# Schema documentation for wss.xsd

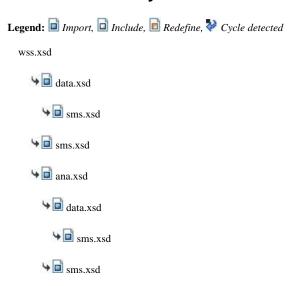
september 13, 2012

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# **Resource hierarchy:**



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

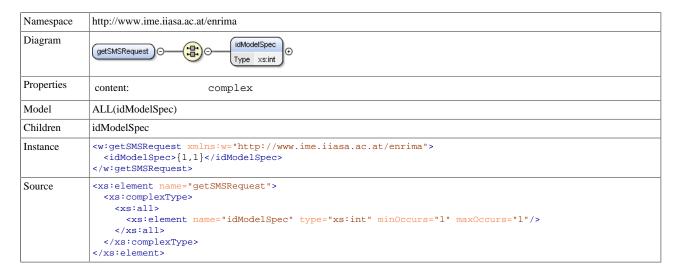
# Schema(s)

### Main schema wss.xsd

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

# Element(s)

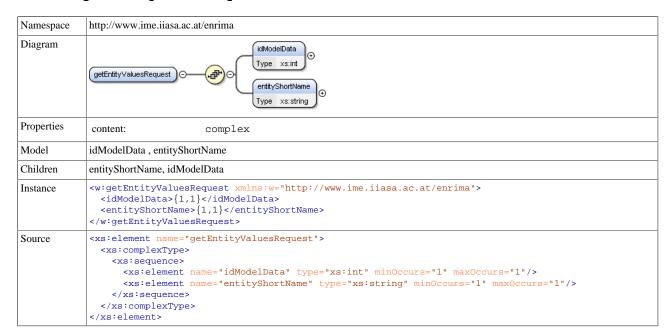
#### Element w: getSMSRequest



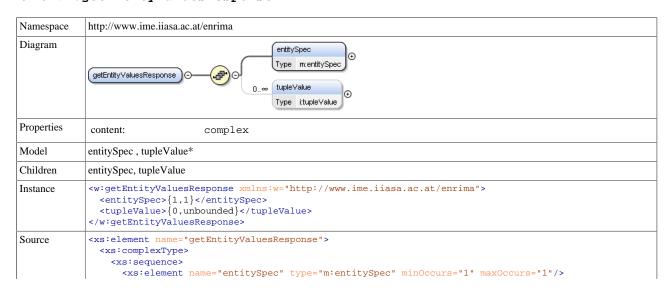
#### Element w:getSMSResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	getSMSResponse ⊙
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>

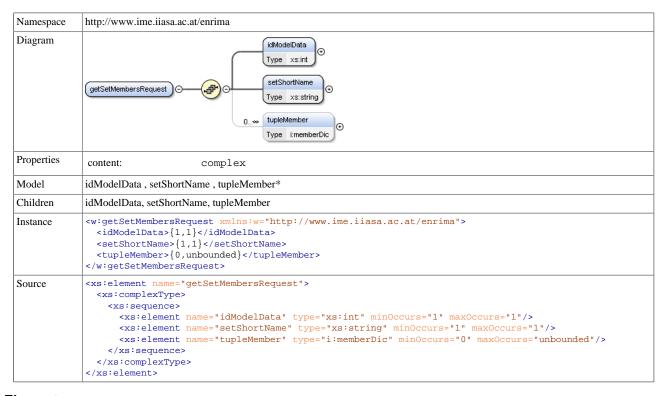
## Element w:getEntityValuesRequest



### Element w:getEntityValuesResponse



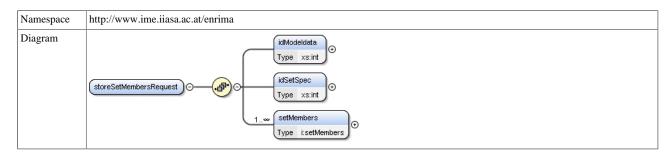
## Element w:getSetMembersRequest



#### Element w:getSetMembersResponse

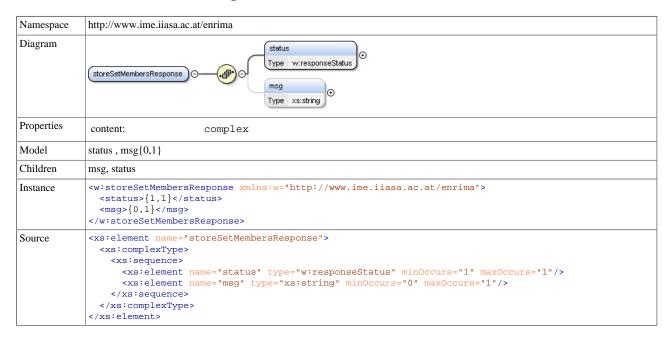
Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	getSetMembersResponse ) ○ 1∞ member Type i:memberDic
Properties	content: complex
Model	member+
Children	member
Instance	<pre><w:getsetmembersresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima">     <member>{1,unbounded}</member> </w:getsetmembersresponse></pre>
Source	<pre><xs:element name="getSetMembersResponse"></xs:element></pre>

#### Element w:storeSetMembersRequest

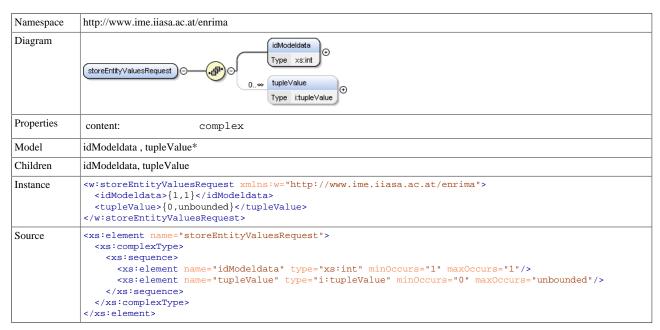


Properties	content: complex
Model	idModeldata , idSetSpec , setMembers+
Children	idModeldata, idSetSpec, setMembers
Instance	<pre><w:storesetmembersrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima">     <idmodeldata>{1,1}</idmodeldata>     <idsetspec>{1,1}</idsetspec>     <setmembers>{1,unbounded}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

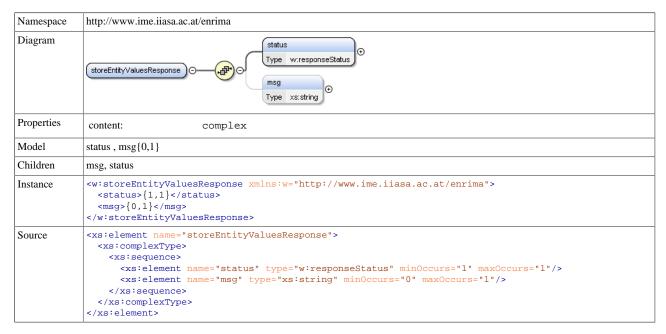
### Element w:storeSetMembersResponse



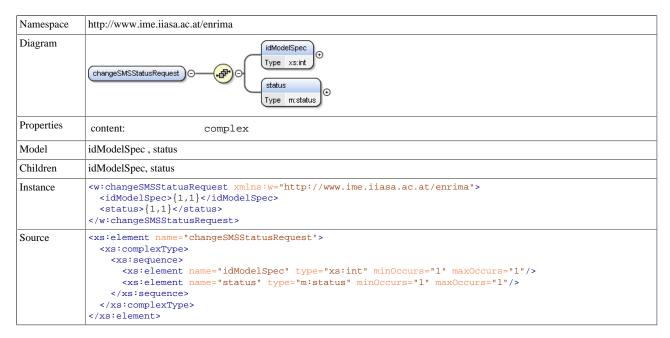
### Element w:storeEntityValuesRequest



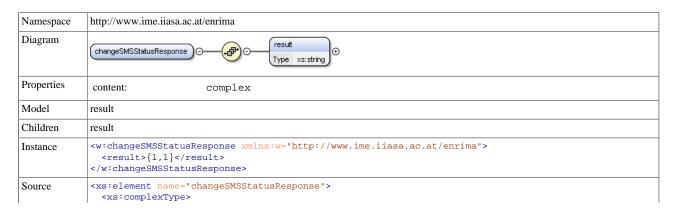
#### Element w:storeEntityValuesResponse



### Element w: changeSMSStatusRequest



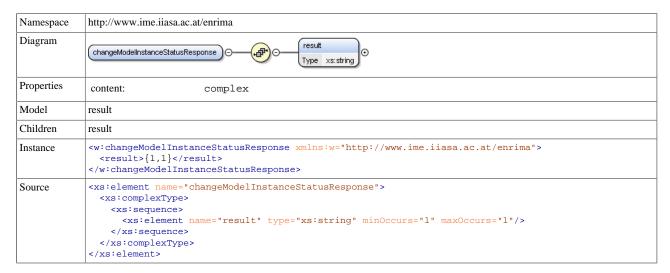
#### Element w: changeSMSStatusResponse



### Element w:changeModelInstanceStatusRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	changeModelInstanceStatusRequest ○
Properties	content: complex
Model	idModelInstance, status
Children	idModelInstance, status
Instance	<pre><w:changemodelinstancestatusrequest xmlns:w="http://www.ime.iiasa.ac.at/enrima"></w:changemodelinstancestatusrequest></pre>
Source	<pre><xs:element name="changeModelInstanceStatusRequest"></xs:element></pre>

#### Element w:changeModelInstanceStatusResponse



### Element w:defineModelDataRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	defineModelDataRequest ○ modelData
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>

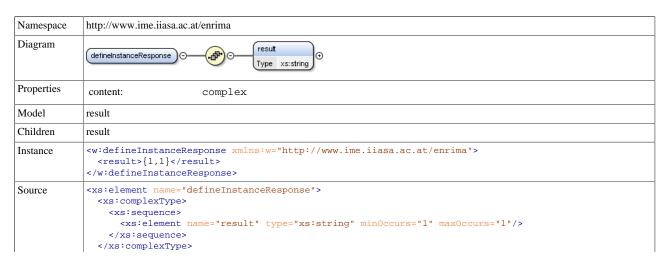
#### Element w:defineModelDataResponse

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

### Element w:defineInstanceRequest

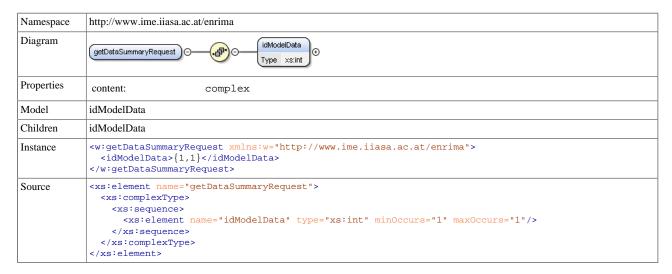


#### Element w:defineInstanceResponse

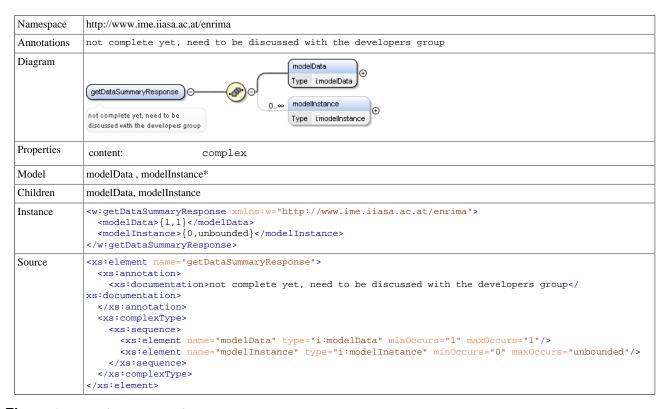


</xs:element>

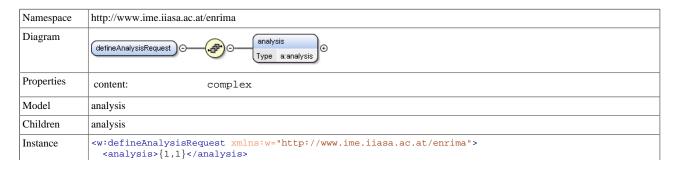
#### Element w:getDataSummaryRequest



#### Element w:getDataSummaryResponse



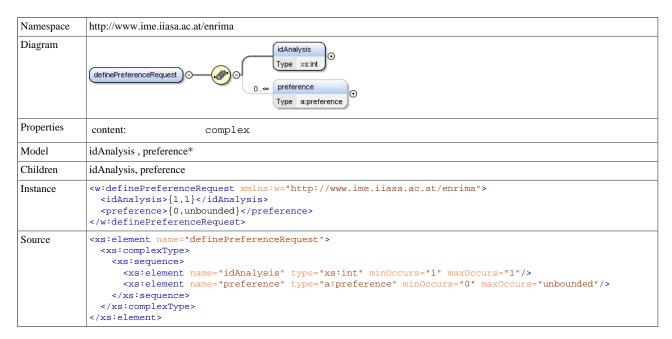
#### Element w:defineAnalysisRequest



#### Element w:defineAnalysisResponse

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

#### Element w:definePreferenceRequest



### Element w:definePreferenceResponse

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	definePreferenceResponse ☐ Type xs:string
Properties	content: complex
Model	result
Children	result
Instance	<pre><w:definepreferenceresponse xmlns:w="http://www.ime.iiasa.ac.at/enrima"></w:definepreferenceresponse></pre>

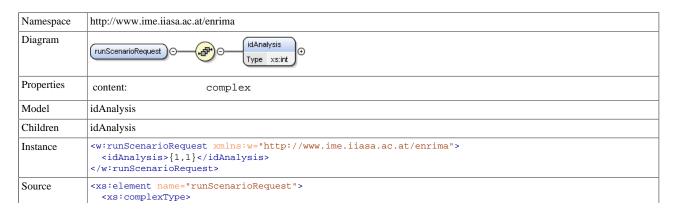
### Element w:runSolverRequest

Namespace	http://www.ime.iiasa.ac.at/enrima
Diagram	runSolverRequest O
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

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

#### Element w:runScenarioRequest



# Element w:runScenarioResponse

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

# Simple Type(s)

### Simple Type w:responseStatus

Namespace	http://www.ime.iiasa.ac.	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_ITERATOR	
	enumeration	INVALID_SET_MEMBER	
	enumeration	INVALID_VALUE	
	enumeration	BOUND_VIOLATION	
Used by	Elements	w:storeEntityValuesResponse/status, w:storeSetMembersResponse/status	
Source	<pre><xs:enumeration <xs:enumeration<="" pre=""></xs:enumeration></pre>	pase="xs:string"> value="OK"/> value="INVALID_ITERATOR"/> value="INVALID_SET_MEMBER"/> value="INVALID_VALUE"/> value="BOUND_VIOLATION"/>	

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

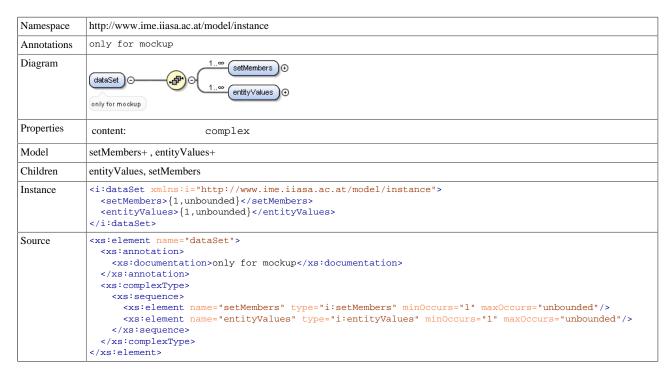
# Schema(s)

## 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

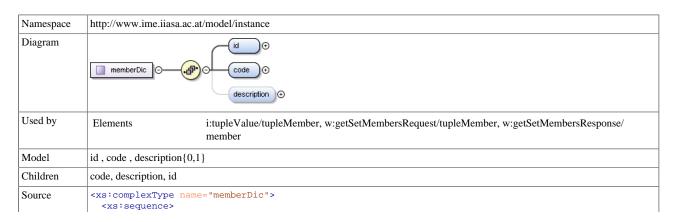


# Complex Type(s)

#### Complex Type i:tupleValue

Namespace	http://www.ime.iiasa.ac.at/model/instance
Diagram	tuple∀alue ⊙ tupleMember ⊙ value ⊙
Used by	Elements w:getEntityValuesResponse/tupleValue, w:storeEntityValuesRequest/tupleValue
Model	tupleMember*, value
Children	tupleMember, value
Source	<pre><xs:complextype name="tupleValue"></xs:complextype></pre>

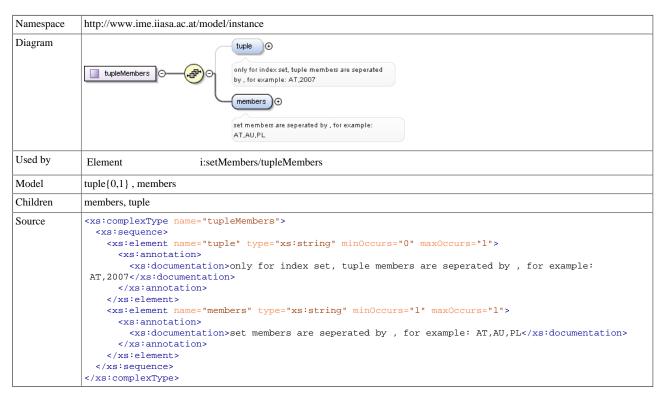
### Complex Type i:memberDic



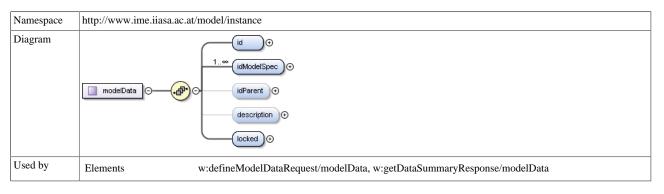
### Complex Type i:setMembers

Namespace	http://www.ime.iiasa.ac.at/model/instance	
Diagram	setMembers ⊙ (setShortName) ⊙ (o	
Used by	Elements i:dataSet/setMembers, w:storeSetMembersRequest/setMembers	
Model	setShortName , tupleMembers*	
Children	setShortName, tupleMembers	
Source	<pre><xs:complextype name="setMembers"></xs:complextype></pre>	

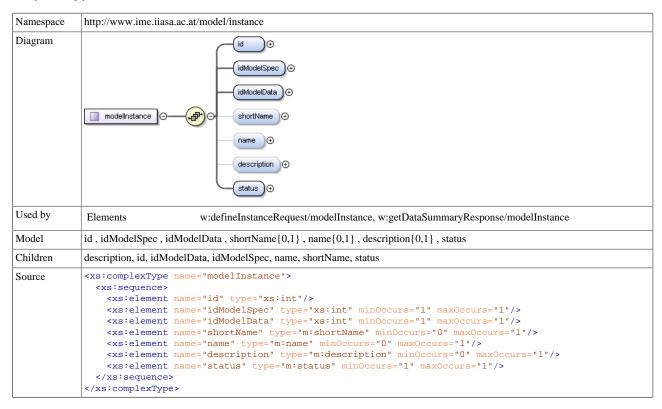
## Complex Type i:tupleMembers



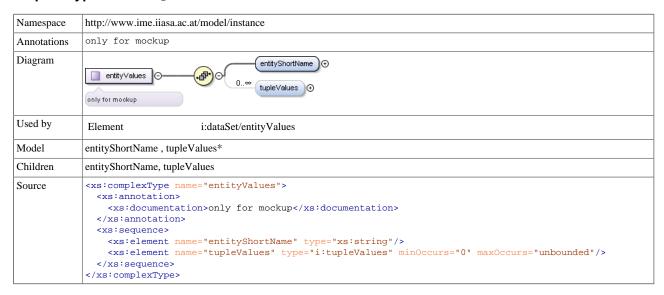
# Complex Type i:modelData



#### Complex Type i:modelInstance

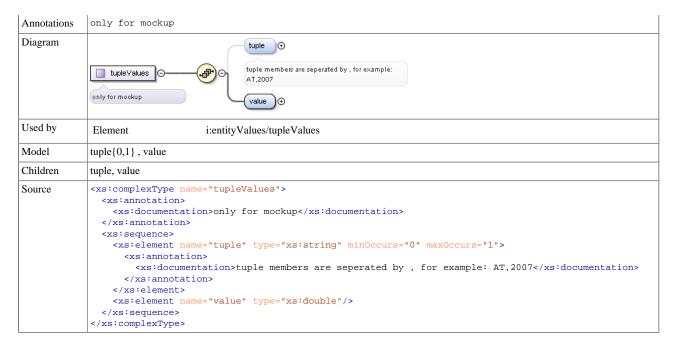


#### Complex Type i:entityValues



#### Complex Type i:tupleValues

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

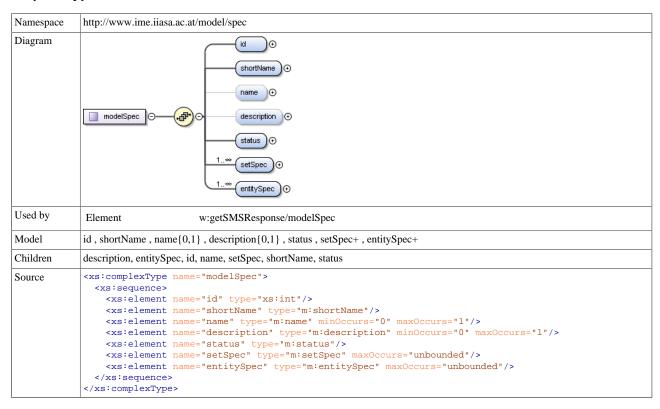
### Schema(s)

### Imported schema sms.xsd

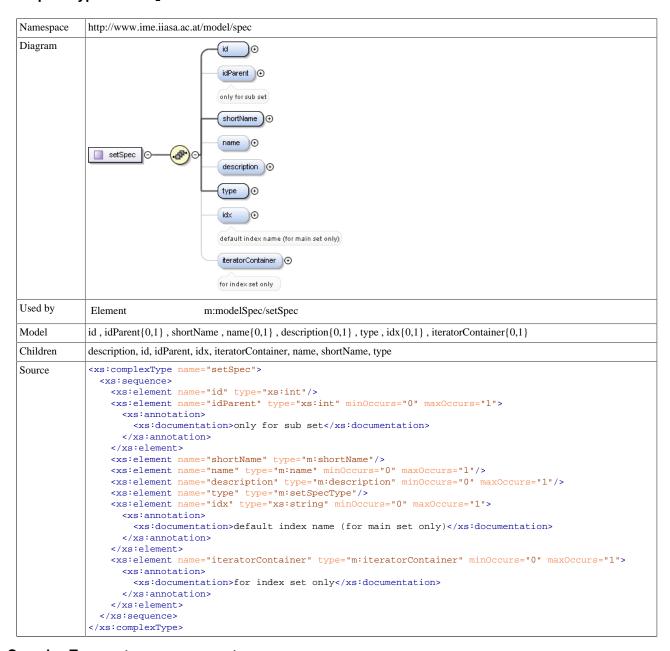
Namespace	http://www.ime.iiasa.ac.at/model/spec	
Properties	attribute form default: unqualified	
	element form default: unqualified	

## Complex Type(s)

#### Complex Type m:modelSpec



#### Complex Type m: setSpec

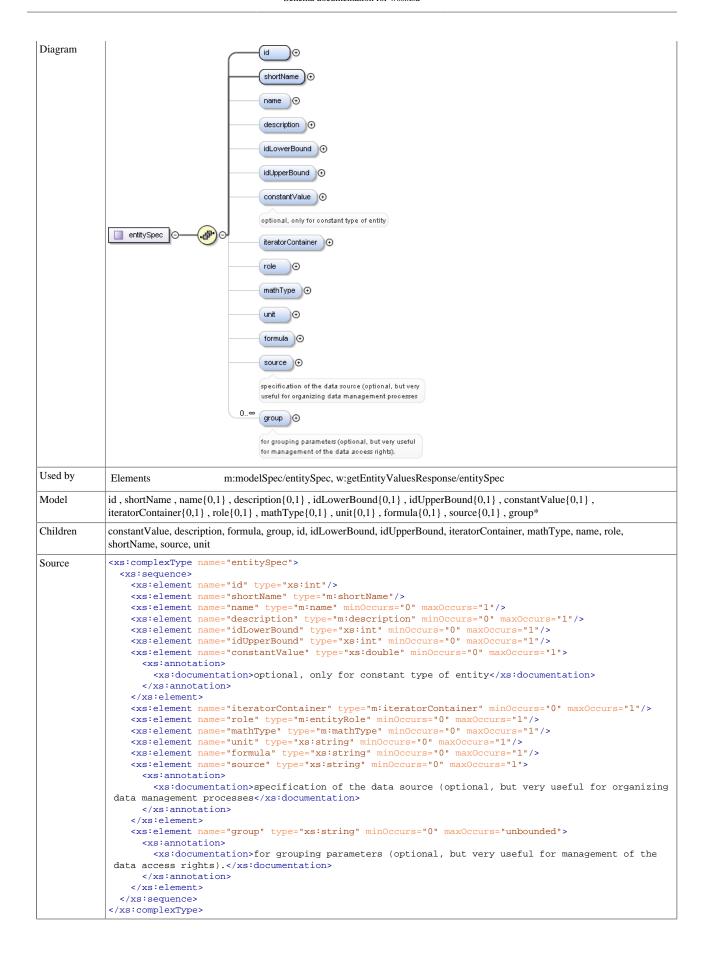


# Complex Type m:iteratorContainer

Namespace	http://www.ime.iiasa.ac.at/model/spec
Diagram	iteratorContainer ○ 1∞ (idSetSpec )⊙
Used by	Elements m:entitySpec/iteratorContainer, m:setSpec/iteratorContainer
Model	idSetSpec+
Children	idSetSpec
Source	<pre><xs:complextype name="iteratorContainer"></xs:complextype></pre>

### Complex Type m:entitySpec

Namespace	http://www.ime.iiasa.ac.at/model/spec
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# Simple Type(s)

# Simple Type m: shortName

Namespace	http://www.ime.iiasa	http://www.ime.iiasa.ac.at/model/spec	
Diagram	shortName	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	restriction of xs:string	g	
Facets	minLength	1	
	maxLength	8	
Used by	Elements	a: an alysis/shortName, i: modelInstance/shortName, m: entitySpec/shortName, m: modelSpec/shortName, m: setSpec/shortName	
Source	<xs:minlengt< td=""><td>n base="xs:string"&gt; h value="1"/&gt; h value="8"/&gt; on&gt;</td></xs:minlengt<>	n base="xs:string"> h value="1"/> h value="8"/> on>	

# Simple Type m:name

Namespace	http://www.ime.iiasa.ac.at/model/spec		
Diagram		xs:string  Duilt-in primitive type. The string datatype represents haracter strings in XML.	
Туре	restriction of xs:string		
Facets	minLength	1	
	maxLength	32	
Used by	Elements	a:analysis/name, a:task/name, 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="32"></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:string	
Facets	minLength	1
	maxLength	512
Used by	Elements	a:analysis/description, a:task/description, i:memberDic/description, i:modelData/description, i:modelInstance/description, m:entitySpec/description, m:modelSpec/description, m:setSpec/description
Source	<pre><xs:simpletype name="description">     <xs:restriction base="xs:string">         <xs:minlength value="1"></xs:minlength>         <xs:maxlength value="512"></xs:maxlength>         </xs:restriction>     </xs:simpletype></pre>	

# Simple Type m: status

Namespace	http://www.ime.iiasa.ac.at/model/spec
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Diagram	Built-in	xs:string in primitive type. The string datatype represents oter strings in XML.
Туре	restriction of xs:string	
Facets	enumeration	EDIT
	enumeration	TEST
	enumeration	COMMITTED
Used by	Elements	$i: model Instance/status, \ m: model Spec/status, \ w: change Model Instance Status Request/status, \ w: change SMSS tatus Request/status$
Source	<pre><xs:simpletype name="status">     <xs:restriction base="xs:string">         <xs:enumeration value="EDIT"></xs:enumeration>         <xs:enumeration value="TEST"></xs:enumeration>         <xs:enumeration value="COMMITTED"></xs:enumeration>         </xs:restriction>         </xs:simpletype></pre>	

# Simple Type m: setSpecType

Namespace	http://www.ime.iias	a.ac.at/model/spec
Diagram	setSpecType ) 🗇	Built-in primitive type. The string datatype represents character strings in XML.
Type	restriction of xs:string	
Facets	enumeration	COLLECTION
	enumeration	SEQUENCE
Used by	Element	m:setSpec/type
Source	<pre><xs:simpletype name="setSpecType">   <xs:restriction base="xs:string">     <xs:enumeration value="COLLECTION"></xs:enumeration>     <xs:enumeration value="SEQUENCE"></xs:enumeration>     </xs:restriction>   </xs:simpletype></pre>	

# Simple Type m:entityRole

Namespace	http://www.ime.iiasa.ac.at/model/spec		
Diagram	□ entityRole ⊙	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	restriction of xs:st	ring	
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	any type of variable: DECISION_VAR, EXTERNAL_DECISION_VAR,OUTCOME_VAR,or AUXILIARY_VAR
	enumeration	A_FORMULA	any type of formula: ASSIGNMENT or CONSTRAINT
Used by	Element	m:entitySpec/role	
Source	<xs:simpletype< td=""><td>e name="entityRole"&gt;</td><td></td></xs:simpletype<>	e name="entityRole">	

```
<xs:restriction base="xs:string">
   <xs:enumeration value="CONSTANT"/>
   <xs:enumeration value="PARAMETER"/>
   <xs:enumeration value="DECISION_VAR"/>
   <xs:enumeration value="EXTERNAL_DECISION_VAR"/>
   <xs:enumeration value="OUTCOME_VAR"/>
   <xs:enumeration value="AUXILIARY_VAR"/>
   <xs:enumeration value="ASSIGNMENT"/>
   <xs:enumeration value="CONSTRAINT"/>
   <xs:enumeration value="A_VARIABLE">
        <xs:documentation>any type of variable: DECISION_VAR, EXTERNAL_DECISION_VAR,OUTCOME_VAR,or
AUXILIARY_VAR</xs:documentation>
      </xs:annotation>
   </xs:enumeration>
   <xs:enumeration value="A_FORMULA">
     <xs:annotation>
        <xs:documentation>any type of formula: ASSIGNMENT or CONSTRAINT</xs:documentation>
    </xs:enumeration>
 </xs:restriction>
</xs:simpleType>
```

#### Simple Type m:mathType

Namespace	http://www.ime.iiasa.ac.at/model/spec	
Diagram	✓ mathType ⊙	### String  Built-in primitive type. The string datatype represents character strings in XML.
Туре	restriction of xs:stri	g
Facets	enumeration	INTEGER
	enumeration	BINARY
	enumeration	REAL
Used by	Element	m:entitySpec/mathType
Source	<pre><xs:simpletype name="mathType">   <xs:restriction base="xs:string">     <xs:enumeration value="INTEGER"></xs:enumeration>     <xs:enumeration value="BINARY"></xs:enumeration>     <xs:enumeration value="REAL"></xs:enumeration>     </xs:restriction>   </xs:simpletype></pre>	

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

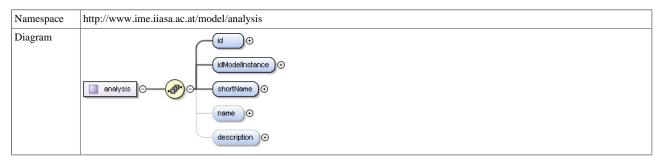
### Schema(s)

### Imported schema ana.xsd

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

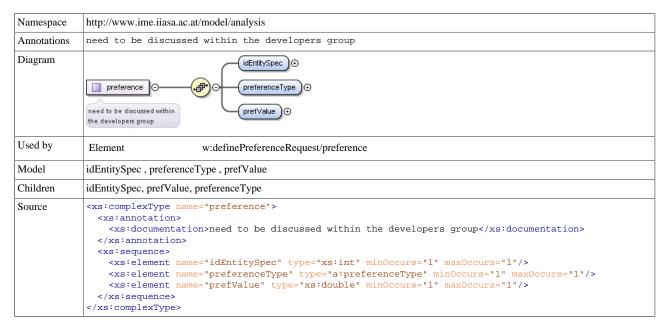
# Complex Type(s)

### Complex Type a:analysis

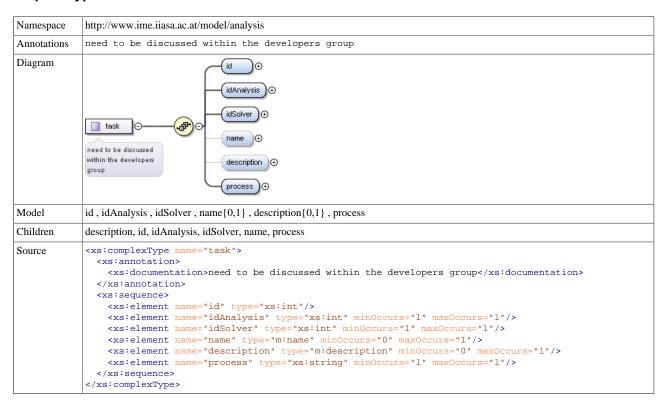


```
Used by
             Element
                                   w:defineAnalysisRequest/analysis
Model
             id, idModelInstance, shortName, name{0,1}, description{0,1}
Children
             description, id, idModelInstance, name, shortName
Source
             <xs:complexType name="analysis">
               <xs:sequence>
                 <xs:element name="id" type="xs:int"/>
                 <xs:element name="idModelInstance" type="xs:int" minOccurs="1" 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:sequence>
             </xs:complexType>
```

### Complex Type a:preference



# Complex Type a: task



# 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>	