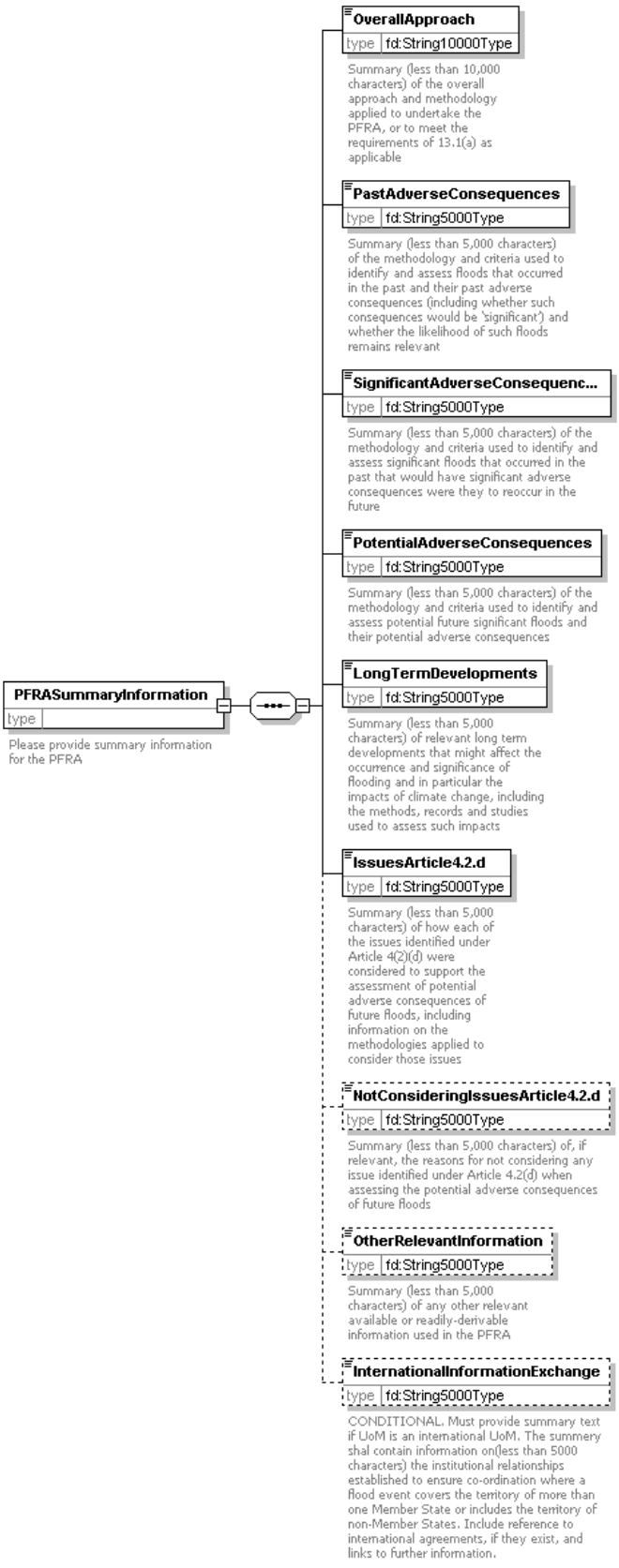
element **PFRA/PFRAInformation/Article4Applied/FloodEventInformation**

diagram



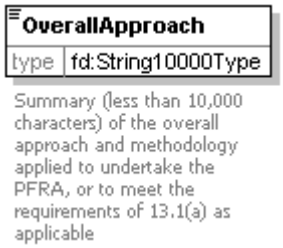
element **PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation**

diagram

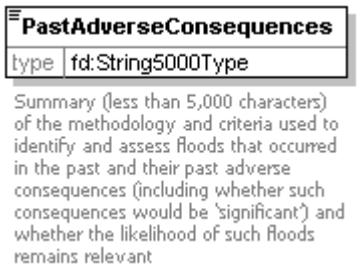


annotation	documentation Please provide summary information for the PFRA

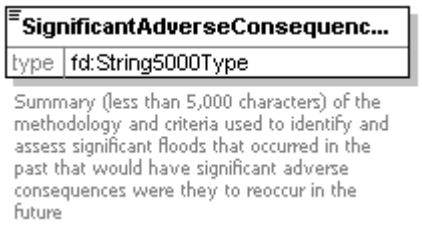
element **PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/OverallApproach**

diagram	
annotation	documentation Summary (less than 10,000 characters) of the overall approach and methodology applied to undertake the PFRA, or to meet the requirements of 13.1(a) as applicable

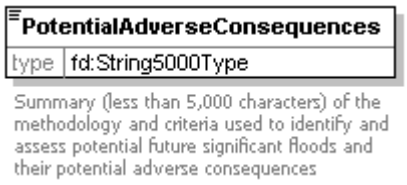
element **PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/PastAdverseConsequences**

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess floods that occurred in the past and their past adverse consequences (including whether such consequences would be 'significant') and whether the likelihood of such floods remains relevant

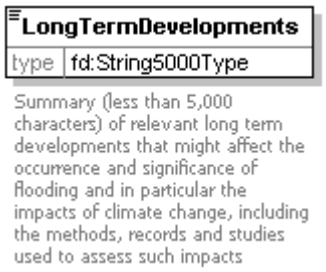
element **PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/SignificantAdverseConsequences**

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess significant floods that occurred in the past that would have significant adverse consequences were they to reoccur in the future

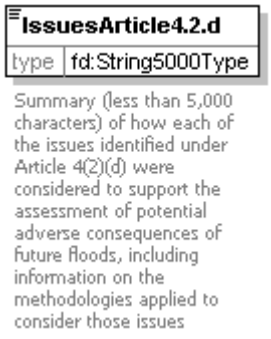
element
PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/PotentialAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess potential future significant floods and their potential adverse consequences

element
PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/LongTermDevelopments

diagram	
annotation	documentation Summary (less than 5,000 characters) of relevant long term developments that might affect the occurrence and significance of flooding and in particular the impacts of climate change, including the methods, records and studies used to assess such impacts

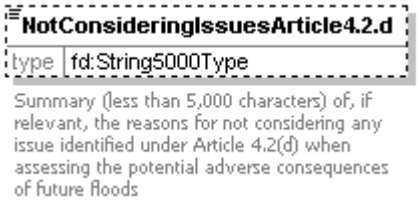
element **PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/IssuesArticle4.2.d**

diagram	
annotation	documentation Summary (less than 5,000 characters) of how each of the issues identified under Article 4(2)(d) were considered to support the assessment of potential adverse consequences of future floods, including information on the methodologies applied to consider those issues

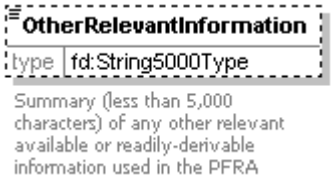
Article 4.2 (d) of the Floods Directive requires that the impacts of climate change and long-term developments on the occurrence of floods should be considered in the Preliminary Flood Risk Assessment, depending on the specific needs of the Member States. Early consideration of climate change and long-term developments will ensure that areas identified as being at significant flood risk, and hence where flood maps and flood management plans are focused, reflects future flood risk resulting from climate change or other long-term developments.

The Floods Directive (Article 4.2) also identifies a range of specific other issues that should be taken into account in undertaking the Preliminary Flood Risk Assessment. This does not preclude the use of any further other relevant available or readily derivable information by MSs.

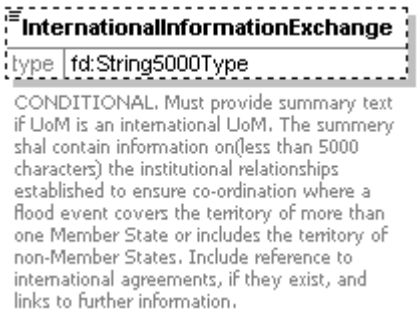
element
PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/NotConsideringIssuesArticle4.2.d

diagram	
annotation	documentation Summary (less than 5,000 characters) of, if relevant, the reasons for not considering any issue identified under Article 4.2(d) when assessing the potential adverse consequences of future floods

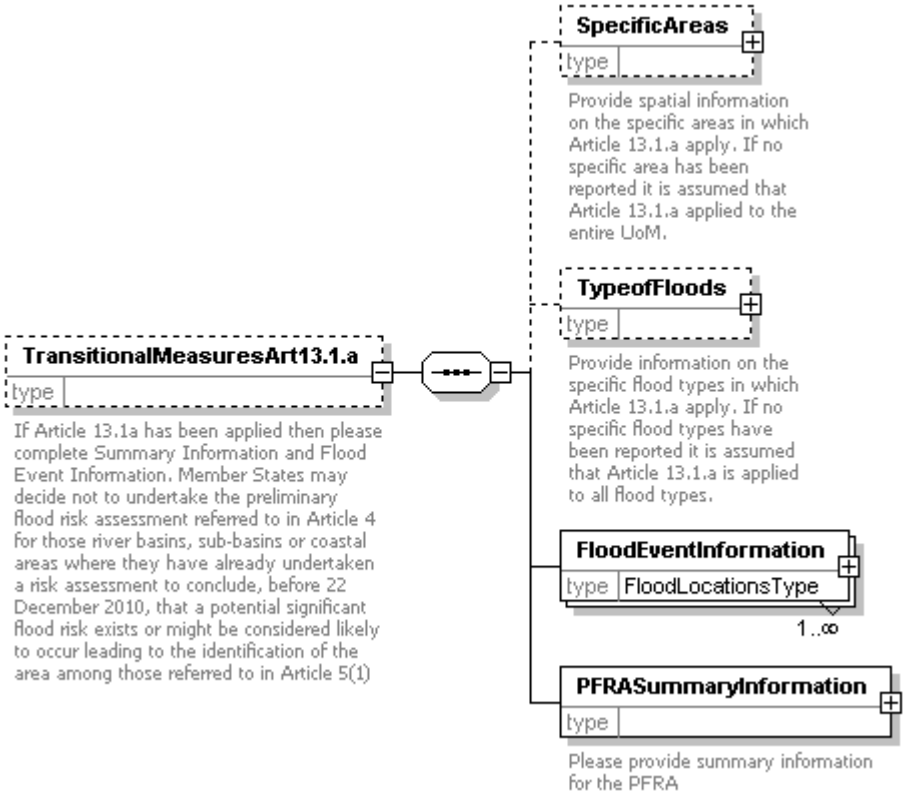
element
PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/OtherRelevantInformation

diagram	
annotation	documentation Summary (less than 5,000 characters) of any other relevant available or readily-derivable information used in the PFRA

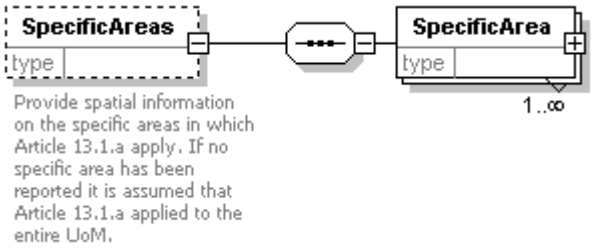
element
PFRA/PFRAInformation/Article4Applied/PFRASummaryInformation/InternationalInformationExchange

diagram	
annotation	documentation CONDITIONAL. Must provide summary text if UoM is an international UoM. The summery shal contain information on(less than 5000 characters) the institutional relationships established to ensure co-ordination where a flood event covers the territory of more than one Member State or includes the territory of non-Member States. Include reference to international agreements, if they exist, and links to further information.

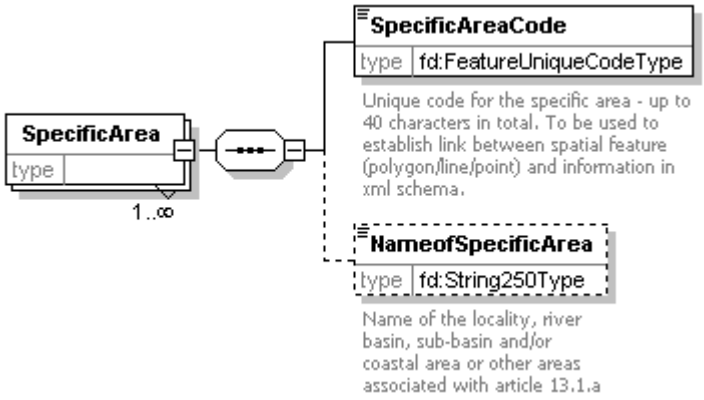
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a**

diagram	
annotation	documentation If Article 13.1a has been applied then please complete Summary Information and Flood Event Information. Member States may decide not to undertake the preliminary flood risk assessment referred to in Article 4 for those river basins, sub-basins or coastal areas where they have already undertaken a risk assessment to conclude, before 22 December 2010, that a potential significant flood risk exists or might be considered likely to occur leading to the identification of the area among those referred to in Article 5(1)

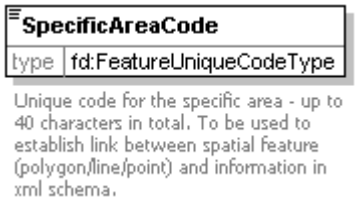
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/SpecificAreas**

diagram	
annotation	documentation Provide spatial information on the specific areas in which Article 13.1.a apply. If no specific area has been reported it is assumed that Article 13.1.a applied to the entire UoM.

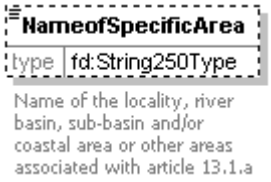
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/SpecificAreas/SpecificArea**

diagram	

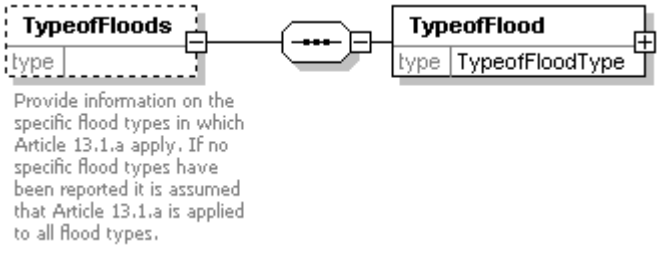
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/SpecificAreas/SpecificArea/SpecificAreaCode**

diagram	
annotation	documentation Unique code for the specific area - up to 40 characters in total. To be used to establish link between spatial feature (polygon/line/point) and information in xml schema.

element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/SpecificAreas/SpecificArea/NameofSpecificArea**

diagram	
annotation	documentation Name of the locality, river basin, sub-basin and/or coastal area or other areas associated with article 13.1.a

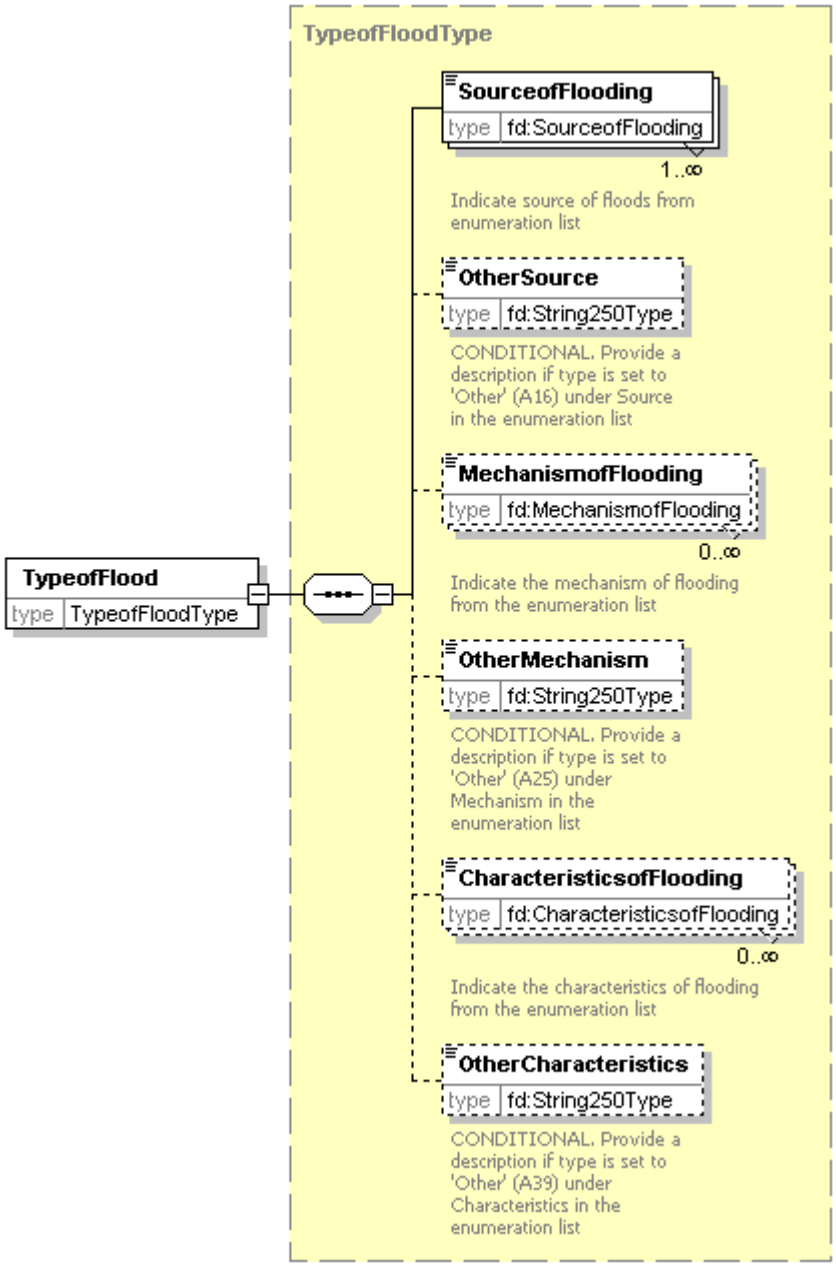
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/TypeofFloods**

diagram	

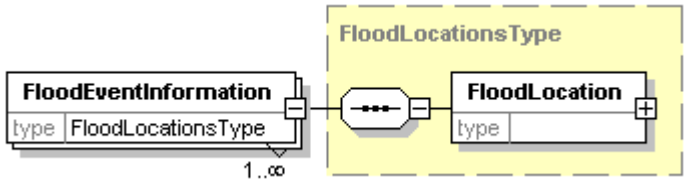
annotation	documentation Provide information on the specific flood types in which Article 13.1.a apply. If no specific flood types have been reported it is assumed that Article 13.1.a is applied to all flood types.

element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/TypeofFloods/TypeofFlood**

diagram

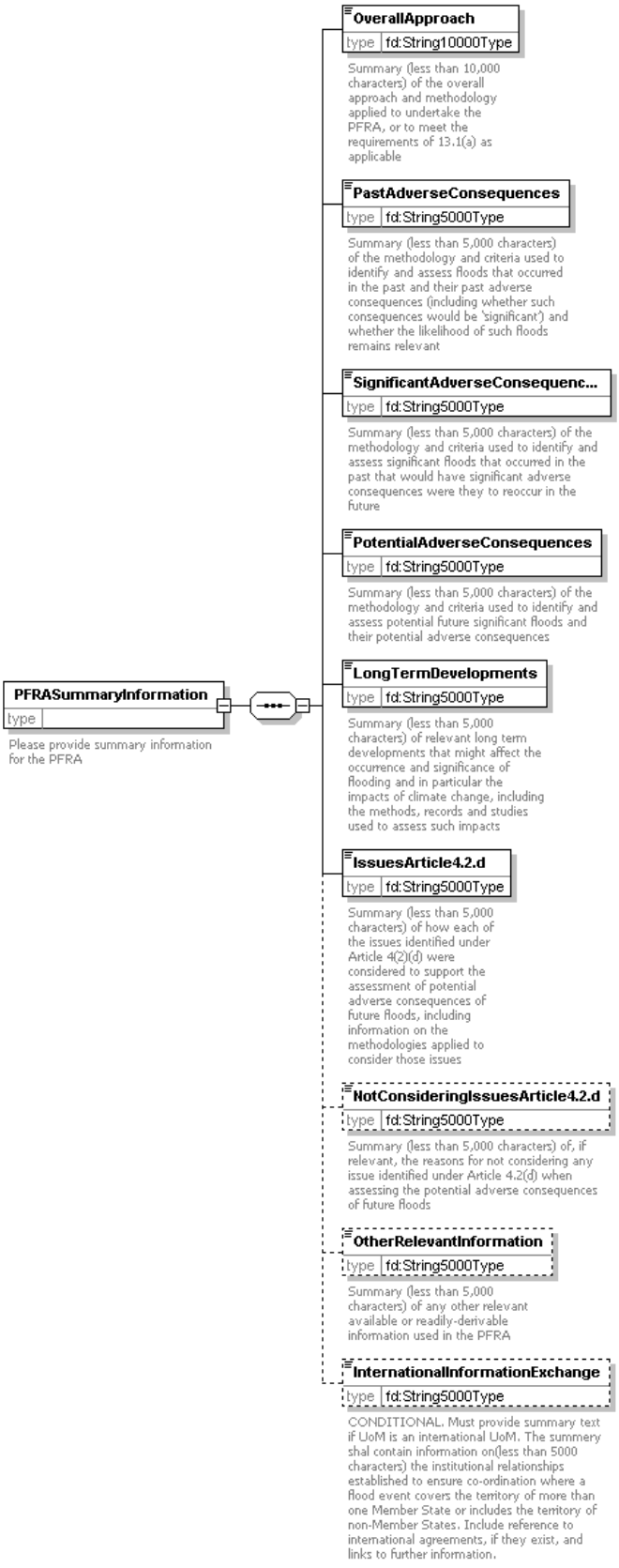


element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/FloodEventInformation**

diagram	

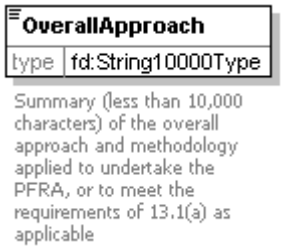
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation**

diagram

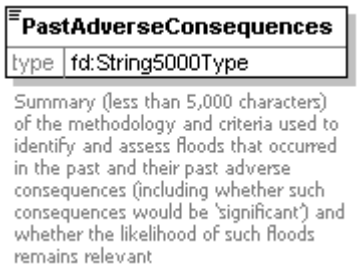


annotation	documentation Please provide summary information for the PFRA

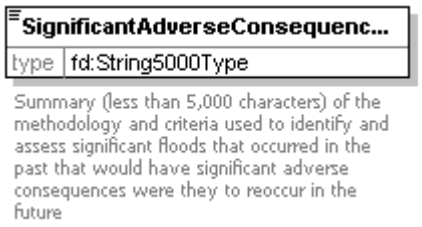
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/OverallApproach

diagram	
annotation	documentation Summary (less than 10,000 characters) of the overall approach and methodology applied to undertake the PFRA, or to meet the requirements of 13.1(a) as applicable

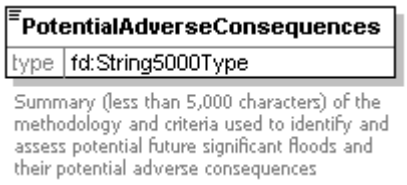
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/PastAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess floods that occurred in the past and their past adverse consequences (including whether such consequences would be 'significant') and whether the likelihood of such floods remains relevant

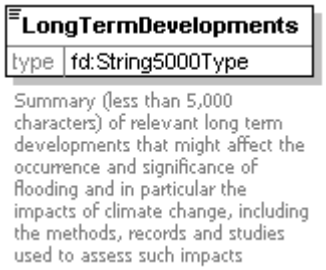
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/SignificantAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess significant floods that occurred in the past that would have significant adverse consequences were they to reoccur in the future

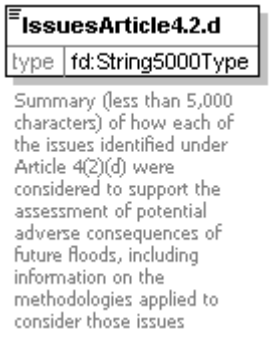
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/PotentialAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess potential future significant floods and their potential adverse consequences

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/LongTermDevelopments

diagram	
annotation	documentation Summary (less than 5,000 characters) of relevant long term developments that might affect the occurrence and significance of flooding and in particular the impacts of climate change, including the methods, records and studies used to assess such impacts

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/IssuesArticle4.2.d

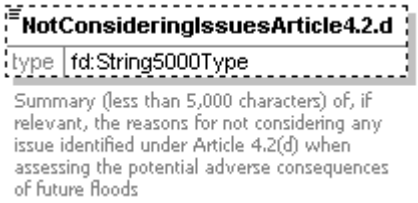
diagram	
annotation	documentation Summary (less than 5,000 characters) of how each of the issues identified under Article 4(2)(d) were considered to support the assessment of potential adverse consequences of future floods, including information on the methodologies applied to consider those issues

Article 4.2 (d) of the Floods Directive requires that the impacts of climate change and long-term developments on the occurrence of floods should be considered in the Preliminary Flood Risk Assessment, depending on the specific needs of the Member States. Early consideration of climate change and long-term developments will ensure that areas identified as being at

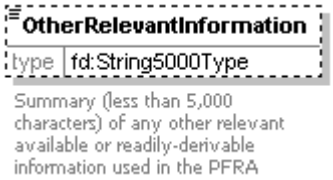
significant flood risk, and hence where flood maps and flood management plans are focused, reflects future flood risk resulting from climate change or other long-term developments.

The Floods Directive (Article 4.2) also identifies a range of specific other issues that should be taken into account in undertaking the Preliminary Flood Risk Assessment. This does not preclude the use of any further other relevant available or readily derivable information by MSs.

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/NotConsideringIssuesArticle4.2.d

diagram	
annotation	documentation Summary (less than 5,000 characters) of, if relevant, the reasons for not considering any issue identified under Article 4.2(d) when assessing the potential adverse consequences of future floods

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/OtherRelevantInformation

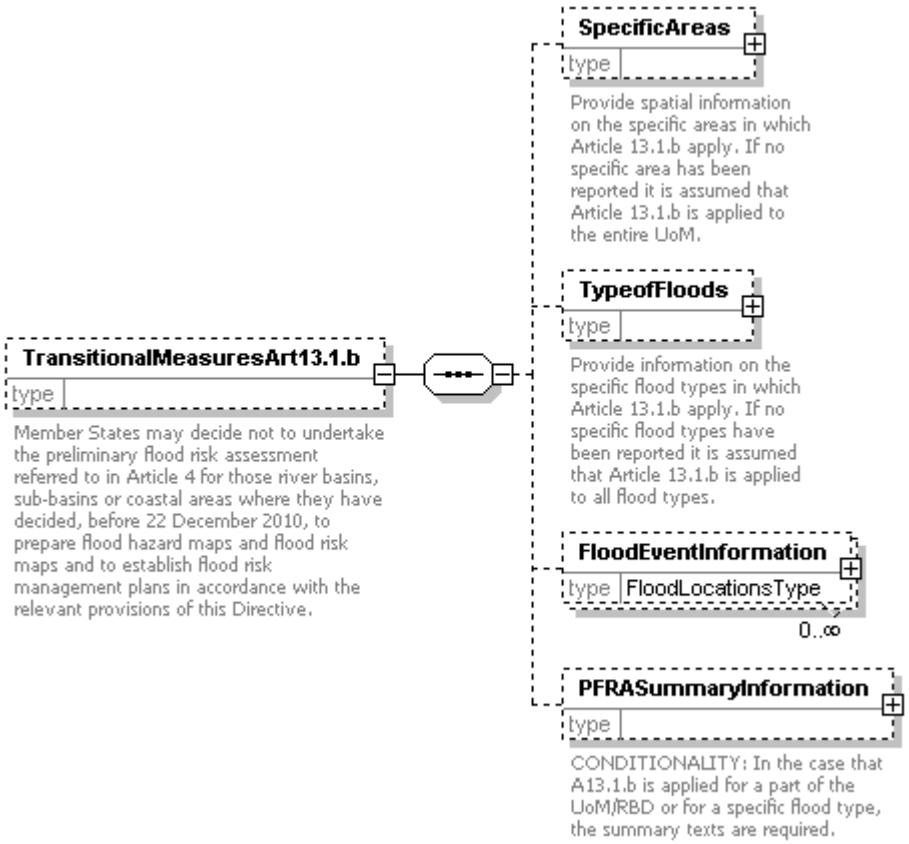
diagram	
annotation	documentation Summary (less than 5,000 characters) of any other relevant available or readily-derivable information used in the PFRA

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.a/PFRASummaryInformation/InternationalInformationExchange

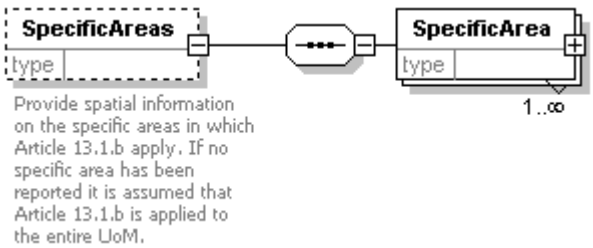
diagram	
annotation	documentation CONDITIONAL. Must provide summary text if UoM is an international UoM. The summery shal contain information on(less than 5000 characters) the institutional relationships established to ensure co-ordination

	where a flood event covers the territory of more than one Member State or includes the territory of non-Member States. Include reference to international agreements, if they exist, and links to further information.

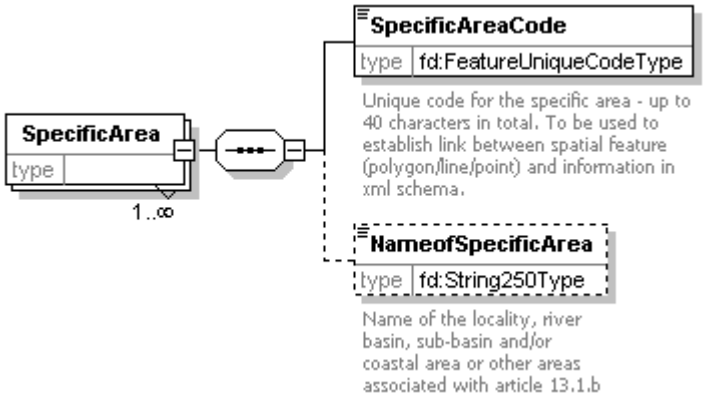
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b**

diagram	
annotation	documentation Member States may decide not to undertake the preliminary flood risk assessment referred to in Article 4 for those river basins, sub-basins or coastal areas where they have decided, before 22 December 2010, to prepare flood hazard maps and flood risk maps and to establish flood risk management plans in accordance with the relevant provisions of this Directive.

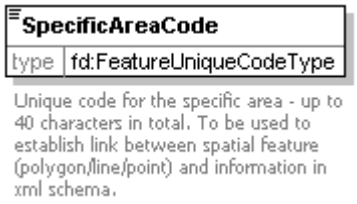
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/SpecificAreas**

diagram	
annotation	documentation Provide spatial information on the specific areas in which Article 13.1.b apply. If no specific area has been reported it is assumed that Article 13.1.b is applied to the entire UoM.

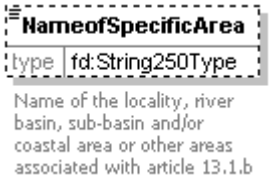
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/SpecificAreas/SpecificArea**

diagram	

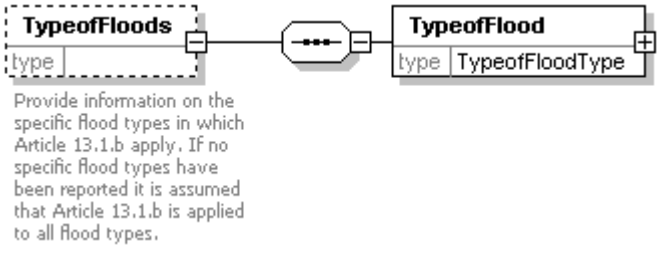
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/SpecificAreas/SpecificArea/SpecificAreaCode**

diagram	
annotation	documentation Unique code for the specific area - up to 40 characters in total. To be used to establish link between spatial feature (polygon/line/point) and information in xml schema.

element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/SpecificAreas/SpecificArea/NameofSpecificArea**

diagram	
annotation	documentation Name of the locality, river basin, sub-basin and/or coastal area or other areas associated with article 13.1.b

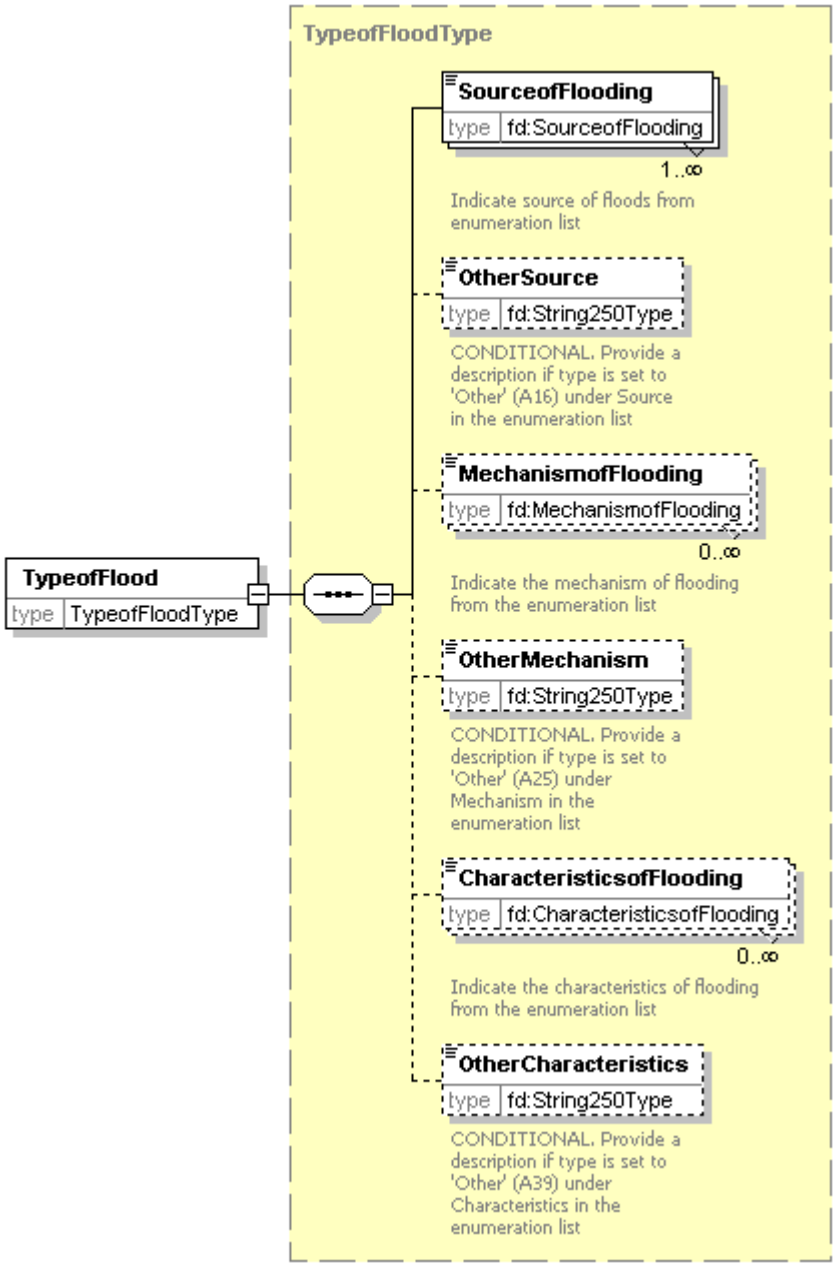
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/TypeofFloods**

diagram	

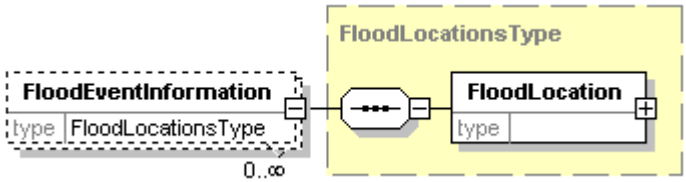
annotation	documentation Provide information on the specific flood types in which Article 13.1.b apply. If no specific flood types have been reported it is assumed that Article 13.1.b is applied to all flood types.

element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/TypeofFloods/TypeofFlood**

diagram

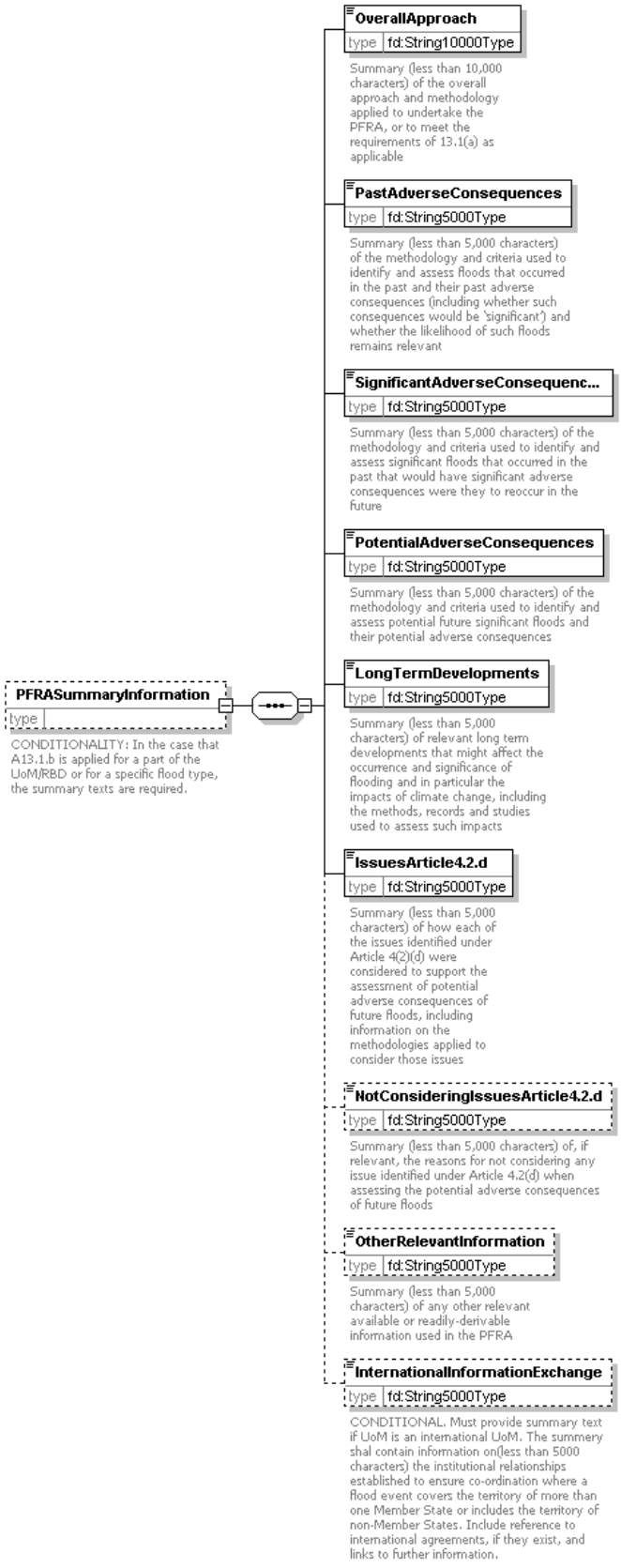


element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/FloodEventInformation**

diagram	

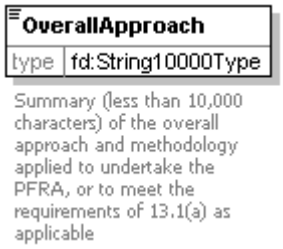
element **PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation**

diagram

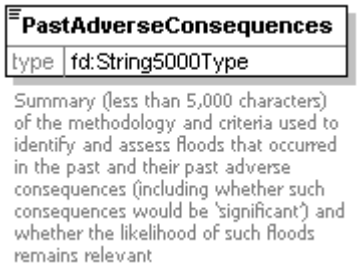


annotation	documentation CONDITIONALITY: In the case that A13.1.b is applied for a part of the UoM/RBD or for a specific flood type, the summary texts are required.

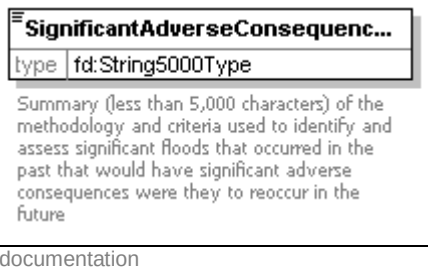
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/OverallApproach

diagram	
annotation	documentation Summary (less than 10,000 characters) of the overall approach and methodology applied to undertake the PFRA, or to meet the requirements of 13.1(a) as applicable

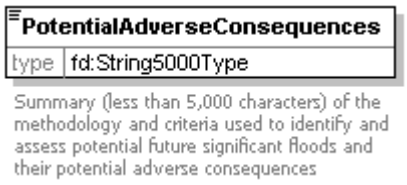
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/PastAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess floods that occurred in the past and their past adverse consequences (including whether such consequences would be 'significant') and whether the likelihood of such floods remains relevant

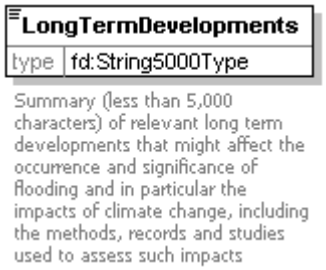
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/SignificantAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess significant floods that occurred in the past that would have significant adverse consequences were they to reoccur in the future

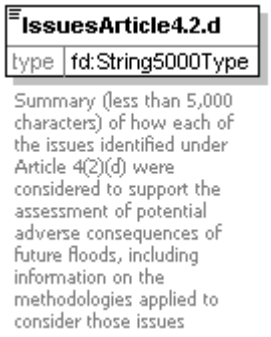
element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/PotentialAdverseConsequences

diagram	
annotation	documentation Summary (less than 5,000 characters) of the methodology and criteria used to identify and assess potential future significant floods and their potential adverse consequences

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/LongTermDevelopments

diagram	
annotation	documentation Summary (less than 5,000 characters) of relevant long term developments that might affect the occurrence and significance of flooding and in particular the impacts of climate change, including the methods, records and studies used to assess such impacts

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/IssuesArticle4.2.d

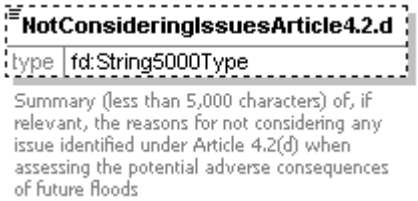
diagram	
annotation	documentation Summary (less than 5,000 characters) of how each of the issues identified under Article 4(2)(d) were considered to support the assessment of potential adverse consequences of future floods, including information on the methodologies applied to consider those issues

Article 4.2 (d) of the Floods Directive requires that the impacts of climate change and long-term developments on the occurrence of floods should be considered in the Preliminary Flood Risk Assessment, depending on the specific needs of the Member States. Early consideration of climate change and long-term developments will ensure that areas identified as being at

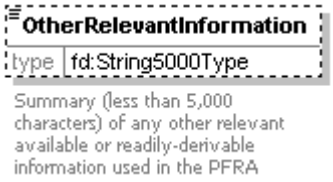
significant flood risk, and hence where flood maps and flood management plans are focused, reflects future flood risk resulting from climate change or other long-term developments.

The Floods Directive (Article 4.2) also identifies a range of specific other issues that should be taken into account in undertaking the Preliminary Flood Risk Assessment. This does not preclude the use of any further other relevant available or readily derivable information by MSs.

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/NotConsideringIssuesArticle4.2.d

diagram	
annotation	documentation Summary (less than 5,000 characters) of, if relevant, the reasons for not considering any issue identified under Article 4.2(d) when assessing the potential adverse consequences of future floods

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/OtherRelevantInformation

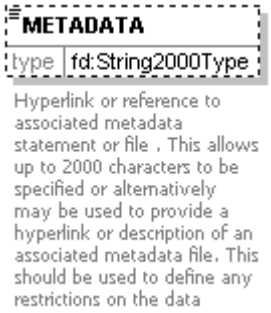
diagram	
annotation	documentation Summary (less than 5,000 characters) of any other relevant available or readily-derivable information used in the PFRA

element
PFRA/PFRAInformation/TransitionalMeasuresArt13.1.b/PFRASummaryInformation/InternationalInformationExchange

diagram	
annotation	documentation CONDITIONAL. Must provide summary text if UoM is an international UoM. The summery shal contain information on(less than 5000 characters) the institutional relationships established to ensure co-ordination

	where a flood event covers the territory of more than one Member State or includes the territory of non-Member States. Include reference to international agreements, if they exist, and links to further information.

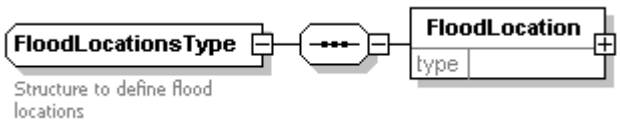
element **PFRA/METADATA**

diagram	
annotation	documentation Hyperlink or reference to associated metadata statement or file . This allows up to 2000 characters to be specified or alternatively may be used to provide a hyperlink or description of an associated metadata file. This should be used to define any restrictions on the data

element **PFRA/URL**

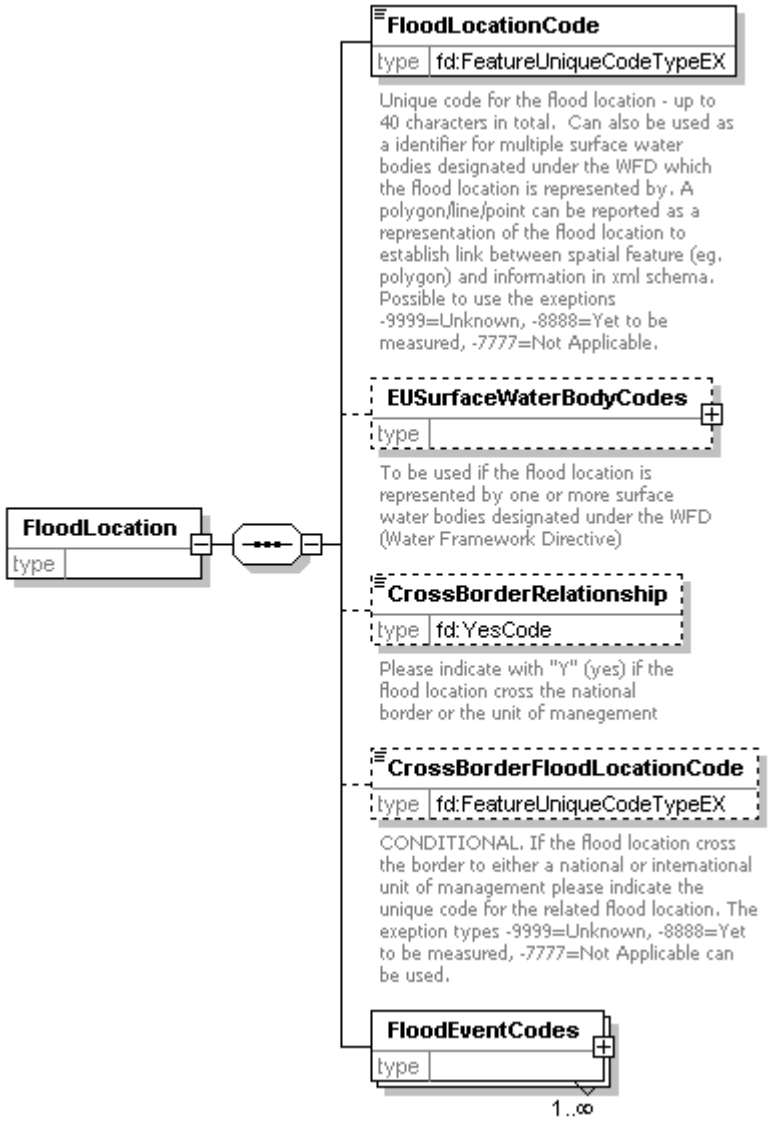
diagram	
annotation	documentation URL for integration of your own internet-based information

complexType **FloodLocationsType**

diagram	
annotation	documentation Structure to define flood locations

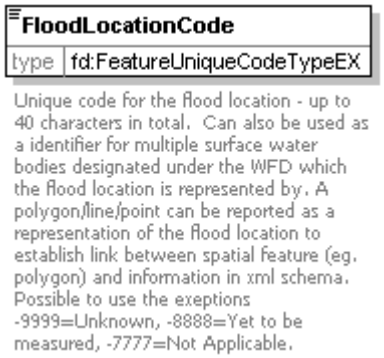
element **FloodLocationsType/FloodLocation**

diagram



element **FloodLocationsType/FloodLocation/FloodLocationCode**

diagram



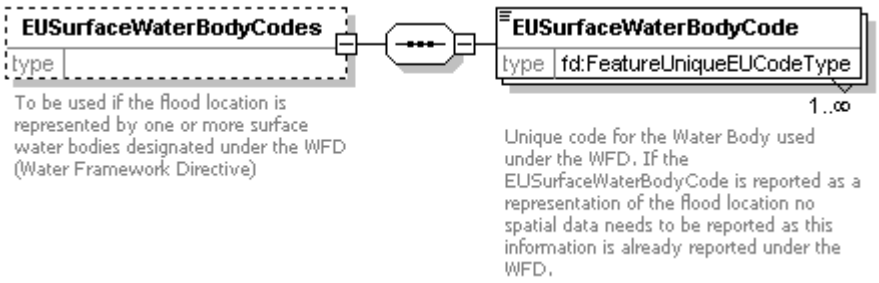
annotation

documentation

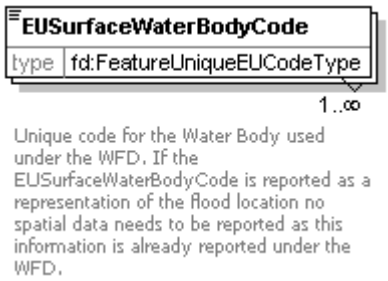
Unique code for the flood location - up to 40 characters in total. Can also be used as a identifier for multiple surface water bodies designated under the WFD which the flood location is represented by. A polygon/line/point

	can be reported as a representation of the flood location to establish link between spatial feature (eg. polygon) and information in xml schema. Possible to use the exeptions -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable.

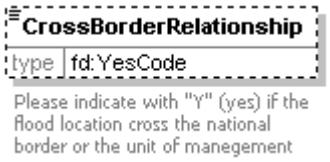
element **FloodLocationsType/FloodLocation/EUSurfaceWaterBodyCodes**

diagram	
annotation	documentation To be used if the flood location is represented by one or more surface water bodies designated under the WFD (Water Framework Directive)

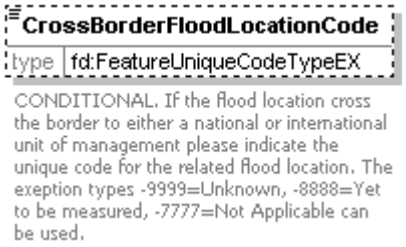
element **FloodLocationsType/FloodLocation/EUSurfaceWaterBodyCodes/EUSurfaceWaterBodyCode**

diagram	
annotation	documentation Unique code for the Water Body used under the WFD. If the EUSurfaceWaterBodyCode is reported as a representation of the flood location no spatial data needs to be reported as this information is already reported under the WFD.

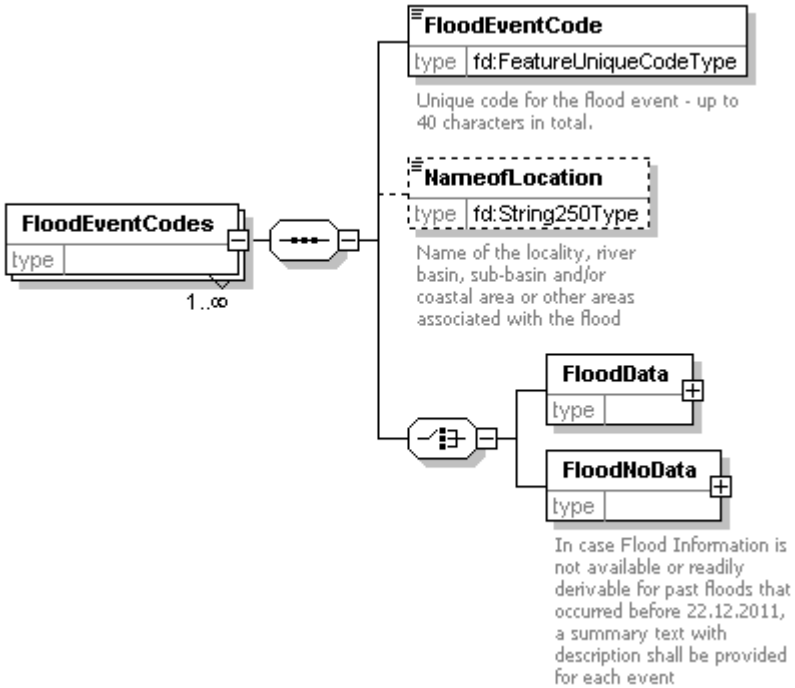
element **FloodLocationsType/FloodLocation/CrossBorderRelationship**

diagram	
facets	Kind Value annotation enumeration Y enumeration
annotation	documentation Please indicate with "Y" (yes) if the flood location cross the national border or the unit of manegement

element **FloodLocationsType/FloodLocation/CrossBorderFloodLocationCode**

diagram	
annotation	documentation CONDITIONAL. If the flood location cross the border to either a national or international unit of management please indicate the unique code for the related flood location. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

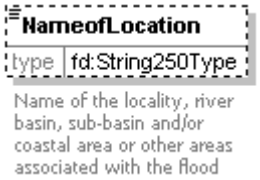
element **FloodLocationsType/FloodLocation/FloodEventCodes**

diagram	

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodEventCode**

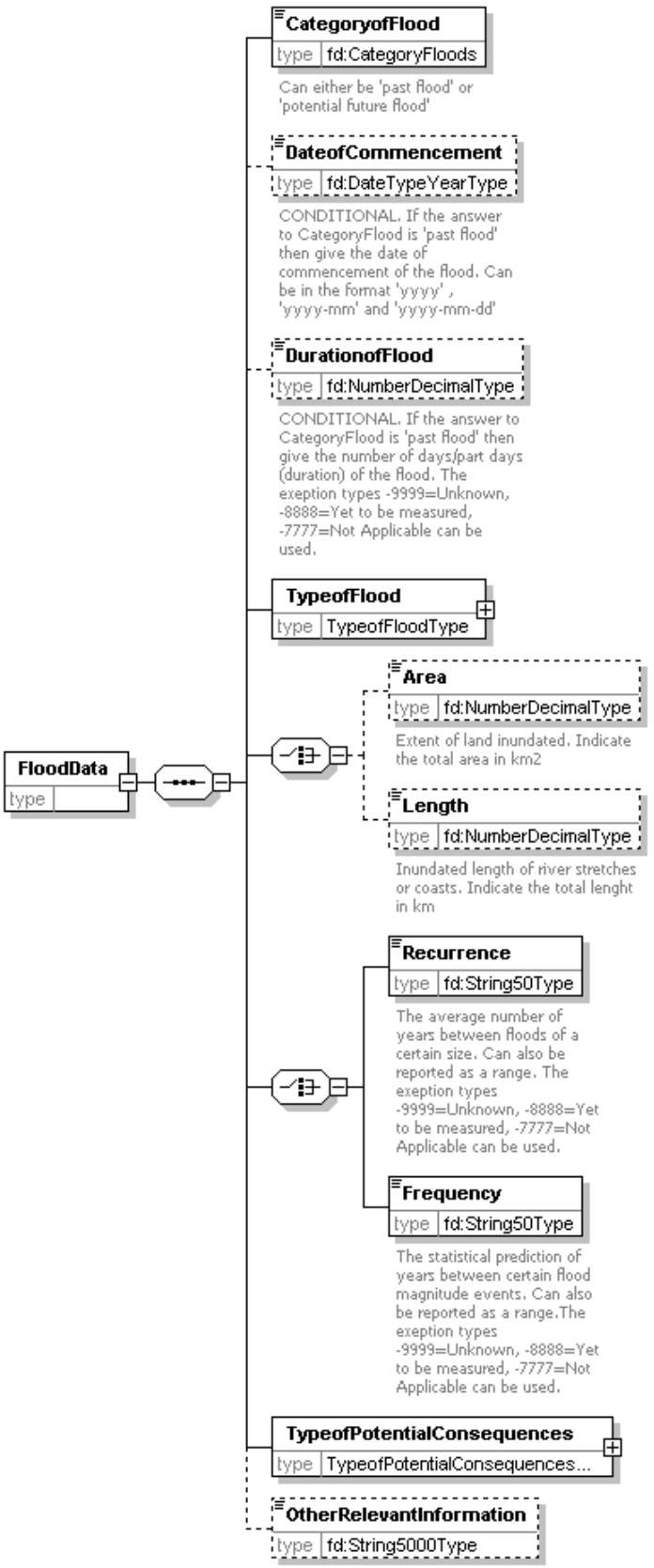
diagram	
annotation	documentation Unique code for the flood event - up to 40 characters in total.

element **FloodLocationsType/FloodLocation/FloodEventCodes/NameofLocation**

diagram	
annotation	documentation Name of the locality, river basin, sub-basin and/or coastal area or other areas associated with the flood

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData**

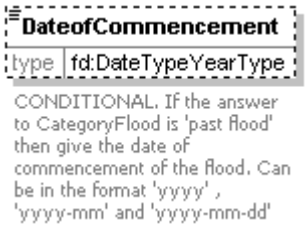
diagram



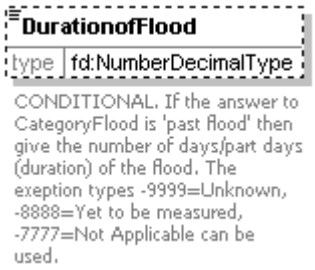
element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/CategoryofFlood**

diagram	
facets	Kind / Value / annotation enumeration past enumeration future
annotation	documentation Can either be 'past flood' or 'potential future flood'

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/DateofCommencement**

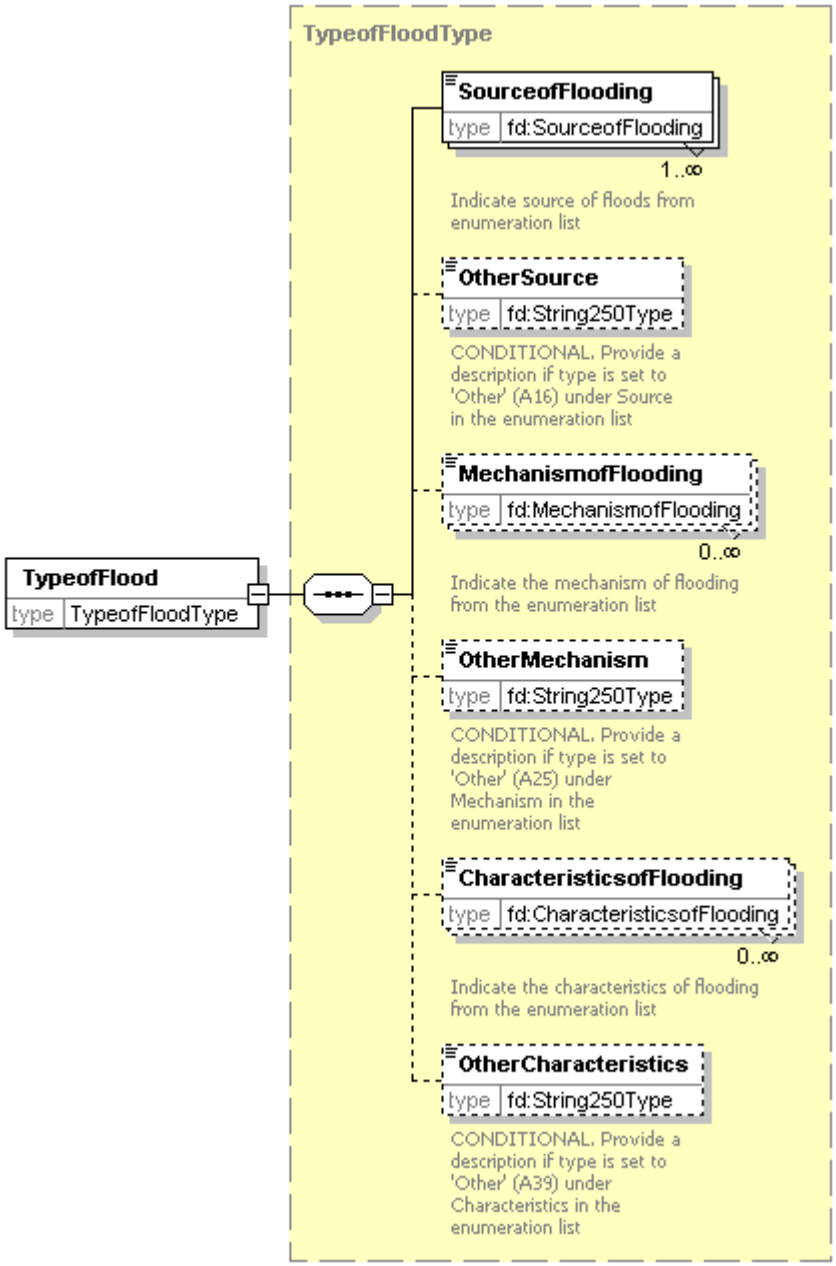
diagram	
annotation	documentation CONDITIONAL. If the answer to CategoryFlood is 'past flood' then give the date of commencement of the flood. Can be in the format 'yyyy' , 'yyyy-mm' and 'yyyy-mm-dd'

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/DurationofFlood**

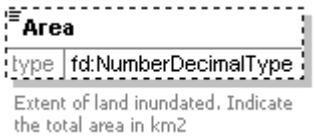
diagram	
annotation	documentation CONDITIONAL. If the answer to CategoryFlood is 'past flood' then give the number of days/part days (duration) of the flood. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/TypeofFlood**

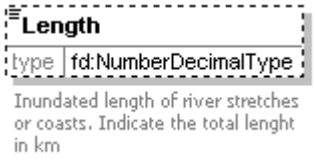
diagram



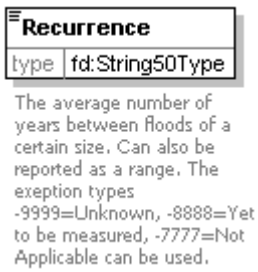
element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/Area**

diagram	
annotation	documentation Extent of land inundated. Indicate the total area in km2

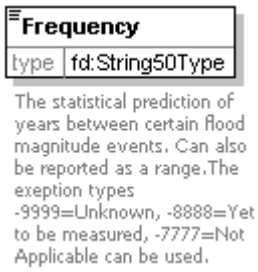
element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/Length**

diagram	
annotation	documentation Inundated length of river stretches or coasts. Indicate the total lenght in km

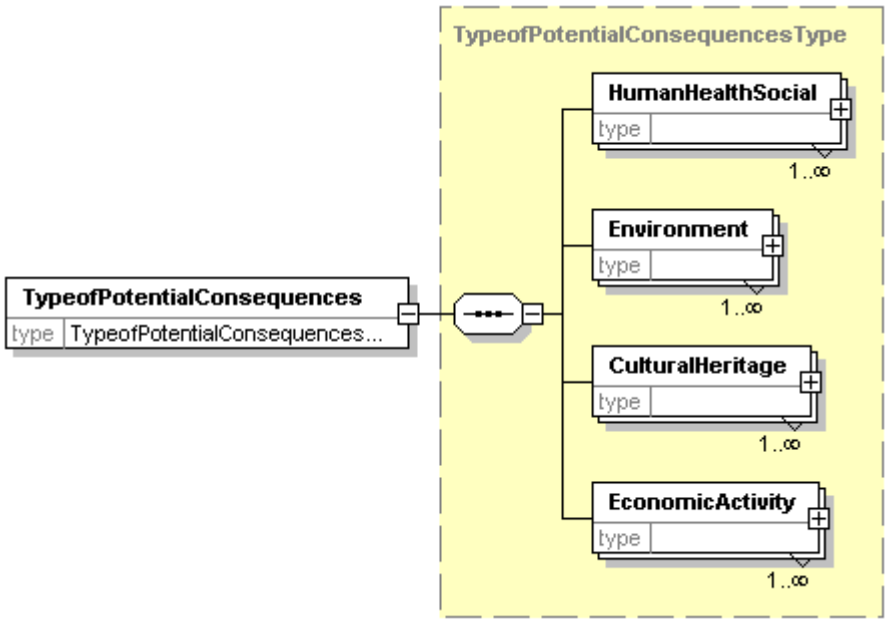
element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/Recurrence**

diagram	
annotation	documentation The average number of years between floods of a certain size. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/Frequency**

diagram	
annotation	documentation The statistical prediction of years between certain flood magnitude events. Can also be reported as a range.The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

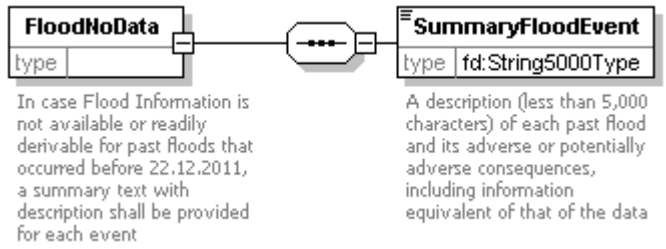
element
FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/TypeofPotentialConsequences

diagram	

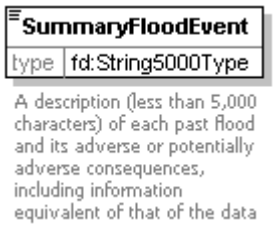
element
FloodLocationsType/FloodLocation/FloodEventCodes/FloodData/OtherRelevantInformation

diagram	

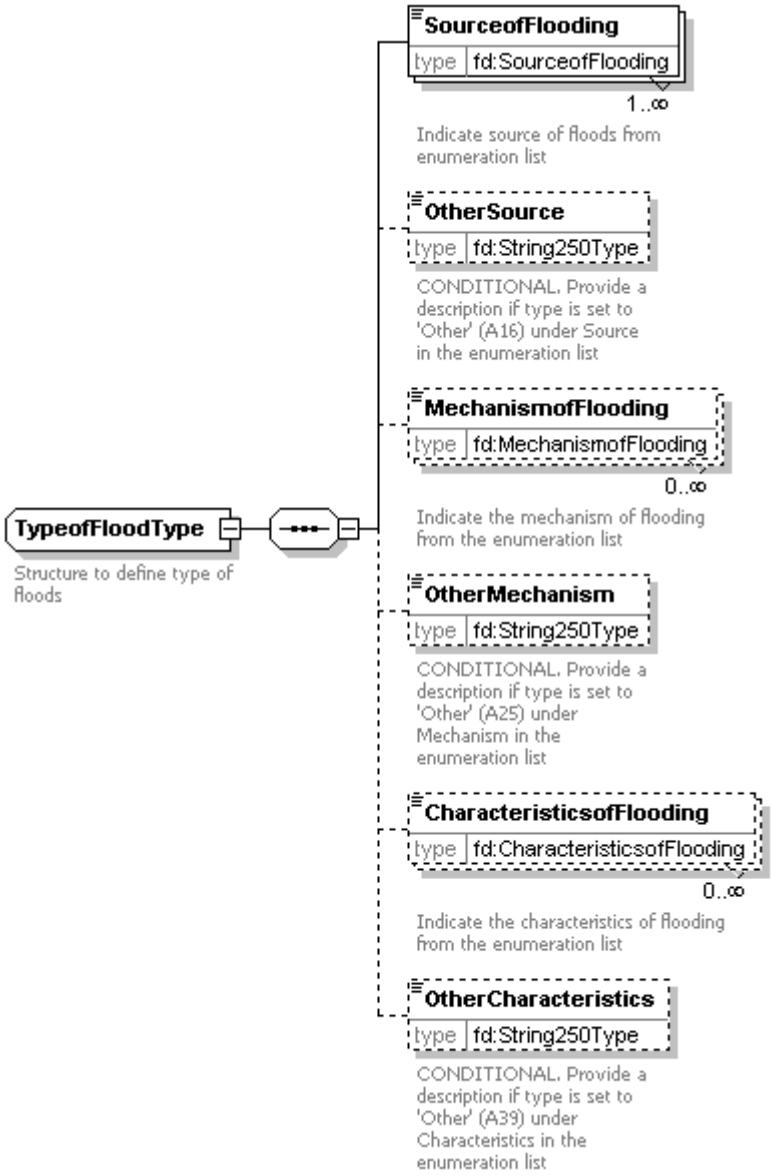
element **FloodLocationsType/FloodLocation/FloodEventCodes/FloodNoData**

diagram	
annotation	documentation In case Flood Information is not available or readily derivable for past floods that occurred before 22.12.2011, a summary text with description shall be provided for each event

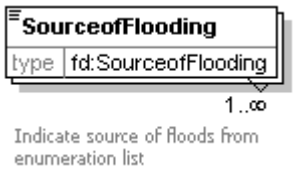
element
FloodLocationsType/FloodLocation/FloodEventCodes/FloodNoData/SummaryFloodEvent

diagram	
annotation	documentation A description (less than 5,000 characters) of each past flood and its adverse or potentially adverse consequences, including information equivalent of that of the data

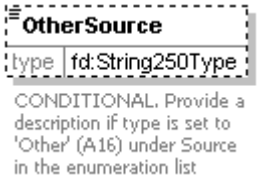
complexType **TypeofFloodType**

diagram	
annotation	documentation Structure to define type of floods

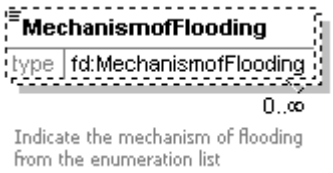
element **TypeofFloodType/SourceofFlooding**

diagram	
facets	Kind / Value / annotation enumeration A11 enumeration A12 enumeration A13 enumeration A14 enumeration A15 enumeration A16 enumeration A17
annotation	documentation Indicate source of floods from enumeration list

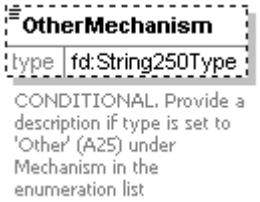
element **TypeofFloodType/OtherSource**

diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A16) under Source in the enumeration list

element **TypeofFloodType/MechanismofFlooding**

diagram	
facets	Kind / Value / annotation enumeration A21 enumeration A22 enumeration A23 enumeration A24 enumeration A25 enumeration A26
annotation	documentation Indicate the mechanism of flooding from the enumeration list

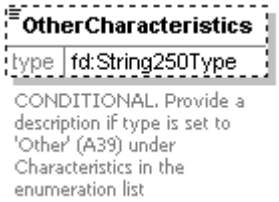
element **TypeofFloodType/OtherMechanism**

diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A25) under Mechanism in the enumeration list

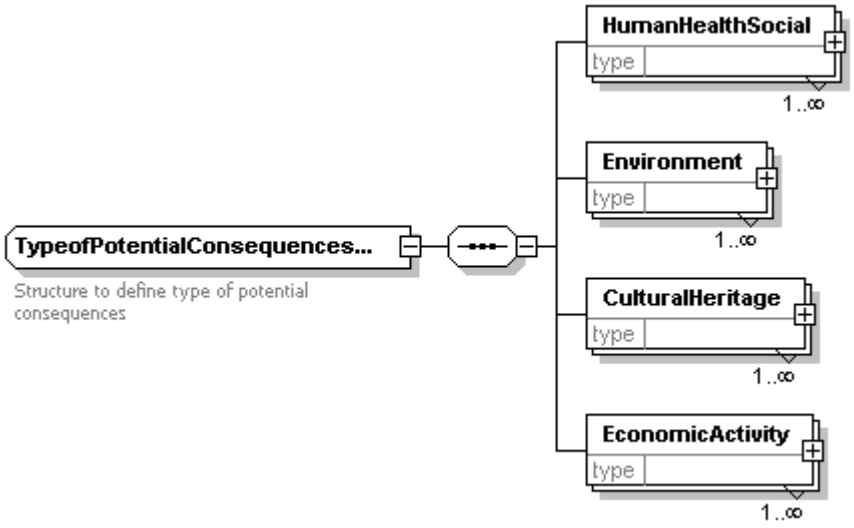
element **TypeofFloodType/CharacteristicsofFlooding**

diagram	
facets	Kind / Value / annotation enumeration A31 enumeration A32 enumeration A33 enumeration A34 enumeration A35 enumeration A36 enumeration A37 enumeration A38 enumeration A39 enumeration A40
annotation	documentation Indicate the characteristics of flooding from the enumeration list

element **TypeofFloodType/OtherCharacteristics**

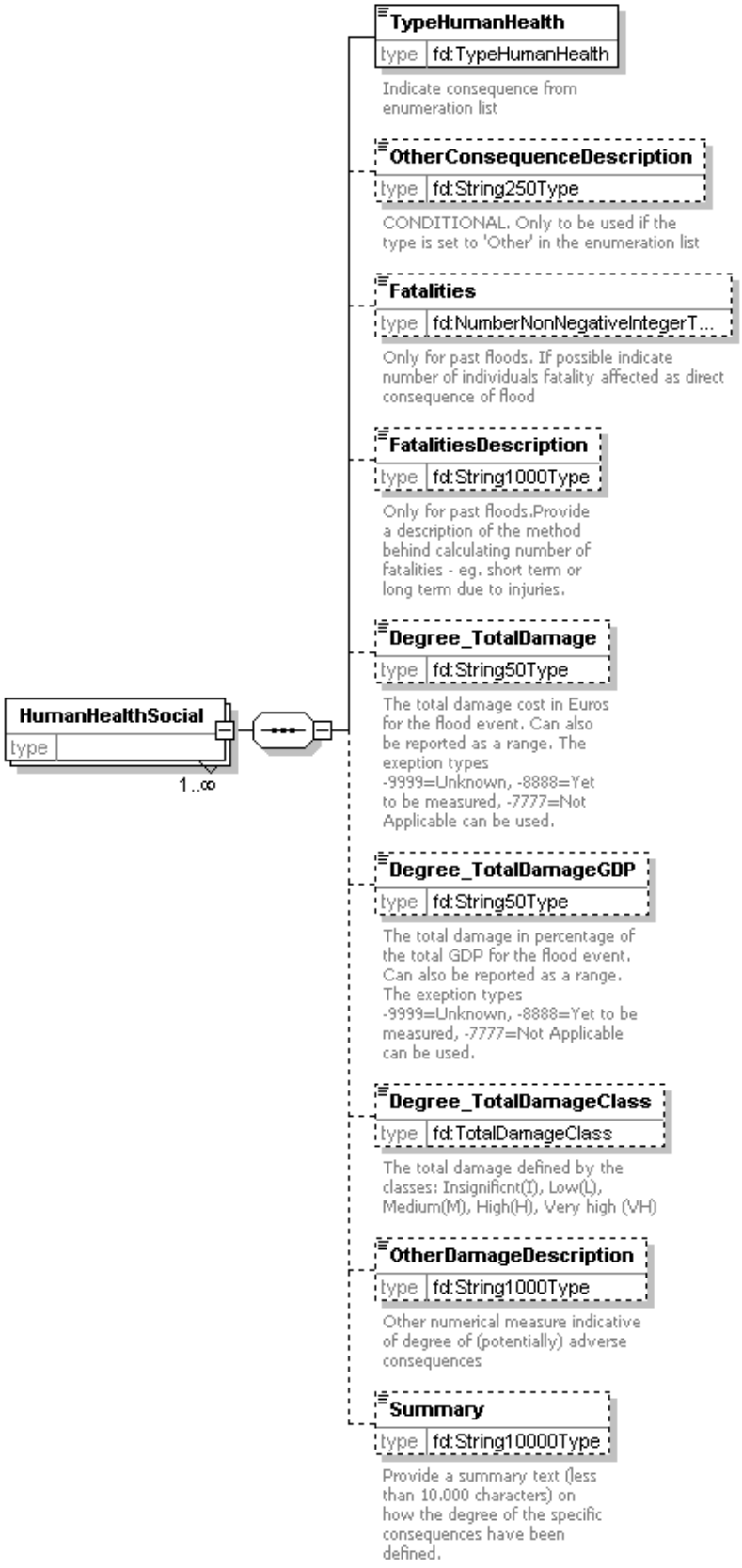
diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A39) under Characteristics in the enumeration list

complexType **TypeofPotentialConsequencesType**

diagram	
annotation	documentation Structure to define type of potential consequences

element **TypeofPotentialConsequencesType/HumanHealthSocial**

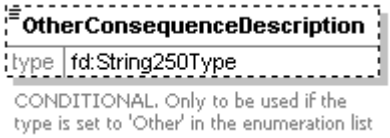
diagram



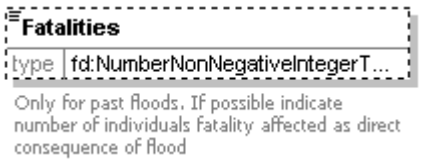
element **TypeofPotentialConsequencesType/HumanHealthSocial/TypeHumanHealth**

diagram	
facets	Kind Value annotation enumeration B10 enumeration B11 enumeration B12 enumeration B13 enumeration B14
annotation	documentation Indicate consequence from enumeration list

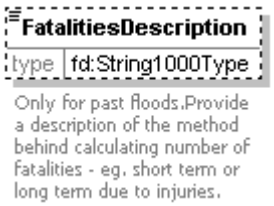
element **TypeofPotentialConsequencesType/HumanHealthSocial/OtherConsequenceDescription**

diagram	
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

element **TypeofPotentialConsequencesType/HumanHealthSocial/Fatalities**

diagram	
annotation	documentation Only for past floods. If possible indicate number of individuals fatality affected as direct consequence of flood

element **TypeofPotentialConsequencesType/HumanHealthSocial/FatalitiesDescription**

diagram	
annotation	documentation Only for past floods.Provide a description of the method behind calculating number of fatalities - eg. short term or long term due to injuries.

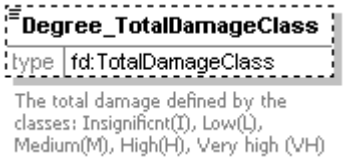
element **TypeofPotentialConsequencesType/HumanHealthSocial/Degree_TotalDamage**

diagram	
annotation	documentation The total damage cost in Euros for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

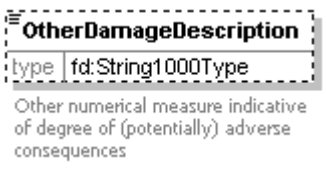
element **TypeofPotentialConsequencesType/HumanHealthSocial/Degree_TotalDamageGDP**

diagram	
annotation	documentation The total damage in percentage of the total GDP for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

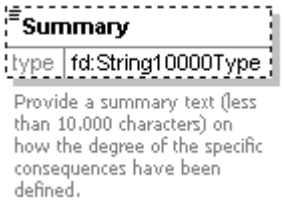
element **TypeofPotentialConsequencesType/HumanHealthSocial/Degree_TotalDamageClass**

diagram	
facets	Kind / Value / annotation enumeration I enumeration L enumeration M enumeration H enumeration VH
annotation	documentation The total damage defined by the classes: Insignificnt(I), Low(L), Medium(M), High(H), Very high (VH)

element **TypeofPotentialConsequencesType/HumanHealthSocial/OtherDamageDescription**

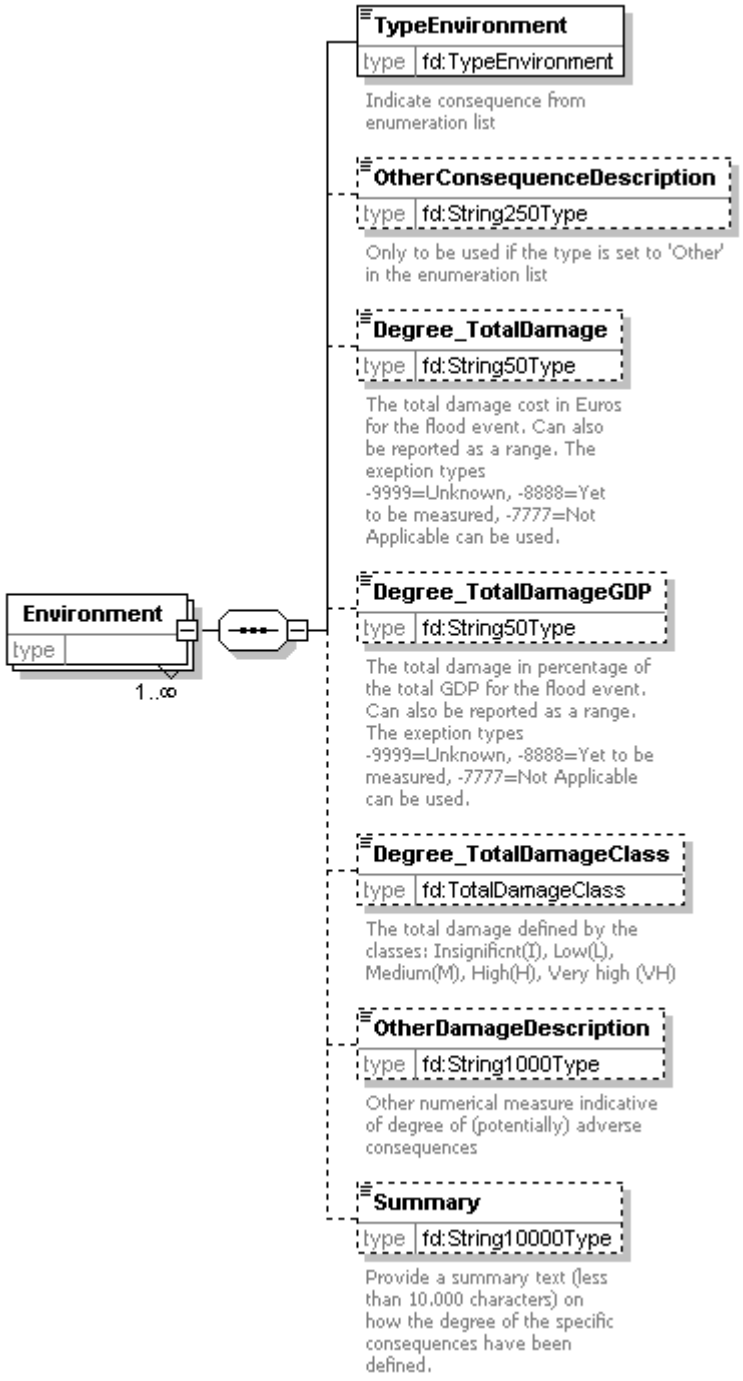
diagram	
annotation	documentation Other numerical measure indicative of degree of (potentially) adverse consequences

element **TypeofPotentialConsequencesType/HumanHealthSocial/Summary**

diagram	
annotation	documentation Provide a summary text (less than 10.000 characters) on how the degree of the specific consequences have been defined.

element **TypeofPotentialConsequencesType/Environment**

diagram

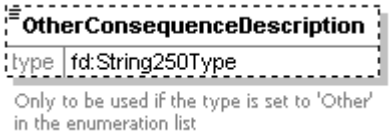


element **TypeofPotentialConsequencesType/Environment/TypeEnvironment**

diagram	
facets	Kind Value annotation

	enumeration B20 enumeration B20 enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Indicate consequence from enumeration list

element **TypeofPotentialConsequencesType/Environment/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

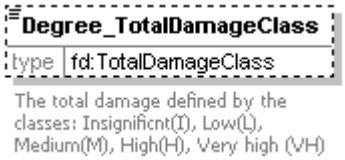
element **TypeofPotentialConsequencesType/Environment/Degree_TotalDamage**

diagram	
annotation	documentation The total damage cost in Euros for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

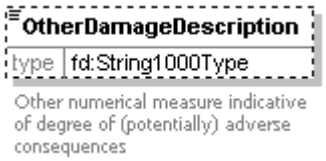
element **TypeofPotentialConsequencesType/Environment/Degree_TotalDamageGDP**

diagram	
annotation	documentation The total damage in percentage of the total GDP for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

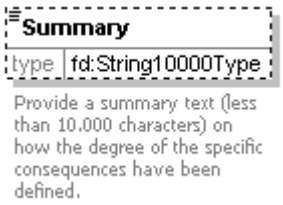
element **TypeofPotentialConsequencesType/Environment/Degree_TotalDamageClass**

diagram	
facets	Kind Value annotation enumeration I enumeration L enumeration M enumeration H enumeration VH
annotation	documentation The total damage defined by the classes: Insignificnt(I), Low(L), Medium(M), High(H), Very high (VH)

element **TypeofPotentialConsequencesType/Environment/OtherDamageDescription**

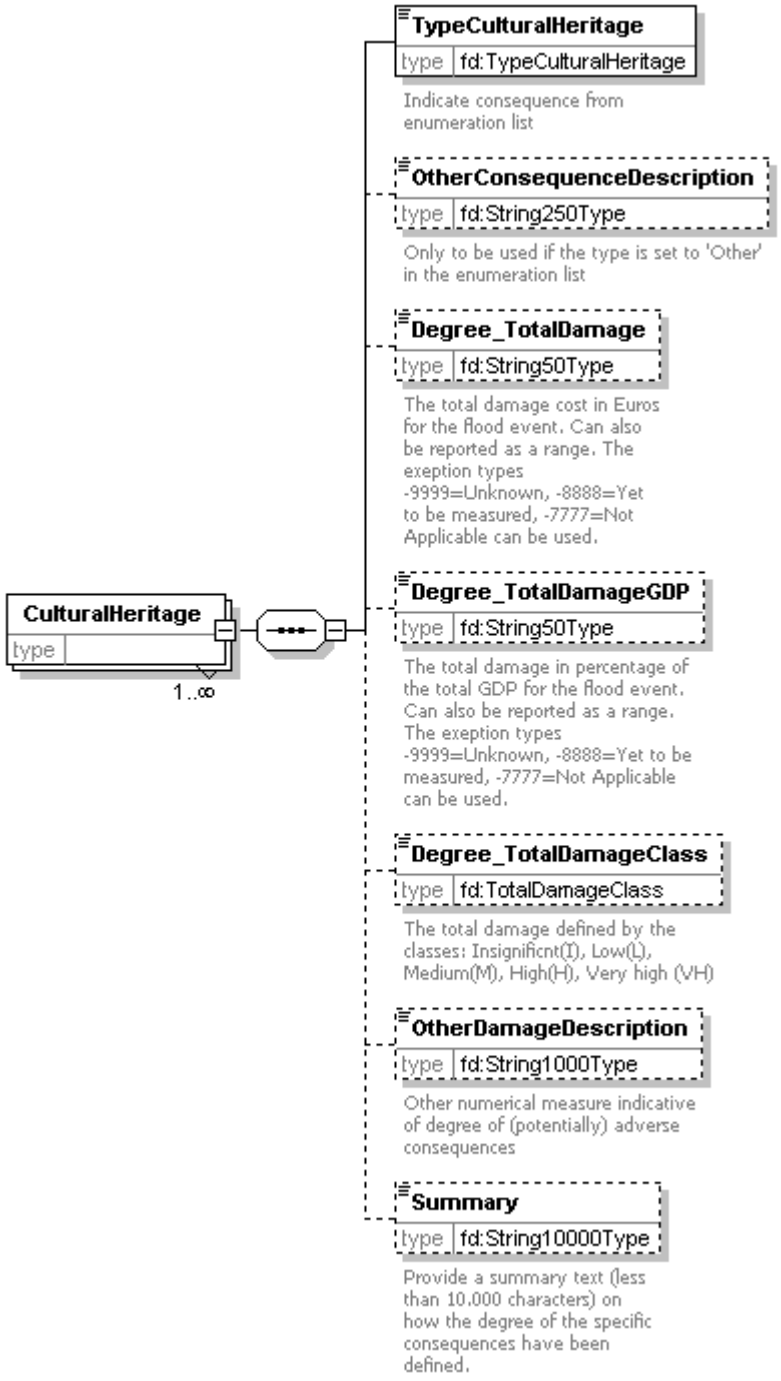
diagram	
annotation	documentation Other numerical measure indicative of degree of (potentially) adverse consequences

element **TypeofPotentialConsequencesType/Environment/Summary**

diagram	
annotation	documentation Provide a summary text (less than 10.000 characters) on how the degree of the specific consequences have been defined.

element **TypeofPotentialConsequencesType/CulturalHeritage**

diagram

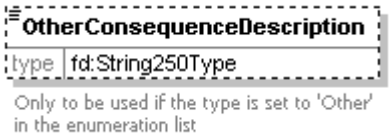


element **TypeofPotentialConsequencesType/CulturalHeritage/TypeCulturalHeritage**

diagram	
facets	Kind Value annotation

	enumeration B30 enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Indicate consequence from enumeration list

element **TypeofPotentialConsequencesType/CulturalHeritage/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

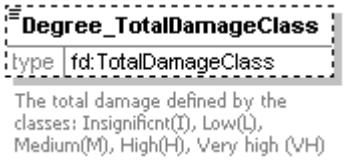
element **TypeofPotentialConsequencesType/CulturalHeritage/Degree_TotalDamage**

diagram	
annotation	documentation The total damage cost in Euros for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

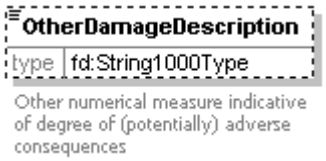
element **TypeofPotentialConsequencesType/CulturalHeritage/Degree_TotalDamageGDP**

diagram	
annotation	documentation The total damage in percentage of the total GDP for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

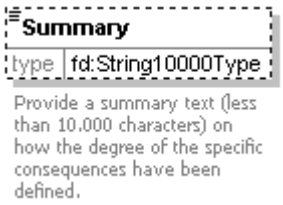
element **TypeofPotentialConsequencesType/CulturalHeritage/Degree_TotalDamageClass**

diagram	
facets	Kind Value annotation enumeration I enumeration L enumeration M enumeration H enumeration VH
annotation	documentation The total damage defined by the classes: Insignificnt(I), Low(L), Medium(M), High(H), Very high (VH)

element **TypeofPotentialConsequencesType/CulturalHeritage/OtherDamageDescription**

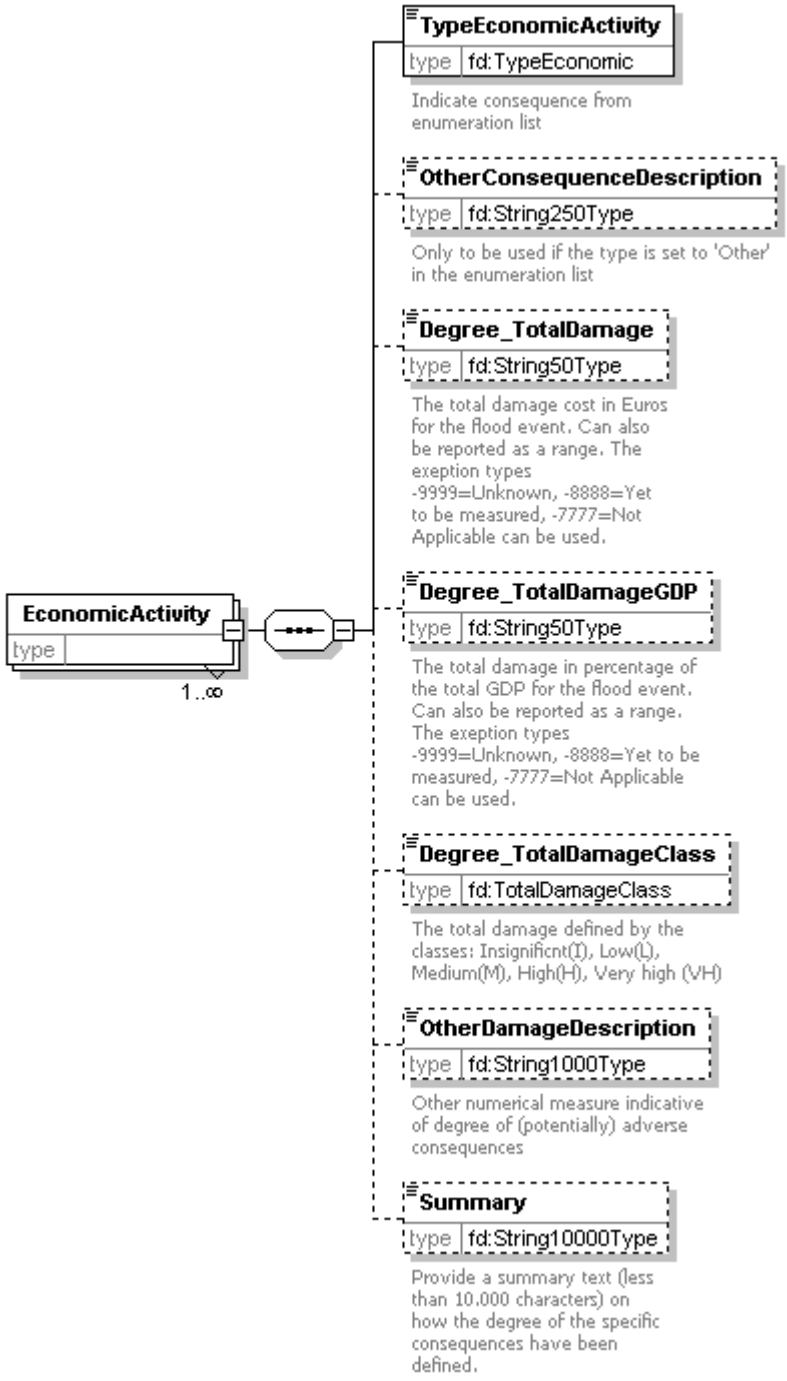
diagram	
annotation	documentation Other numerical measure indicative of degree of (potentially) adverse consequences

element **TypeofPotentialConsequencesType/CulturalHeritage/Summary**

diagram	
annotation	documentation Provide a summary text (less than 10.000 characters) on how the degree of the specific consequences have been defined.

element **TypeofPotentialConsequencesType/EconomicActivity**

diagram

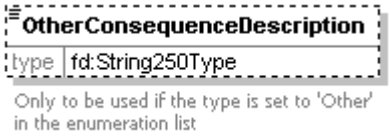


element **TypeofPotentialConsequencesType/EconomicActivity/TypeEconomicActivity**

diagram	
facets	Kind Value annotation

	enumeration B40 enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45 enumeration B46
annotation	documentation Indicate consequence from enumeration list

element **TypeofPotentialConsequencesType/EconomicActivity/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

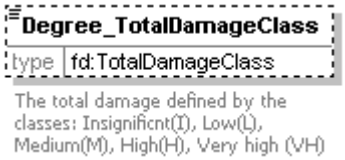
element **TypeofPotentialConsequencesType/EconomicActivity/Degree_TotalDamage**

diagram	
annotation	documentation The total damage cost in Euros for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

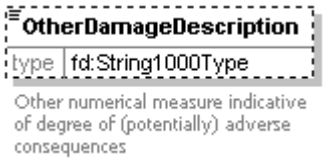
element **TypeofPotentialConsequencesType/EconomicActivity/Degree_TotalDamageGDP**

diagram	
annotation	documentation The total damage in percentage of the total GDP for the flood event. Can also be reported as a range. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

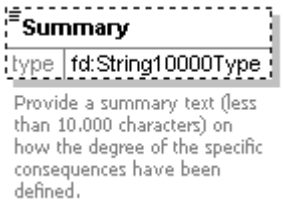
element **TypeofPotentialConsequencesType/EconomicActivity/Degree_TotalDamageClass**

diagram	
facets	Kind Value annotation enumeration I enumeration L enumeration M enumeration H enumeration VH
annotation	documentation The total damage defined by the classes: Insignificnt(I), Low(L), Medium(M), High(H), Very high (VH)

element **TypeofPotentialConsequencesType/EconomicActivity/OtherDamageDescription**

diagram	
annotation	documentation Other numerical measure indicative of degree of (potentially) adverse consequences

element **TypeofPotentialConsequencesType/EconomicActivity/Summary**

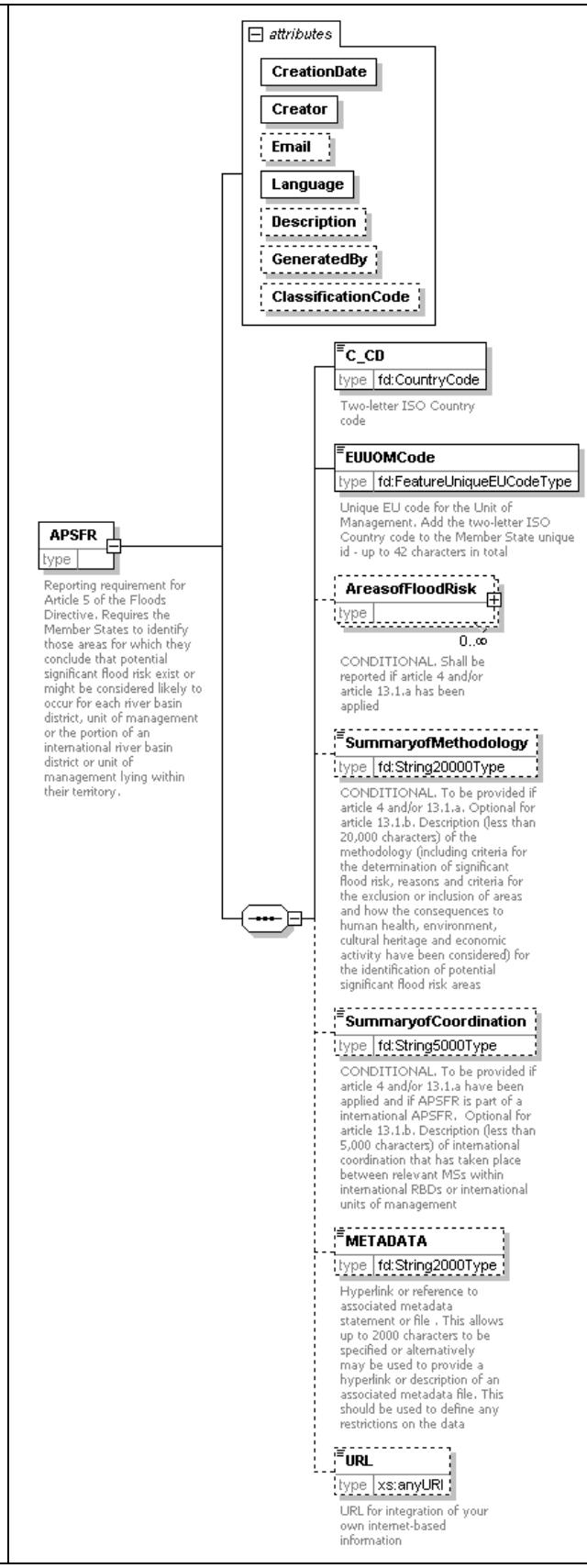
diagram	
annotation	documentation Provide a summary text (less than 10.000 characters) on how the degree of the specific consequences have been defined.

Schema **APSFR_3p0.xsd**

Elements
APSFR

element **APSFR**

diagram



attributes	Name	Type	Use	Default	Fixed	annotation
	CreationDate	**xs:string**	required			
	Creator	**xs:string**	required			
	Email	**xs:string**				
	Language	**LanguageCode**	required			
	Description	**xs:string**				
	GeneratedBy	**xs:string**				
	ClassificationCode	**DataConfidentialityClassificationCode**				
annotation	documentation Reporting requirement for Article 5 of the Floods Directive. Requires the Member States to identify those areas for which they conclude that potential significant flood risk exist or might be considered likely to occur for each river basin district, unit of management or the portion of an international river basin district or unit of management lying within their territory.					

attribute **APSFR/@CreationDate**

attribute **APSFR/@Creator**

attribute **APSFR/@Email**

attribute **APSFR/@Language**

facets	Kind	Value	annotation
	enumeration	bg	
	enumeration	es	
	enumeration	cs	
	enumeration	da	
	enumeration	de	
	enumeration	et	
	enumeration	el	
	enumeration	en	
	enumeration	fr	
	enumeration	ga	
	enumeration	hr	
	enumeration	ic	
	enumeration	it	
	enumeration	lv	
	enumeration	lt	
	enumeration	hu	
	enumeration	mt	
	enumeration	nl	
	enumeration	no	
	enumeration	pl	
	enumeration	pt	
	enumeration	ro	
	enumeration	sk	
	enumeration	sl	

	enumeration	sr
	enumeration	tr
	enumeration	fi
	enumeration	sv

attribute **APSFR/@Description**

attribute **APSFR/@GeneratedBy**

attribute **APSFR/@ClassificationCode**

	Kind	Value	annotation
facets	enumeration	001	
	enumeration	003	

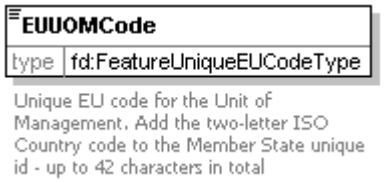
element **APSFR/C_CD**

diagram

	Kind	Value	annotation
facets	enumeration	AT	
	enumeration	BE	
	enumeration	BG	
	enumeration	CH	
	enumeration	CZ	
	enumeration	CY	
	enumeration	DE	
	enumeration	DK	
	enumeration	EE	
	enumeration	EL	
	enumeration	ES	
	enumeration	FI	
	enumeration	FR	
	enumeration	HR	
	enumeration	HU	
	enumeration	IE	
	enumeration	IS	
	enumeration	IT	
	enumeration	LT	
	enumeration	LU	
	enumeration	LV	
	enumeration	MT	
	enumeration	NO	
	enumeration	NL	

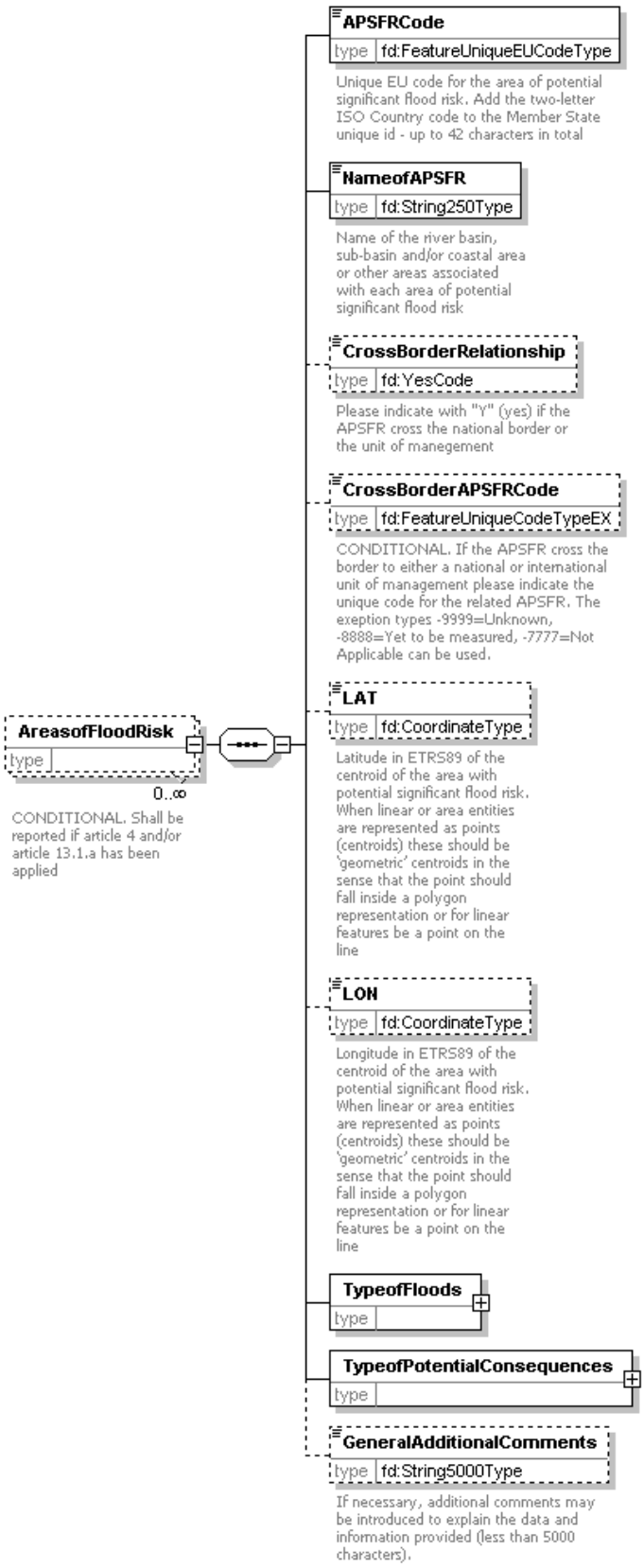
	enumeration PL enumeration PT enumeration RO enumeration SE enumeration SI enumeration SK enumeration TR enumeration UK
annotation	documentation Two-letter ISO Country code

element **APSFR/EUUOMCode**

diagram	
annotation	documentation Unique EU code for the Unit of Management. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total

element **APSFR/AreasofFloodRisk**

diagram

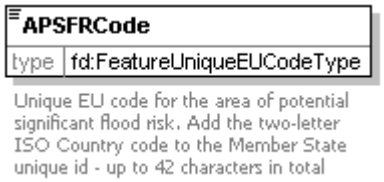


annotation

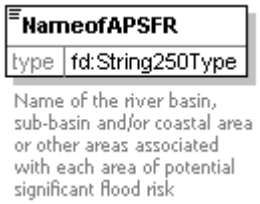
documentation

CONDITIONAL. Shall be reported if article 4 and/or article 13.1.a has been applied

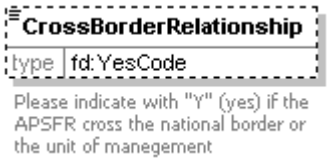
element **APSFR/AreasofFloodRisk/APSFRCode**

diagram	
annotation	documentation Unique EU code for the area of potential significant flood risk. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total

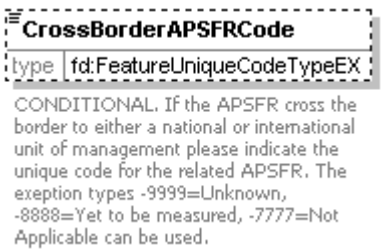
element **APSFR/AreasofFloodRisk/NameofAPSFR**

diagram	
annotation	documentation Name of the river basin, sub-basin and/or coastal area or other areas associated with each area of potential significant flood risk

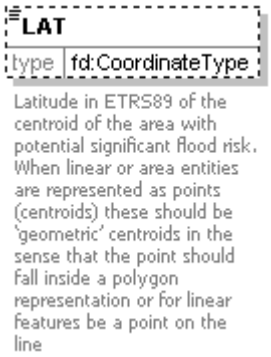
element **APSFR/AreasofFloodRisk/CrossBorderRelationship**

diagram	
facets	Kind Value annotation enumeration Y enumeration
annotation	documentation Please indicate with "Y" (yes) if the APSFR cross the national border or the unit of manegement

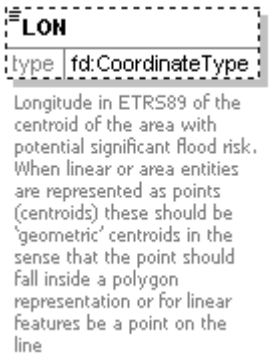
element **APSFR/AreasofFloodRisk/CrossBorderAPSFRCode**

diagram	
annotation	documentation CONDITIONAL. If the APSFR cross the border to either a national or international unit of management please indicate the unique code for the related APSFR. The exeption types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element **APSFR/AreasofFloodRisk/LAT**

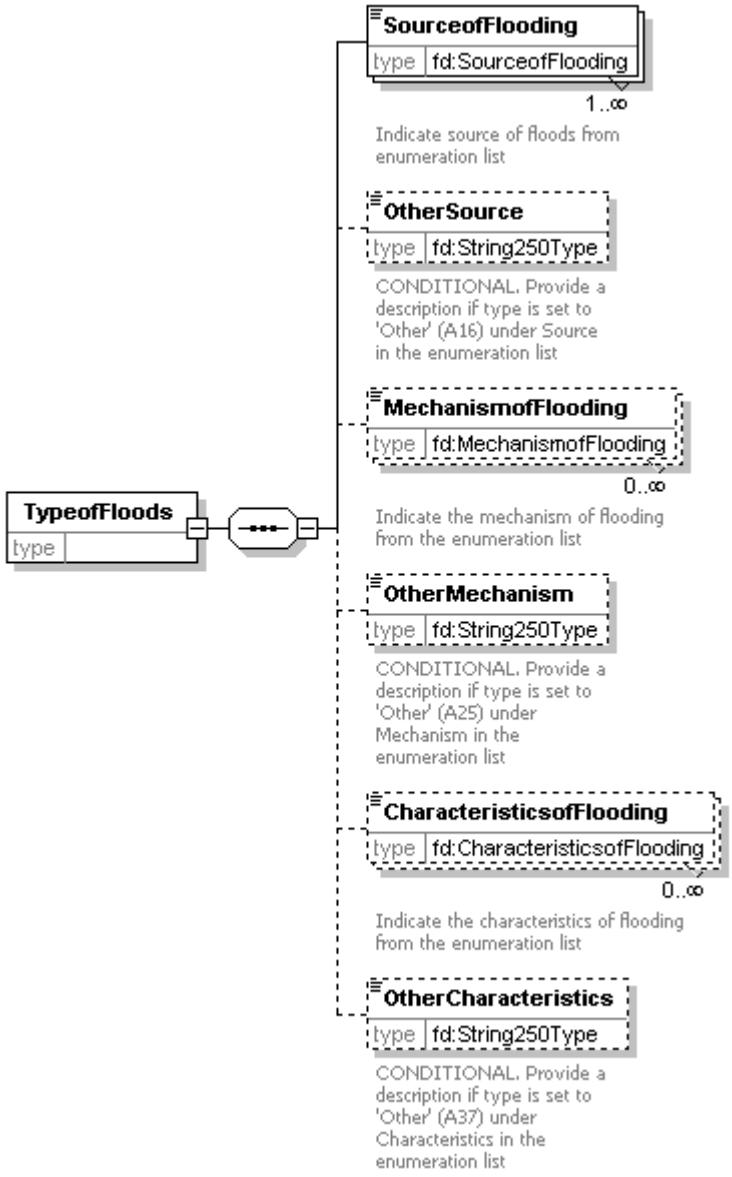
diagram	
annotation	documentation Latitude in ETRS89 of the centroid of the area with potential significant flood risk. When linear or area entities are represented as points (centroids) these should be 'geometric' centroids in the sense that the point should fall inside a polygon representation or for linear features be a point on the line

element **APSFR/AreasofFloodRisk/LON**

diagram	
annotation	documentation Longitude in ETRS89 of the centroid of the area with potential significant flood risk. When linear or area entities are represented as points (centroids) these should be 'geometric' centroids in the sense that the point should fall inside a polygon representation or for linear features be a point on the line

element **APSFR/AreasofFloodRisk/TypeofFloods**

diagram



element **APSFR/AreasofFloodRisk/TypeofFloods/SourceofFlooding**

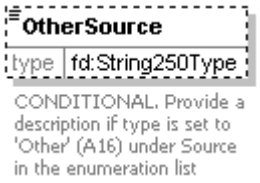
diagram

facets

Kind	Value	annotation
enumeration	A11	
enumeration	A12	
enumeration	A13	
enumeration	A14	
enumeration	A15	

	enumeration A16 enumeration A17
annotation	documentation Indicate source of floods from enumeration list

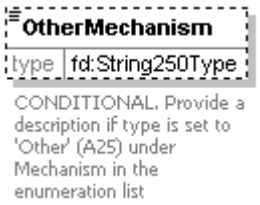
element **APSFR/AreasofFloodRisk/TypeofFloods/OtherSource**

diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A16) under Source in the enumeration list

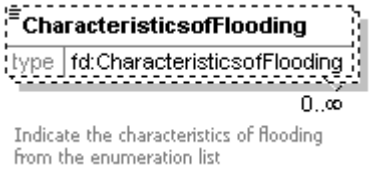
element **APSFR/AreasofFloodRisk/TypeofFloods/MechanismofFlooding**

diagram	
facets	Kind Value annotation enumeration A21 enumeration A22 enumeration A23 enumeration A24 enumeration A25 enumeration A26
annotation	documentation Indicate the mechanism of flooding from the enumeration list

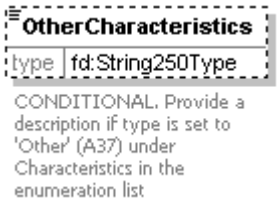
element **APSFR/AreasofFloodRisk/TypeofFloods/OtherMechanism**

diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A25) under Mechanism in the enumeration list

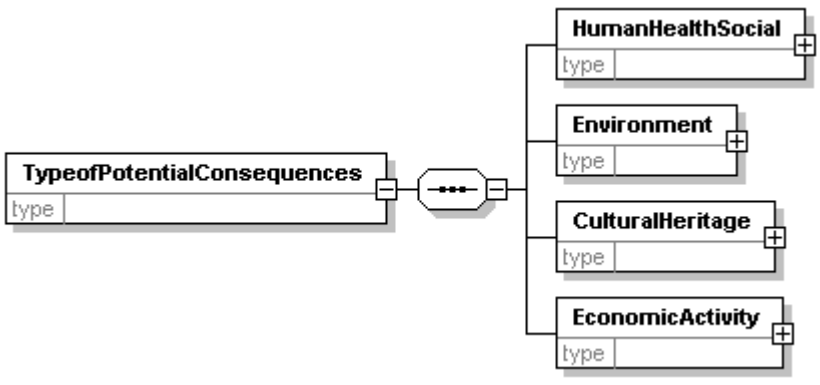
element **APSFR/AreasofFloodRisk/TypeofFloods/CharacteristicsofFlooding**

diagram	
facets	Kind / Value / annotation enumeration A31 enumeration A32 enumeration A33 enumeration A34 enumeration A35 enumeration A36 enumeration A37 enumeration A38 enumeration A39 enumeration A40
annotation	documentation Indicate the characteristics of flooding from the enumeration list

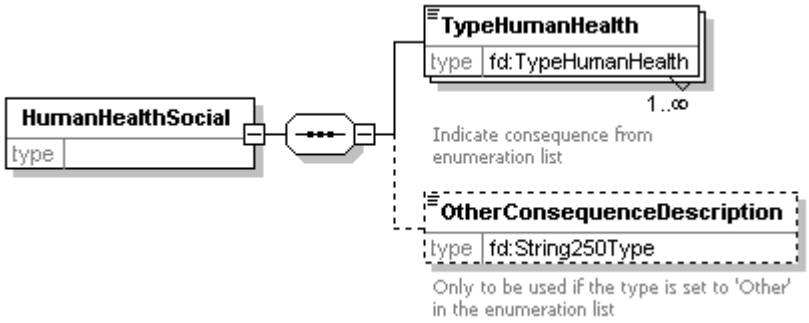
element **APSFR/AreasofFloodRisk/TypeofFloods/OtherCharacteristics**

diagram	
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A37) under Characteristics in the enumeration list

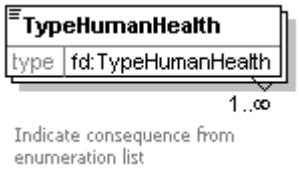
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences**

diagram	

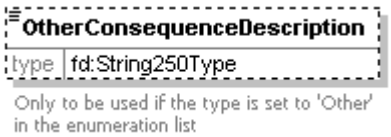
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/HumanHealthSocial**

diagram	

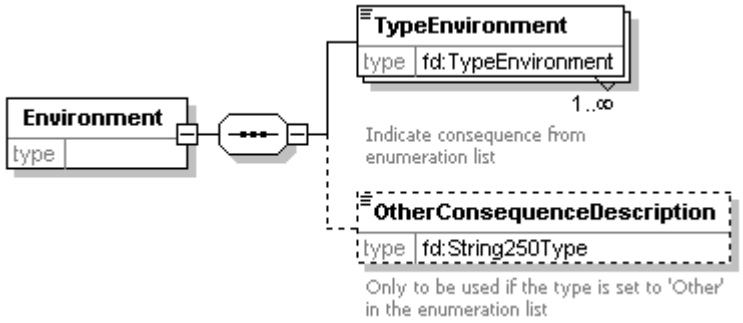
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/HumanHealthSocial/TypeHumanHealth**

diagram	
facets	Kind / Value / annotation enumeration B10 enumeration B11 enumeration B12 enumeration B13 enumeration B14
annotation	documentation Indicate consequence from enumeration list

element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/HumanHealthSocial/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

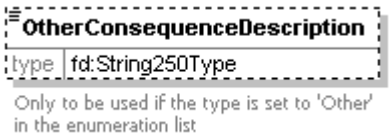
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/Environment**

diagram	

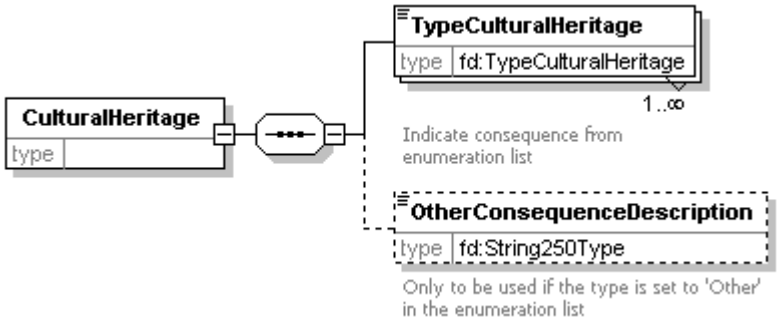
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/Environment/TypeEnvironment**

diagram	
facets	Kind / Value / annotation enumeration B20 enumeration B20 enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Indicate consequence from enumeration list

element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/Environment/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

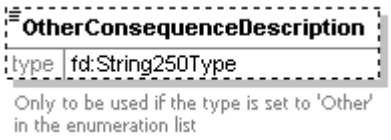
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/CulturalHeritage**

diagram	

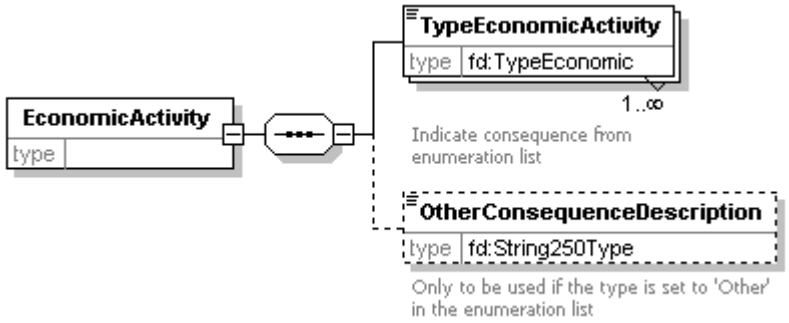
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/CulturalHeritage/TypeCulturalHeritage**

diagram	
facets	Kind / Value / annotation enumeration B30 enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Indicate consequence from enumeration list

element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/CulturalHeritage/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

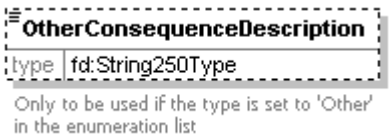
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/EconomicActivity**

diagram	

element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/EconomicActivity/TypeEconomicActivity**

diagram	
facets	Kind / Value / annotation enumeration B40 enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45 enumeration B46
annotation	documentation Indicate consequence from enumeration list

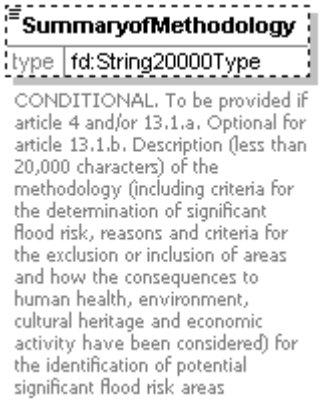
element **APSFR/AreasofFloodRisk/TypeofPotentialConsequences/EconomicActivity/OtherConsequenceDescription**

diagram	
annotation	documentation Only to be used if the type is set to 'Other' in the enumeration list

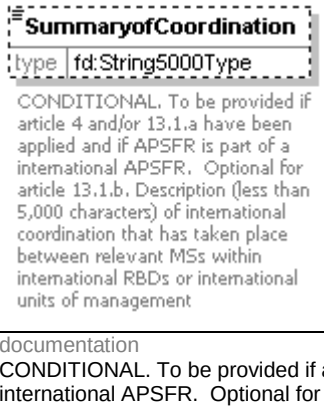
element **APSFR/AreasofFloodRisk/GeneralAdditionalComments**

diagram	
annotation	documentation If necessary, additional comments may be introduced to explain the data and information provided (less than 5000 characters).

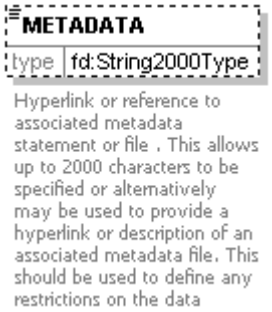
element **APSFR/SummaryofMethodology**

diagram	
annotation	documentation CONDITIONAL. To be provided if article 4 and/or 13.1.a. Optional for article 13.1.b. Description (less than 20,000 characters) of the methodology (including criteria for the determination of significant flood risk, reasons and criteria for the exclusion or inclusion of areas and how the consequences to human health, environment, cultural heritage and economic activity have been considered) for the identification of potential significant flood risk areas

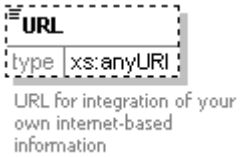
element **APSFR/SummaryofCoordination**

diagram	
annotation	documentation CONDITIONAL. To be provided if article 4 and/or 13.1.a have been applied and if APSFR is part of a international APSFR. Optional for article 13.1.b. Description (less than 5,000 characters) of international coordination that has taken place between relevant MSs within international RBDs or international units of management

element **APSFR/METADATA**

diagram	
annotation	documentation Hyperlink or reference to associated metadata statement or file . This allows up to 2000 characters to be specified or alternatively may be used to provide a hyperlink or description of an associated metadata file. This should be used to define any restrictions on the data

element **APSFR/URL**

diagram	
annotation	documentation URL for integration of your own internet-based information

3.4 SCHEMA: FLOOD HAZARD AND RISK MAPS[1]

Schema **FHRM.xsd**

Article 6 of the Floods Directive requires member states to prepare flood hazard maps and flood risk maps. These maps must be prepared, at the river basin level and at the most appropriate scale, for the areas of potentially significant flood risk identified under Article 5 or according to article 13.1 (a), or for the areas for which MS decide to prepare flood maps according to article 13(1)(b) (art 6.1). Member States will determine the most appropriate scale of flood hazard maps and flood risk maps, and different scales can be chosen for instance depending on the location and type of map. The scale at which information is made available at European level via WISE is a different matter, and visualisation of flood related information in WISE (at scale 1:250.000) will be developed in separate GIS Guidance (CIS Guidance document n° 22, new Annex 13). Member States may chose to develop several flood maps for each type of relevant flood, provided that the requirements of the Directive are complied with.

Flood hazard maps must show the geographical area which could be flooded under different scenarios (art. 6.3), whereas flood risk maps must show the potential adverse

[1] Text is from agreed FHRM Reporting sheet

consequences of these flood scenarios (article 6.5). The flood maps must be prepared for the following flooding scenarios:

(a) floods with low probability, or extreme event scenarios;
(b) floods with a medium probability (likely return period ≥ 100 years);
(c) floods with a high probability, where appropriate.

Members States have flexibility to assign specific flood probabilities to these scenarios.

For each scenario, Members State must prepare information of flood extents and water depth or levels (art 6.4). Where appropriate, Members States could also prepare information on flow velocities or the relevant water flow..

For each flooding scenario, the flood risk maps shall show:

1. the indicative number of inhabitants potentially affected;
2. type of economic activity of the area potentially affected;
3. installations as referred to in Annex I to Council Directive 2008/1/EC (codified version of Directive 96/61/EC of 24 September 1996) concerning integrated pollution prevention and control which might cause accidental pollution in case of flooding and potentially affected WFD protected areas[2] identified in Annex IV(1)(i), (iii) and (v) to Directive 2000/60/EC;

The maps may show other information which the Member State considers useful such as the indication of areas where floods with a high content of transported sediments and debris floods can occur and information on other significant sources of pollution.

For coastal flooding where there is an adequate level of protection in place, and for groundwater flooding, Member States can decide to limit the preparation of flood hazard maps to low probability or extreme events (art 6.6 and 6.7).

The flood hazard maps and flood risk maps must be completed by the 22nd December 2013 and made available to the Commission by the 22nd March 2014. Member States may also use flood hazard maps and flood risk maps which were finalised before 22.12.2010, provided these maps "provide a level of information equivalent to the requirements of Article 6" (art 13.2).

Prior exchange of information between Member States in the preparation of Flood maps is required in shared Units of managements (art 6.2).

The preparation of flood hazard maps and flood risk maps shall be coordinated with the review of the assessment carried out under article 5 of the Water Framework Directive 2000/60/EC. The coordination shall ensure that the information they contain is consistent, and the overall purpose of the coordination is to focus on opportunities for improving efficiency, information exchange and achieving common synergies and benefits having regard to the environmental objectives of that Directive.

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[2] The term "protected areas", referring here to areas identified in WFD Annex IV(1)(i), (iii) and (v), such as Natura 2000 areas, should not be confused with areas protected against floods, e.g. by dikes.

To enable the Commission to assess the compliance of Member States flood hazard maps and flood risk maps with the requirement of article 6 and 13.2, a number of summary questions are included in this reporting sheet focusing on the methodology for preparing flood hazard maps and flood risk maps.

Flood hazard maps and flood risk maps shall also be made available to the public by the Member States.

All reporting under the Directive should be done electronically via WISE (Water Information Systems for Europe). The reporting of Flood hazard maps and flood risk maps however presents two main challenges in this context.

Firstly, the current scale of visualisation of maps in the current WISE map viewer (scale 1:250000) might not be the appropriate scale for such maps, as mentioned in the Directive.

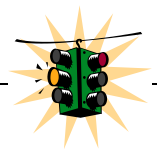
Secondly, the INSPIRE Directive rules for metadata on relevant topics will not be operational until after 2014, that is most likely after the reporting deadline for the flood hazard maps and flood risk maps.

This leads to a two pronged approach on reporting and visualisation of flood maps via WISE.

To address these challenges, a decentralised and staged approach to reporting flood maps will be implemented. The detailed and reference data for the flood hazard maps and flood risk maps shall rest in the national repositories for these maps (the decentralised approach), with web-links to these maps provided through geographical information as set out in section C of the reporting sheet (and through textual information on methodologies) provided to the public through WISE.

Under the staged approach, it is proposed that ***in the short term (until 2014)*** the reporting of flood maps should be based on textual information on methodologies used, and reporting of geographical information as set out in section C, with web-links to detailed maps held in the Member States. This should be visualised in a way which allows the user to select an area from the EU-wide WISE background map, and then via hyperlink established in WISE, to switch and to zoom into the correct area at MS level. This will also take into consideration the reporting of existing maps according to article 13.2. Data, as set out in section C, shall be reported which are required to enable certain maps and reference data sets to be produced at the European level (WISE scale) and to enable compliance checking by Commission, and, subject to prior consent of the Member State, for other uses by the Commission, including JRC and EEA.

In the longer term as INSPIRE is being implemented, notably to be in place for the second cycle of flood maps (deadline for establishing maps : 22.12.2019), the format for reporting/data and information exchange and visualisation/displayed of flood maps should be in a decentralised mode foreseen by that Directive, and in line with a Shared Environmental Information System (SEIS) initative and made available via WISE.



Look Out!
Fully INSPIRE compliant reporting formats may not be operational for the 1st cycle of reporting of flood hazard maps and flood risk maps.

	Member States have to implement the system to the reporting of the second cycle (March 2020) at the latest, although reporting should as far as reasonably possible be INSPIRE compliant in the first cycle. Depending on the developments under the implementation of INSPIRE, this reporting sheet or other related document may need to be revised. For the first cycle, Member States can report either in an INSPIRE compatible format (decentralised system), or if not fully implemented in that Member State, hyperlinks to maps available in digital format, with geo-referenced hyperlinks which enables access from a certain area identified within WISE. For the second cycle, reporting formats/schemas shall aim at being fully INSPIRE compliant.

For both stages the content of the reporting needs to be defined in this Reporting sheet, but the technical reporting schemas and formats may differ between the 1st and 2nd cycles. The reporting sheets developed for the first implementation cycle will be assessed after the reporting, and if necessary be subject to a revision. This may be particularly relevant for the reporting of flood hazard and flood risk maps.

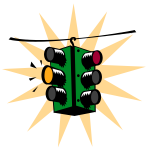
CIS Guidance Document No. 22: Updated Guidance on Implementing the Geographical Information System (GIS) Elements of the EU Water policy, shall be taken into account, and relevant parts should also be updated for the purpose of reporting of the Floods Directive by WG F (supported by the drafting group).[3] The further development of reporting/data exchange formats and visualisation shall furthermore be in line with relevant requirements of INSPIRE, in particular as regards the Annex III theme Natural Risk Zones, but also in relation to other relevant themes. Active involvement of WG F in the development of the INSPIRE requirements is foreseen.

Different existing data layers in WISE (e.g. RBD, sub-units, as well as currently under development 'WISE main rivers and Main lakes' reference dataset), and databases such as European Pollutant Release and Transfer Register (E-PRTR) can be used, along with background maps such as those provided for the PFRA(according to application of article 4,5 and 13.1 as relevant), showing topography and land-use.

As outlined in the Concept paper on reporting (chapter 3.2) information for other uses may be asked for, , with the consent from the Member States; going beyond compliance checking purposes for the Floods Directive. With a view of streamlining reporting on, for instance, State of the Environment reports by the European Environment Agency with reporting for the Floods Directive, some additional optional information may be asked for.

[3] http://circa.europa.eu/Members/irc/env/wfd/library?l=/framework_directive/guidance_documents&vm=detailed&sb=Title

To facilitate and structure the technical reporting formats, enumeration lists of types of floods and of types of adverse consequences will be developed, to be implemented in the reporting schemas. Appropriate structures such as NACE codes[4], or national correlated equivalent codes, can for instance be used for this purpose.

	**Look Out!**
	Coordination at the scale for the RBD (or smaller Unit of management, if relevant) is important, such as for the identification of common scenarios, for instance in the view of assessing the impacts of climate change on floods (Ref. Guidance document "River Basin Management in a changing climate"), which may have an impact on flood maps. Thus, coordination between member states and between regions in such shared RBD / UoM in the production of flood hazard maps and flood risk maps will therefore be important.

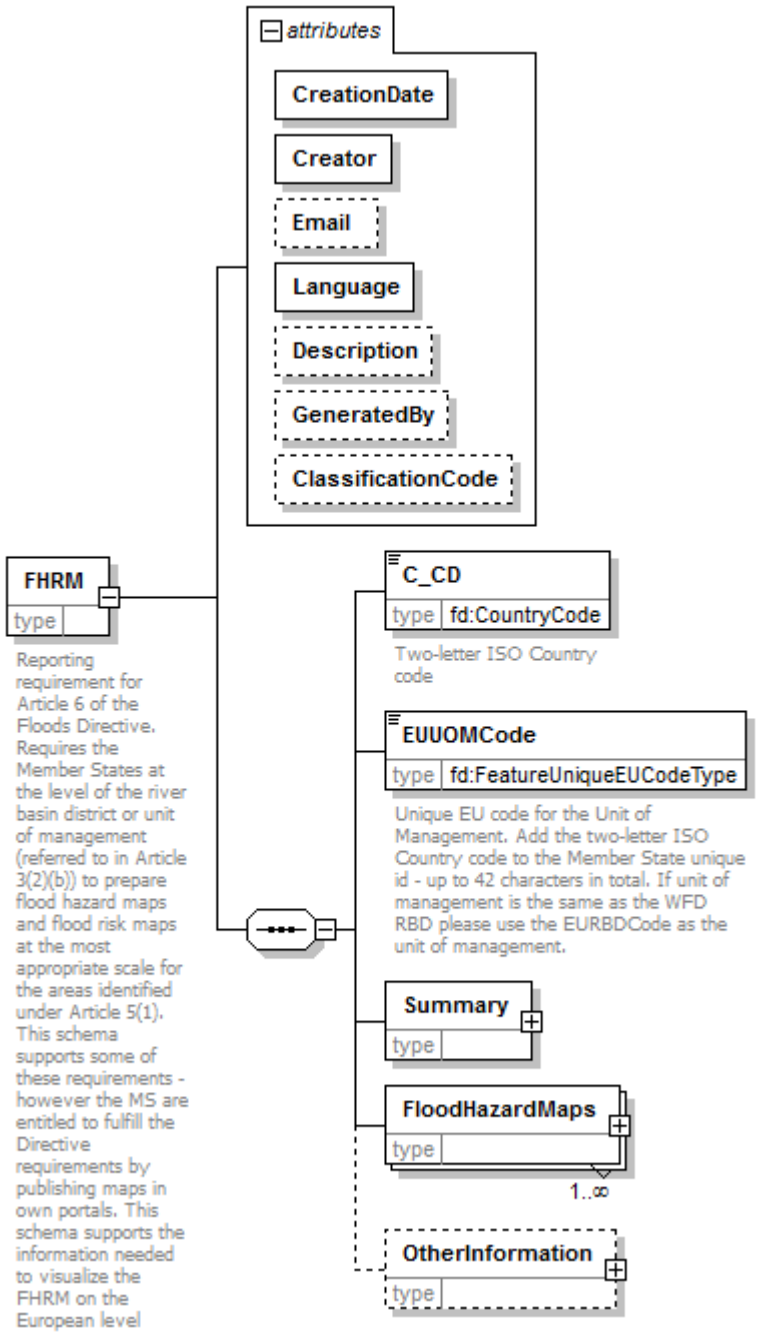
It is also noted that certain information in relation to the implementation of this Directive, such as mapping of effects of failures of critical infrastructure, may need to be reported to the Commission for compliance checking purposes only, if such information be deemed classified in the Member State concerned.

[4] NACE : The **Statistical Classification of Economic Activities in the European Community** (in French: Nomenclature statistique des activités économiques dans la Communauté européenne), commonly referred to as **NACE**, is a European industry standard classification system consisting of a 6 digit code.

Schema **FHRM_2p1.xsd**

element **FHRM**

diagram



annotation

documentation

Reporting requirement for Article 6 of the Floods Directive. Requires the Member States at the level of the river basin district or unit of management (referred to in Article 3(2)(b)) to prepare flood hazard maps and flood risk maps at the most appropriate scale for the areas identified under Article 5(1). This schema supports some of these requirements - however the MS are entitled to fulfill the Directive requirements by publishing maps in own portals. This schema supports the information needed to visualize the FHRM on the European level

attribute **FHRM/@CreationDate**

type	**xs:string**

attribute **FHRM/@Creator**

type	**xs:string**

attribute **FHRM/@Email**

type	**xs:string**

attribute **FHRM/@Language**

type	**LanguageCode**		
facets	Kind	Value	annotation
	enumeration	bg	
	enumeration	es	
	enumeration	cs	
	enumeration	da	
	enumeration	de	
	enumeration	et	
	enumeration	el	
	enumeration	en	
	enumeration	fr	
	enumeration	ga	
	enumeration	hr	
	enumeration	ic	
	enumeration	it	
	enumeration	lv	
	enumeration	lt	
	enumeration	hu	
	enumeration	mt	
	enumeration	nl	
	enumeration	no	
	enumeration	pl	
	enumeration	pt	
	enumeration	ro	
	enumeration	sk	
	enumeration	sl	
	enumeration	sr	
	enumeration	tr	
	enumeration	fi	
	enumeration	sv	

attribute **FHRM/@Description**

type	**xs:string**

attribute **FHRM/@GeneratedBy**

type	**xs:string**

attribute **FHRM/@ClassificationCode**

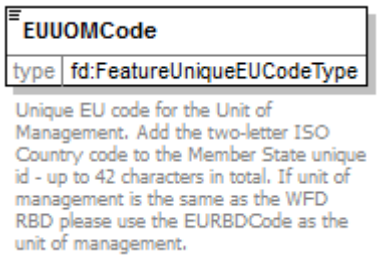
type	**DataConfidentialityClassificationCode**		
facets	Kind	Value	annotation
	enumeration	001	
	enumeration	003	

element **FHRM/C_CD**

diagram			
type	**CountryCode**		
facets	Kind	Value	annotation
	enumeration	AT	
	enumeration	BE	
	enumeration	BG	
	enumeration	CH	
	enumeration	CZ	
	enumeration	CY	
	enumeration	DE	
	enumeration	DK	
	enumeration	EE	
	enumeration	EL	
	enumeration	ES	
	enumeration	FI	
	enumeration	FR	
	enumeration	HR	
	enumeration	HU	
	enumeration	IE	
	enumeration	IS	
	enumeration	IT	
	enumeration	LT	
	enumeration	LU	
	enumeration	LV	
	enumeration	MT	
	enumeration	NO	
	enumeration	NL	
	enumeration	PL	
	enumeration	PT	
	enumeration	RO	

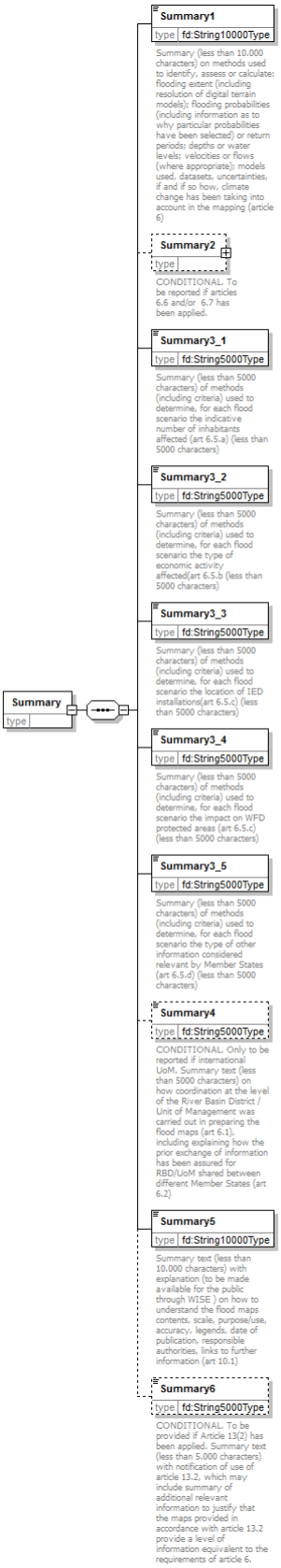
	enumeration SE enumeration SI enumeration SK enumeration TR enumeration UK
annotation	documentation Two-letter ISO Country code

element **FHRM/EUUOMCode**

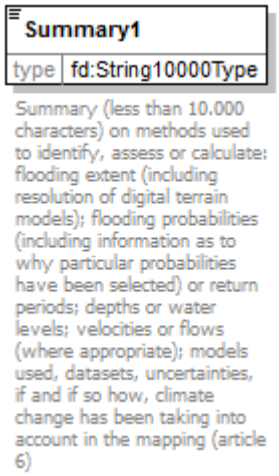
diagram	
type	**FeatureUniqueEUCodeType**
annotation	documentation Unique EU code for the Unit of Management. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total. If unit of management is the same as the WFD RBD please use the EURBDCode as the unit of management.

element **FHRM/Summary**

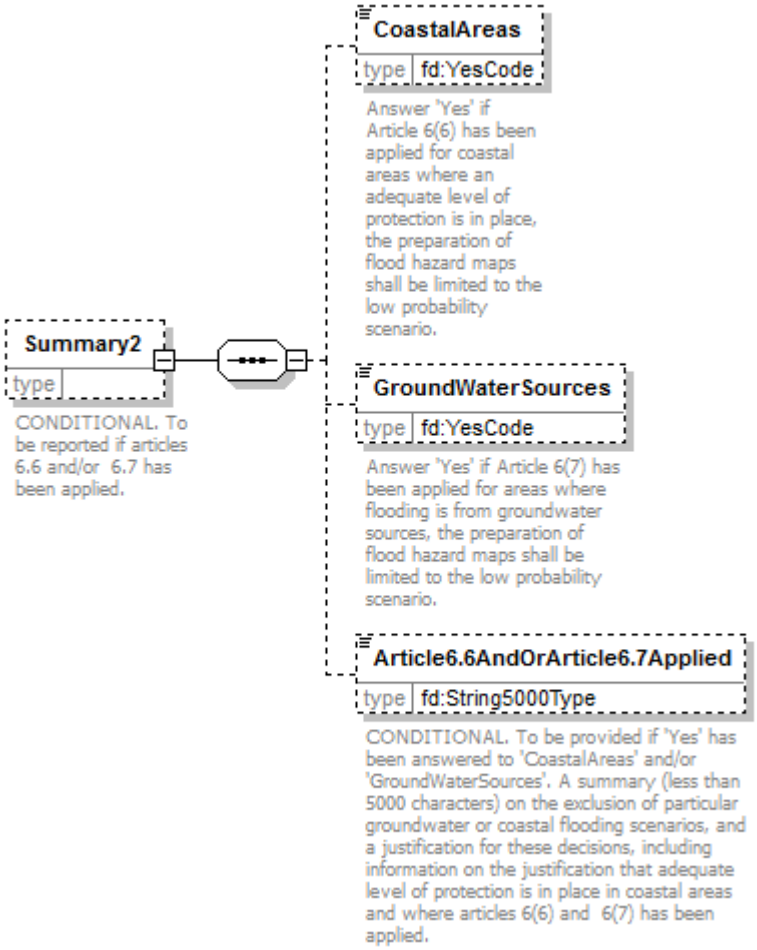
diagram



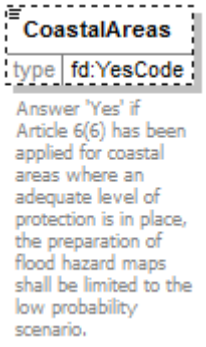
element **FHRM/Summary/Summary1**

diagram	
type	**String10000Type**
annotation	documentation Summary (less than 10.000 characters) on methods used to identify, assess or calculate: flooding extent (including resolution of digital terrain models); flooding probabilities (including information as to why particular probabilities have been selected) or return periods; depths or water levels; velocities or flows (where appropriate); models used, datasets, uncertainties, if and if so how, climate change has been taking into account in the mapping (article 6)

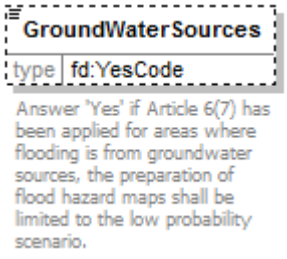
element **FHRM/Summary/Summary2**

diagram	
annotation	documentation CONDITIONAL. To be reported if articles 6.6 and/or 6.7 has been applied.

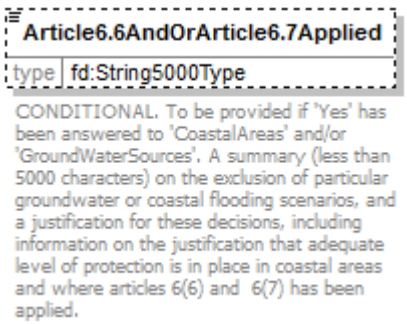
element **FHRM/Summary/Summary2/CoastalAreas**

diagram	
type	**YesCode**
facets	Kind enumeration Value Y annotation enumeration
annotation	documentation Answer 'Yes' if Article 6(6) has been applied for coastal areas where an adequate level of protection is in place, the preparation of flood hazard maps shall be limited to the low probability scenario.

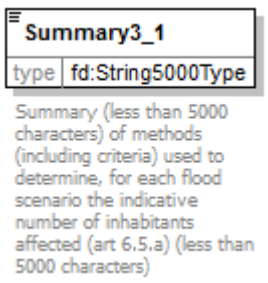
element **FHRM/Summary/Summary2/GroundWaterSources**

diagram	
type	**YesCode**
facets	Kind Value annotation enumeration Y enumeration
annotation	documentation Answer 'Yes' if Article 6(7) has been applied for areas where flooding is from groundwater sources, the preparation of flood hazard maps shall be limited to the low probability scenario.

element **FHRM/Summary/Summary2/Article6.6AndOrArticle6.7Applied**

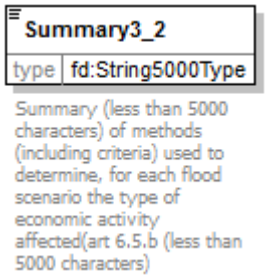
diagram	
type	**String5000Type**
annotation	documentation CONDITIONAL. To be provided if 'Yes' has been answered to 'CoastalAreas' and/or 'GroundWaterSources'. A summary (less than 5000 characters) on the exclusion of particular groundwater or coastal flooding scenarios, and a justification for these decisions, including information on the justification that adequate level of protection is in place in coastal areas and where articles 6(6) and 6(7) has been applied.

element **FHRM/Summary/Summary3_1**

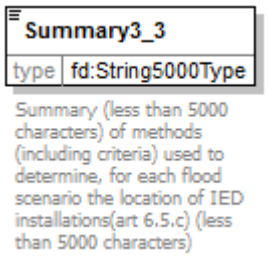
diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of methods (including criteria) used to determine, for each flood scenario

	the indicative number of inhabitants affected (art 6.5.a) (less than 5000 characters)

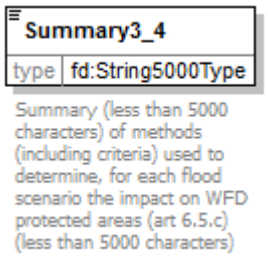
element **FHRM/Summary/Summary3_2**

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of methods (including criteria) used to determine, for each flood scenario the type of economic activity affected(art 6.5.b (less than 5000 characters)

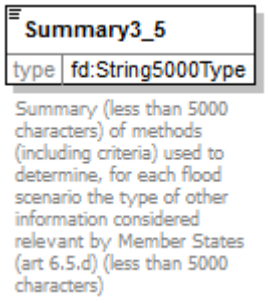
element **FHRM/Summary/Summary3_3**

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of methods (including criteria) used to determine, for each flood scenario the location of IED installations(art 6.5.c) (less than 5000 characters)

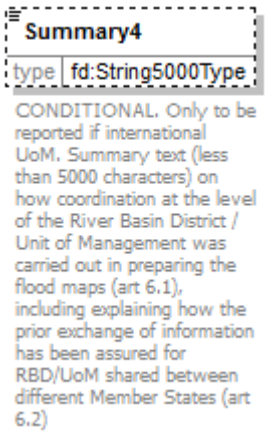
element **FHRM/Summary/Summary3_4**

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of methods (including criteria) used to determine, for each flood scenario the impact on WFD protected areas (art 6.5.c) (less than 5000 characters)

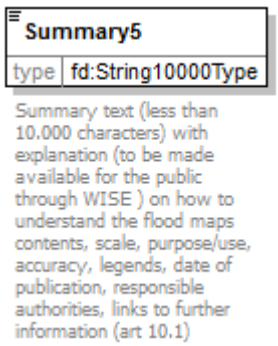
element **FHRM/Summary/Summary3_5**

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of methods (including criteria) used to determine, for each flood scenario the type of other information considered relevant by Member States (art 6.5.d) (less than 5000 characters)

element **FHRM/Summary/Summary4**

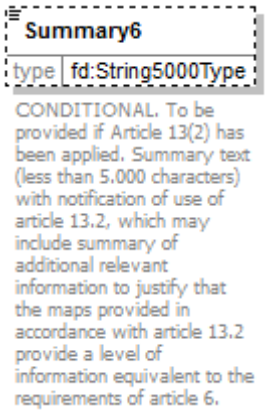
diagram	
type	**String5000Type**
annotation	documentation CONDITIONAL. Only to be reported if international UoM. Summary text (less than 5000 characters) on how coordination at the level of the River Basin District / Unit of Management was carried out in preparing the flood maps (art 6.1), including explaining how the prior exchange of information has been assured for RBD/UoM shared between different Member States (art 6.2)

element **FHRM/Summary/Summary5**

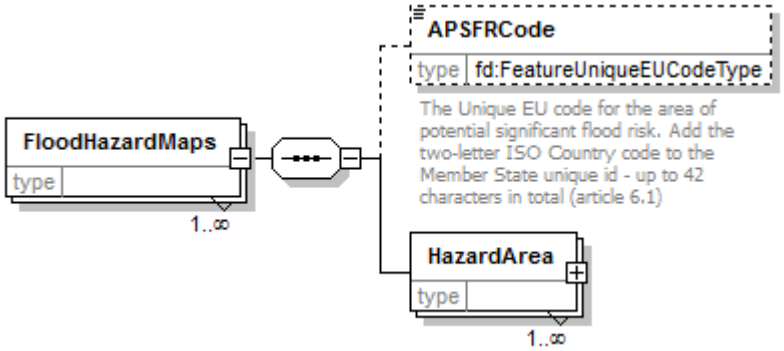
diagram	
type	**String10000Type**

annotation	documentation Summary text (less than 10.000 characters) with explanation (to be made available for the public through WISE) on how to understand the flood maps contents, scale, purpose/use, accuracy, legends, date of publication, responsible authorities, links to further information (art 10.1)

element **FHRM/Summary/Summary6**

diagram	
type	**String5000Type**
annotation	documentation CONDITIONAL. To be provided if Article 13(2) has been applied. Summary text (less than 5.000 characters) with notification of use of article 13.2, which may include summary of additional relevant information to justify that the maps provided in accordance with article 13.2 provide a level of information equivalent to the requirements of article 6.

element **FHRM/FloodHazardMaps**

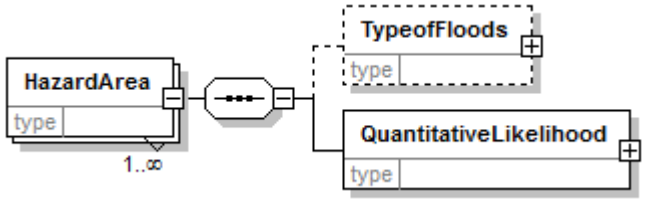
diagram	

element **FHRM/FloodHazardMaps/APSFRCode**

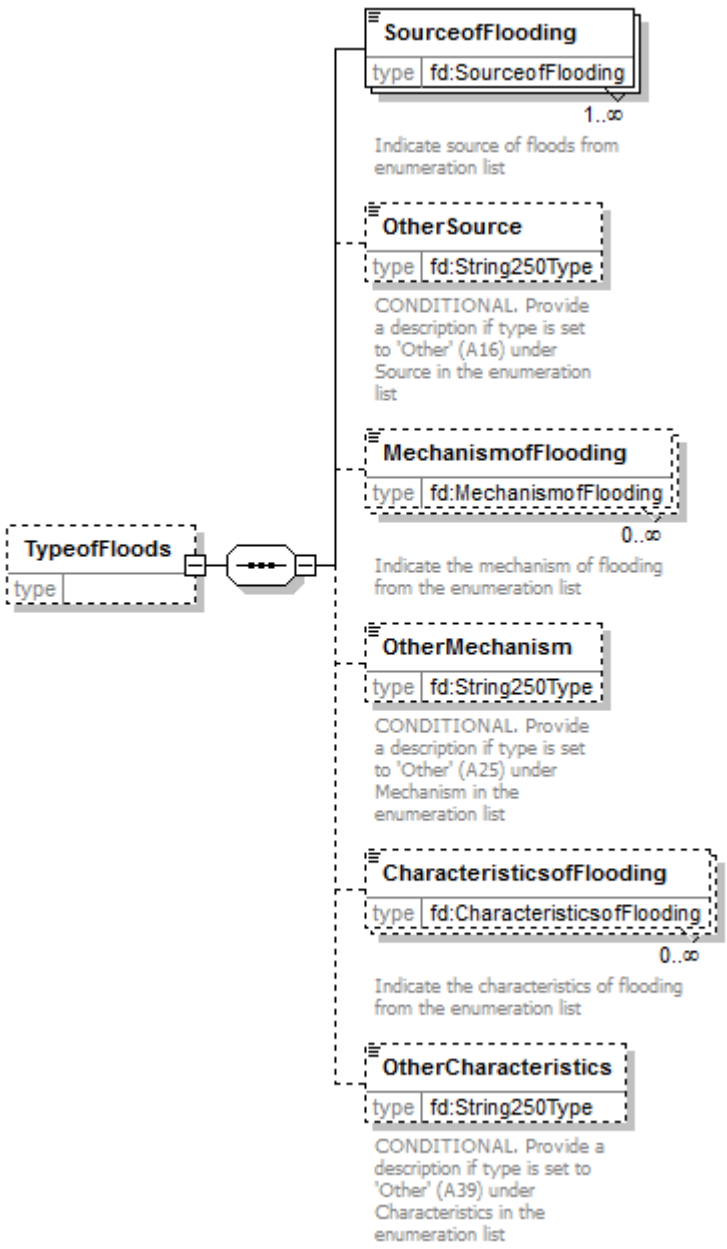
diagram	
type	**FeatureUniqueEUCodeType**
annotation	documentation The Unique EU code for the area of potential significant flood risk. Add the two-letter ISO Country code to the

	Member State unique id - up to 42 characters in total (article 6.1)

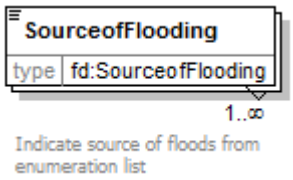
element **FHRM/FloodHazardMaps/HazardArea**

diagram	

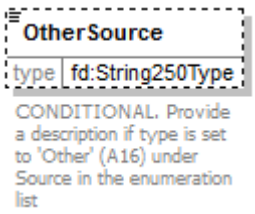
element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods**

diagram	

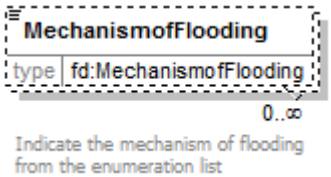
element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/SourceofFlooding**

diagram	
type	**SourceofFlooding**
facets	Kind / Value / annotation enumeration A11 enumeration A12 enumeration A13 enumeration A14 enumeration A15 enumeration A16 enumeration A17
annotation	documentation Indicate source of floods from enumeration list

element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/OtherSource**

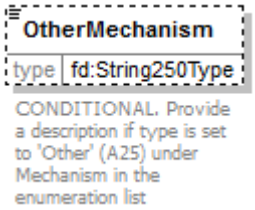
diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A16) under Source in the enumeration list

element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/MechanismofFlooding**

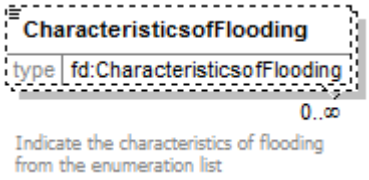
diagram	
type	**MechanismofFlooding**
facets	Kind / Value / annotation enumeration A21 enumeration A22 enumeration A23 enumeration A24 enumeration A25 enumeration A26

annotation	documentation Indicate the mechanism of flooding from the enumeration list

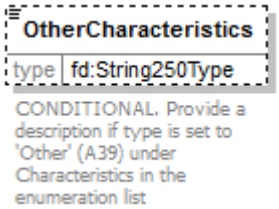
element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/OtherMechanism**

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A25) under Mechanism in the enumeration list

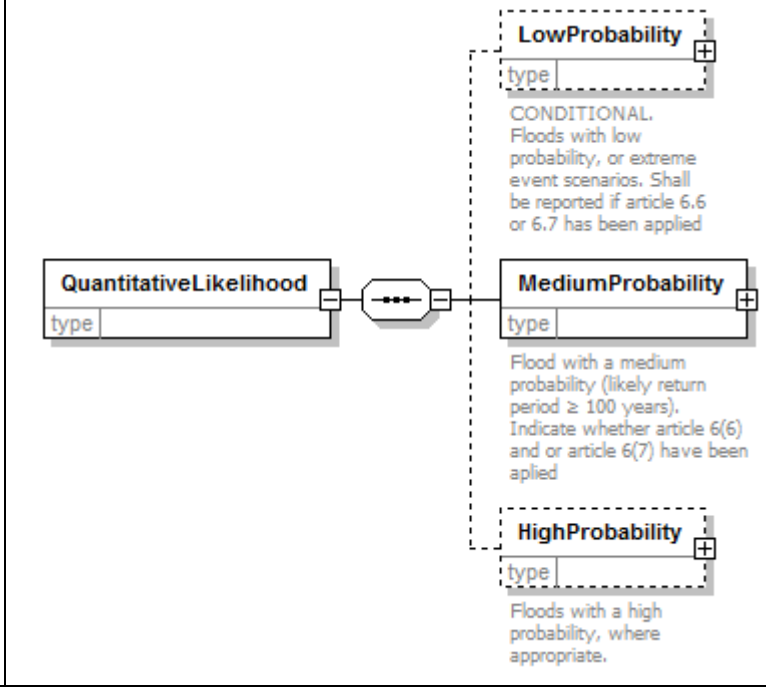
element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/CharacteristicsofFlooding**

diagram	
type	**CharacteristicsofFlooding**
facets	Kind / Value / annotation enumeration A31 enumeration A32 enumeration A33 enumeration A34 enumeration A35 enumeration A36 enumeration A37 enumeration A38 enumeration A39 enumeration A40
annotation	documentation Indicate the characteristics of flooding from the enumeration list

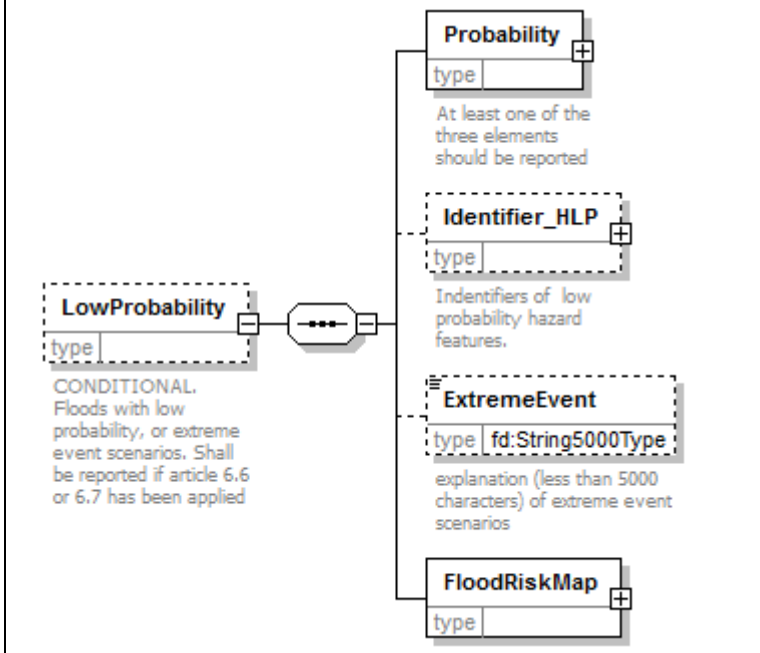
element **FHRM/FloodHazardMaps/HazardArea/TypeofFloods/OtherCharacteristics**

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Provide a description if type is set to 'Other' (A39) under Characteristics in the enumeration list

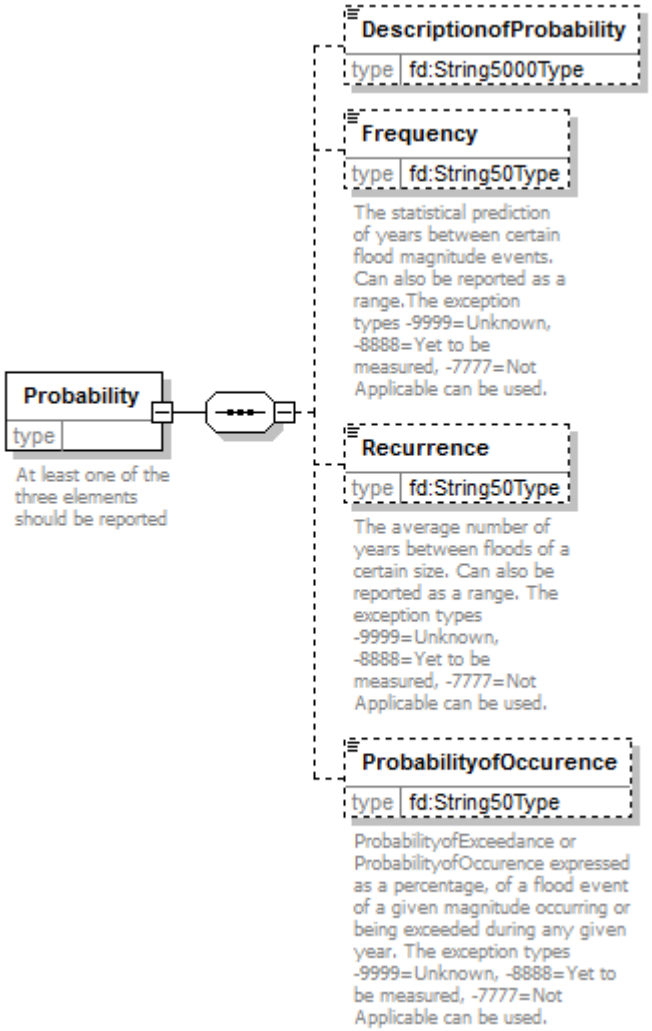
element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood**

diagram	

element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability**

diagram	
annotation	documentation CONDITIONAL. Floods with low probability, or extreme event scenarios. Shall be reported if article 6.6 or 6.7 has been applied

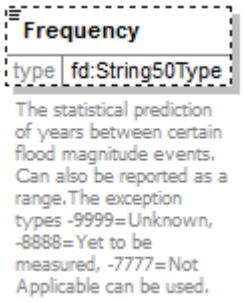
element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Probability**

diagram	
annotation	documentation At least one of the three elements should be reported

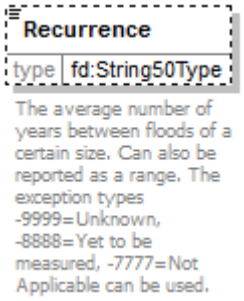
element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Probability/DescriptionofProbability**

diagram	
type	**String5000Type**

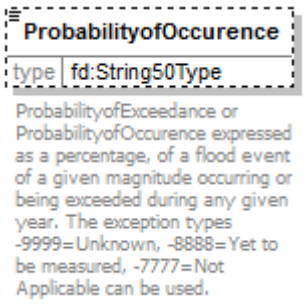
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Probability/Frequency

diagram	
type	**String50Type**
annotation	documentation The statistical prediction of years between certain flood magnitude events. Can also be reported as a range.The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Probability/Recurrence

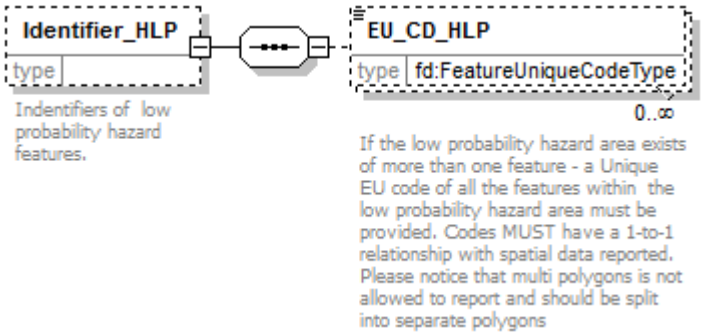
diagram	
type	**String50Type**
annotation	documentation The average number of years between floods of a certain size. Can also be reported as a range. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Probability/ProbabilityofOccurence

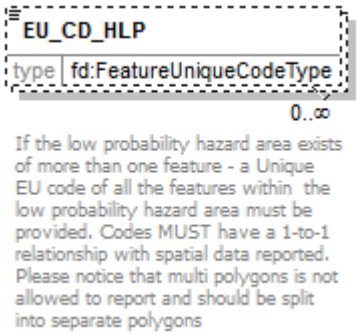
diagram	
type	**String50Type**
annotation	documentation ProbabilityofExceedance or ProbabilityofOccurence expressed as a percentage, of a flood event of a given

	magnitude occurring or being exceeded during any given year. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

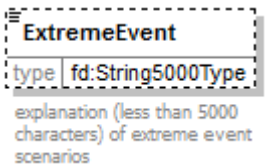
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Identifier_HLP

diagram	
annotation	documentation Indentifiers of low probability hazard features.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/Identifier_HLP/EU_CD_HLP

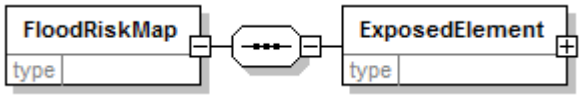
diagram	
type	**FeatureUniqueCodeType**
annotation	documentation If the low probability hazard area exists of more than one feature - a Unique EU code of all the features within the low probability hazard area must be provided. Codes MUST have a 1-to-1 relationship with spatial data reported. Please notice that multi polygons is not allowed to report and should be split into separate polygons

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/ExtremeEvent

diagram	
type	**String5000Type**
annotation	documentation explanation (less than 5000 characters) of extreme event scenarios

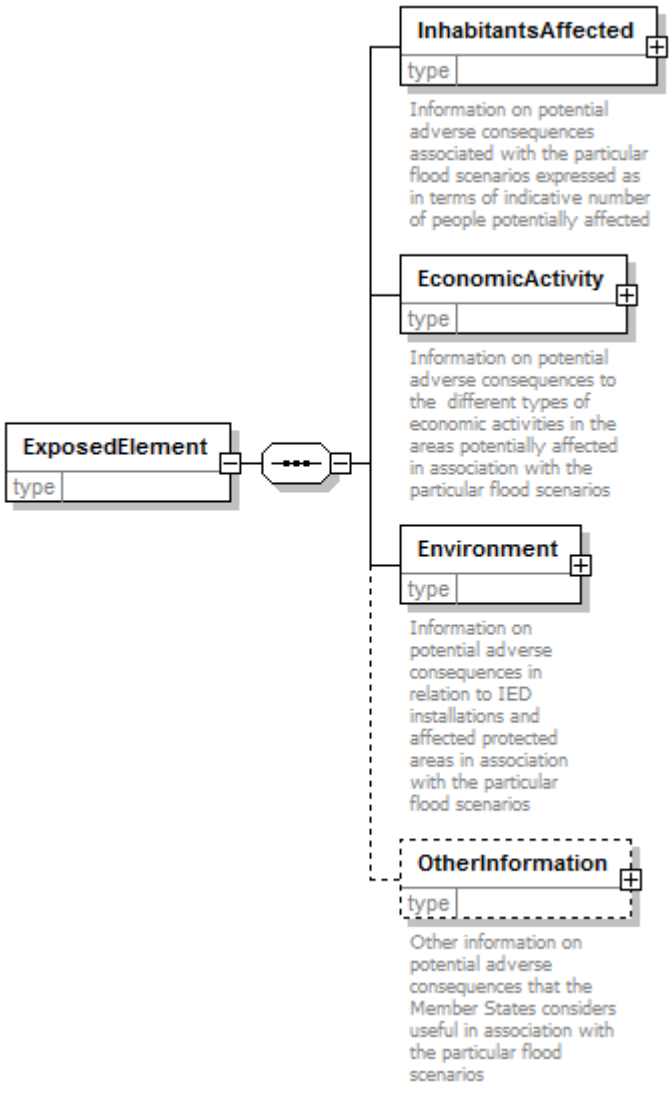
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap

diagram

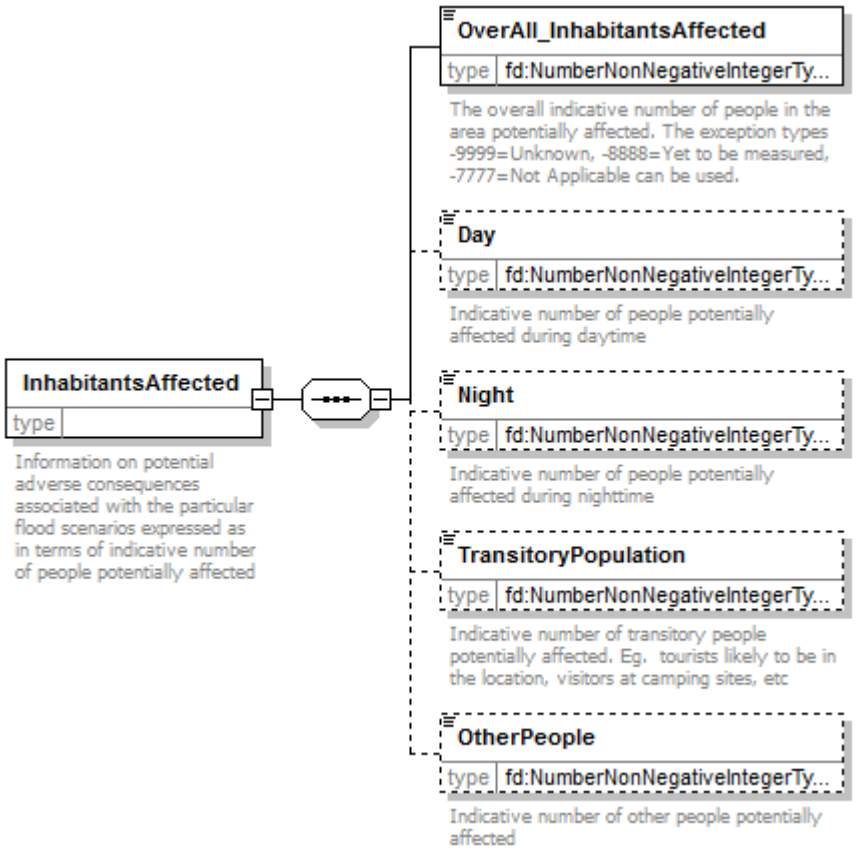


element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement

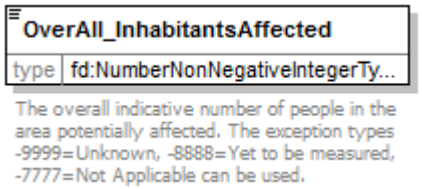
diagram



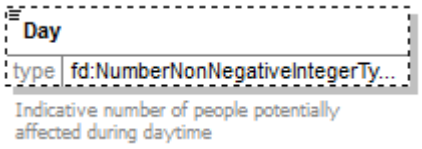
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected

diagram	
annotation	documentation Information on potential adverse consequences associated with the particular flood scenarios expressed as in terms of indicative number of people potentially affected

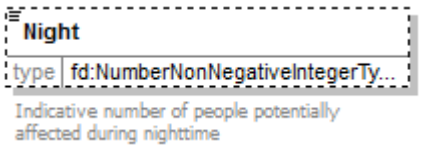
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected/OverAll_InhabitantsAffected

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation The overall indicative number of people in the area potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

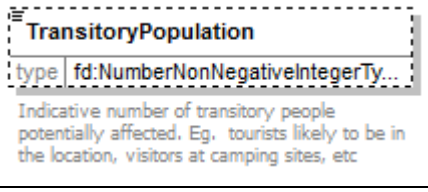
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected/Day

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during daytime

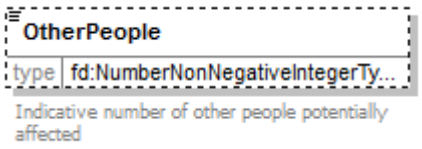
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected/Night

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during nighttime

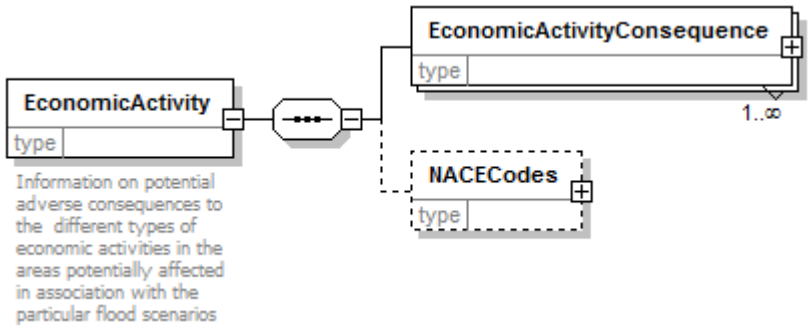
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected/TransitoryPopulation

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of transitory people potentially affected. Eg. tourists likely to be in the location, visitors at camping sites, etc

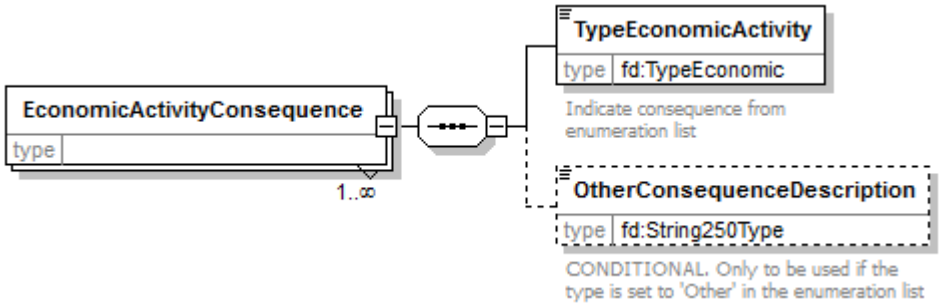
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/InhabitantsAffected/OtherPeople

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of other people potentially affected

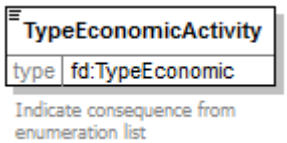
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity

diagram	
annotation	documentation Information on potential adverse consequences to the different types of economic activities in the areas potentially affected in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence

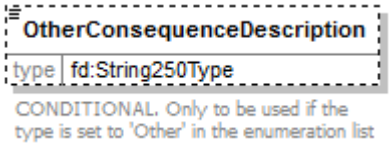
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/TypeEconomicActivity

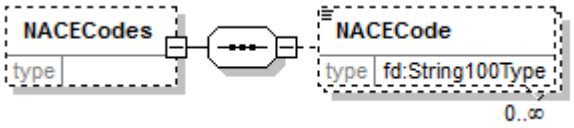
diagram	
type	**TypeEconomic**
facets	Kind / Value / annotation enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45 enumeration B46

annotation	documentation Indicate consequence from enumeration list

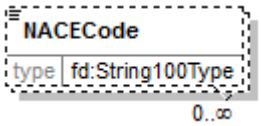
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

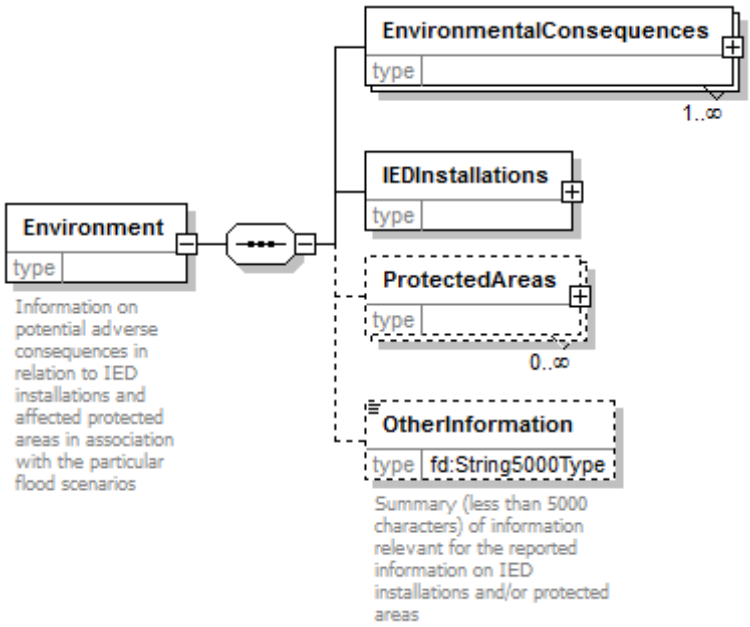
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes

diagram	

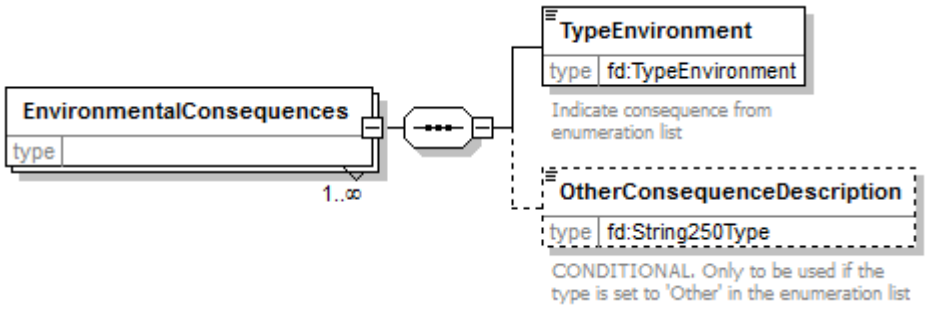
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes/NACECode

diagram	
type	**String100Type**

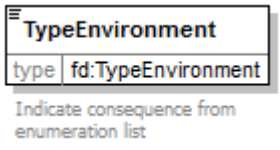
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment

diagram	
annotation	documentation Information on potential adverse consequences in relation to IED installations and affected protected areas in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences

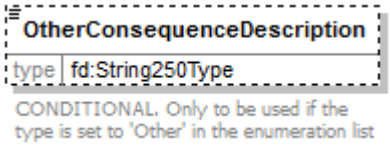
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/TypeEnvironment

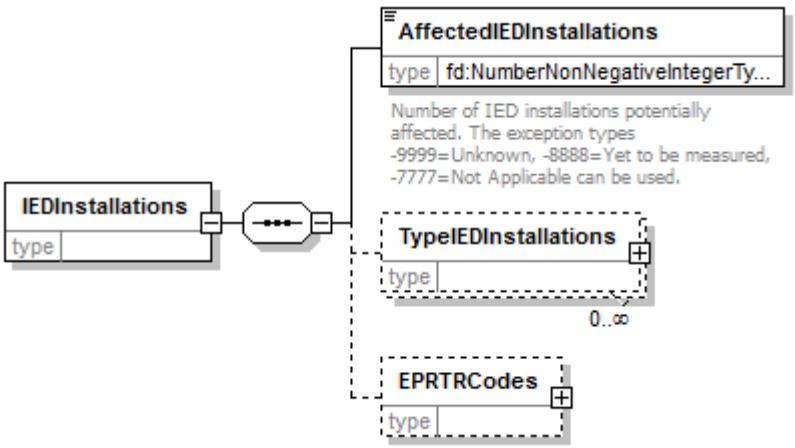
diagram	
type	**TypeEnvironment**
facets	Kind Value annotation

	enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Indicate consequence from enumeration list

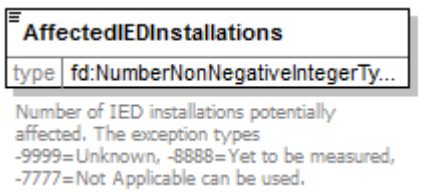
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations

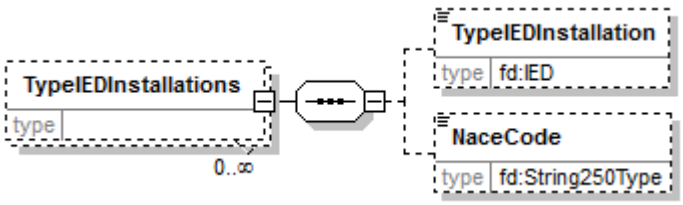
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/AffectedIEDInstallations

diagram	
type	**NumberNonNegativeIntegerType**

annotation	documentation Number of IED installations potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations

diagram	

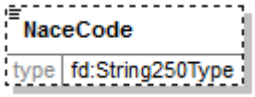
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/TypeIEDInstallation

diagram	
type	**IED**
facets	Kind / Value / annotation enumeration 1 enumeration 1.1 enumeration 1.2 enumeration 1.3 enumeration 1.4.a enumeration 1.4.b enumeration 2 enumeration 2.1 enumeration 2.2 enumeration 2.3.a enumeration 2.3.b enumeration 2.3.c enumeration 2.4 enumeration 2.5.a enumeration 2.5.b enumeration 2.6 enumeration 3 enumeration 3.1.a enumeration 3.1.b enumeration 3.1.c enumeration 3.2 enumeration 3.3 enumeration 3.4 enumeration 3.5 enumeration 4

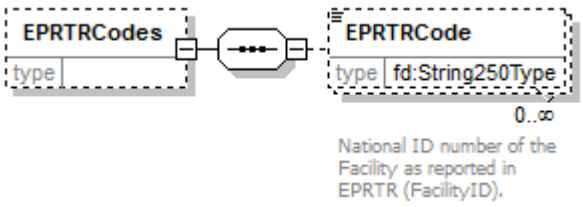
	enumeration 4.1.a enumeration 4.1.b enumeration 4.1.c enumeration 4.1.d enumeration 4.1.e enumeration 4.1.f enumeration 4.1.g enumeration 4.1.h enumeration 4.1.i enumeration 4.1.j enumeration 4.1.k enumeration 4.2.a enumeration 4.2.b enumeration 4.2.c enumeration 4.2.d enumeration 4.2.e enumeration 4.3 enumeration 4.4 enumeration 4.5 enumeration 4.6 enumeration 5 enumeration 5.1.a enumeration 5.1.b enumeration 5.1.c enumeration 5.1.d enumeration 5.1.e enumeration 5.1.f enumeration 5.1.g enumeration 5.1.h enumeration 5.1.i enumeration 5.1.j enumeration 5.1.k enumeration 5.2.a enumeration 5.2.b enumeration 5.3.a.i enumeration 5.3.a.ii enumeration 5.3.a.iii enumeration 5.3.a.iv enumeration 5.3.a.v enumeration 5.3.b.i enumeration 5.3.b.ii enumeration 5.3.b.iii enumeration 5.3.b.iv enumeration 5.4 enumeration 5.5 enumeration 5.6 enumeration 6

	enumeration 6.1.a enumeration 6.1.b enumeration 6.1.c enumeration 6.2 enumeration 6.3 enumeration 6.4.a enumeration 6.4.b.i enumeration 6.4.b.ii enumeration 6.4.b.iii enumeration 6.4.c enumeration 6.5 enumeration 6.6.a enumeration 6.6.b enumeration 6.6.c enumeration 6.7 enumeration 6.8 enumeration 6.9 enumeration 6.10 enumeration 6.11

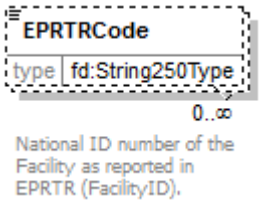
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/NaceCode

diagram	
type	**String250Type**

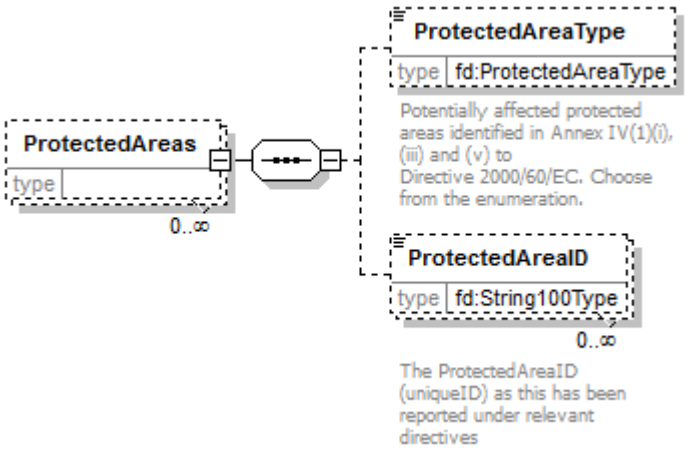
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes

diagram	

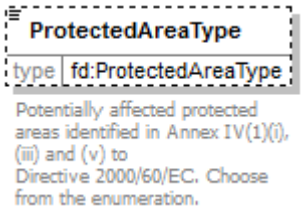
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes/EPRTRCode

diagram	
type	**String250Type**
annotation	documentation National ID number of the Facility as reported in EPRTR (FacilityID).

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/ProtectedAreas

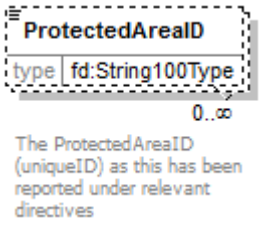
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ ProtectedAreaType

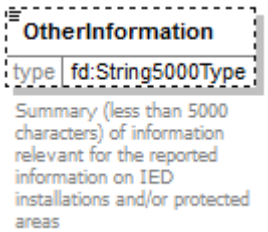
diagram	
type	**ProtectedAreaType**
facets	Kind / Value / annotation enumeration Bathing enumeration Birds enumeration Habitats enumeration Nitrates enumeration UWWT

	enumeration Article 7 Abstraction for drinking water enumeration WFD_WaterBodies enumeration EuropeanOther enumeration National enumeration Local
annotation	documentation Potentially affected protected areas identified in Annex IV(1)(i), (iii) and (v) to Directive 2000/60/EC. Choose from the enumeration.

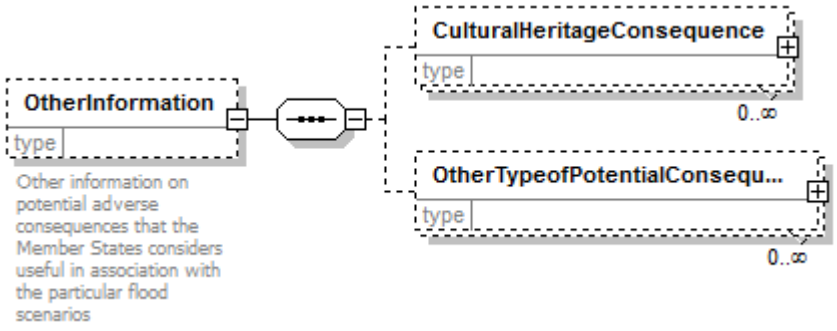
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ProtectedAreaID

diagram	
type	**String100Type**
annotation	documentation The ProtectedAreaID (uniqueID) as this has been reported under relevant directives

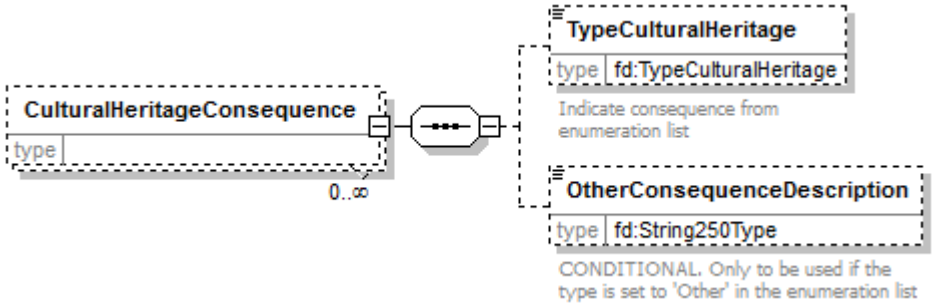
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/Environment/OtherInformation

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of information relevant for the reported information on IED installations and/or protected areas

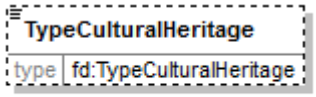
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation

diagram	
annotation	documentation Other information on potential adverse consequences that the Member States considers useful in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence

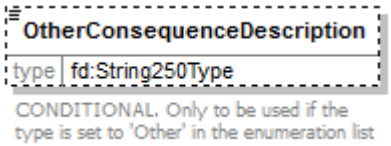
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/TypeCulturalHeritage

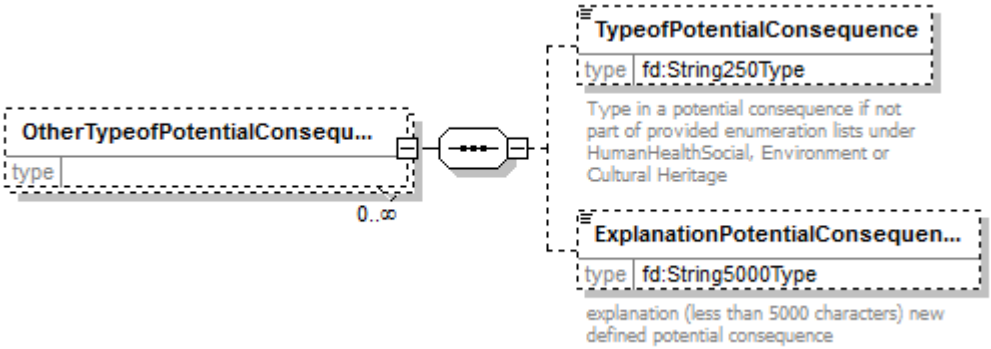
diagram	
type	**TypeCulturalHeritage**
facets	Kind / Value / annotation enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Indicate consequence from enumeration list

element

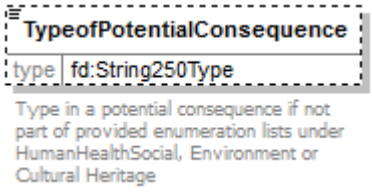
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

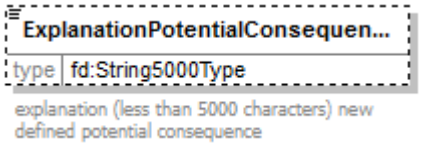
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences

diagram	

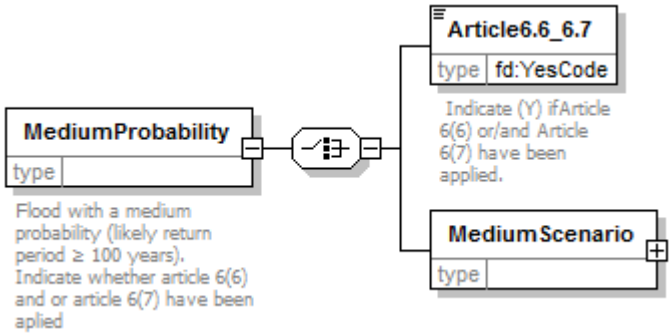
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/TypeofPotentialConsequence

diagram	
type	**String250Type**
annotation	documentation Type in a potential consequence if not part of provided enumeration lists under HumanHealthSocial, Environment or Cultural Heritage

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/LowProbability/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/ExplanationPotentialConsequence

diagram	
type	**String5000Type**
annotation	documentation explanation (less than 5000 characters) new defined potential consequence

element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability**

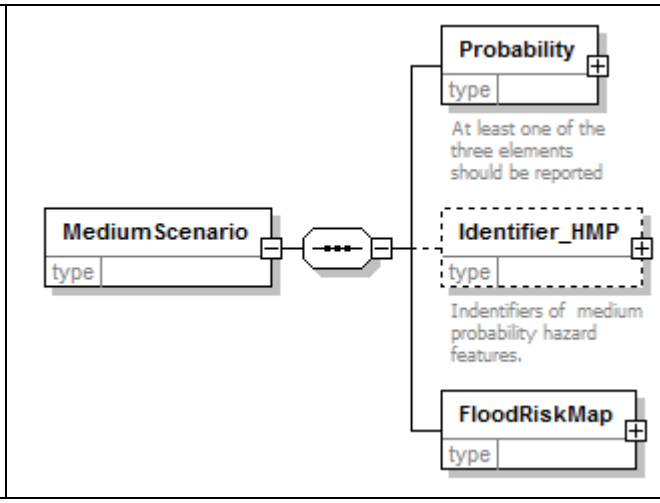
diagram	
annotation	documentation Flood with a medium probability (likely return period ≥ 100 years). Indicate whether article 6(6) and or article 6(7) have been aplied

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/Article6.6_6.7

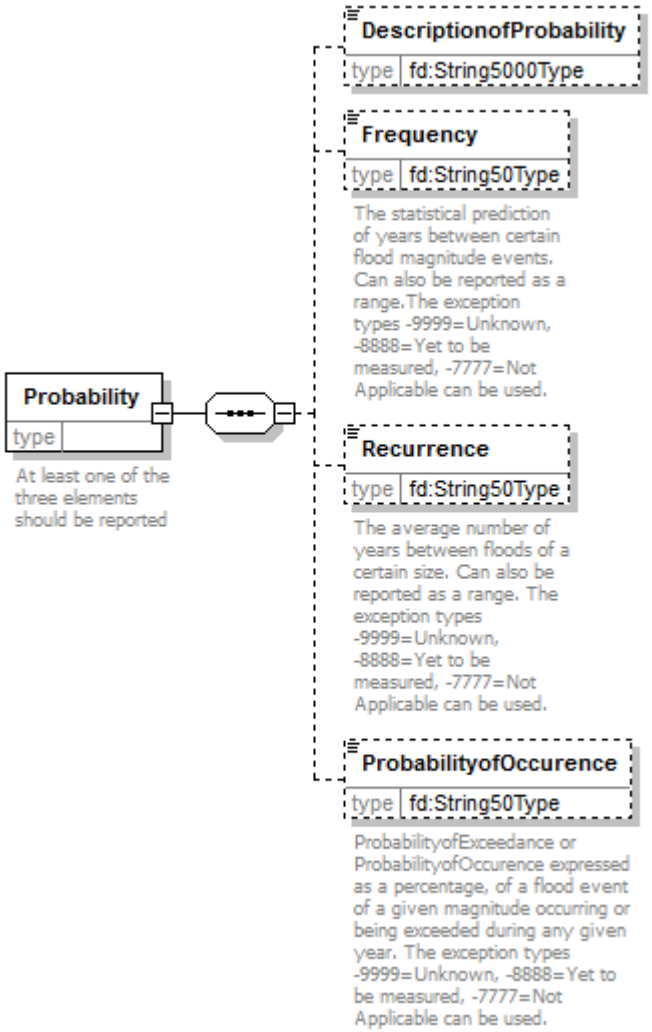
diagram	
type	**YesCode**
facets	Kind Value annotation enumeration Y enumeration
annotation	documentation Indicate (Y) ifArticle 6(6) or/and Article 6(7) have been applied.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario

diagram



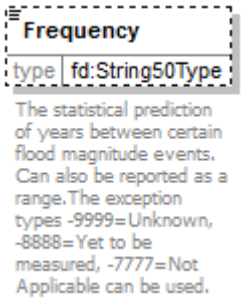
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Probability

diagram	
annotation	documentation At least one of the three elements should be reported

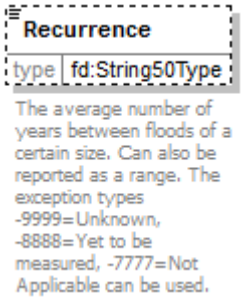
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Probability/DescriptionofProbability

diagram	
type	**String5000Type**

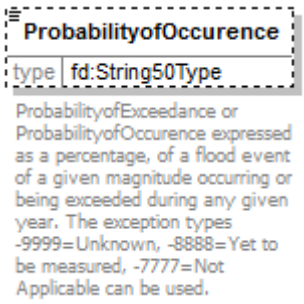
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Probability/Frequency

diagram	
type	**String50Type**
annotation	documentation The statistical prediction of years between certain flood magnitude events. Can also be reported as a range.The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Probability/Recurrence

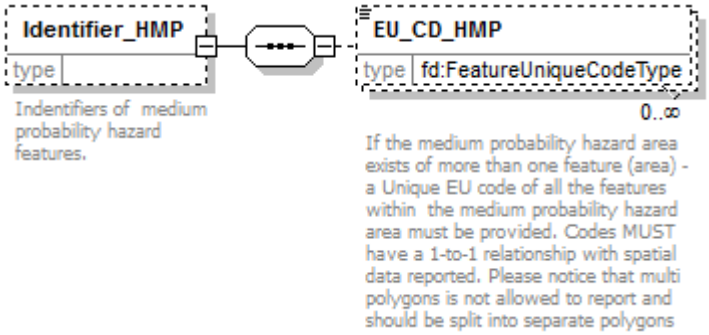
diagram	
type	**String50Type**
annotation	documentation The average number of years between floods of a certain size. Can also be reported as a range. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Probability/ProbabilityofOccurence

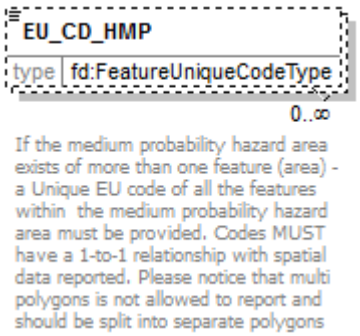
diagram	
type	**String50Type**
annotation	documentation ProbabilityofExceedance or ProbabilityofOccurence expressed as a percentage, of a flood event of a given

	magnitude occurring or being exceeded during any given year. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

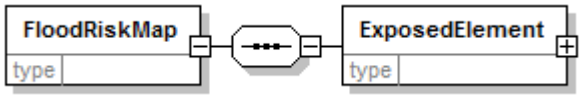
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Identifier_HMP

diagram	
annotation	documentation Indentifiers of medium probability hazard features.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/Identifier_HMP/EU_CD_HMP

diagram	
type	**FeatureUniqueCodeType**
annotation	documentation If the medium probability hazard area exists of more than one feature (area) - a Unique EU code of all the features within the medium probability hazard area must be provided. Codes MUST have a 1-to-1 relationship with spatial data reported. Please notice that multi polygons is not allowed to report and should be split into separate polygons

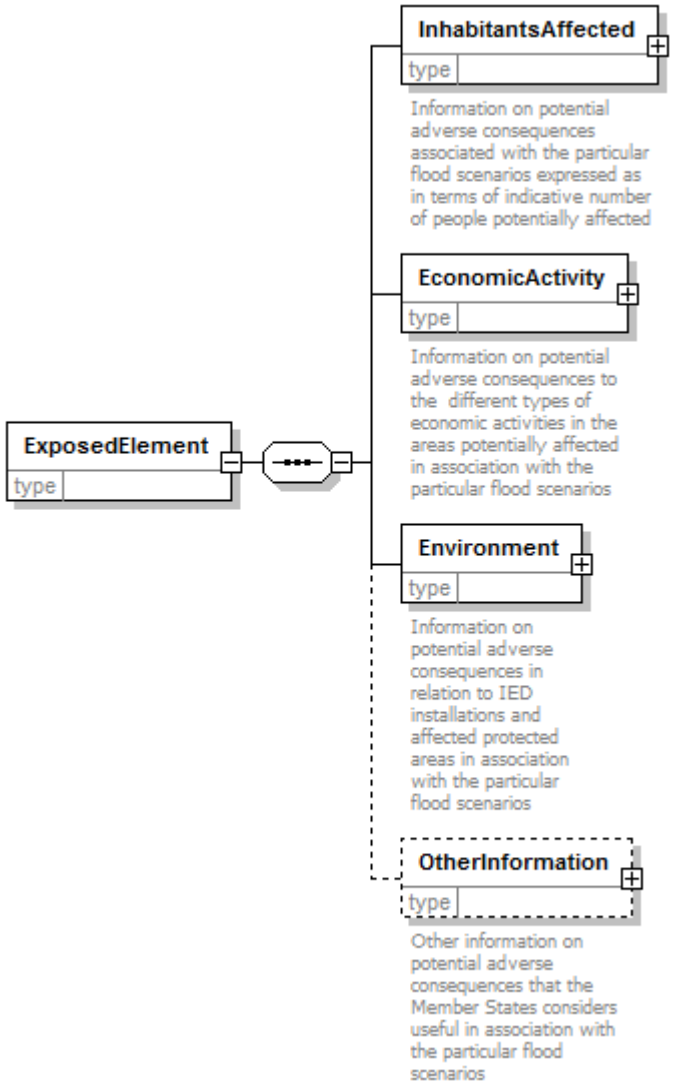
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap

diagram	

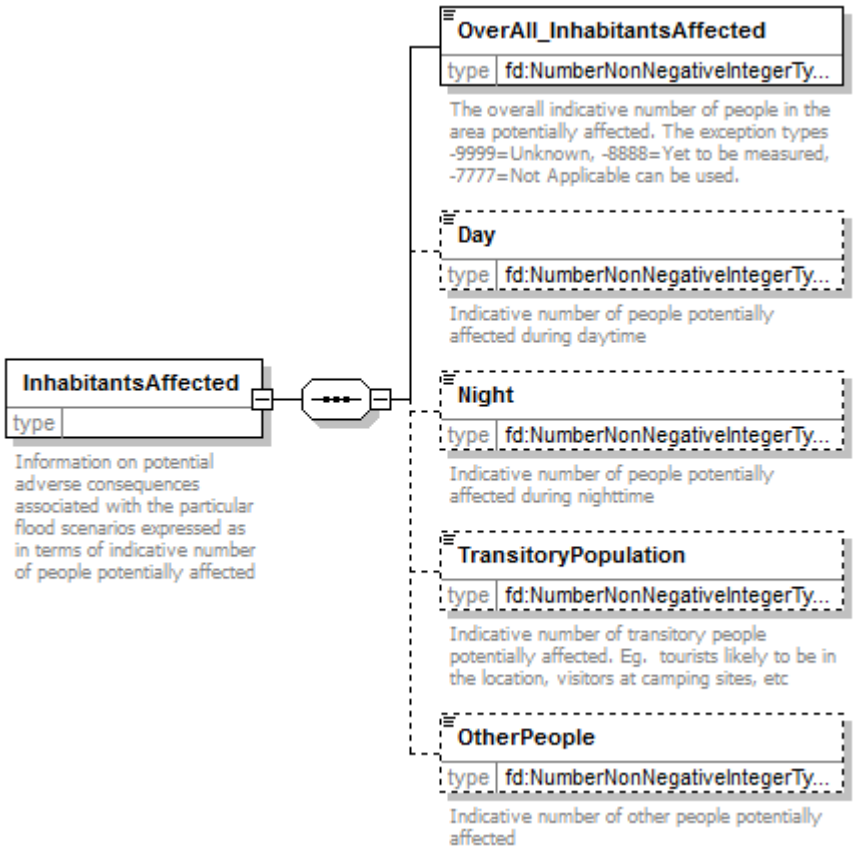
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenari

o/FloodRiskMap/ExposedElement

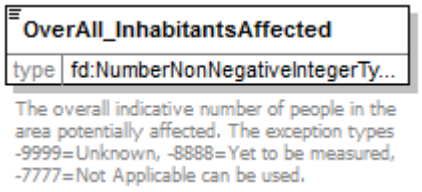
diagram



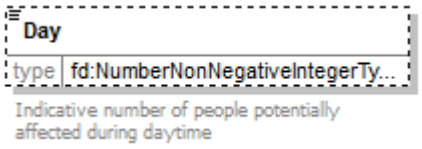
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected

diagram	
annotation	documentation Information on potential adverse consequences associated with the particular flood scenarios expressed as in terms of indicative number of people potentially affected

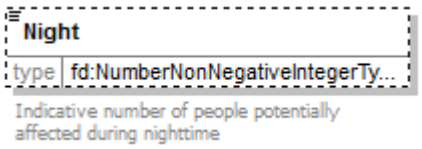
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/OverAll_InhabitantsAffected

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation The overall indicative number of people in the area potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

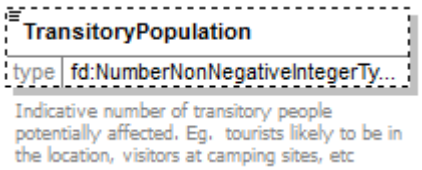
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/Day

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during daytime

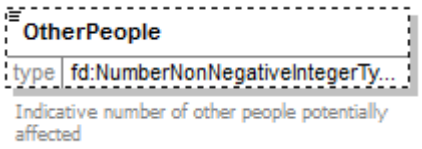
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/Night

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during nighttime

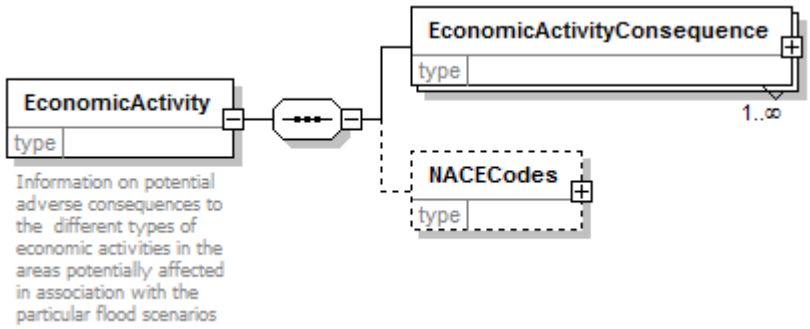
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/TransitoryPopulation

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of transitory people potentially affected. Eg. tourists likely to be in the location, visitors at camping sites, etc

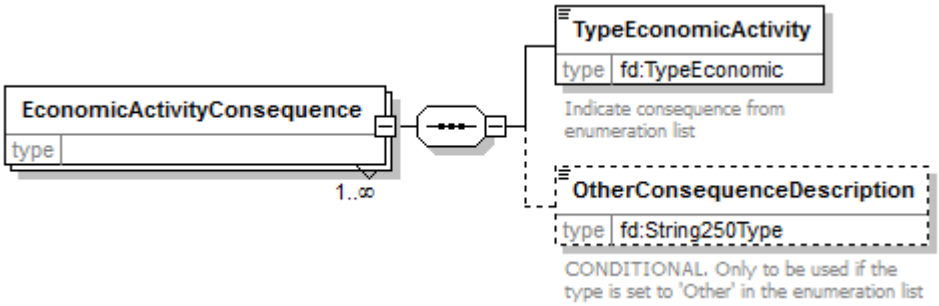
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/OtherPeople

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of other people potentially affected

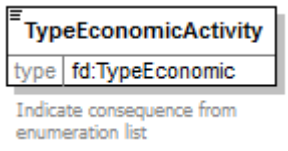
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity

diagram	
annotation	documentation Information on potential adverse consequences to the different types of economic activities in the areas potentially affected in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence

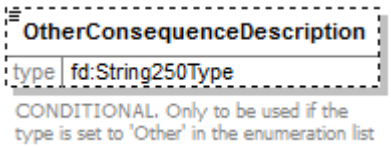
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/TypeEconomicActivity

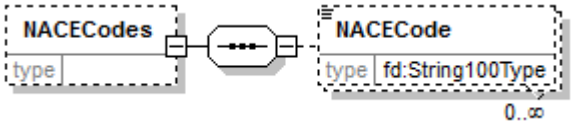
diagram	
type	**TypeEconomic**
facets	Kind / Value / annotation enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45

	enumeration B46
annotation	documentation Indicate consequence from enumeration list

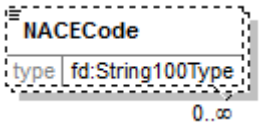
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

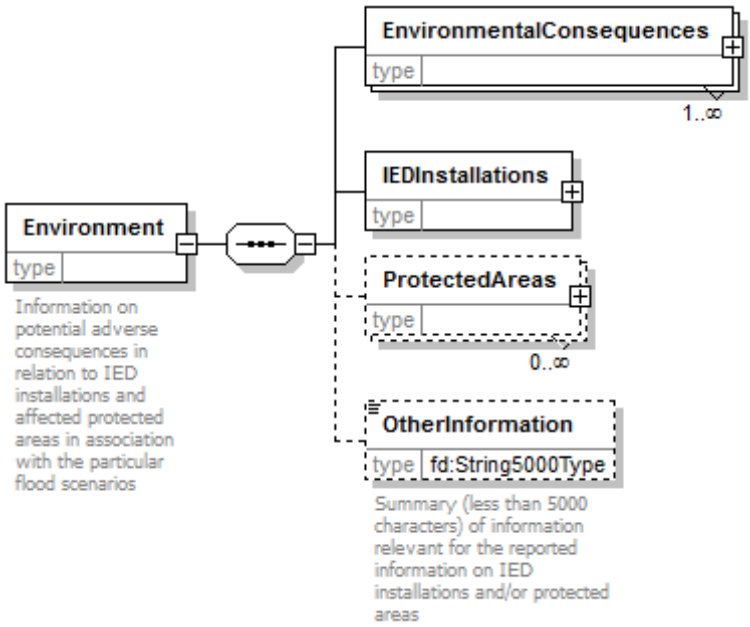
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes

diagram	

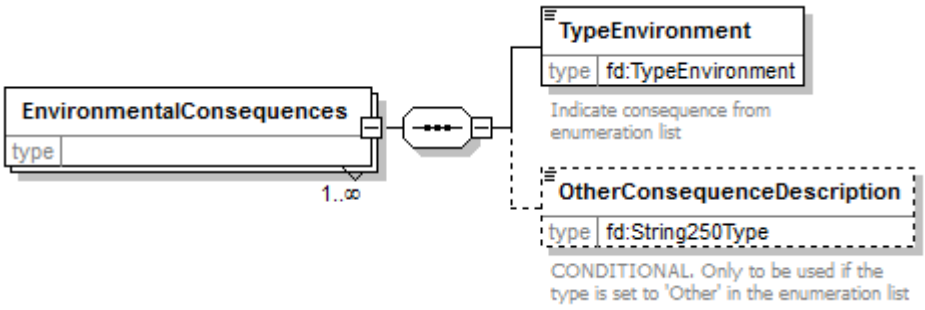
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes/NACECode

diagram	
type	**String100Type**

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment

diagram	
annotation	documentation Information on potential adverse consequences in relation to IED installations and affected protected areas in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences

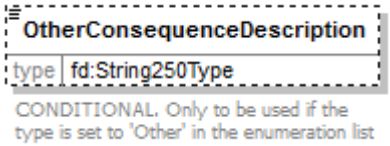
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/TypeEnvironment

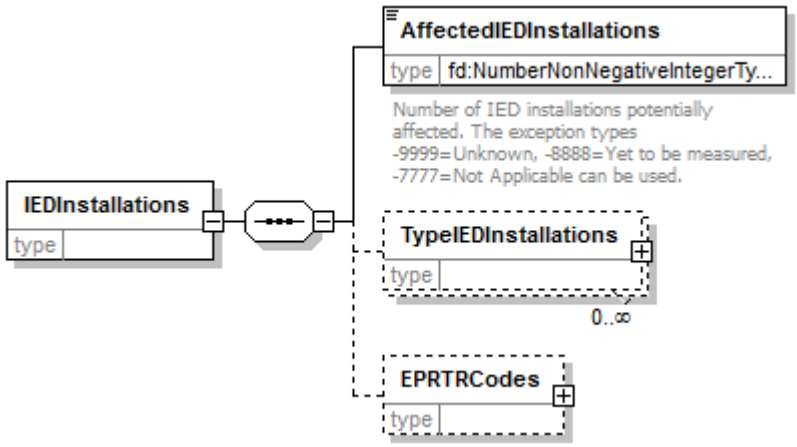
diagram	
type	**TypeEnvironment**
facets	Kind Value annotation

	enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Indicate consequence from enumeration list

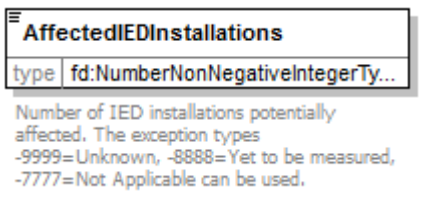
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations

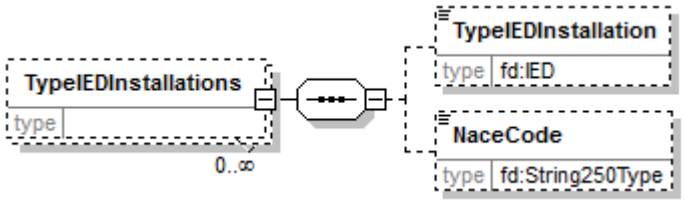
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/AffectedIEDInstallations

diagram	

type	**NumberNonNegativeIntegerType**
annotation	documentation Number of IED installations potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations

diagram	

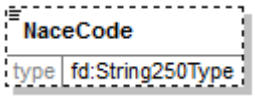
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/TypeIEDInstallation

diagram	
type	**IED**
facets	Kind / Value / annotation enumeration 1 enumeration 1.1 enumeration 1.2 enumeration 1.3 enumeration 1.4.a enumeration 1.4.b enumeration 2 enumeration 2.1 enumeration 2.2 enumeration 2.3.a enumeration 2.3.b enumeration 2.3.c enumeration 2.4 enumeration 2.5.a enumeration 2.5.b enumeration 2.6 enumeration 3 enumeration 3.1.a enumeration 3.1.b enumeration 3.1.c enumeration 3.2 enumeration 3.3 enumeration 3.4

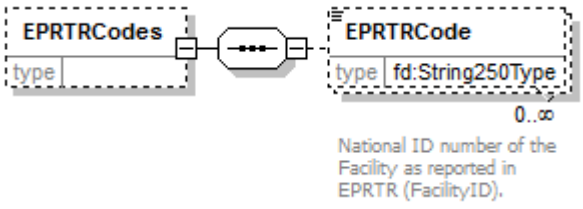
	enumeration 3.5 enumeration 4 enumeration 4.1.a enumeration 4.1.b enumeration 4.1.c enumeration 4.1.d enumeration 4.1.e enumeration 4.1.f enumeration 4.1.g enumeration 4.1.h enumeration 4.1.i enumeration 4.1.j enumeration 4.1.k enumeration 4.2.a enumeration 4.2.b enumeration 4.2.c enumeration 4.2.d enumeration 4.2.e enumeration 4.3 enumeration 4.4 enumeration 4.5 enumeration 4.6 enumeration 5 enumeration 5.1.a enumeration 5.1.b enumeration 5.1.c enumeration 5.1.d enumeration 5.1.e enumeration 5.1.f enumeration 5.1.g enumeration 5.1.h enumeration 5.1.i enumeration 5.1.j enumeration 5.1.k enumeration 5.2.a enumeration 5.2.b enumeration 5.3.a.i enumeration 5.3.a.ii enumeration 5.3.a.iii enumeration 5.3.a.iv enumeration 5.3.a.v enumeration 5.3.b.i enumeration 5.3.b.ii enumeration 5.3.b.iii enumeration 5.3.b.iv enumeration 5.4 enumeration 5.5

	enumeration 5.6 enumeration 6 enumeration 6.1.a enumeration 6.1.b enumeration 6.1.c enumeration 6.2 enumeration 6.3 enumeration 6.4.a enumeration 6.4.b.i enumeration 6.4.b.ii enumeration 6.4.b.iii enumeration 6.4.c enumeration 6.5 enumeration 6.6.a enumeration 6.6.b enumeration 6.6.c enumeration 6.7 enumeration 6.8 enumeration 6.9 enumeration 6.10 enumeration 6.11

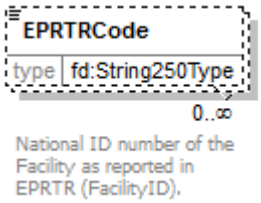
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/NaceCode

diagram	
type	**String250Type**

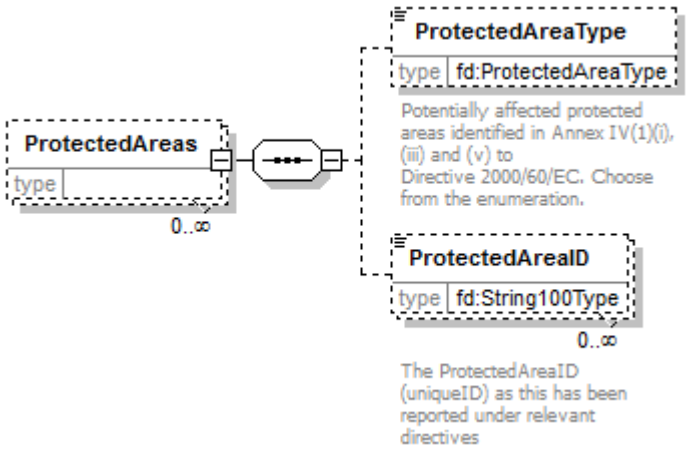
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes

diagram	

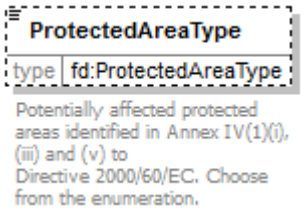
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes/EPRTRCode

diagram	
type	**String250Type**
annotation	documentation National ID number of the Facility as reported in EPRTR (FacilityID).

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas

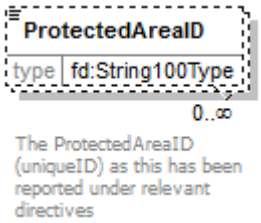
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ ProtectedAreaType

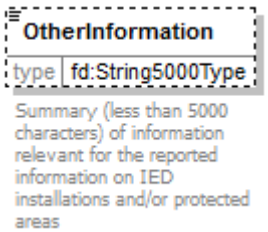
diagram	
type	**ProtectedAreaType**
facets	Kind / Value / annotation enumeration Bathing enumeration Birds enumeration Habitats enumeration Nitrates enumeration UWWT

	enumeration Article 7 Abstraction for drinking water enumeration WFD_WaterBodies enumeration EuropeanOther enumeration National enumeration Local
annotation	documentation Potentially affected protected areas identified in Annex IV(1)(i), (iii) and (v) to Directive 2000/60/EC. Choose from the enumeration.

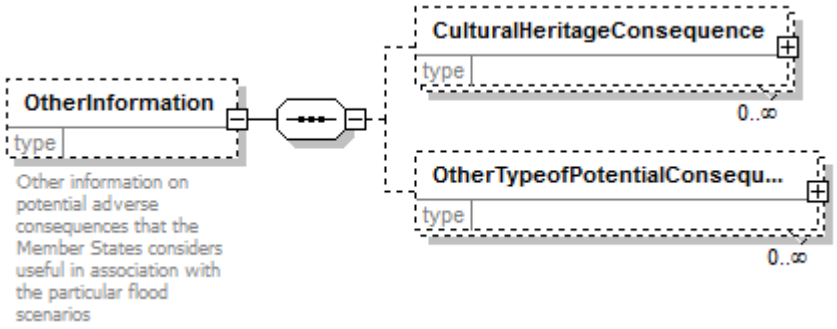
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ProtectedAreaID

diagram	
type	**String100Type**
annotation	documentation The ProtectedAreaID (uniqueID) as this has been reported under relevant directives

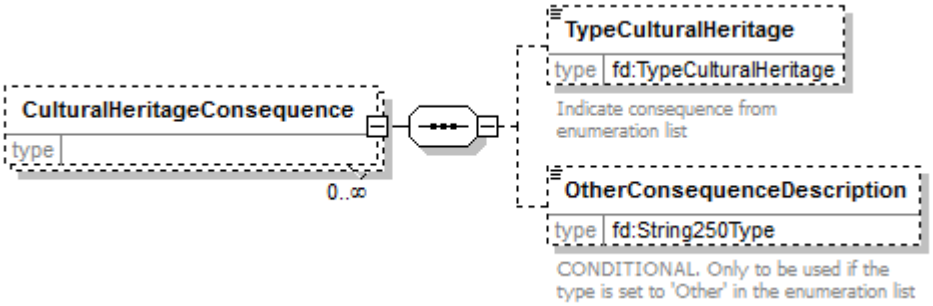
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/Environment/OtherInformation

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of information relevant for the reported information on IED installations and/or protected areas

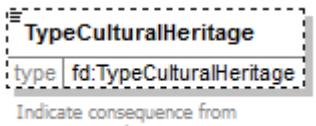
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation

diagram	
annotation	documentation Other information on potential adverse consequences that the Member States considers useful in association with the particular flood scenarios

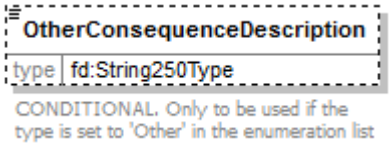
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence

diagram	

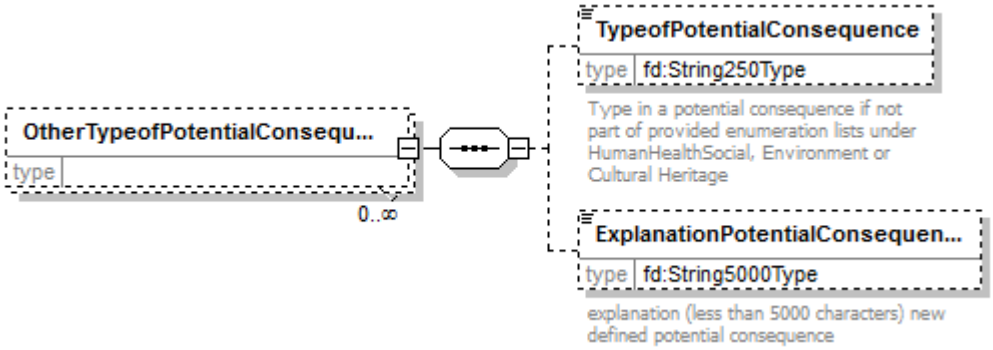
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/TypeCulturalHeritage

diagram	
type	**TypeCulturalHeritage**
facets	Kind / Value / annotation enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Indicate consequence from enumeration list

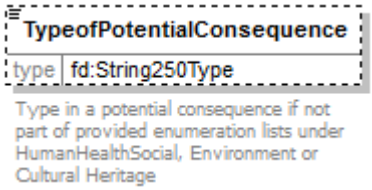
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

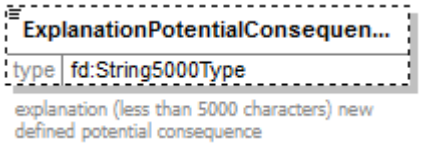
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences

diagram	

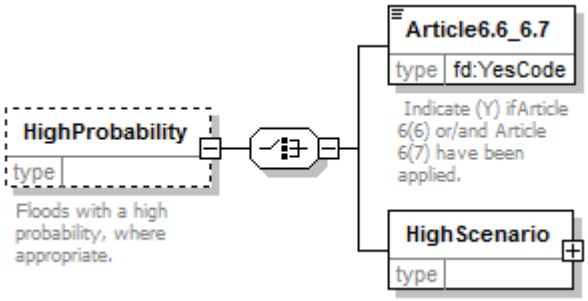
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/TypeofPotentialConsequence

diagram	
type	**String250Type**
annotation	documentation Type in a potential consequence if not part of provided enumeration lists under HumanHealthSocial, Environment or Cultural Heritage

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/MediumProbability/MediumScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/ExplanationPotentialConsequence

diagram	
type	**String5000Type**
annotation	documentation explanation (less than 5000 characters) new defined potential consequence

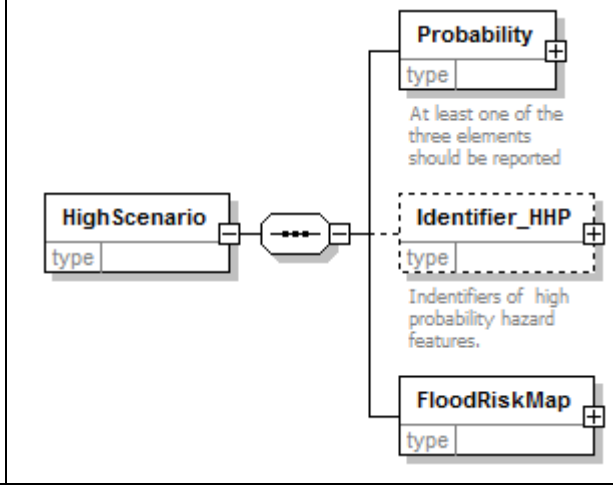
element **FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability**

diagram	
annotation	documentation Floods with a high probability, where appropriate.

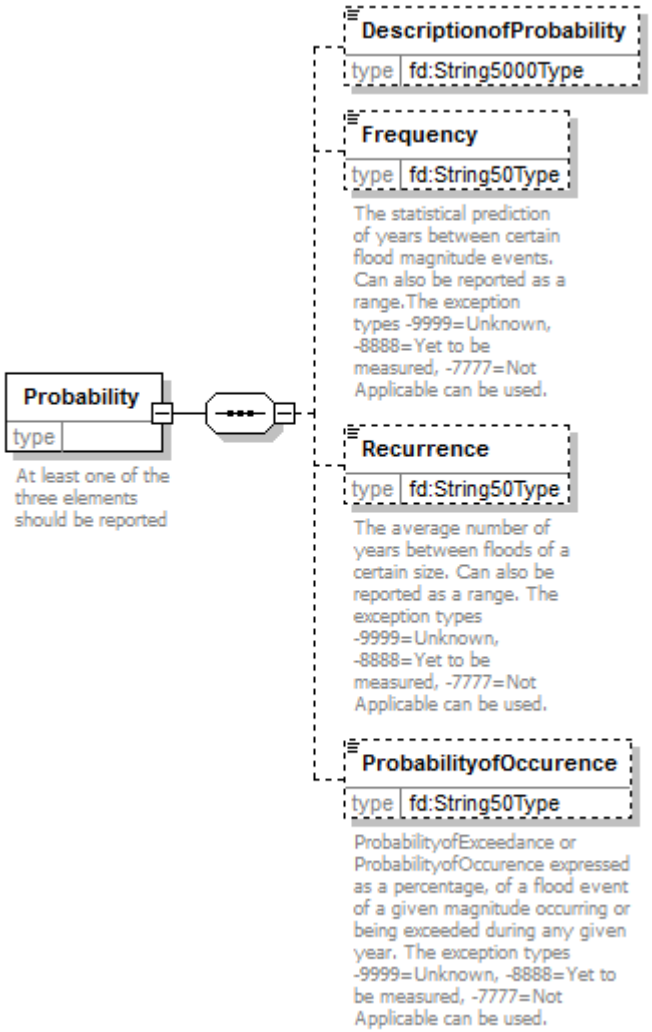
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/Article6.6_6.7

diagram	
type	**YesCode**
facets	Kind Value annotation enumeration Y enumeration
annotation	documentation Indicate (Y) ifArticle 6(6) or/and Article 6(7) have been applied.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario

diagram	

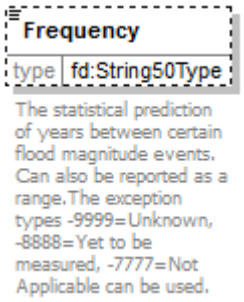
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Probability

diagram	
annotation	documentation At least one of the three elements should be reported

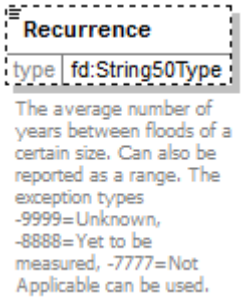
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Probability/DescriptionofProbability

diagram	
type	**String5000Type**

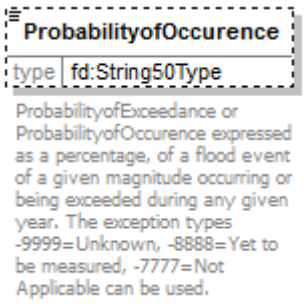
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Probability/Frequency

diagram	
type	**String50Type**
annotation	documentation The statistical prediction of years between certain flood magnitude events. Can also be reported as a range.The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Probability/Recurrence

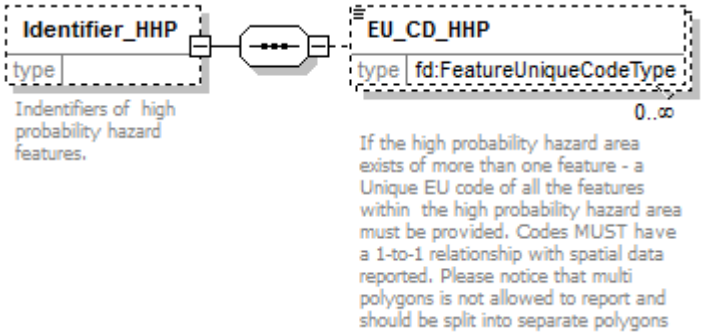
diagram	
type	**String50Type**
annotation	documentation The average number of years between floods of a certain size. Can also be reported as a range. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Probability/ProbabilityofOccurence

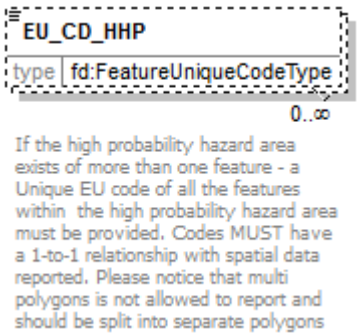
diagram	
type	**String50Type**
annotation	documentation ProbabilityofExceedance or ProbabilityofOccurence expressed as a percentage, of a flood event of a given

	magnitude occurring or being exceeded during any given year. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

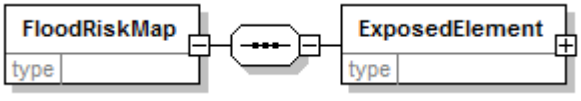
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Identifier_HHP

diagram	
annotation	documentation Indentifiers of high probability hazard features.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Identifier_HHP/EU_CD_HHP

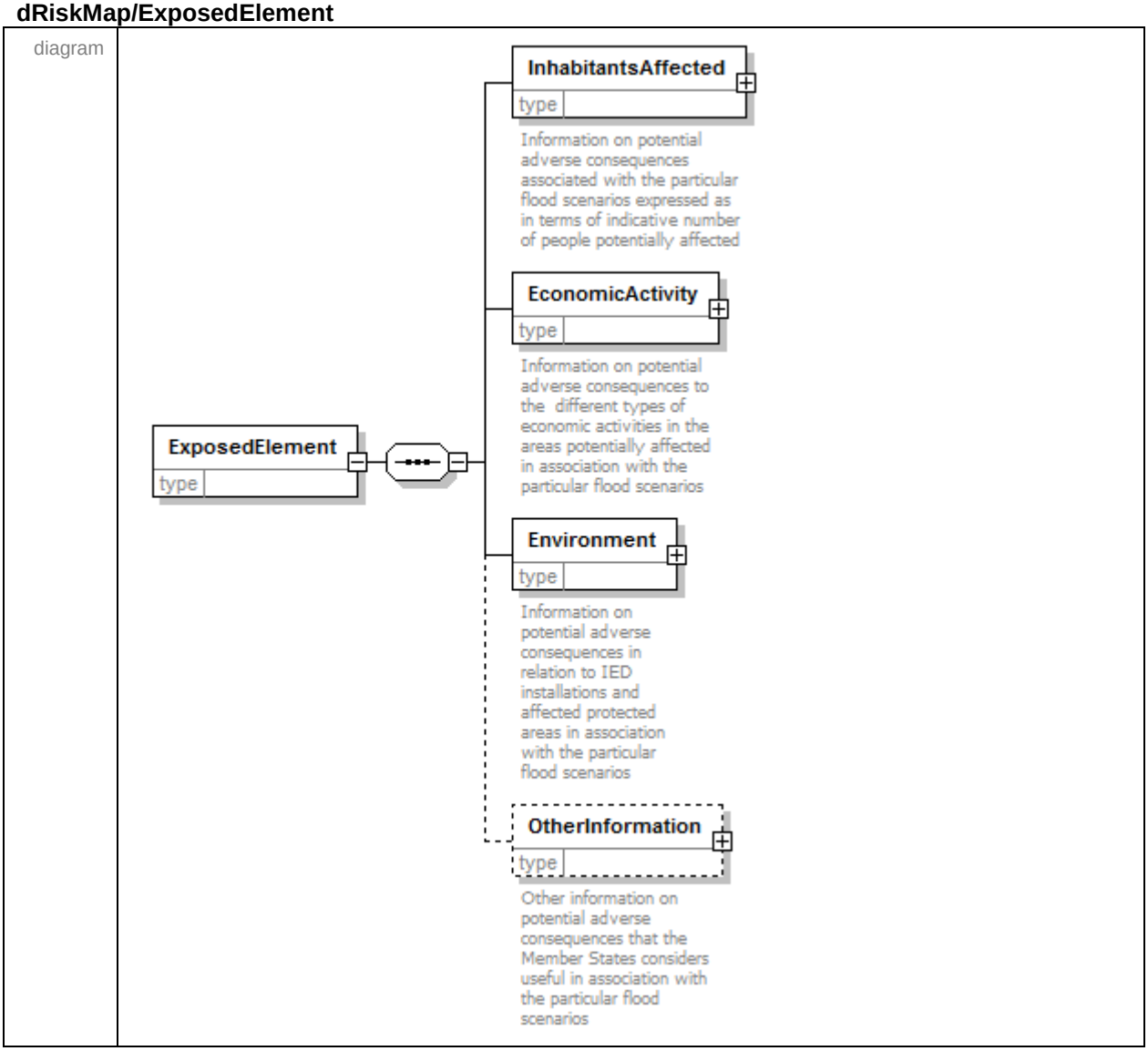
diagram	
type	**FeatureUniqueCodeType**
annotation	documentation If the high probability hazard area exists of more than one feature - a Unique EU code of all the features within the high probability hazard area must be provided. Codes MUST have a 1-to-1 relationship with spatial data reported. Please notice that multi polygons is not allowed to report and should be split into separate polygons

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap

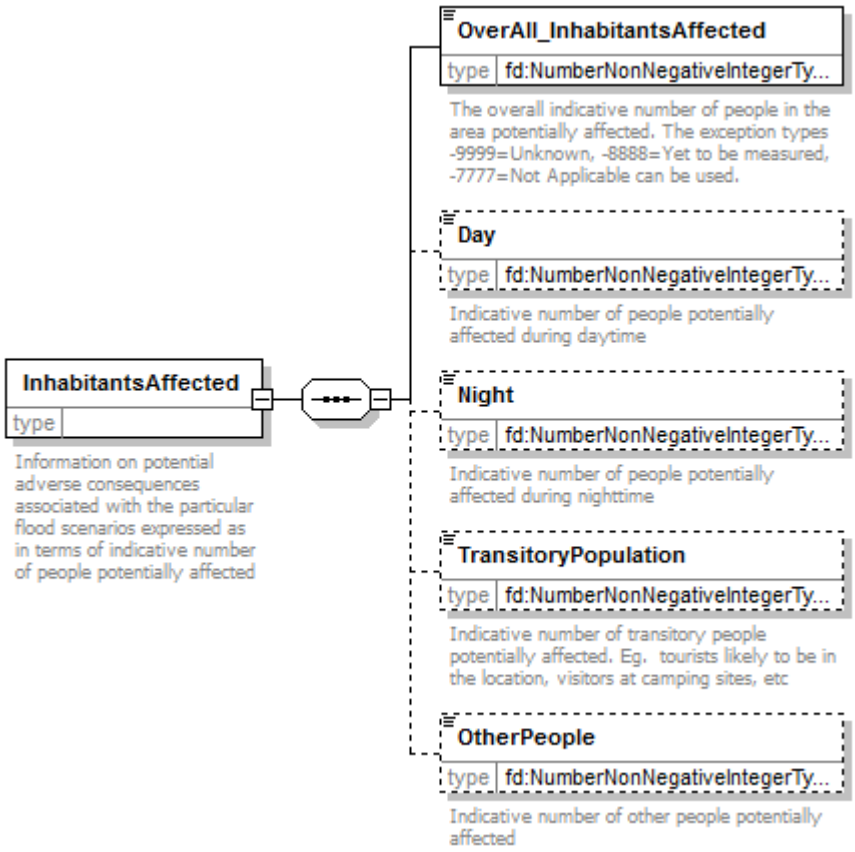
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/Floo

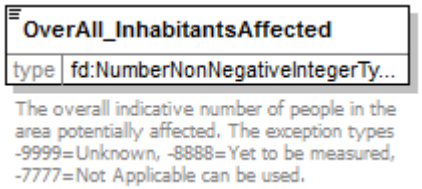
dRiskMap/ExposedElement



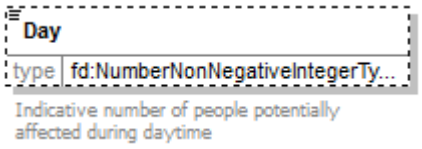
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected

diagram	
annotation	documentation Information on potential adverse consequences associated with the particular flood scenarios expressed as in terms of indicative number of people potentially affected

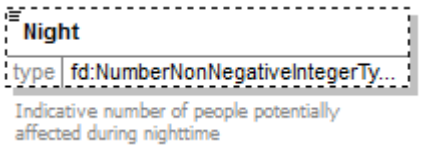
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/OverAll_InhabitantsAffected

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation The overall indicative number of people in the area potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

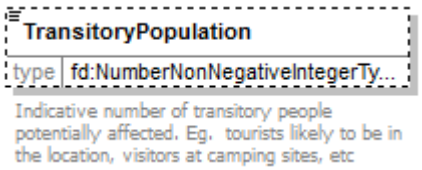
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/Day

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during daytime

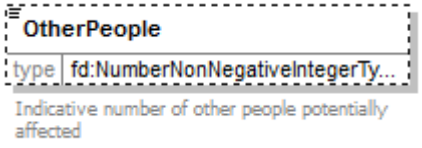
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/Night

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of people potentially affected during nighttime

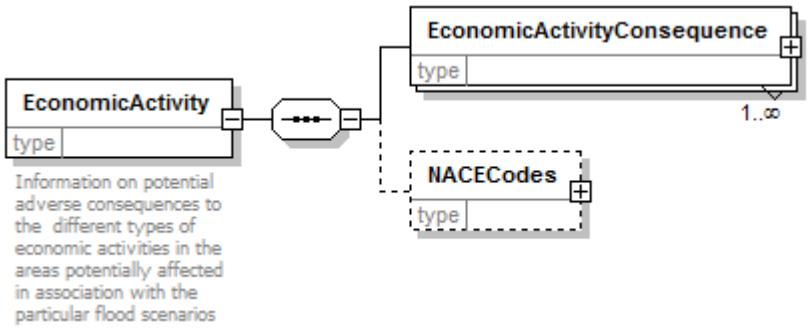
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/TransitoryPopulation

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of transitory people potentially affected. Eg. tourists likely to be in the location, visitors at camping sites, etc

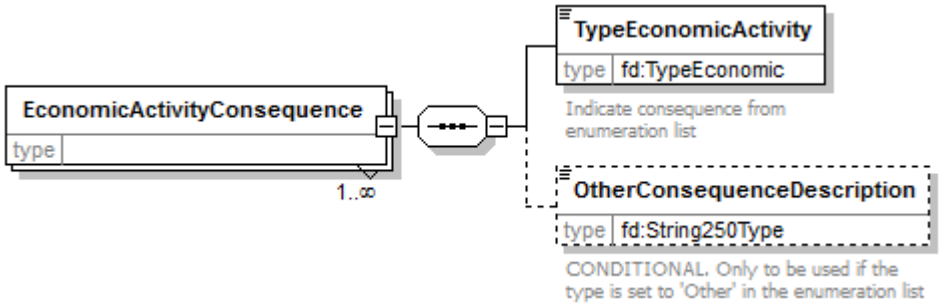
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/InhabitantsAffected/OtherPeople

diagram	
type	**NumberNonNegativeIntegerType**
annotation	documentation Indicative number of other people potentially affected

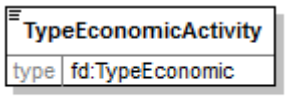
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity

diagram	
annotation	documentation Information on potential adverse consequences to the different types of economic activities in the areas potentially affected in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence

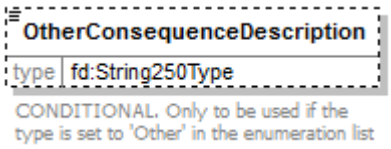
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/TypeEconomicActivity

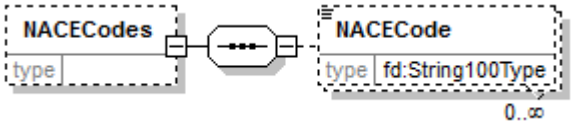
diagram	
type	**TypeEconomic**
facets	Kind / Value / annotation enumeration B41 enumeration B42 enumeration B43 enumeration B44 enumeration B45

	enumeration B46
annotation	documentation Indicate consequence from enumeration list

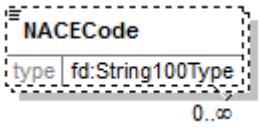
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity/EconomicActivityConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

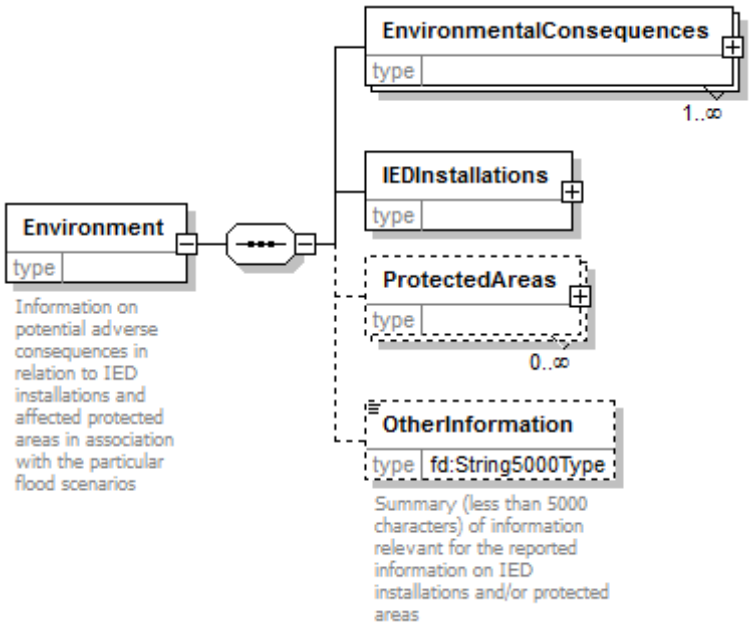
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes

diagram	

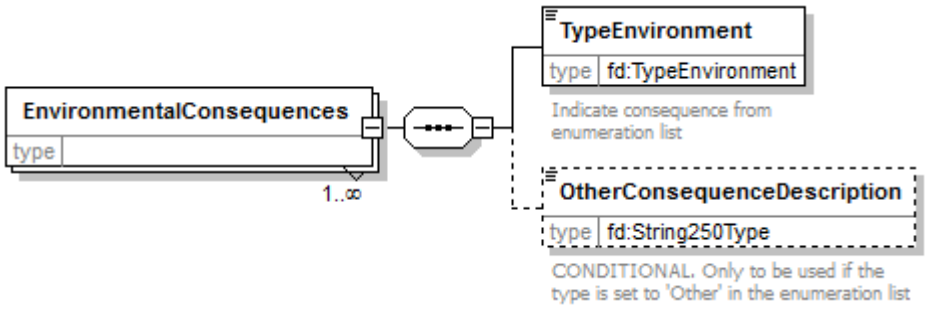
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/EconomicActivity/NACECodes/NACECode

diagram	
type	**String100Type**

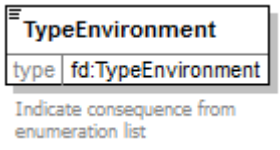
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment

diagram	
annotation	documentation Information on potential adverse consequences in relation to IED installations and affected protected areas in association with the particular flood scenarios

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences

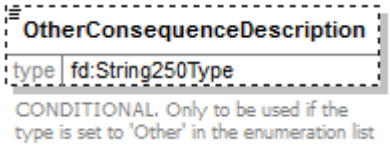
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/TypeEnvironment

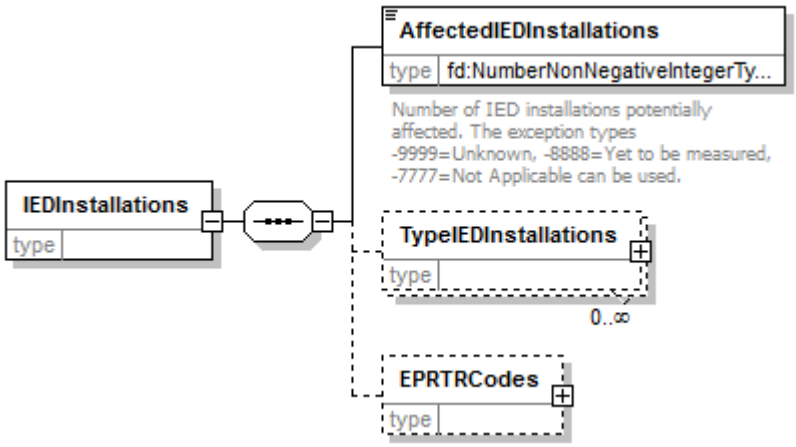
diagram	
type	**TypeEnvironment**
facets	Kind Value annotation

	enumeration B21 enumeration B22 enumeration B23 enumeration B24 enumeration B25
annotation	documentation Indicate consequence from enumeration list

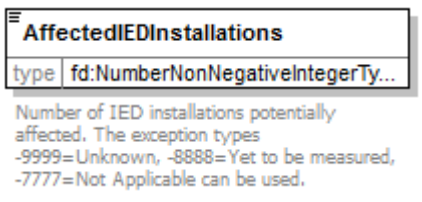
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/EnvironmentalConsequences/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations

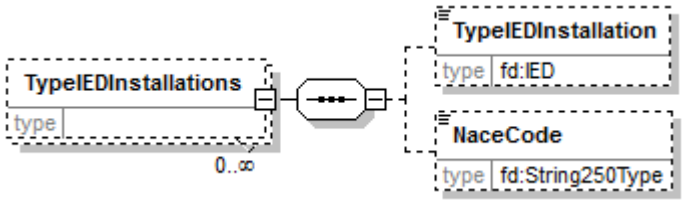
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/AffectedIEDInstallations

diagram	

type	**NumberNonNegativeIntegerType**
annotation	documentation Number of IED installations potentially affected. The exception types -9999=Unknown, -8888=Yet to be measured, -7777=Not Applicable can be used.

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations

diagram	

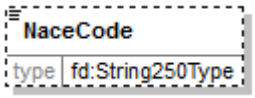
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/TypeIEDInstallation

diagram	
type	**IED**
facets	Kind / Value / annotation enumeration 1 enumeration 1.1 enumeration 1.2 enumeration 1.3 enumeration 1.4.a enumeration 1.4.b enumeration 2 enumeration 2.1 enumeration 2.2 enumeration 2.3.a enumeration 2.3.b enumeration 2.3.c enumeration 2.4 enumeration 2.5.a enumeration 2.5.b enumeration 2.6 enumeration 3 enumeration 3.1.a enumeration 3.1.b enumeration 3.1.c enumeration 3.2 enumeration 3.3 enumeration 3.4

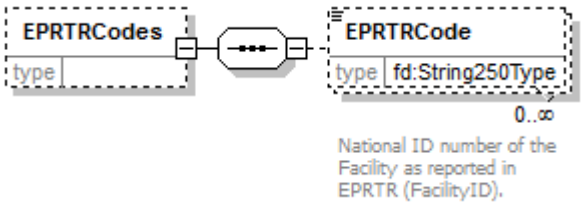
	enumeration 3.5 enumeration 4 enumeration 4.1.a enumeration 4.1.b enumeration 4.1.c enumeration 4.1.d enumeration 4.1.e enumeration 4.1.f enumeration 4.1.g enumeration 4.1.h enumeration 4.1.i enumeration 4.1.j enumeration 4.1.k enumeration 4.2.a enumeration 4.2.b enumeration 4.2.c enumeration 4.2.d enumeration 4.2.e enumeration 4.3 enumeration 4.4 enumeration 4.5 enumeration 4.6 enumeration 5 enumeration 5.1.a enumeration 5.1.b enumeration 5.1.c enumeration 5.1.d enumeration 5.1.e enumeration 5.1.f enumeration 5.1.g enumeration 5.1.h enumeration 5.1.i enumeration 5.1.j enumeration 5.1.k enumeration 5.2.a enumeration 5.2.b enumeration 5.3.a.i enumeration 5.3.a.ii enumeration 5.3.a.iii enumeration 5.3.a.iv enumeration 5.3.a.v enumeration 5.3.b.i enumeration 5.3.b.ii enumeration 5.3.b.iii enumeration 5.3.b.iv enumeration 5.4 enumeration 5.5

	enumeration 5.6 enumeration 6 enumeration 6.1.a enumeration 6.1.b enumeration 6.1.c enumeration 6.2 enumeration 6.3 enumeration 6.4.a enumeration 6.4.b.i enumeration 6.4.b.ii enumeration 6.4.b.iii enumeration 6.4.c enumeration 6.5 enumeration 6.6.a enumeration 6.6.b enumeration 6.6.c enumeration 6.7 enumeration 6.8 enumeration 6.9 enumeration 6.10 enumeration 6.11

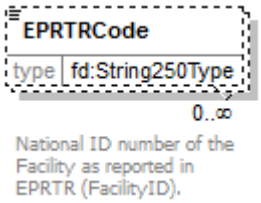
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/TypeIEDInstallations/NaceCode

diagram	
type	**String250Type**

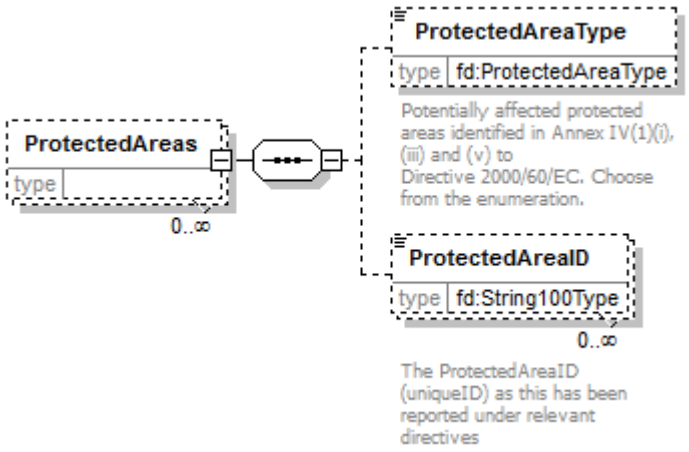
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes

diagram	

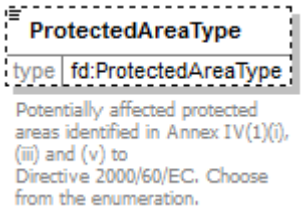
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/IEDInstallations/EPRTRCodes/EPRTRCode

diagram	
type	**String250Type**
annotation	documentation National ID number of the Facility as reported in EPRTR (FacilityID).

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas

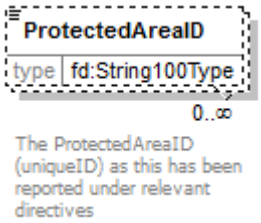
diagram	

element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ ProtectedAreaType

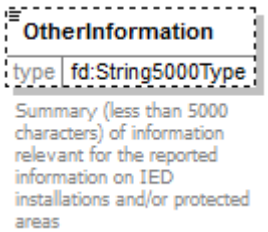
diagram	
type	**ProtectedAreaType**
facets	Kind / Value / annotation enumeration Bathing enumeration Birds enumeration Habitats enumeration Nitrates enumeration UWWT

	enumeration Article 7 Abstraction for drinking water enumeration WFD_WaterBodies enumeration EuropeanOther enumeration National enumeration Local
annotation	documentation Potentially affected protected areas identified in Annex IV(1)(i), (iii) and (v) to Directive 2000/60/EC. Choose from the enumeration.

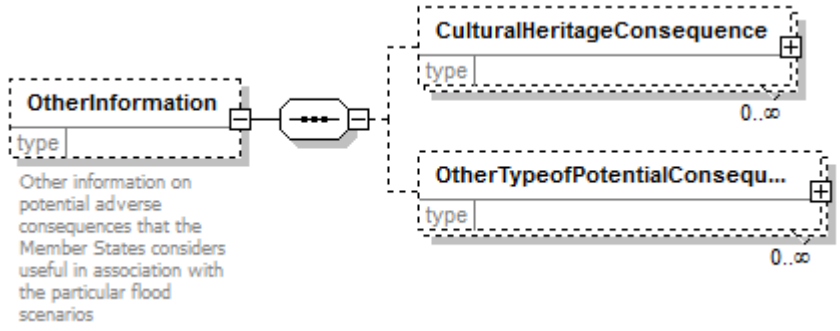
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/ProtectedAreas/ProtectedAreaID

diagram	
type	**String100Type**
annotation	documentation The ProtectedAreaID (uniqueID) as this has been reported under relevant directives

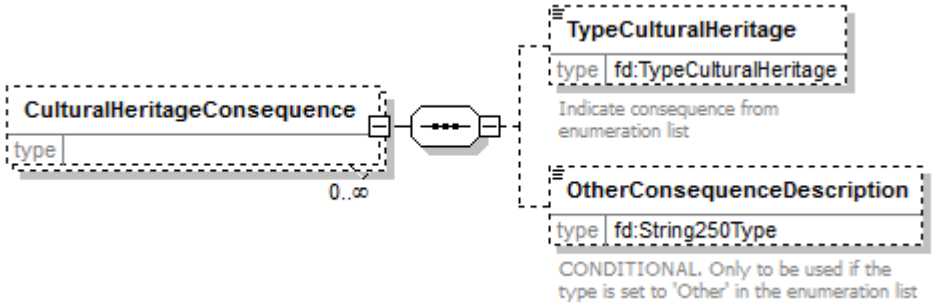
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/Environment/OtherInformation

diagram	
type	**String5000Type**
annotation	documentation Summary (less than 5000 characters) of information relevant for the reported information on IED installations and/or protected areas

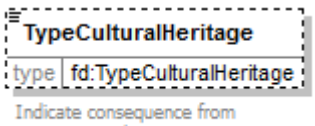
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation

diagram	
annotation	documentation Other information on potential adverse consequences that the Member States considers useful in association with the particular flood scenarios

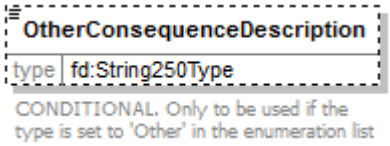
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence

diagram	

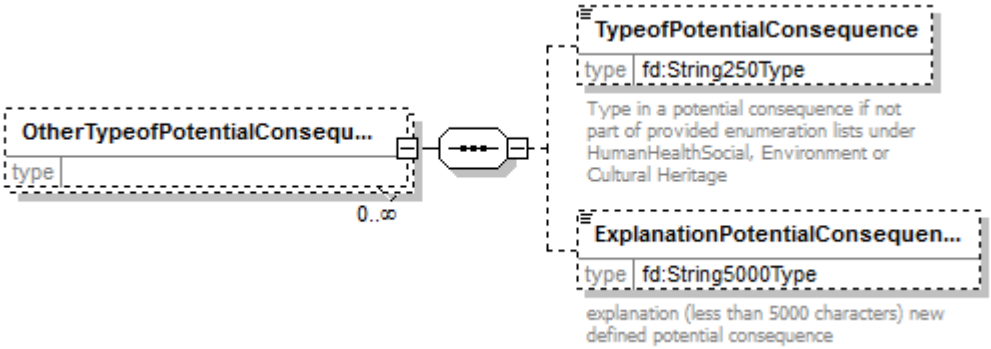
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/TypeCulturalHeritage

diagram	
type	**TypeCulturalHeritage**
facets	Kind / Value / annotation enumeration B31 enumeration B32 enumeration B33 enumeration B34
annotation	documentation Indicate consequence from enumeration list

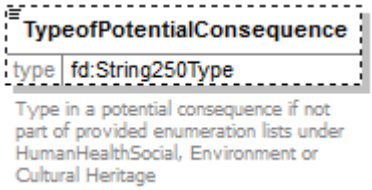
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/CulturalHeritageConsequence/OtherConsequenceDescription

diagram	
type	**String250Type**
annotation	documentation CONDITIONAL. Only to be used if the type is set to 'Other' in the enumeration list

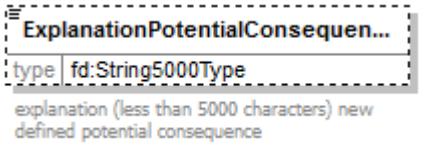
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences

diagram	

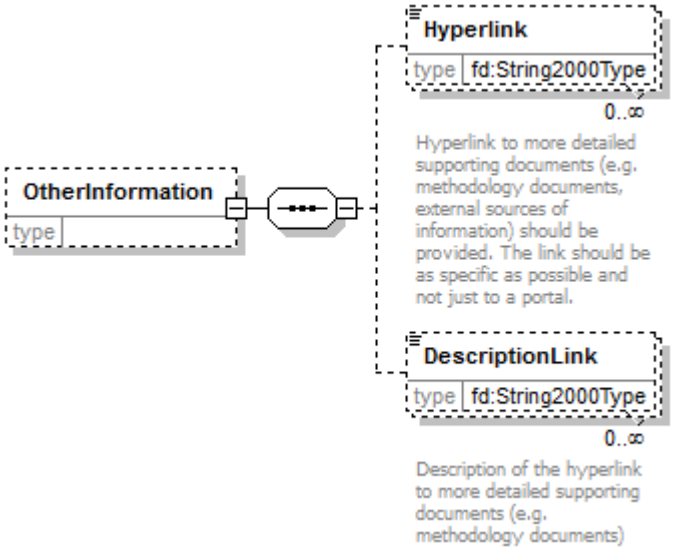
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/TypeofPotentialConsequence

diagram	
type	**String250Type**
annotation	documentation Type in a potential consequence if not part of provided enumeration lists under HumanHealthSocial, Environment or Cultural Heritage

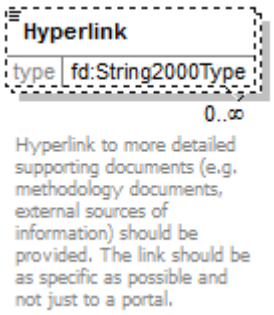
element
FHRM/FloodHazardMaps/HazardArea/QuantitativeLikelihood/HighProbability/HighScenario/FloodRiskMap/ExposedElement/OtherInformation/OtherTypeofPotentialConsequences/ExplanationPotentialConsequence

diagram	
type	**String5000Type**
annotation	documentation explanation (less than 5000 characters) new defined potential consequence

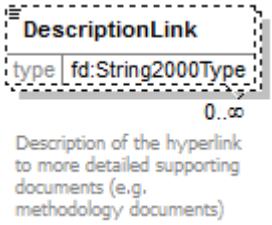
element **FHRM/OtherInformation**

diagram	

element **FHRM/OtherInformation/Hyperlink**

diagram	
type	**String2000Type**
annotation	documentation Hyperlink to more detailed supporting documents (e.g. methodology documents, external sources of information) should be provided. The link should be as specific as possible and not just to a portal.

element **FHRM/OtherInformation/DescriptionLink**

diagram	
type	**String2000Type**
annotation	documentation Description of the hyperlink to more detailed supporting documents (e.g. methodology documents)

XML Schema documentation generated by **XMLSpy** Schema Editor **http://www.altova.com/xmlspy**

3.5 SCHEMA: FLOOD RISK MANAGEMENT PLANS[5]

Article 7 of the Floods Directive requires Member States to prepare Flood Risk Management Plans (FRMPs) for all areas identified as being at potentially significant flood risk (APSFR) under Article 5 or Article 13.1(a), and areas covered by Article 13.1(b), on the basis of the maps prepared under Article 6.

The plans must be coordinated at the level of the River Basin District (RBD) or other Unit of Management (UoM) as defined under Article 3.2(b) (art 7.1 & 4, art 8).

The Flood Risk Management Plans (FRMP) must set out appropriate objectives for the management of flood risk within the areas covered by the plan. The objectives must focus on reducing the adverse consequences of flooding for human health, the environment, cultural heritage and economic activity. Where appropriate, the FRMPs should focus on reducing the likelihood of flooding and/or on using non-structural measures, including flood forecasting and raising awareness of flooding (Article 7.2). The flood risk management plans shall include measures for achieving identified objectives (Article 7.3).

Flood risk management plans shall include the components as detailed in the annex (Part 1) of the Directive:

- Conclusions of the preliminary flood risk assessment(PFRA)[6], as required in Chapter II in the form of a summary map of the RBD/UoM delineating the areas of potential significant flood risk(APSFR) (Annex part A.I.1)[7];
- Flood Hazard maps and Flood Risk maps (Annex part A.I.2)[8];

[5] Text from FRMP reporting sheets: http://rod.eionet.europa.eu/obligations/603

[6] Or decision on use of article 13.1 b as applied, for further information see reporting sheet on the preliminary flood risk assessment.

[7] This information needs to be included in the FRMP, but does not however need to be reported electronically again to the Commission if the information has already been reported in accordance with Article 15.

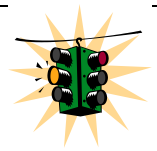
[8] This information needs to be included in the FRMP, but does not however need to be reported electronically again to the Commission if the information has already been reported in accordance with Article 15.

- Description of the objectives((Annex part A.I.3);
- Summary of measures and their prioritisation, including those taken under other Community acts (such as EIA, SEA, SEVESO, WFD[9]), aiming to achieve the objectives (Annex part A.I.4),
- Description of the cost-benefit methodology, when available, used in transnational context (Annex part A.I.5).
- Description of how implementation progress will be monitored (Annex part A.II.1),
- Summary of public information and consultation (Annex part A.II.2),
- List of competent authorities [10] (Annex part A.II.3);.
- Description of the co-ordination process in international RBD/other UoM (Annex part A.II.3)
- Description of the coordination process with the WFD(Directive 2000/60/EC) (Annex part A.II.3)

The review of the Flood Risk Management Plans (FRMP) shall include the following components (Annex Part B):

- Information on any changes or updates since the publication of the previous version of the FRMP, including a summary of the reviews carried out in compliance with Article 14 (Annex Part B.1).
- An assessment of the progress made towards achieving the objectives referred to in Article 7.2; a description of, and explanation for, any measures foreseen in the earlier version of the FRMP which were planned to be undertaken and have not been taken forward (Annex Part B.3);
- A description of any additional measures since the publication of the previous version of the FRMPs(Annex Part B.4).

For the reviews of the Flood risk management plans, it is expected that Member States shall report on the same issues as for the initial plan, but focus on the progress and changes as outlined in the Directive. After the reporting for the first implementation cycle, the reporting sheet will be reviewed, based upon the experiences made.



Look Out!
In part A of the Annex all components of the FRMP for the first cycle are listed and part B describes what is expected for the following cycles.
It is important to highlight though, that where complete reports have already been submitted according to earlier stages (Competent Authorities(CA), Units of Management, Preliminary Flood Risk Assessment, Flood Hazard maps and Flood Risk maps), it is not expected that Member States report these again to WISE, unless the Member State in question wishes to submit updated information.

[9] For full references see the annex of Directive 2007/60/EC.

[10] This information needs to be included in the FRMP, but does however not need to be reported electronically again to the Commission if the information has already been reported in accordance with Article 3, it is assumed that Member States will update the reporting under Article 3, at the latest three months after there are changes made to the administrative arrangements, in accordance with Article 3.2.

The FRMP shall address all aspects of flood risk management, focusing on prevention, protection and preparedness, and taking into account the characteristics of the particular river basin or sub-basin, including flood forecasting and early warning systems.

The FRMP may include :

- promotion of sustainable land-use practices;
- improvements in water retention;
- controlled flooding of certain areas;
- structural and non-structural approaches to reducing the likelihood and consequences of flooding;
- other actions in relation to preventing, protecting, or preparing against the adverse consequences of flooding.

FRMP plans shall take into account relevant aspects such as (Article 7):

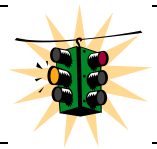
- costs and benefits;
- flood extent and conveyance routes;
- areas which have the potential to retain flood waters; such as natural flood plains;
- the environmental objectives of the WFD;
- soil and water management, as well as nature conservation;
- spatial planning and land use;
- navigation and port infrastructure;
- the likely impact of climate change on the occurrence of floods, required at the latest from the first review of the FRMP (Article 14.4).

The FRMP shall be subject to public consultation and the active encouragement of the involvement of interested parties in coordination with Article 14 of the WFD (Article 9.3 and 10.2).

The complete FRMP shall also be made available to the public (Article 10.1).

The FRMPs must be completed and published by 22nd December 2015 and made available to the Commission by 22nd March 2016 (Articles 7.5 and 15.1). As a transitional measure, FRMPs available by 22 nd December 2010 may be used for the first cycle, provided that their content is "equivalent to the requirements set out in Article 7" (Article 13.3).

Due to the need to coordinate and synchronise the FRMPs with the 2nd cycle River Basin Management Plans (RBMP), and the need to avoid double reporting, the reporting formats will be coordinated. For the purpose of this reporting sheet, cross references to and the structure of the information provided is linked to the relevant RBMP reporting sheet included in Guidance document N°21. This concerns in particular the summary of the update of the Article 5(WFD) reports and the measures to address these pressures to be included in the programme of measures as part of the RBMP in 2015.



Look Out!
As part of WFD RBMP Member States were requested to report information on relevant and significant pressures and the establishment of a programme of measures (PoM) for each RBD or

	part of an international RBD. Some of those pressure types and measure types are of particular interest, and may be of importance for FRMP, also in terms of coordination and synergies between both processes. A number of WFD relevant pressures and relevant WFD measures are of particular importance from the perspective of the co-ordinated implementation of Directives 2000/60/EC and 2007/60/ECwith a view of improving information exchange, and of achieving common synergies and benefits. Taking into account the possibility to develop an integrated FRMP and RBMP (as expressed in Article 9.2 FD) the objective must be to develop a reporting structure to avoid double reporting. The reporting structure must give MS flexibility to report both plans in an integrated form or two single co-ordinated plans .

To the extent that geographical information is reported, *the "CIS Guidance Document No. 22: Updated Guidance on Implementing the Geographical Information System (GIS) Elements of the EU Water policy",* shall be taken into account, and relevant parts shall also be updated for the purpose of reporting of the Floods Directive[11]. The further development of reporting formats and visualisation, including any review of the reporting sheet for the second cycle, shall be in line with relevant requirements of INSPIRE as far as possible given the timetable for implementation of that Directive.

Schema **FRMP_1p1.xsd**

schema location: **..\..\schemas\FRMP_1p1.xsd**
attributeFormDefault: **unqualified**
elementFormDefault: **qualified**
targetNamespace: **http://water.eionet.europa.eu/schemas/dir200760ec**

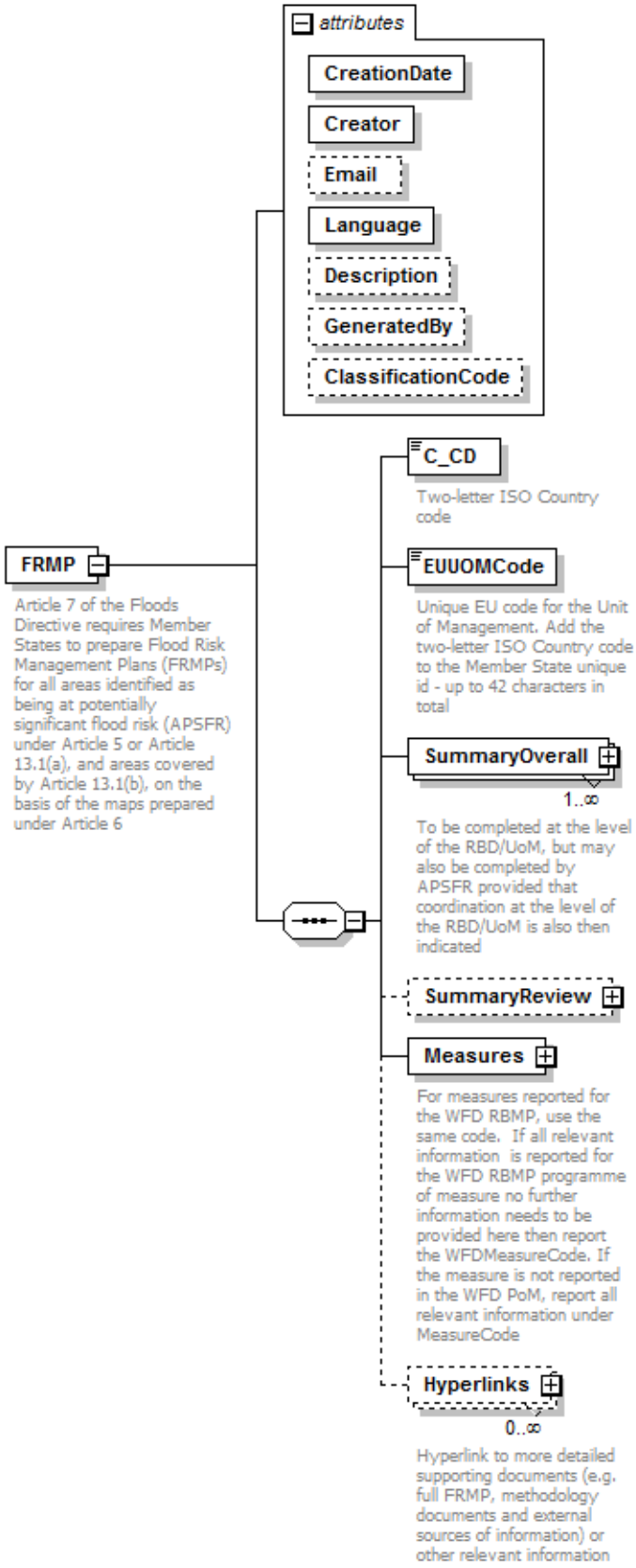
Elements
FRMP

schema location: **..\..\schemas\FDCommon.xsd**
attributeFormDefault: **unqualified**
elementFormDefault: **qualified**
targetNamespace: **http://water.eionet.europa.eu/schemas/dir200760ec/fdcommon**

[11]http://circa.europa.eu/Members/irc/env/wfd/library?l=/framework_directive/guidance_documents&vm=detailed&sb=Title

element **FRMP**

diagram



attributes	Name	Type	Use	Default	Fixed	Annotation
	CreationDate	**xs:string**	required			
	Creator	**xs:string**	required			
	Email	**xs:string**				
	Language	**LanguageCode**	required			
	Description	**xs:string**				
	GeneratedBy	**xs:string**				
	ClassificationCode	**DataConfidentialityClassificationCode**				
annotation	documentation Article 7 of the Floods Directive requires Member States to prepare Flood Risk Management Plans (FRMPs) for all areas identified as being at potentially significant flood risk (APSFR) under Article 5 or Article 13.1(a), and areas covered by Article 13.1(b), on the basis of the maps prepared under Article 6					

attribute **FRMP/@CreationDate**

type	**xs:string**

attribute **FRMP/@Creator**

type	**xs:string**

attribute **FRMP/@Email**

type	**xs:string**

attribute **FRMP/@Language**

type	**LanguageCode**		
facets	Kind	Value	Annotation
	enumeration	bg	
	enumeration	es	
	enumeration	cs	
	enumeration	da	
	enumeration	de	
	enumeration	et	
	enumeration	el	
	enumeration	en	
	enumeration	fr	
	enumeration	ga	
	enumeration	hr	
	enumeration	ic	
	enumeration	it	
	enumeration	lv	
	enumeration	lt	
	enumeration	hu	
	enumeration	mt	
	enumeration	nl	
	enumeration	no	
	enumeration	pl	

	enumeration	pt
	enumeration	ro
	enumeration	sk
	enumeration	sl
	enumeration	sr
	enumeration	tr
	enumeration	fi
	enumeration	sv

attribute **FRMP/@Description**

type	**xs:string**

attribute **FRMP/@GeneratedBy**

type	**xs:string**

attribute **FRMP/@ClassificationCode**

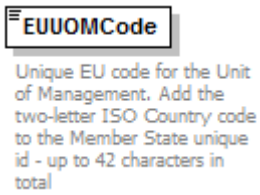
type	**DataConfidentialityClassificationCode**		
facets	Kind	Value	Annotation
	enumeration	001	
	enumeration	003	

element **FRMP/C_CD**

diagram			
type	**CountryCode**		
facets	Kind	Value	Annotation
	enumeration	AT	
	enumeration	BE	
	enumeration	BG	
	enumeration	CH	
	enumeration	CZ	
	enumeration	CY	
	enumeration	DE	
	enumeration	DK	
	enumeration	EE	
	enumeration	EL	
	enumeration	ES	
	enumeration	FI	
	enumeration	FR	
	enumeration	HR	
	enumeration	HU	
	enumeration	IE	

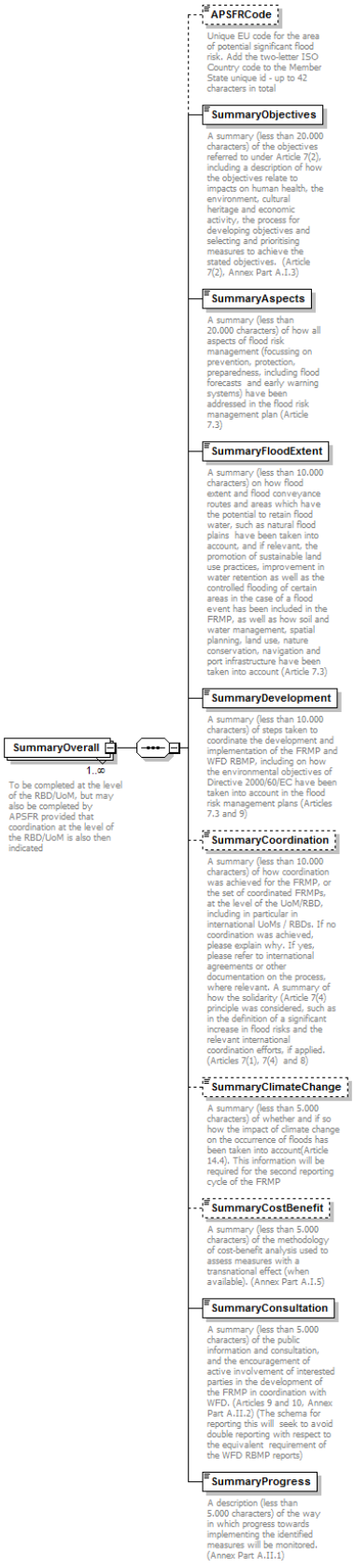
	enumeration IS enumeration IT enumeration LT enumeration LU enumeration LV enumeration MT enumeration NO enumeration NL enumeration PL enumeration PT enumeration RO enumeration SE enumeration SI enumeration SK enumeration TR enumeration UK
annotation	documentation Two-letter ISO Country code

element **FRMP/EUUOMCode**

diagram	
type	**FeatureUniqueEUCodeType**
facets	Kind Value Annotation minLength 3 maxLength 42
annotation	documentation Unique EU code for the Unit of Management. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total

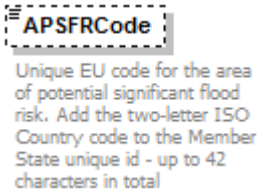
element **FRMP/SummaryOverall**

diagram

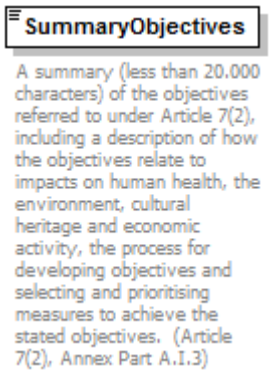


annotation	documentation To be completed at the level of the RBD/UoM, but may also be completed by APSFR provided that coordination at the level of the RBD/UoM is also then indicated

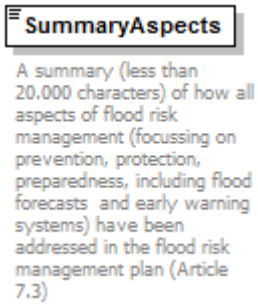
element **FRMP/SummaryOverall/APSFRCode**

diagram	
type	**FeatureUniqueEUCodeType**
facets	Kind Value Annotation minLength 3 maxLength 42
annotation	documentation Unique EU code for the area of potential significant flood risk. Add the two-letter ISO Country code to the Member State unique id - up to 42 characters in total

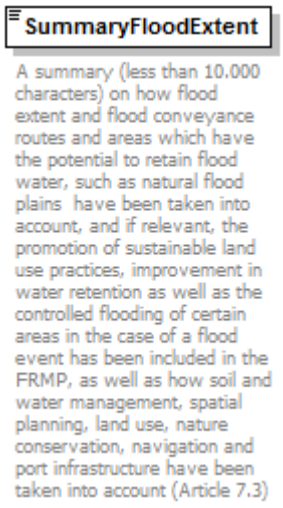
element **FRMP/SummaryOverall/SummaryObjectives**

diagram	
type	**String20000Type**
facets	Kind Value Annotation minLength 1 maxLength 20000
annotation	documentation A summary (less than 20.000 characters) of the objectives referred to under Article 7(2), including a description of how the objectives relate to impacts on human health, the environment, cultural heritage and economic activity, the process for developing objectives and selecting and prioritising measures to achieve the stated objectives. (Article 7(2), Annex Part A.I.3)

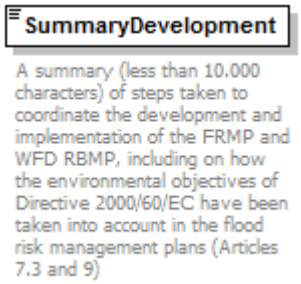
element **FRMP/SummaryOverall/SummaryAspects**

diagram	
type	**String20000Type**
facets	Kind Value Annotation minLength 1 maxLength 20000
annotation	documentation A summary (less than 20.000 characters) of how all aspects of flood risk management (focussing on prevention, protection, preparedness, including flood forecasts and early warning systems) have been addressed in the flood risk management plan (Article 7.3)

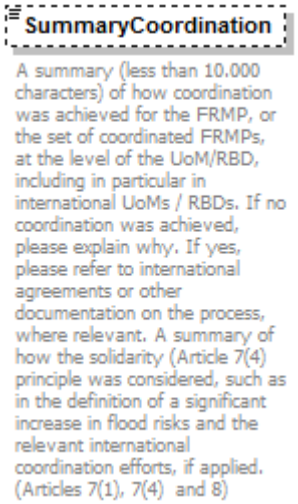
element **FRMP/SummaryOverall/SummaryFloodExtent**

diagram	
type	**String100000Type**
facets	Kind Value Annotation minLength 1 maxLength 100000
annotation	documentation A summary (less than 10.000 characters) on how flood extent and flood conveyance routes and areas which have the potential to retain flood water, such as natural flood plains have been taken into account, and if relevant, the promotion of sustainable land use practices, improvement in water retention as well as the controlled flooding of certain areas in the case of a flood event has been included in the FRMP, as well as how soil and water management, spatial planning, land use, nature conservation, navigation and port infrastructure have been taken into account (Article 7.3)

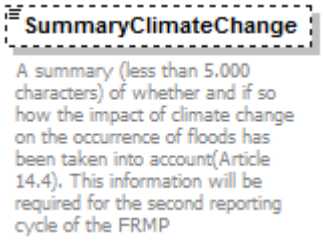
element **FRMP/SummaryOverall/SummaryDevelopment**

diagram	
type	**String10000Type**
facets	Kind Value Annotation minLength 1 maxLength 10000
annotation	documentation A summary (less than 10.000 characters) of steps taken to coordinate the development and implementation of the FRMP and WFD RBMP, including on how the environmental objectives of Directive 2000/60/EC have been taken into account in the flood risk management plans (Articles 7.3 and 9)

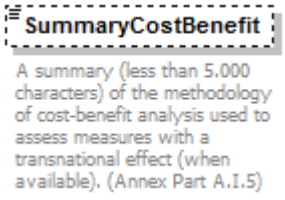
element **FRMP/SummaryOverall/SummaryCoordination**

diagram	
type	**String10000Type**
facets	Kind Value Annotation minLength 1 maxLength 10000
annotation	documentation A summary (less than 10.000 characters) of how coordination was achieved for the FRMP, or the set of coordinated FRMPs, at the level of the UoM/RBD, including in particular in international UoMs / RBDs. If no coordination was achieved, please explain why. If yes, please refer to international agreements or other documentation on the process, where relevant. A summary of how the solidarity (Article 7(4) principle was considered, such as in the definition of a significant increase in flood risks and the relevant international coordination efforts, if applied. (Articles 7(1), 7(4) and 8)

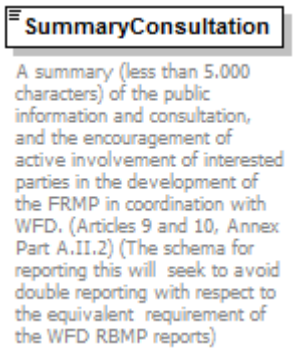
element **FRMP/SummaryOverall/SummaryClimateChange**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation A summary (less than 5.000 characters) of whether and if so how the impact of climate change on the occurrence of floods has been taken into account(Article 14.4). This information will be required for the second reporting cycle of the FRMP

element **FRMP/SummaryOverall/SummaryCostBenefit**

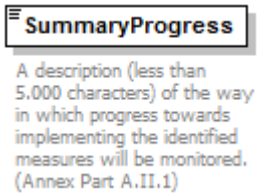
diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation A summary (less than 5.000 characters) of the methodology of cost-benefit analysis used to assess measures with a transnational effect (when available). (Annex Part A.I.5)

element **FRMP/SummaryOverall/SummaryConsultation**

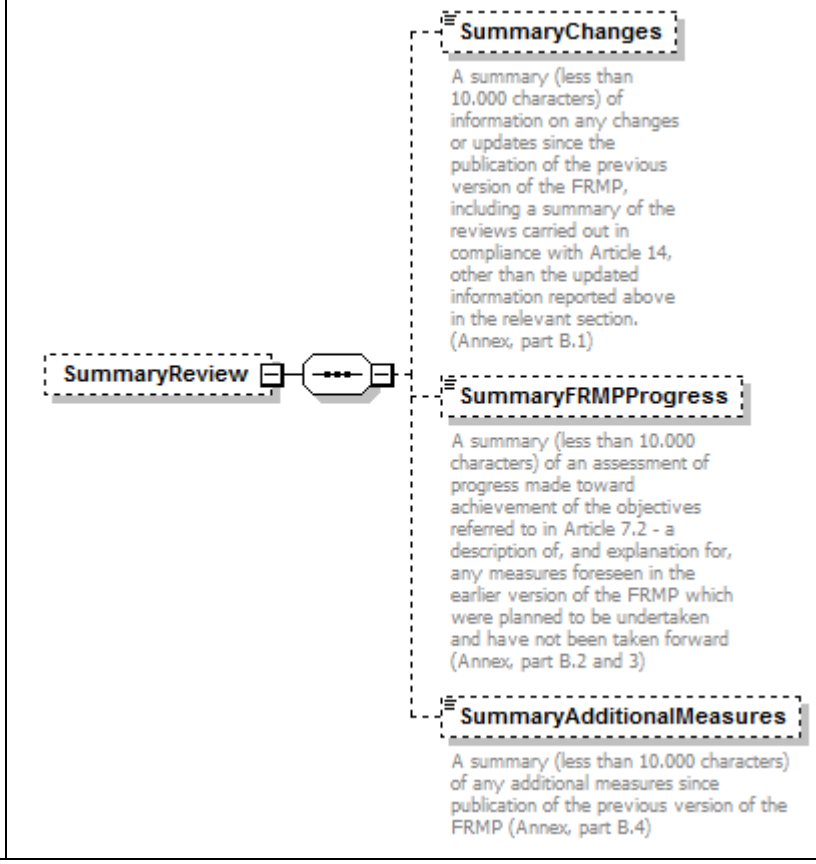
diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000

annotation	documentation A summary (less than 5.000 characters) of the public information and consultation, and the encouragement of active involvement of interested parties in the development of the FRMP in coordination with WFD. (Articles 9 and 10, Annex Part A.II.2) (The schema for reporting this will seek to avoid double reporting with respect to the equivalent requirement of the WFD RBMP reports)

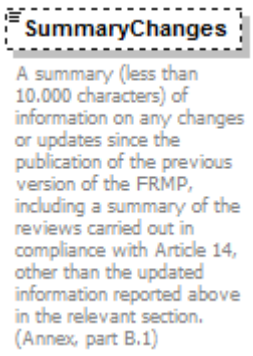
element **FRMP/SummaryOverall/SummaryProgress**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation A description (less than 5.000 characters) of the way in which progress towards implementing the identified measures will be monitored. (Annex Part A.II.1)

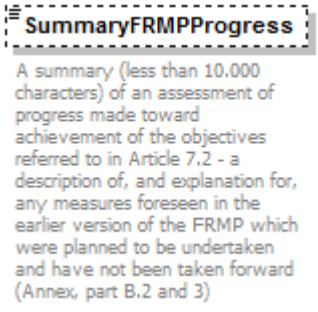
element **FRMP/SummaryReview**

diagram	

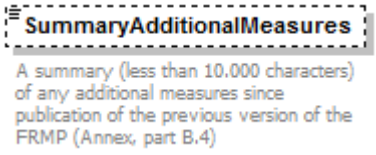
element **FRMP/SummaryReview/SummaryChanges**

diagram	
type	**String10000Type**
facets	Kind Value Annotation minLength 1 maxLength 10000
annotation	documentation A summary (less than 10.000 characters) of information on any changes or updates since the publication of the previous version of the FRMP, including a summary of the reviews carried out in compliance with Article 14, other than the updated information reported above in the relevant section. (Annex, part B.1)

element **FRMP/SummaryReview/SummaryFRMPProgress**

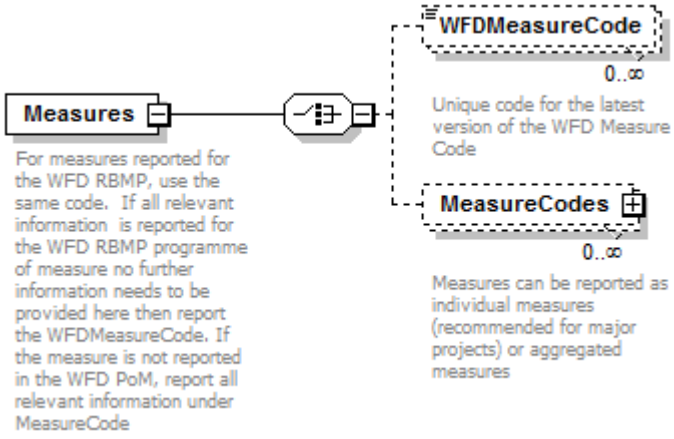
diagram	
type	**String10000Type**
facets	Kind Value Annotation minLength 1 maxLength 10000
annotation	documentation A summary (less than 10.000 characters) of an assessment of progress made toward achievement of the objectives referred to in Article 7.2 - a description of, and explanation for, any measures foreseen in the earlier version of the FRMP which were planned to be undertaken and have not been taken forward (Annex, part B.2 and 3)

element **FRMP/SummaryReview/SummaryAdditionalMeasures**

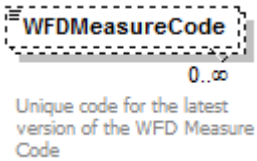
diagram	
type	**String10000Type**
facets	Kind Value Annotation minLength 1

	maxLength 10000
annotation	documentation A summary (less than 10.000 characters) of any additional measures since publication of the previous version of the FRMP (Annex, part B.4)

element **FRMP/Measures**

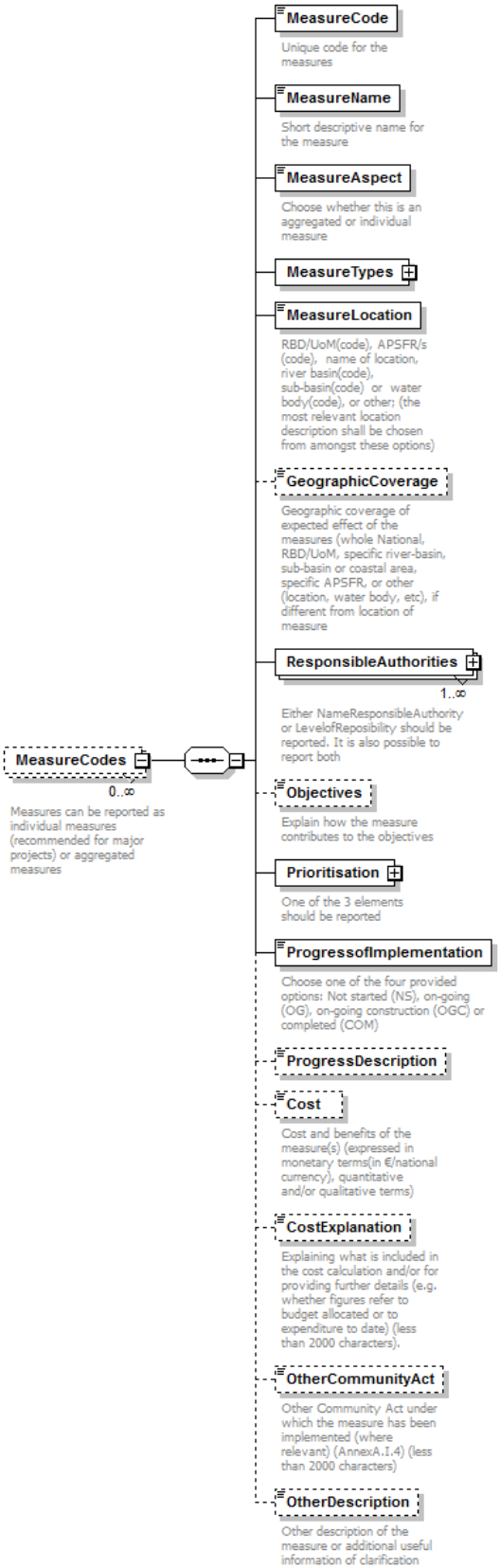
diagram	
annotation	documentation For measures reported for the WFD RBMP, use the same code. If all relevant information is reported for the WFD RBMP programme of measure no further information needs to be provided here then report the WFDMeasureCode. If the measure is not reported in the WFD PoM, report all relevant information under MeasureCode

element **FRMP/Measures/WFDMeasureCode**

diagram	
type	**String250Type**
facets	Kind Value Annotation minLength 1 maxLength 250
annotation	documentation Unique code for the latest version of the WFD Measure Code

element **FRMP/Measures/MeasureCodes**

diagram

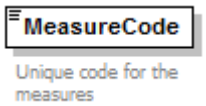


annotation

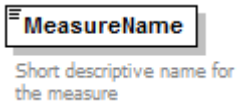
documentation

Measures can be reported as individual measures (recommended for major projects) or aggregated measures

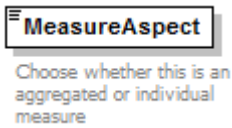
element **FRMP/Measures/MeasureCodes/MeasureCode**

diagram	
type	**String250Type**
facets	Kind Value Annotation minLength 1 maxLength 250
annotation	documentation Unique code for the measures

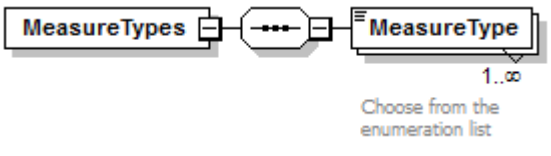
element **FRMP/Measures/MeasureCodes/MeasureName**

diagram	
type	**String250Type**
facets	Kind Value Annotation minLength 1 maxLength 250
annotation	documentation Short descriptive name for the measure

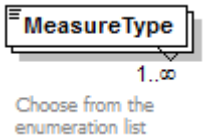
element **FRMP/Measures/MeasureCodes/MeasureAspect**

diagram	
type	**MeasureAspect**
facets	Kind Value Annotation enumeration Aggregated enumeration Individual
annotation	documentation Choose whether this is an aggregated or individual measure

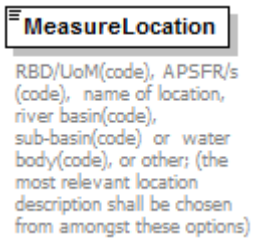
element **FRMP/Measures/MeasureCodes/MeasureTypes**

diagram	

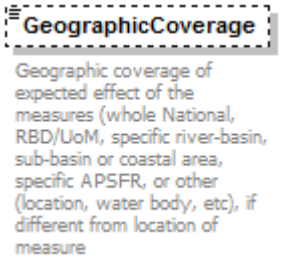
element **FRMP/Measures/MeasureCodes/MeasureTypes/MeasureType**

diagram	
type	**MeasureType**
facets	Kind / Value / Annotation enumeration M11 enumeration M21 enumeration M22 enumeration M23 enumeration M24 enumeration M31 enumeration M32 enumeration M33 enumeration M34 enumeration M35 enumeration M41 enumeration M42 enumeration M43 enumeration M44 enumeration M51 enumeration M52 enumeration M53 enumeration M61
annotation	documentation Choose from the enumeration list

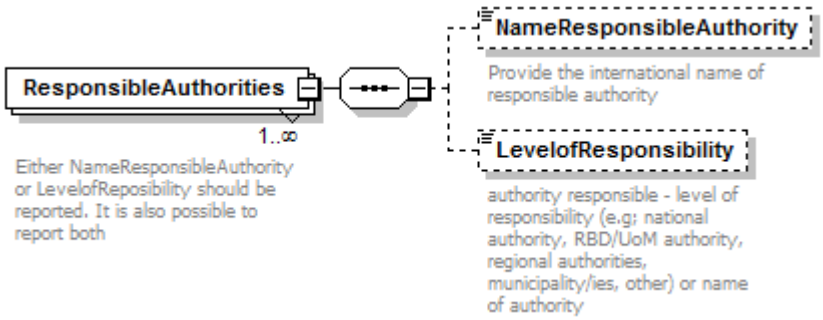
element **FRMP/Measures/MeasureCodes/MeasureLocation**

diagram	
type	**String250Type**
facets	Kind / Value / Annotation minLength 1 maxLength 250
annotation	documentation RBD/UoM(code), APSFR/s (code), name of location, river basin(code), sub-basin(code) or water body(code), or other; (the most relevant location description shall be chosen from amongst these options)

element **FRMP/Measures/MeasureCodes/GeographicCoverage**

diagram	
type	**String1000Type**
facets	Kind Value Annotation minLength 1 maxLength 1000
annotation	documentation Geographic coverage of expected effect of the measures (whole National, RBD/UoM, specific river-basin, sub-basin or coastal area, specific APSFR, or other (location, water body, etc), if different from location of measure

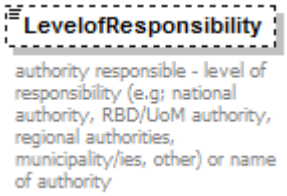
element **FRMP/Measures/MeasureCodes/ResponsibleAuthorities**

diagram	
annotation	documentation Either NameResponsibleAuthority or LevelofReposibility should be reported. It is also possible to report both

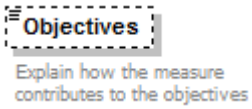
element **FRMP/Measures/MeasureCodes/ResponsibleAuthorities/NameResponsibleAuthority**

diagram	
type	**String250Type**
facets	Kind Value Annotation minLength 1 maxLength 250
annotation	documentation Provide the international name of responsible authority

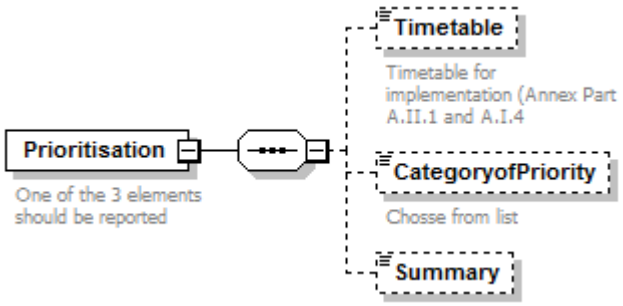
element **FRMP/Measures/MeasureCodes/ResponsibleAuthorities/LevelofResponsibility**

diagram	
type	**String250Type**
facets	Kind Value Annotation minLength 1 maxLength 250
annotation	documentation authority responsible - level of responsibility (e.g; national authority, RBD/UoM authority, regional authorities, municipality/ies, other) or name of authority

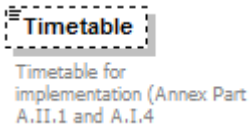
element **FRMP/Measures/MeasureCodes/Objectives**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation Explain how the measure contributes to the objectives

element **FRMP/Measures/MeasureCodes/Prioritisation**

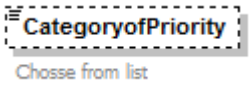
diagram	
annotation	documentation One of the 3 elements should be reported

element **FRMP/Measures/MeasureCodes/Prioritisation/Timetable**

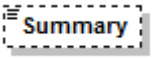
diagram	
type	**String5000Type**

facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation Timetable for implementation (Annex Part A.II.1 and A.I.4

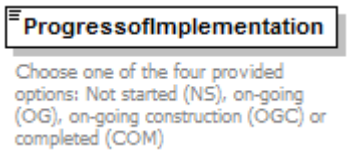
element **FRMP/Measures/MeasureCodes/Prioritisation/CategoryofPriority**

diagram	
type	**PriorityCategories**
facets	Kind Value Annotation enumeration VeryHigh enumeration High enumeration Critical enumeration Moderate enumeration Low
annotation	documentation Chosse from list

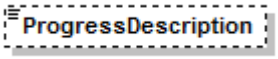
element **FRMP/Measures/MeasureCodes/Prioritisation/Summary**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000

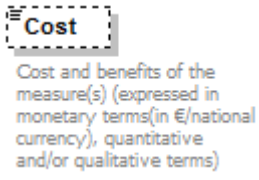
element **FRMP/Measures/MeasureCodes/ProgressofImplementation**

diagram	
type	**Status**
facets	Kind Value Annotation enumeration NS enumeration POG enumeration OGC enumeration COM
annotation	documentation Choose one of the four provided options: Not started (NS), on-going (OG), on-going construction (OGC) or completed (COM)

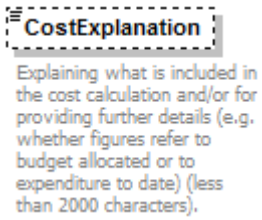
element **FRMP/Measures/MeasureCodes/ProgressDescription**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000

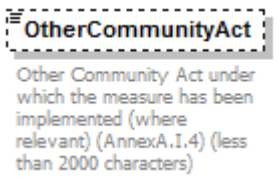
element **FRMP/Measures/MeasureCodes/Cost**

diagram	
type	**String2000Type**
facets	Kind Value Annotation minLength 1 maxLength 2000
annotation	documentation Cost and benefits of the measure(s) (expressed in monetary terms(in €/national currency), quantitative and/or qualitative terms)

element **FRMP/Measures/MeasureCodes/CostExplanation**

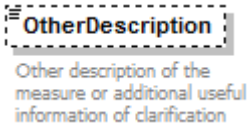
diagram	
type	**String2000Type**
facets	Kind Value Annotation minLength 1 maxLength 2000
annotation	documentation Explaining what is included in the cost calculation and/or for providing further details (e.g. whether figures refer to budget allocated or to expenditure to date) (less than 2000 characters).

element **FRMP/Measures/MeasureCodes/OtherCommunityAct**

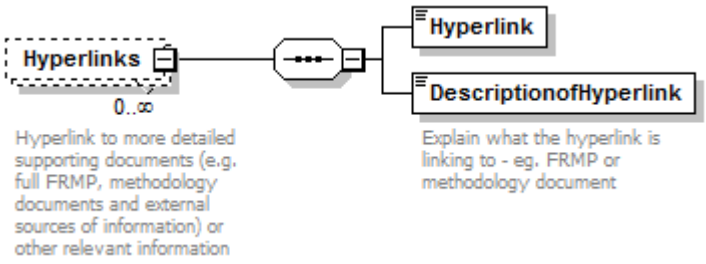
diagram	
type	**String2000Type**

facets	Kind Value Annotation minLength 1 maxLength 2000
annotation	documentation Other Community Act under which the measure has been implemented (where relevant) (AnnexA.I.4) (less than 2000 characters)

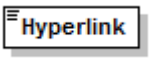
element **FRMP/Measures/MeasureCodes/OtherDescription**

diagram	
type	**String5000Type**
facets	Kind Value Annotation minLength 1 maxLength 5000
annotation	documentation Other description of the measure or additional useful information of clarification

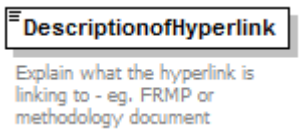
element **FRMP/Hyperlinks**

diagram	
annotation	documentation Hyperlink to more detailed supporting documents (e.g. full FRMP, methodology documents and external sources of information) or other relevant information

element **FRMP/Hyperlinks/Hyperlink**

diagram	
type	**xs:anyURI**

element **FRMP/Hyperlinks/DescriptionofHyperlink**

diagram	
type	**String1000Type**
facets	Kind Value Annotation minLength 1 maxLength 1000

annotation	documentation Explain what the hyperlink is linking to - eg. FRMP or methodology document

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