Schema documentation for et.xsd

december 2, 2011

Table of Contents

Namespace: "http://www.ime.iiasa.ac.at/et/schemas"
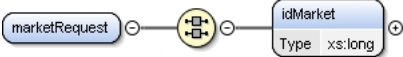
Schema(s)

Main schema `et.xsd`
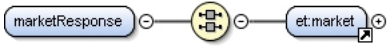
Namespace	http://www.ime.iiasa.ac.at/et/schemas	
Properties	attribute form default:	`unqualified`
	element form default:	`unqualified`

Element(s)
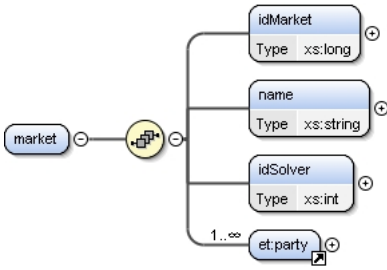
Element `et:marketRequest`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: `complex`
Model	ALL(idMarket)
Children	idMarket
Instance	``` <et:marketRequest xmlns:et="http://www.ime.iiasa.ac.at/et/schemas"> <idMarket>{1,1}</idMarket> </et:marketRequest> ```
Source	``` <xs:element name="marketRequest"> <xs:complexType> <xs:all> <xs:element name="idMarket" type="xs:long"/> </xs:all> </xs:complexType> </xs:element> ```

Element `et:marketResponse`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:market)
Children	et:market

Instance	```xml
	<et:marketResponse xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
	  <et:market>{1,1}</et:market>
	</et:marketResponse>
	``

Source	```xml
	<xs:element name="marketResponse">
	  <xs:complexType>
	    <xs:all>
	      <xs:element ref="et:market"/>
	    </xs:all>
	  </xs:complexType>
	</xs:element>
	``

Element `et:market`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Used by	Element et:marketResponse
Model	idMarket , name , idSolver , et:party+
Children	et:party, idMarket, idSolver, name

Instance	```xml
	<et:market xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
	  <idMarket>{1,1}</idMarket>
	  <name>{1,1}</name>
	  <idSolver>{1,1}</idSolver>
	  <et:party>{1,unbounded}</et:party>
	</et:market>
	``

Source	```xml
	<xs:element name="market">
	  <xs:complexType>
	    <xs:sequence>
	      <xs:element name="idMarket" type="xs:long"/>
	      <xs:element name="name" type="xs:string"/>
	      <xs:element name="idSolver" type="xs:int"/>
	      <xs:element maxOccurs="unbounded" ref="et:party"/>
	    </xs:sequence>
	  </xs:complexType>
	</xs:element>
	``

Element `et:party`

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	

Properties	content:	complex

Used by	Element	et:market

Model	idParty , name , uncertainty , minEm , baseEm , targetEm , et:func

Children	baseEm, et:func, idParty, minEm, name, targetEm, uncertainty
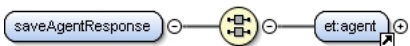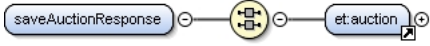
Instance	
| | ```xml
<et:party xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <idParty>{1,1}</idParty>
  <name>{1,1}</name>
  <uncertainty>{1,1}</uncertainty>
  <minEm>{1,1}</minEm>
  <baseEm>{1,1}</baseEm>
  <targetEm>{1,1}</targetEm>
  <et:func>{1,1}</et:func>
</et:party>
``` |

Source	
| | ```xml
<xs:element name="party">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="idParty" type="xs:int"/>
      <xs:element name="name" type="xs:string"/>
      <xs:element name="uncertainty" type="xs:double"/>
      <xs:element name="minEm" type="xs:double"/>
      <xs:element name="baseEm" type="xs:double"/>
      <xs:element name="targetEm" type="xs:double"/>
      <xs:element ref="et:func"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
``` |

Element `et:func`

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	

Properties	content:	complex

Used by	Element	et:party

Model	type , et:point+

Children	et:point, type

Instance	
| | ```xml
<et:func xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <type>{1,1}</type>
  <et:point>{1,unbounded}</et:point>
</et:func>
``` |

Source	
| | ```xml
<xs:element name="func">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="type" type="xs:string"/>
      <xs:element maxOccurs="unbounded" ref="et:point"/>
``` |

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

Element `et:point`

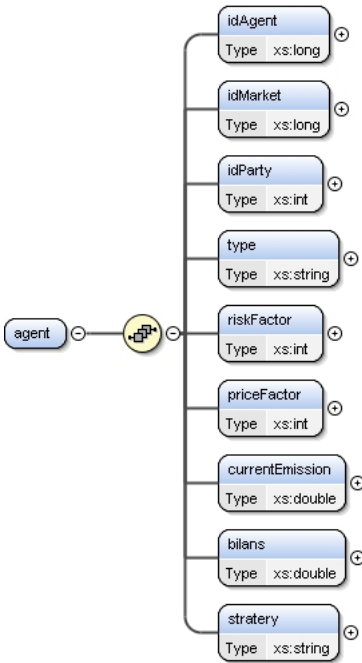|	
Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Used by	Element et:func
Model	em , cost
Children	cost, em

Instance	`<et:point xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	  `<em>{1,1}</em>`
	  `<cost>{1,1}</cost>`
	`</et:point>`

Source	`<xs:element name="point">`
	  `<xs:complexType>`
	    `<xs:sequence>`
	      `<xs:element name="em" type="xs:double"/>`
	      `<xs:element name="cost" type="xs:double"/>`
	    `</xs:sequence>`
	  `</xs:complexType>`
	`</xs:element>`

Element `et:saveAgentRequest`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:agent)
Children	et:agent

Instance	`<et:saveAgentRequest xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	  `<et:agent>{1,1}</et:agent>`
	`</et:saveAgentRequest>`

Source	`<xs:element name="saveAgentRequest">`
	  `<xs:complexType>`
	    `<xs:all>`
	      `<xs:element ref="et:agent"/>`
	    `</xs:all>`
	  `</xs:complexType>`
	`</xs:element>`

Element `et:agent`

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	
Properties	content: complex
Used by	Elements et:saveAgentRequest, et:saveAgentResponse
Model	idAgent , idMarket , idParty , type , riskFactor , priceFactor , currentEmission , bilans , stratery
Children	bilans, currentEmission, idAgent, idMarket, idParty, priceFactor, riskFactor, stratery, type

Instance	`<et:agent xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	`  <idAgent>{1,1}</idAgent>`
	`  <idMarket>{1,1}</idMarket>`
	`  <idParty>{1,1}</idParty>`
	`  <type>{1,1}</type>`
	`  <riskFactor>{1,1}</riskFactor>`
	`  <priceFactor>{1,1}</priceFactor>`
	`  <currentEmission>{1,1}</currentEmission>`
	`  <bilans>{1,1}</bilans>`
	`  <stratery>{1,1}</stratery>`
	`</et:agent>`

Source	`<xs:element name="agent">`
	`  <xs:complexType>`
	`    <xs:sequence>`
	`      <xs:element name="idAgent" type="xs:long"/>`
	`      <xs:element name="idMarket" type="xs:long"/>`
	`      <xs:element name="idParty" type="xs:int"/>`
	`      <xs:element name="type" type="xs:string"/>`
	`      <xs:element name="riskFactor" type="xs:int"/>`
	`      <xs:element name="priceFactor" type="xs:int"/>`
	`      <xs:element name="currentEmission" type="xs:double"/>`
	`      <xs:element name="bilans" type="xs:double"/>`
	`      <xs:element name="stratery" type="xs:string"/>`
	`    </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Element et:saveAgentResponse

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:agent)
Children	et:agent

Instance	`<et:saveAgentResponse xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	`  <et:agent>{1,1}</et:agent>`
	`</et:saveAgentResponse>`

| Source | ```xml
<xs:element name="saveAgentResponse">
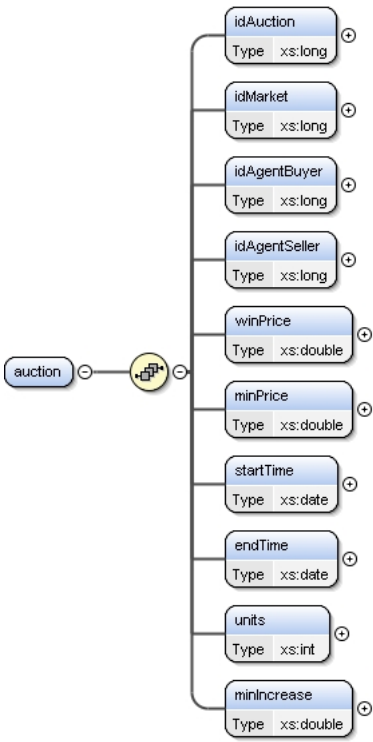  <xs:complexType>
    <xs:all>
      <xs:element ref="et:agent"/>
    </xs:all>
  </xs:complexType>
</xs:element>
``` |
|---|---|

Element et:saveAuctionRequest

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:auction)
Children	et:auction
| Instance | ```xml
<et:saveAuctionRequest xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <et:auction>{1,1}</et:auction>
</et:saveAuctionRequest>
``` |
| Source | ```xml
<xs:element name="saveAuctionRequest">
  <xs:complexType>
    <xs:all>
      <xs:element ref="et:auction"/>
    </xs:all>
  </xs:complexType>
</xs:element>
``` |

Element et:auction

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Used by	Elements et:saveAuctionRequest, et:saveAuctionResponse
Model	idAuction , idMarket , idAgentBuyer , idAgentSeller , winPrice , minPrice , startTime , endTime , units , minIncrease
Children	endTime, idAgentBuyer, idAgentSeller, idAuction, idMarket, minIncrease, minPrice, startTime, units, winPrice
| Instance | ```xml
<et:auction xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <idAuction>{1,1}</idAuction>
  <idMarket>{1,1}</idMarket>
``` |

```
        <idAgentBuyer>{1,1}</idAgentBuyer>
        <idAgentSeller>{1,1}</idAgentSeller>
        <winPrice>{1,1}</winPrice>
        <minPrice>{1,1}</minPrice>
        <startTime>{1,1}</startTime>
        <endTime>{1,1}</endTime>
        <units>{1,1}</units>
        <minIncrease>{1,1}</minIncrease>
      </et:auction>
```

| Source | ```
<xs:element name="auction">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="idAuction" type="xs:long"/>
      <xs:element name="idMarket" type="xs:long"/>
      <xs:element name="idAgentBuyer" type="xs:long"/>
      <xs:element name="idAgentSeller" type="xs:long"/>
      <xs:element name="winPrice" type="xs:double"/>
      <xs:element name="minPrice" type="xs:double"/>
      <xs:element name="startTime" type="xs:date"/>
      <xs:element name="endTime" type="xs:date"/>
      <xs:element name="units" type="xs:int"/>
      <xs:element name="minIncrease" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
``` |
|---|---|

Element `et:saveAuctionResponse`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	saveAuctionResponse ⊖ ──[⊞]── ⊖ ── et:auction ⊕
Properties	content: complex
Model	ALL(et:auction)
Children	et:auction
| Instance | ```
<et:saveAuctionResponse xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <et:auction>{1,1}</et:auction>
</et:saveAuctionResponse>
``` |
| Source | ```
<xs:element name="saveAuctionResponse">
  <xs:complexType>
    <xs:all>
      <xs:element ref="et:auction"/>
    </xs:all>
  </xs:complexType>
</xs:element>
``` |

Element `et:saveBidRequest`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	saveBidRequest ⊖ ──[⊞]── ⊖ ── et:bid ⊕
Properties	content: complex
Model	ALL(et:bid)
Children	et:bid
| Instance | ```
<et:saveBidRequest xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <et:bid>{1,1}</et:bid>
</et:saveBidRequest>
``` |
| Source | ```
<xs:element name="saveBidRequest">
  <xs:complexType>
    <xs:all>
      <xs:element ref="et:bid"/>
    </xs:all>
  </xs:complexType>
</xs:element>
``` |

Element `et:bid`

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	
Properties	content: complex
Used by	Elements et:saveBidRequest, et:saveBidResponse
Model	idBid , idAuction , idAgent , price , time
Children	idAgent, idAuction, idBid, price, time

Instance	`<et:bid xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	`  <idBid>{1,1}</idBid>`
	`  <idAuction>{1,1}</idAuction>`
	`  <idAgent>{1,1}</idAgent>`
	`  <price>{1,1}</price>`
	`  <time>{1,1}</time>`
	`</et:bid>`

Source	`<xs:element name="bid">`
	`  <xs:complexType>`
	`    <xs:sequence>`
	`      <xs:element name="idBid" type="xs:int"/>`
	`      <xs:element name="idAuction" type="xs:long"/>`
	`      <xs:element name="idAgent" type="xs:long"/>`
	`      <xs:element name="price" type="xs:double"/>`
	`      <xs:element name="time" type="xs:date"/>`
	`    </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Element `et:saveBidResponse`

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:bid)
Children	et:bid

Instance	`<et:saveBidResponse xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">`
	`  <et:bid>{1,1}</et:bid>`
	`</et:saveBidResponse>`

Source	`<xs:element name="saveBidResponse">`
	`  <xs:complexType>`
	`    <xs:all>`
	`      <xs:element ref="et:bid"/>`
	`    </xs:all>`
	`  </xs:complexType>`
	`</xs:element>`

Element `et:solution`

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	
Properties	content: complex
Used by	Element et:saveSolutionRequest
Model	status , solverStatus , et:marketSolution , et:partySolution+ , et:msg+
Children	et:marketSolution, et:msg, et:partySolution, solverStatus, status
| Instance | ```xml
<et:solution xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <status>{1,1}</status>
  <solverStatus>{1,1}</solverStatus>
  <et:marketSolution>{1,1}</et:marketSolution>
  <et:partySolution>{1,unbounded}</et:partySolution>
  <et:msg>{1,unbounded}</et:msg>
</et:solution>
``` |
| Source | ```xml
<xs:element name="solution">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="status" type="xs:int"/>
      <xs:element name="solverStatus" type="xs:int"/>
      <xs:element ref="et:marketSolution"/>
      <xs:element maxOccurs="unbounded" ref="et:partySolution"/>
      <xs:element maxOccurs="unbounded" ref="et:msg"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
``` |

Element et:marketSolution

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Used by	Element et:solution
Model	idMarket , mrgCost , profit
Children	idMarket, mrgCost, profit
| Instance | ```xml
<et:marketSolution xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
  <idMarket>{1,1}</idMarket>
  <mrgCost>{1,1}</mrgCost>
  <profit>{1,1}</profit>
</et:marketSolution>
``` |
| Source | ```xml
<xs:element name="marketSolution">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="idMarket" type="xs:long"/>
      <xs:element name="mrgCost" type="xs:double"/>
      <xs:element name="profit" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
``` |

Element et:partySolution

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	
Properties	content: complex
Used by	Element et:solution
Model	idMarket , idParty , em , mrgEm , mrgBase , mrgTarget , costBase , costEm , costTarget , profit
Children	costBase, costEm, costTarget, em, idMarket, idParty, mrgBase, mrgEm, mrgTarget, profit

Instance	```xml
	<et:partySolution xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
	  <idMarket>{1,1}</idMarket>
	  <idParty>{1,1}</idParty>
	  {1,1}
	  <mrgEm>{1,1}</mrgEm>
	  <mrgBase>{1,1}</mrgBase>
	  <mrgTarget>{1,1}</mrgTarget>
	  <costBase>{1,1}</costBase>
	  <costEm>{1,1}</costEm>
	  <costTarget>{1,1}</costTarget>
	  <profit>{1,1}</profit>
	</et:partySolution>
	``

Source	```xml
	<xs:element name="partySolution">
	  <xs:complexType>
	    <xs:sequence>
	      <xs:element name="idMarket" type="xs:long"/>
	      <xs:element name="idParty" type="xs:int"/>
	      <xs:element name="em" type="xs:double"/>
	      <xs:element name="mrgEm" type="xs:double"/>
	      <xs:element name="mrgBase" type="xs:double"/>
	      <xs:element name="mrgTarget" type="xs:double"/>
	      <xs:element name="costBase" type="xs:double"/>
	      <xs:element name="costEm" type="xs:double"/>
	      <xs:element name="costTarget" type="xs:double"/>
	      <xs:element name="profit" type="xs:double"/>
	    </xs:sequence>
	  </xs:complexType>
	</xs:element>
	``

Element et:msg

Namespace	http://www.ime.iiasa.ac.at/et/schemas

Diagram	
Properties	content: complex
Used by	Element et:solution
Model	msgType , idMarket , idParty , msg , seq
Children	idMarket, idParty, msg, msgType, seq

Instance	<pre><et:msg xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
	  <msgType>{1,1}</msgType>
	  <idMarket>{1,1}</idMarket>
	  <idParty>{1,1}</idParty>
	  <msg>{1,1}</msg>
	  <seq>{1,1}</seq>
	</et:msg></pre>

Source	<pre><xs:element name="msg">
	  <xs:complexType>
	    <xs:sequence>
	      <xs:element name="msgType" type="xs:int"/>
	      <xs:element name="idMarket" type="xs:long"/>
	      <xs:element name="idParty" type="xs:int"/>
	      <xs:element name="msg" type="xs:string"/>
	      <xs:element name="seq" type="xs:int"/>
	    </xs:sequence>
	  </xs:complexType>
	</xs:element></pre>

Element et:saveSolutionRequest

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Properties	content: complex
Model	ALL(et:solution)
Children	et:solution

Instance	<pre><et:saveSolutionRequest xmlns:et="http://www.ime.iiasa.ac.at/et/schemas">
	  <et:solution>{1,1}</et:solution>
	</et:saveSolutionRequest></pre>

Source	<pre><xs:element name="saveSolutionRequest">
	  <xs:complexType>
	    <xs:all>
	      <xs:element ref="et:solution"/>
	    </xs:all>
	  </xs:complexType>
	</xs:element></pre>

Element et:saveSolutionResponse

Namespace	http://www.ime.iiasa.ac.at/et/schemas
Diagram	
Type	xs:string

Properties	content:	simple
Source	`<xs:element name="saveSolutionResponse" type="xs:string"/>`	

Properties	content:	simple
Source	`<xs:element name="saveSolutionResponse" type="xs:string"/>`	