Schema documentation for wss.xsd

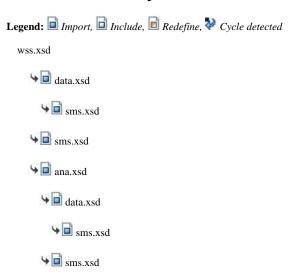
august 18, 2012

Table of Contents

	rcny: http://www.ime.iiasa.ac.at/enrima"
	(s)
	Main schema wss.xsd
	t(s)
	Element w:getSMSRequest Element w:getSMSResponse
	Element w:getSmsResponse Element w:getEntityValuesRequest
	Element w:getEntityValuesResponse
	Element w:getSetMembersRequest
	Element w:getSetMembersResponse
	Element w:storeMainSetRequest
	Element w:storeMainSetResponse
	Element w:storeSetMembersRequest
	Element w:storeSetMembersResponse
	Element w:removeSetMembersRequest
	Element w:removeSetMembersResponse
	Element w:storeEntityValuesRequest
	Element w:storeEntityValuesResponse
]	Element w:removeEntityValuesRequest
	Element w:removeEntityValuesResponse
]	Element w:defineModelDataRequest
]	Element w:defineModelDataResponse
]	Element w:changeModelDataStatusRequest
]	Element w:changeModelDataStatusResponse
]	Element w:defineInstanceRequest
]	Element w:defineInstanceResponse
]	Element w:defineAnalysisRequest
]	Element w:defineAnalysisResponse
	Element w:getAnalysesRequest
]	Element w:getAnalysesResponse
	Element w:updateSolverStatusRequest
	Element w:updateSolverStatusResponse
	Element w:getSolverStatusRequest
	Element w:getSolverStatusResponse
	Element w:definePreferenceRequest
	Element w:definePreferenceResponse
	Element w:getPreferenceRequest
	Element w:getPreferenceResponse
	Element w:storeSolutionRequest
	Element w:storeSolutionResponse
	Element w:getSolutionRequest
	Element w:getSolutionResponse
	Element w:getSolutionResponse Element w:runSolverRequest
	Element w:runSolverResponse
	-
	Element w:runScenarioRequest
	Element w:runScenarioResponse
	Element w:getBatchValuesRequest
	Element w:getBatchValuesResponse
	Element w:getDataSummaryRequest
	Element w:getDataSummaryResponse
	Type(s)
	Simple Type w:responseStatus
	ttp://www.ime.iiasa.ac.at/model/instance"
	a(s)
	Imported schema data.xsd
	t(s)
]	Element i:dataSet
Comple	x Type(s)
	Complex Type i:tupleValue
	Complex Type i:memberDic
	Complex Type i:value
	Complex Type i:setMembers

Complex Type i:tupleMembers	21
Complex Type i:entityValues	22
Complex Type i:tupleValues	22
Complex Type i:modelData	22
Complex Type i:modelInstance	23
Complex Type i:batchValues	23
Namespace: "http://www.ime.iiasa.ac.at/model/spec"	23
Schema(s)	
Imported schema sms.xsd	23
Complex Type(s)	23
Complex Type m:modelSpec	23
Complex Type m:setSpec	24
Complex Type m:iteratorContainer	25
Complex Type m:entitySpec	25
Simple Type(s)	26
Simple Type m:shortName	26
Simple Type m:name	26
Simple Type m:description	27
Simple Type m:status	27
Simple Type m:setSpecType	27
Simple Type m:entityRole	28
Simple Type m:mathType	28
Namespace: "http://www.ime.iiasa.ac.at/model/analysis"	29
Schema(s)	29
Imported schema ana.xsd	29
Complex Type(s)	29
Complex Type a:analysis	29
Complex Type a:preference	29
Simple Type(s)	
Simple Type a:preferenceType	
• • • •	

Resource hierarchy:



Namespace: "http://www.ime.iiasa.ac.at/enrima"

Schema(s)

Main schema wss.xsd

Namespace	http://www.ime.iiasa.ac.at/enrima	
Properties	attribute form default:	unqualified
	element form default:	unqualified

Element(s)

Element w:getSMSRequest

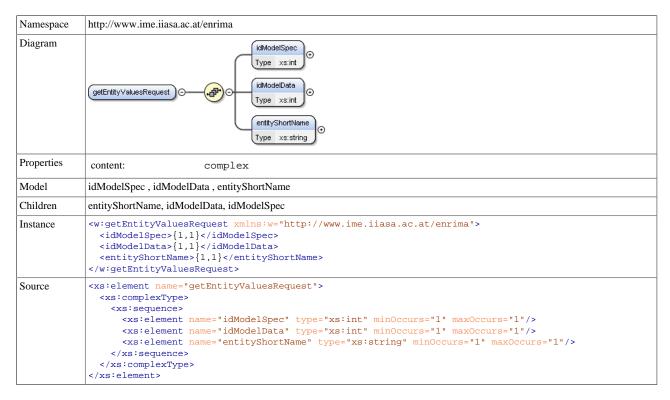
Namespace	http://www.ime.iiasa.ac.at/enrima
-----------	-----------------------------------

Diagram	getSMSRequest ○ (idModelSpec Type xs:int)
Properties	content: complex
Model	ALL(idModelSpec)
Children	idModelSpec
Instance	<pre><w:getsmsrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idmodelspec>{1,1}</idmodelspec> </w:getsmsrequest></pre>
Source	<pre><xs:element name="getSMSRequest"> <xs:complextype> <xs:all></xs:all></xs:complextype></xs:element></pre>

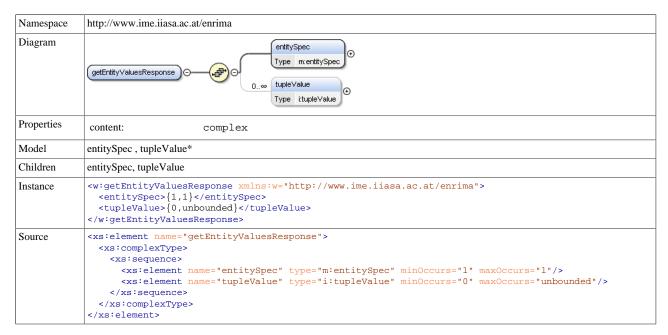
Element w:getSMSResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	getSMSResponse ○ Type m:modelSpec Type m:modelSpec
Properties	content: complex
Model	modelSpec
Children	modelSpec
Instance	<pre><w:getsmsresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <modelspec>{1,1}</modelspec> </w:getsmsresponse></pre>
Source	<pre><xs:element name="getSMSResponse"></xs:element></pre>

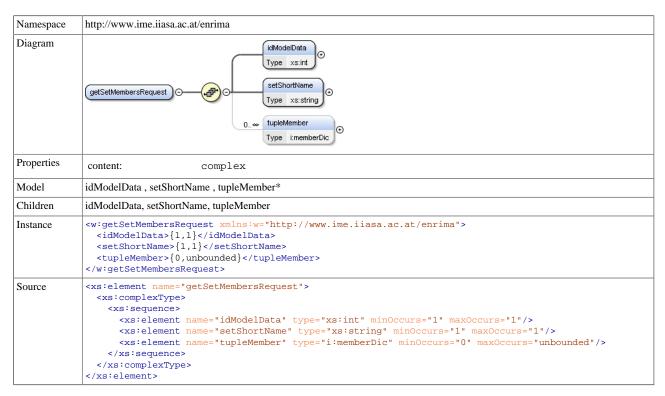
Element w:getEntityValuesRequest



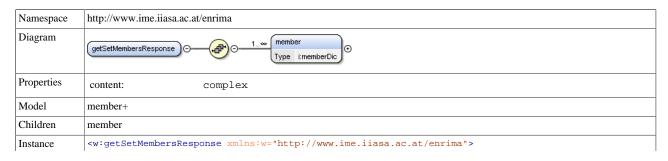
Element w:getEntityValuesResponse



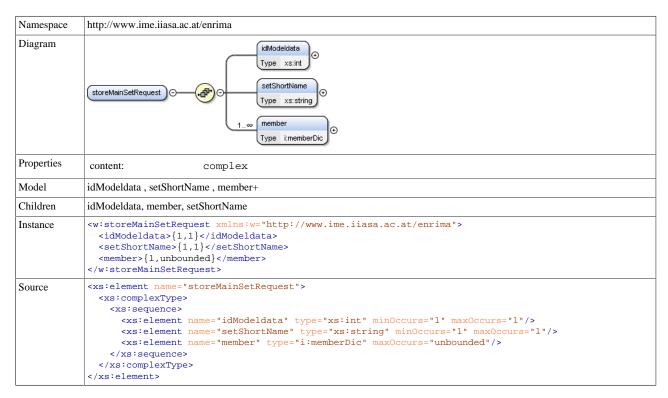
Element w:getSetMembersRequest



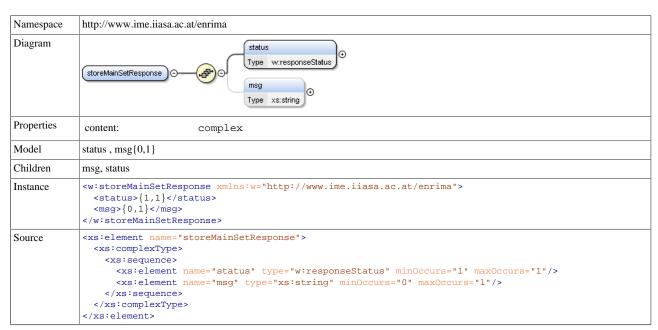
Element w:getSetMembersResponse



Element w:storeMainSetRequest



Element w:storeMainSetResponse

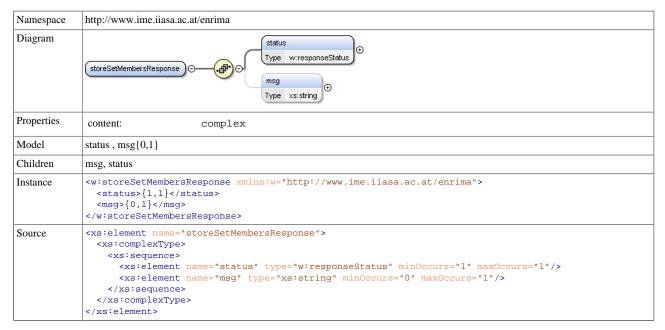


Element w:storeSetMembersRequest

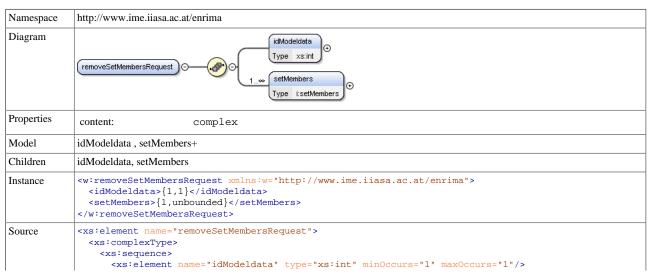
Namespace	http://www.ime.iiasa.ac.at/enrima
-----------	-----------------------------------

Diagram	storeSetMembersRequest ○ (idModeldata Type xs:int) (Type xs:int) (Type i.setMembers Type i.setMembers)
Properties	content: complex
Model	idModeldata , setMembers+
Children	idModeldata, setMembers
Instance	<pre><w:storesetmembersrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idmodeldata>{1,1}</idmodeldata> <setmembers>{1,unbounded}</setmembers> </w:storesetmembersrequest></pre>
Source	<pre><xs:element name="storeSetMembersRequest"></xs:element></pre>

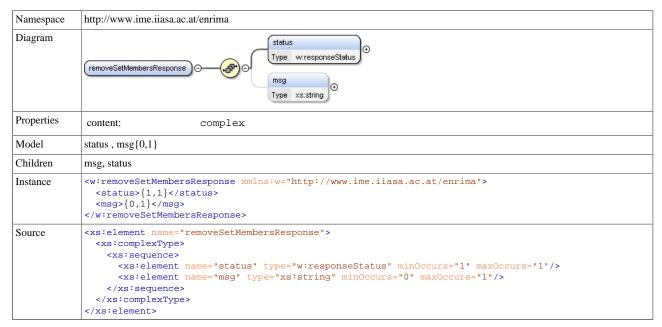
Element w:storeSetMembersResponse



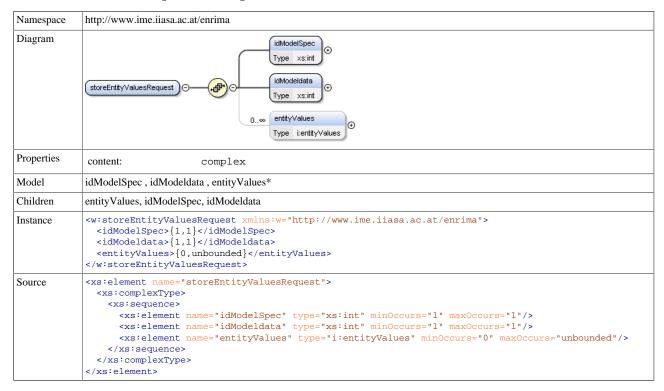
Element w:removeSetMembersRequest



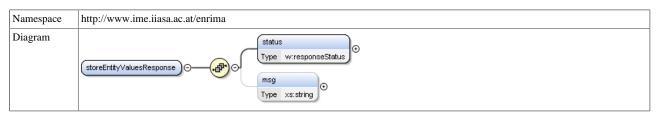
Element w:removeSetMembersResponse



Element w:storeEntityValuesRequest

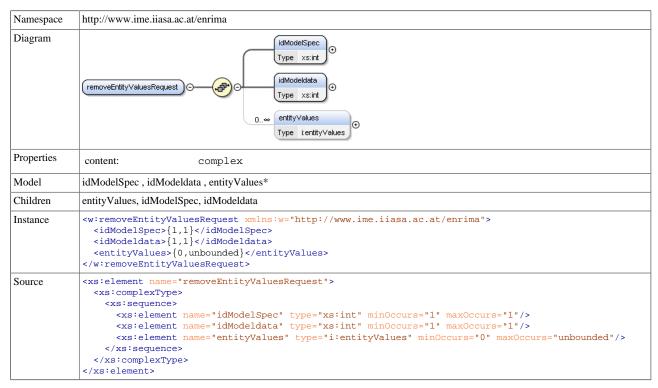


Element w:storeEntityValuesResponse

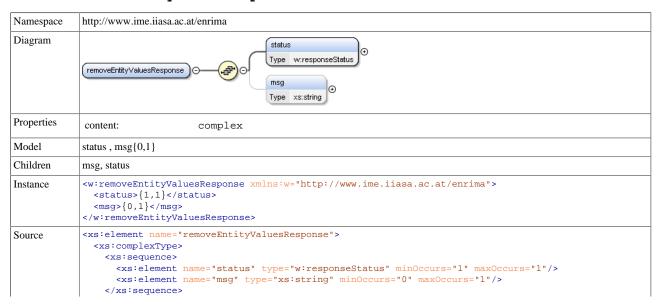


Properties	content: complex
Model	status, msg{0,1}
Children	msg, status
Instance	<pre><w:storeentityvaluesresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <status>{1,1}</status> <msg>{0,1}</msg> </w:storeentityvaluesresponse></pre>
Source	<pre><xs:element name="storeEntityValuesResponse"></xs:element></pre>

Element w:removeEntityValuesRequest



Element w:removeEntityValuesResponse

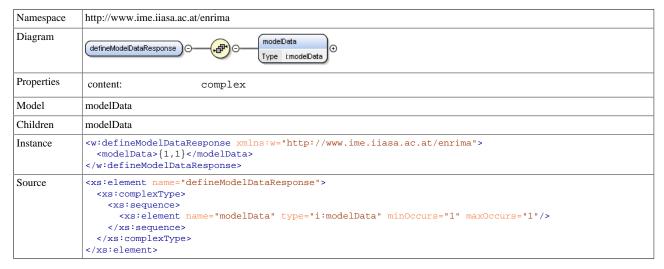


```
</xs:complexType>
</xs:element>
```

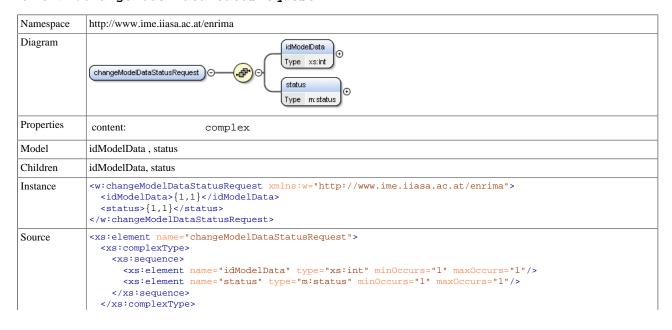
Element w:defineModelDataRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	defineModelDataRequest ○
Properties	content: complex
Model	modelData
Children	modelData
Instance	<pre><w:definemodeldatarequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <modeldata>{1,1}</modeldata> </w:definemodeldatarequest></pre>
Source	<pre><xs:element name="defineModelDataRequest"></xs:element></pre>

Element w:defineModelDataResponse



Element w:changeModelDataStatusRequest



</rs>element>

Element w:changeModelDataStatusResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	changeModelDataStatusResponse ○ Tresult Type xs:string
Properties	content: complex
Model	result
Children	result
Instance	<pre><w:changemodeldatastatusresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <result>{1,1}</result> </w:changemodeldatastatusresponse></pre>
Source	<pre><xs:element name="changeModelDataStatusResponse"></xs:element></pre>

Element w:defineInstanceRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	defineInstanceRequest ○ Impose it modelInstance Type it modelInstance
Properties	content: complex
Model	modelInstance
Children	modelInstance
Instance	<pre><w:defineinstancerequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <modelinstance>{1,1}</modelinstance> </w:defineinstancerequest></pre>
Source	<pre><xs:element name="defineInstanceRequest"></xs:element></pre>

Element w:defineInstanceResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	defineInstanceResponse ⊙ modelInstance ⊙ Type i.modelInstance ⊙
Properties	content: complex
Model	modelInstance
Children	modelInstance
Instance	<pre><w:defineinstanceresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <modelinstance>{1,1}</modelinstance> </w:defineinstanceresponse></pre>
Source	<pre><xs:element name="defineInstanceResponse"></xs:element></pre>

Element w:defineAnalysisRequest

Namespace	http://www.ime.iiasa.ac.at/enrima	
-----------	-----------------------------------	--

Diagram	defineAnalysisRequest ○ Image: Comparison of the property of the p
Properties	content: complex
Model	analysis
Children	analysis
Instance	<pre><w:defineanalysisrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <analysis>{1,1}</analysis> </w:defineanalysisrequest></pre>
Source	<pre><xs:element name="defineAnalysisRequest"></xs:element></pre>

Element w:defineAnalysisResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	defineAnalysisResponse ⊙
Properties	content: complex
Model	analysis
Children	analysis
Instance	<pre><w:defineanalysisresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <analysis>{1,1}</analysis> </w:defineanalysisresponse></pre>
Source	<pre><xs:element name="defineAnalysisResponse"></xs:element></pre>

Element w:getAnalysesRequest



Element w:getAnalysesResponse

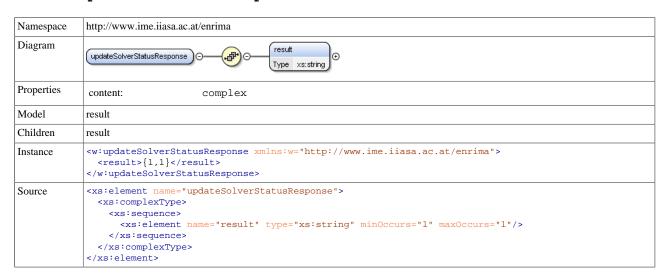


Properties	content: complex
Model	analysis*
Children	analysis
Instance	<pre><w:getanalysesresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <analysis>{0,unbounded}</analysis> </w:getanalysesresponse></pre>
Source	<pre><xs:element name="getAnalysesResponse"></xs:element></pre>

Element w:updateSolverStatusRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	updateSolverStatusRequest ⊙
Properties	content: complex
Model	idAnalysis , status
Children	idAnalysis, status
Instance	<pre><w:updatesolverstatusrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idanalysis>{1,1}</idanalysis> <status>{1,1}</status> </w:updatesolverstatusrequest></pre>
Source	<pre><xs:element name="updateSolverStatusRequest"></xs:element></pre>

Element w:updateSolverStatusResponse



Element w:getSolverStatusRequest

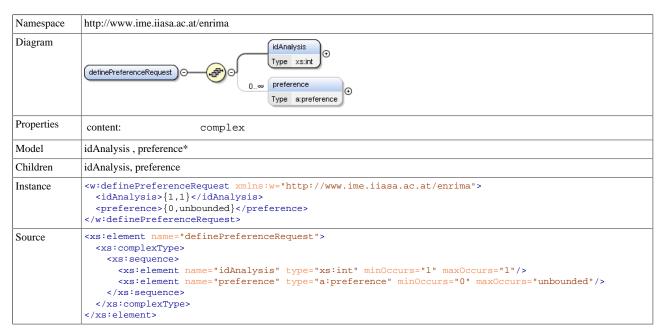


Properties	content: complex
Model	idAnalysis
Children	idAnalysis
Instance	<pre><w:getsolverstatusrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idanalysis>{1,1}</idanalysis> </w:getsolverstatusrequest></pre>
Source	<pre><xs:element name="getSolverStatusRequest"></xs:element></pre>

Element w:getSolverStatusResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	getSolverStatusResponse ○
Properties	content: complex
Model	result
Children	result
Instance	<pre><w:getsolverstatusresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <result>{1,1}</result> </w:getsolverstatusresponse></pre>
Source	<pre><xs:element name="getSolverStatusResponse"></xs:element></pre>

Element w:definePreferenceRequest



Element w:definePreferenceResponse

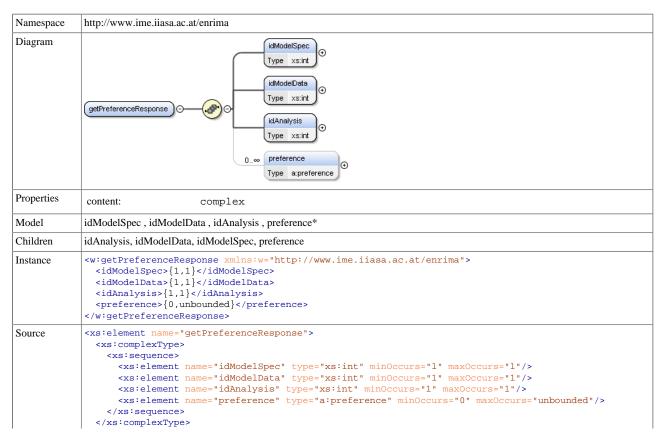


Properties	content: complex
Model	result
Children	result
Instance	<pre><w:definepreferenceresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <result>{1,1}</result> </w:definepreferenceresponse></pre>
Source	<pre><xs:element name="definePreferenceResponse"></xs:element></pre>

Element w:getPreferenceRequest

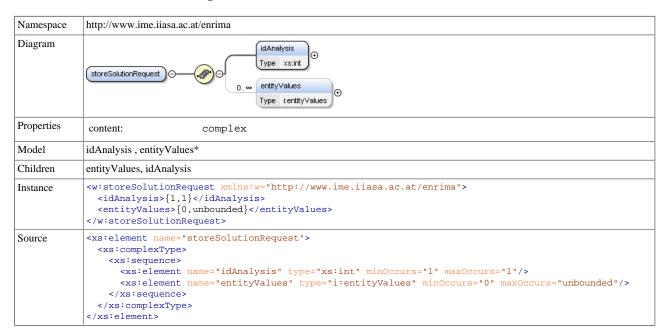
Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	getPreferenceRequest ○ IdAnalysis Type xs:int
Properties	content: complex
Model	idAnalysis
Children	idAnalysis
Instance	<pre><w:getpreferencerequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idanalysis>{1,1}</idanalysis> </w:getpreferencerequest></pre>
Source	<pre><xs:element name="getPreferenceRequest"></xs:element></pre>

Element w:getPreferenceResponse



</xs:element>

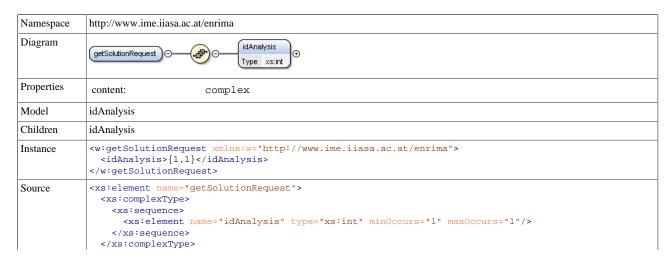
Element w:storeSolutionRequest



Element w:storeSolutionResponse

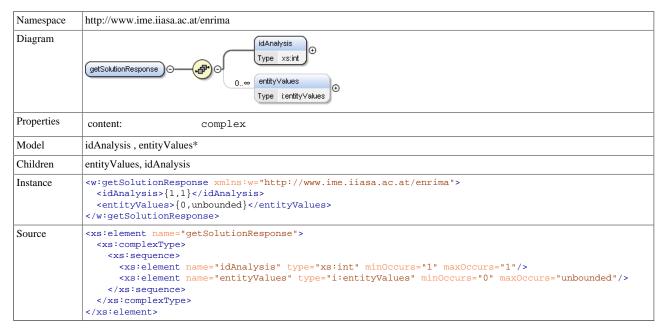
Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	storeSolutionResponse ⊙
Properties	content: complex
Model	result
Children	result
Instance	<pre><w:storesolutionresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <result>{1,1}</result> </w:storesolutionresponse></pre>
Source	<pre><xs:element name="storeSolutionResponse"></xs:element></pre>

Element w:getSolutionRequest



</xs:element>

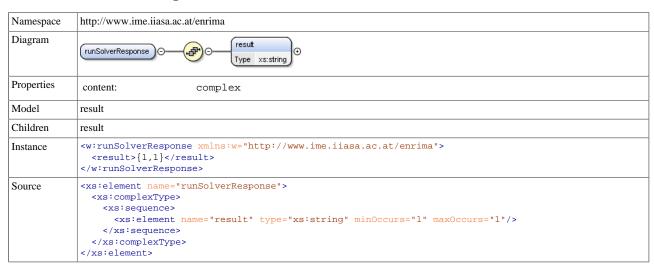
Element w:getSolutionResponse



Element w:runSolverRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	runSolverRequest O tidAnalysis Type xs:int
Properties	content: complex
Model	idAnalysis
Children	idAnalysis
Instance	<pre><w:runsolverrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idanalysis>{1,1}</idanalysis> </w:runsolverrequest></pre>
Source	<pre><xs:element name="runSolverRequest"></xs:element></pre>

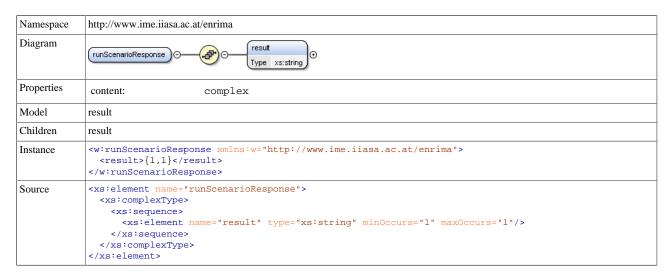
Element w:runSolverResponse



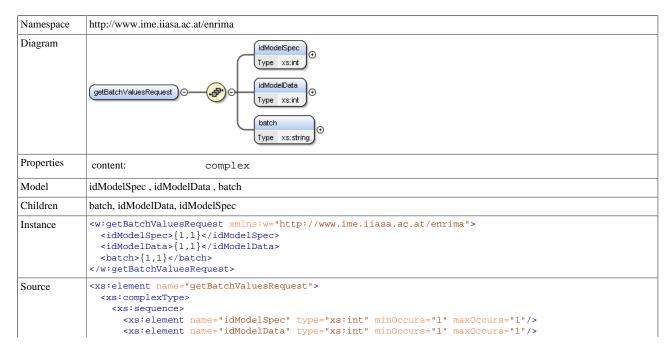
Element w:runScenarioRequest

Namespace	http://www.ime.iiasa.ac.at/enrima		
Diagram	runScenarioRequest ⊙ (idAnalysis Type xs:int) ⊙		
Properties	content: complex		
Model	idAnalysis		
Children	idAnalysis		
Instance	<pre><w:runscenariorequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"> <idanalysis>{1,1}</idanalysis> </w:runscenariorequest></pre>		
Source	<pre><xs:element name="runScenarioRequest"></xs:element></pre>		

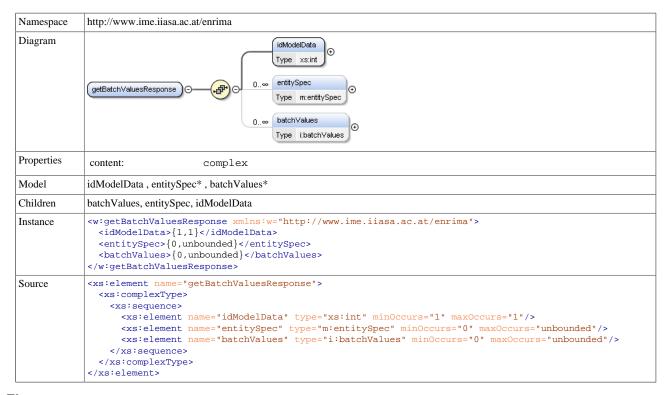
Element w:runScenarioResponse



Element w:getBatchValuesRequest



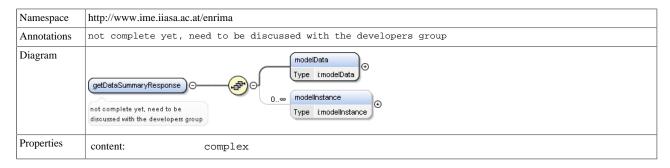
Element w:getBatchValuesResponse



Element w:getDataSummaryRequest



Element w:getDataSummaryResponse



```
Model
            modelData, modelInstance*
Children
            modelData, modelInstance
            <w:getDataSummaryResponse xmlns:w="http://www.ime.iiasa.ac.at/enrima">
Instance
              <modelData>{1,1}</modelData>
              <modelInstance>{0,unbounded}</modelInstance>
            </w:getDataSummaryResponse>
            <xs:element name="getDataSummaryResponse">
Source
              <xs:annotation>
                <xs:documentation>not complete yet, need to be discussed with the developers group/
            xs:documentation>
              </xs:annotation>
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="modelData" type="i:modelData" minOccurs="1" maxOccurs="1"/>
                  <xs:element name="modelInstance" type="i:modelInstance" minOccurs="0" maxOccurs="unbounded"/>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
```

Simple Type(s)

Simple Type w:responseStatus

Namespace	http://www.ime.iiasa.ac.at/enrima		
Diagram	responseStatus ⊙	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	restriction of xs:string		
Facets	enumeration	OK	
	enumeration	INVALID_SETNAME	
	enumeration	INVALID_DATAUPDATE	
	enumeration	INVALID_ITERATOR	
	enumeration	INVALID_SET_MEMBER	
	enumeration	INVALID_VALUE	
	enumeration	INVALID_ENTITYNAME	
	enumeration	BOUND_VIOLATION	
	enumeration	UNKOWN_EXECEPTION	
Used by	Elements	w:removeEntityValuesResponse/status, w:removeSetMembersResponse/status, w:storeEntityValuesResponse/status, w:storeMainSetResponse/status, w:storeSetMembersResponse/status	
Source	<pre><xs:enumeration <xs:enumeration="" <xs:enumeration<="" pre=""></xs:enumeration></pre>	ase="xs:string">	

Namespace: "http://www.ime.iiasa.ac.at/model/instance"

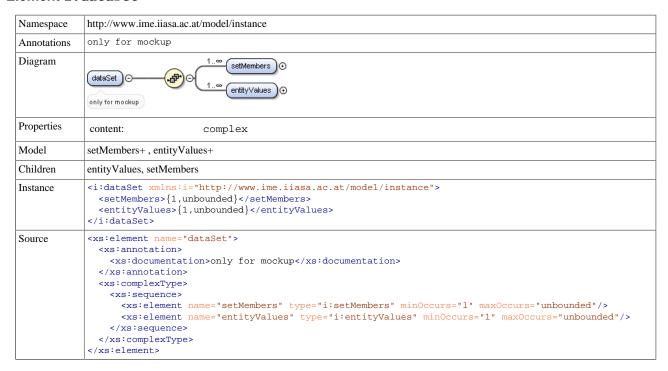
Schema(s)

Imported schema data.xsd

Namespace	http://www.ime.iiasa.ac.at/model/instance		
Properties	attribute form default:	unqualified	
	element form default:	unqualified	

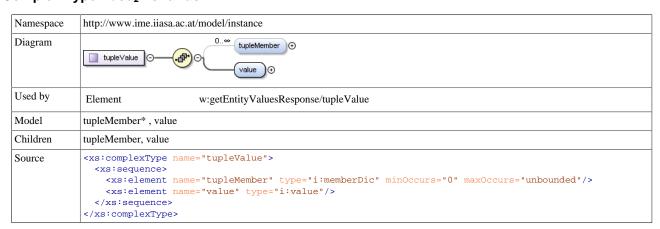
Element(s)

Element i:dataSet

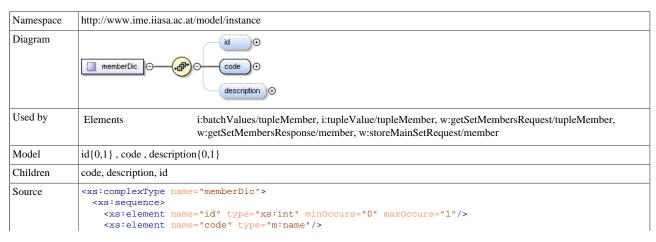


Complex Type(s)

Complex Type i:tupleValue



Complex Type i:memberDic

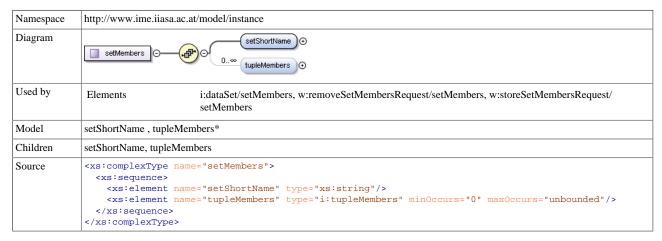


```
<xs:element name="description" type="m:description" minOccurs="0" maxOccurs="1"/>
</xs:sequence>
</xs:complexType>
```

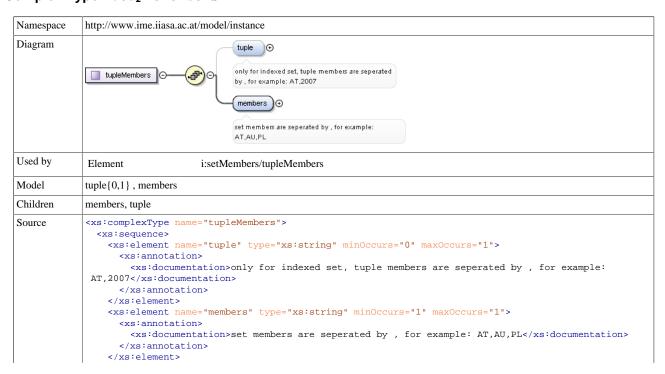
Complex Type i:value

Namespace	http://www.ime.iiasa.ac.at/model/instance		
Diagram	value		
Used by	Elements i:batchValues/value, i:tupleValue, i:tupleValues/value		
Model	intValue doubleValue		
Children	doubleValue, intValue		
Source	<pre><xs:complextype name="value"> <xs:choice></xs:choice></xs:complextype></pre>		

Complex Type i:setMembers



Complex Type i:tupleMembers

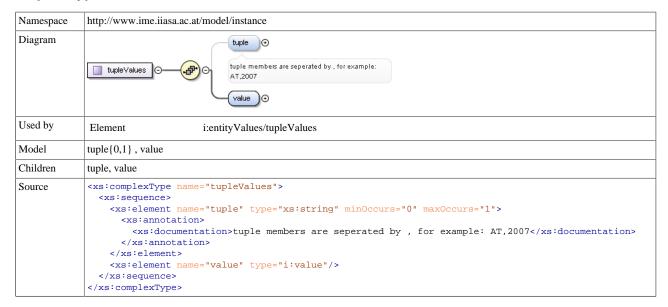


```
</xs:sequence>
</xs:complexType>
```

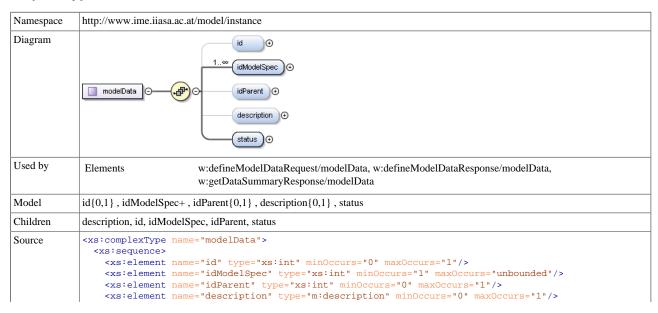
Complex Type i:entityValues

Namespace	http://www.ime.iiasa.ac.at/model/instance		
Diagram	entityValues ⊙ ———————————————————————————————————		
Used by	Elements i:dataSet/entityValues, w:getSolutionResponse/entityValues, w:removeEntityValuesRequest/entityValues, w:storeEntityValuesRequest/entityValues, w:storeSolutionRequest/entityValues		
Model	entityShortName, tupleValues*		
Children	entityShortName, tupleValues		
Source	<pre><xs:complextype name="entityValues"></xs:complextype></pre>		

Complex Type i:tupleValues

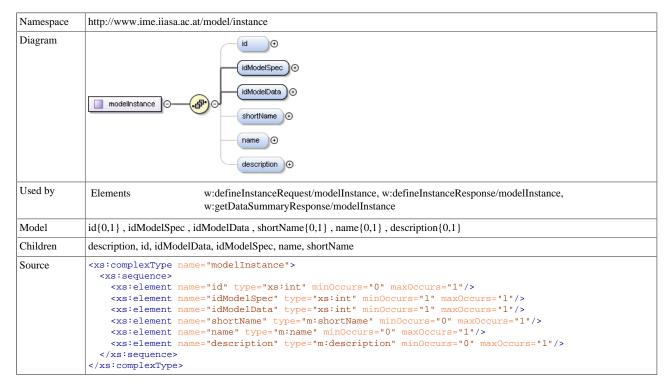


Complex Type i:modelData



```
<xs:element name="status" type="m:status" minOccurs="1" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
```

Complex Type i:modelInstance



Complex Type i:batchValues

Namespace	http://www.ime.iiasa.ac.at/model/instance		
Diagram	batchValues ⊙ tupleMember ⊕ 0∞ tupleMember ⊕ 0∞ value ⊕		
Used by	Element w:getBatchValuesResponse/batchValues		
Model	tupleMember*, value*		
Children	tupleMember, value		
Source	<pre><xs:complextype name="batchValues"></xs:complextype></pre>		

Namespace: "http://www.ime.iiasa.ac.at/model/spec"

Schema(s)

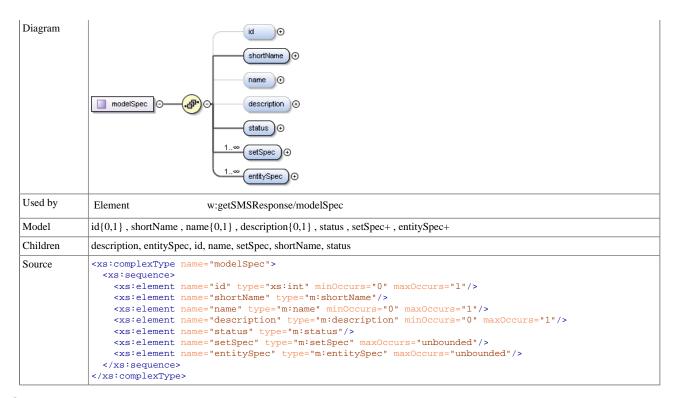
Imported schema sms.xsd

Namespace	http://www.ime.iiasa.ac.at/model/spec	
Properties	ties attribute form default: unqualified	
	element form default:	unqualified

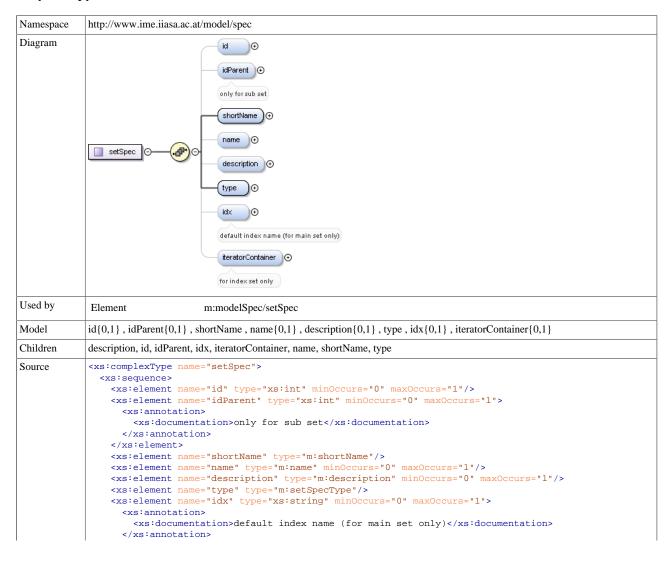
Complex Type(s)

Complex Type m:modelSpec

Namespace	http://www.ime.iiasa.ac.at/model/spec	
-----------	---------------------------------------	--



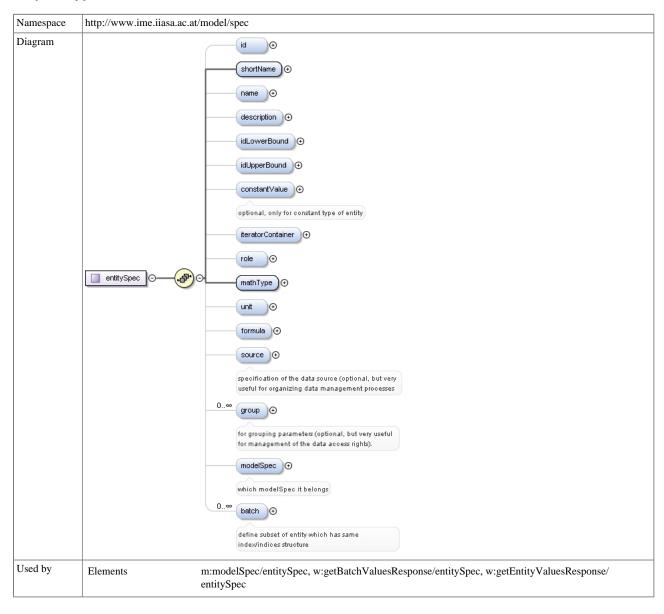
Complex Type m: setSpec



Complex Type m:iteratorContainer

Namespace	http://www.ime.iiasa.ac.at/model/spec		
Diagram	iteratorContainer		
Used by	Elements m:entitySpec/iteratorContainer, m:setSpec/iteratorContainer		
Model	idSetSpec+		
Children	idSetSpec		
Source	<pre> </pre> <pre> </pre> <pre> </pre> <pre> <pr< td=""></pr<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>		

Complex Type m:entitySpec



```
Model
                                     id\{0,1\} \ , \ shortName \ , \ name\{0,1\} \ , \ description\{0,1\} \ , \ idLowerBound\{0,1\} \ , \ idUpperBound\{0,1\} \ , \ constantValue\{0,1\} \ , \ on the state of t
                                     iterator Container \{0,1\} \ , \\ role \{0,1\} \ , \\ math Type \ , \\ unit \{0,1\} \ , \\ formula \{0,1\} \ , \\ source \{0,1\} \ , \\ group^* \ , \\ model Spec \{0,1\} \ , \\ batch^* \ , \\ model Spec \{0,1\} \ , \\ formula \{0
Children
                                     batch, constantValue, description, formula, group, id, idLowerBound, idUpperBound, iteratorContainer, mathType, modelSpec,
                                     name, role, shortName, source, unit
Source
                                     <xs:complexType name="entitySpec">
                                           <xs:sequence>
                                                 <xs:element name="id" type="xs:int" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="shortName" type="m:shortName"/>
                                                <xs:element name="name" type="m:name" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="description" type="m:description" minOccurs="0" maxOccurs="1"/>
                                                <xs:element name="idLowerBound" type="xs:int" minOccurs="0" maxOccurs="1"/>
<xs:element name="idUpperBound" type="xs:int" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="constantValue" type="xs:double" minOccurs="0" maxOccurs="1">
                                                      <xs:annotation>
                                                             <xs:documentation>optional, only for constant type of entity</xs:documentation>
                                                      </xs:annotation>
                                                 </xs:element>
                                                 <xs:element name="iteratorContainer" type="m:iteratorContainer" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="role" type="m:entityRole" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="mathType" type="m:mathType" minOccurs="1" maxOccurs="1"/>
                                                <xs:element name="unit" type="xs:string" minOccurs="0" maxOccurs="1"/>
<xs:element name="formula" type="xs:string" minOccurs="0" maxOccurs="1"/>
                                                 <xs:element name="source" type="xs:string" minOccurs="0" maxOccurs="1">
                                                       <xs:annotation>
                                                            <xs:documentation>specification of the data source (optional, but very useful for organizing
                                        data management processes</xs:documentation>
                                                       </xs:annotation>
                                                 </xs:element>
                                                 <xs:element name="group" type="xs:string" minOccurs="0" maxOccurs="unbounded">
                                                       <xs:annotation>
                                                            <xs:documentation>for grouping parameters (optional, but very useful for management of the
                                        data access rights).</xs:documentation>
                                                       </xs:annotation>
                                                 </xs:element>
                                                 <xs:element name="modelSpec" type="xs:string" minOccurs="0" maxOccurs="1">
                                                       <xs:annotation>
                                                             <xs:documentation>which modelSpec it belongs</xs:documentation>
                                                       </xs:annotation>
                                                 </xs:element>
                                                 <xs:element name="batch" type="xs:string" minOccurs="0" maxOccurs="unbounded">
                                                       <xs:annotation>
                                                           <xs:documentation>define subset of entity which has same index/indices structure/
                                     xs:documentation>
                                                      </xs:annotation>
                                                 </xs:element>
                                           </xs:sequence>
                                     </xs:complexType>
```

Simple Type(s)

Simple Type m: shortName

Namespace	http://www.ime.iiasa.ac.at/model/spec		
Diagram	shortName O-	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	restriction of xs:string		
Facets	minLength	1	
	maxLength	16	
Used by	Elements	$a: analysis/shortName, \ i: modelInstance/shortName, \ m: entitySpec/shortName, \ m: modelSpec/shortName, \ m: setSpec/shortName$	
Source	<pre><xs:simpletype name="shortName"> <xs:restriction base="xs:string"> <xs:minlength value="1"></xs:minlength> <xs:maxlength value="16"></xs:maxlength> </xs:restriction> </xs:simpletype></pre>		

Simple Type m:name

Namespace	http://www.ime.iiasa.ac.at/model/spec
-----------	---------------------------------------

Diagram		xs:string Built-in primitive type. The string datatype represents sharacter strings in XML.
Type	restriction of xs:str	ing
Facets	minLength	1
	maxLength	64
Used by	Elements	a:analysis/name, i:memberDic/code, i:modelInstance/name, m:entitySpec/name, m:modelSpec/name, m:setSpec/name
Source	<pre><xs:simpletype name="name"> <xs:restriction base="xs:string"> <xs:minlength value="1"></xs:minlength> <xs:maxlength value="64"></xs:maxlength> </xs:restriction> </xs:simpletype></pre>	

Simple Type m:description

Namespace	http://www.ime.iiasa.ac.at/model/spec	
Diagram	(description) ⊙—	Built-in primitive type. The string datatype represents character strings in XML.
Туре	restriction of xs:str	ing
Facets	minLength	1
	maxLength	1000
Used by	Elements	a: analysis/description, i: member Dic/description, i: model Data/description, i: model Instance/description, m: entity Spec/description, m: model Spec/description, m: set Spec/description
Source	<pre><xs:simpletype name="description"> <xs:restriction base="xs:string"></xs:restriction></xs:simpletype></pre>	

Simple Type m: status



Simple Type m:setSpecType



Type	restriction of xs:string	
Facets	enumeration	MAINSET
	enumeration	SUBSET
	enumeration	INDEXEDSUBSET
Used by	Element	m:setSpec/type
Source	<pre><xs:simpletype name="setSpecType"> <xs:restriction base="xs:string"> <xs:enumeration value="MAINSET"></xs:enumeration> <xs:enumeration value="SUBSET"></xs:enumeration> <xs:enumeration value="INDEXEDSUBSET"></xs:enumeration> </xs:restriction> </xs:simpletype></pre>	

Simple Type m:entityRole

Namespace	http://www.ime.iiasa	a.ac.at/model/spec		
Diagram	entityRole			
		Built-in primitive type. The string datatype represents character strings in XML.		
Туре	restriction of xs:strin	ng		
Facets	enumeration	CONSTANT		
	enumeration	PARAMETER		
	enumeration	DECISION_VAR		
	enumeration	EXTERNAL_DECISION_VAR		
	enumeration	OUTCOME_VAR		
	enumeration	AUXILIARY_VAR		
	enumeration	ASSIGNMENT		
	enumeration	CONSTRAINT		
	enumeration	A_VARIABLE	<pre>any type of variable: DECISION_VAR, EXTERNAL_DECISION_VAR,OUTCOME_VAR,or AUXILIARY_VAR</pre>	
	enumeration	A_FORMULA	any type of formula: ASSIGNMENT or CONSTRAINT	
Used by	Element	m:entitySpec/role		
Source	<pre><xs:restrictio <="" <xs:annota="" <xs:enumerat="" pre="" xs:annot="" xs:annota<="" xs:enumerat=""> </xs:restrictio></pre>	mmentation>any type of variable: (xs:documentation> cation> cion value="A_FORMULA"> cion value="A_FORMULA"> cion> cution> con>	DECISION_VAR, EXTERNAL_DECISION_VAR,OUTCOME_VAR,or ASSIGNMENT or CONSTRAINT	

Simple Type m:mathType

Namespace	http://www.ime.iiasa.ac.at/model/spec

Diagram	☐ mathType ☐	Built-in primitive type. The string datatype represents character strings in XML.	
Type	restriction of xs:stri	ng	
Facets	enumeration	INTEGER	
	enumeration	REAL	
Used by	Element	m:entitySpec/mathType	
Source	<pre><xs:simpletype name="mathType"> <xs:restriction base="xs:string"></xs:restriction></xs:simpletype></pre>		

Namespace: "http://www.ime.iiasa.ac.at/model/analysis"

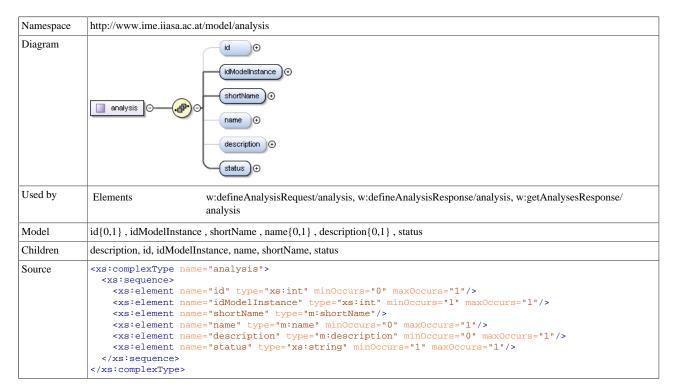
Schema(s)

Imported schema ana.xsd

Namespace	http://www.ime.iiasa.ac.at/model/analysis		
Properties	attribute form default: unqualified		
	element form default: unqualified		

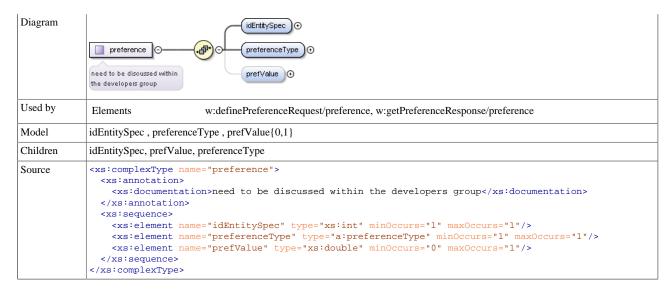
Complex Type(s)

Complex Type a: analysis



Complex Type a:preference

Namespace	http://www.ime.iiasa.ac.at/model/analysis	
Annotations	need to be discussed within the developers group	



Simple Type(s)

Simple Type a:preferenceType

Namespace	http://www.ime.iiasa.ac.at/model/analysis		
Annotations	need to be discussed within the developers group		
Diagram	preferenceType O	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	restriction of xs:string		
Facets	enumeration	MIN	
	enumeration	MAX	
	enumeration	LOWER_BND	
	enumeration	UPPER_BND	
Used by	Element	a:preference/preferenceType	
Source	<pre><xs:simpletype name="preferenceType"></xs:simpletype></pre>		