

# Schema documentation for prognosis-1-1-0.xsd

february 17, 2017

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## Namespace: "http://gaslab.zib.de/kwpt/prognosis"

### Schema(s)

#### Main schema prognosis-1-1-0.xsd

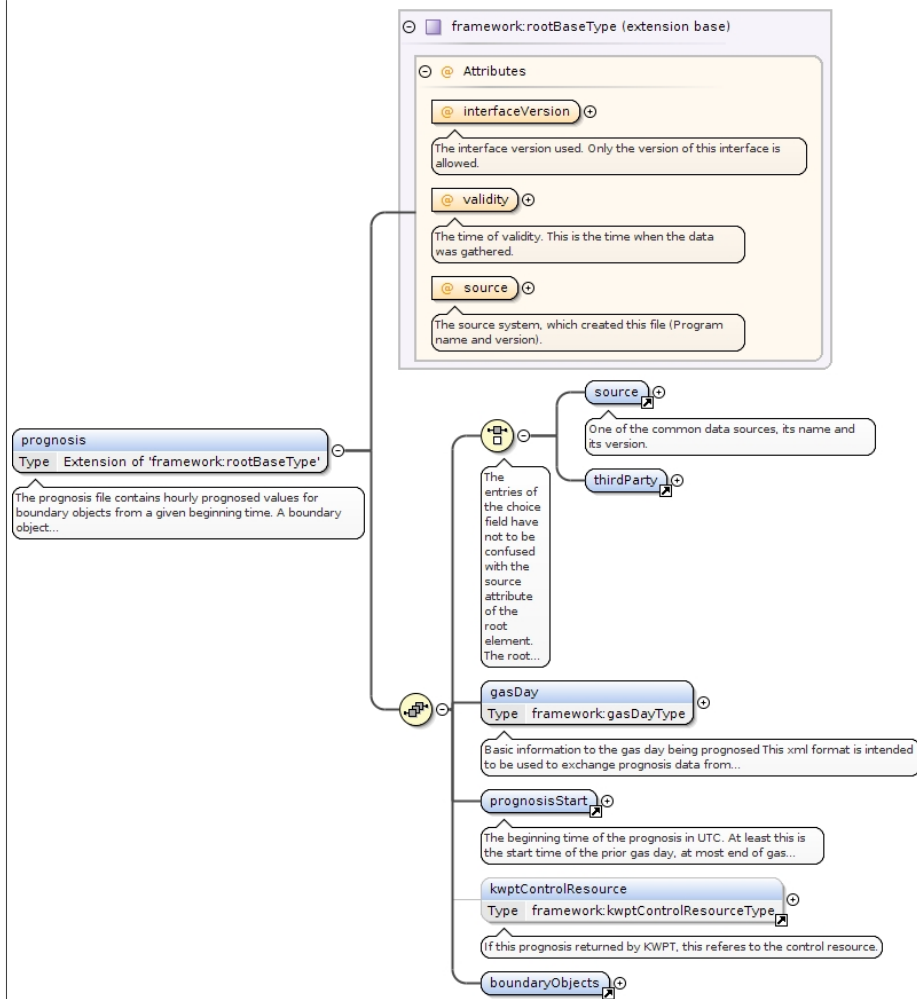
Namespace	http://gaslab.zib.de/kwpt/prognosis
Properties	attribute form default: unqualified
	element form default: qualified
	version: 1.1.0

### Element(s)

#### Element prognosis

Namespace	http://gaslab.zib.de/kwpt/prognosis
Annotations	The prognosis file contains hourly prognosed values for boundary objects from a given beginning time. A boundary object is either a boundary node or a sibling.

## Diagram



Type extension of rootBaseType

Type hierarchy

- rootBaseType

Properties content: complex

Model (source | thirdParty) , gasDay , prognosisStart , kwptControlResource{0,1} , boundaryObjects

Children boundaryObjects, gasDay, kwptControlResource, prognosisStart, source, thirdParty

```

<prognosis interfaceVersion="" source="" validity="" xmlns="http://gaslab.zib.de/kwpt/prognosis">
  <source name="" version="">{1,1}</source>
  <thirdParty name="" version="">{1,1}</thirdParty>
  <gasDay date="" gasDayLengthInHours="" gasDayStartHourInUTC="">{1,1}</gasDay>
  <prognosisStart time="">{1,1}</prognosisStart>
  <kwptControlResource md5="" name="" schema="">{0,1}</kwptControlResource>
  <boundaryObjects>{1,1}</boundaryObjects>
</prognosis>

```

## Attributes

QName	Type	Use	
<b>interfaceVersion</b>	interfaceVersionType	required	
	The interface version used. Only the version of this interface is allowed.		
<b>source</b>	sourceType	required	
	The source system, which created this file (Program name and version).		
<b>validity</b>	xsd:dateTime	required	
	The time of validity. This is the time when the data was gathered.		

## Source

```

<xs:element name="prognosis">
  <xs:annotation>
    <xs:documentation>The prognosis file contains hourly prognosed values for boundary objects
    from a given beginning time. A boundary object is either a boundary node or a sibling.</
  </xs:annotation>
  <xs:complexType>

```

```

<xs:complexContent>
  <xs:extension base="framework:rootBaseType">
    <xs:sequence>
      <xs:choice>
        <xs:annotation>
          <xs:documentation>The entries of the choice field have not to be confused with the
source attribute of the root element. The root element's source is the source resp. creator of the
XML file, e.g. the "OAD server" converting the data from the source "Kassandra".</xs:documentation>
        </xs:annotation>
        <xs:element ref="source"/>
        <xs:element ref="thirdParty"/>
      </xs:choice>
      <xs:element name="gasDay" type="framework:gasDayType">
        <xs:annotation>
          <xs:documentation>Basic information to the gas day being prognosed This xml format is
intended to be used to exchange prognosis data from and to phil.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="prognosisStart"/>
      <xs:element ref="kwptControlResource" minOccurs="0"/>
      <xs:element ref="boundaryObjects"/>
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
</xs:element>

```

## Element source

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Annotations	One of the common data sources, its name and its version.		
Diagram			
Properties	content:	complex	
Used by	Element	prognosis	
Attributes	QName	Type	Use
	name	restriction of xs:string	required
	version	sourceSoftwareVersion	required
	The Version of the used tool as unformatted string.		
Source	<pre> &lt;xs:element name="source"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;One of the common data sources, its name and its version.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:complexType&gt;     &lt;xs:attribute name="name" use="required"&gt;       &lt;xs:simpleType&gt;         &lt;xs:restriction base="xs:string"&gt;           &lt;xs:enumeration value="Kassandra"&gt;             &lt;xs:annotation&gt;               &lt;xs:documentation&gt;The prognosis from KWPT.&lt;/xs:documentation&gt;             &lt;/xs:annotation&gt;           &lt;/xs:enumeration&gt;           &lt;xs:enumeration value="DAISY"&gt;             &lt;xs:annotation&gt;               &lt;xs:documentation&gt;The prognosis from DAISY.&lt;/xs:documentation&gt;             &lt;/xs:annotation&gt;           &lt;/xs:enumeration&gt;           &lt;xs:enumeration value="boundaryValueScenario"&gt;             &lt;xs:annotation&gt;               &lt;xs:documentation&gt;A boundary value scenario generated by Phil.&lt;/xs:documentation&gt;             &lt;/xs:annotation&gt;           &lt;/xs:enumeration&gt;           &lt;xs:enumeration value="manuallyGenerated"&gt;             &lt;xs:annotation&gt; </pre>		

```

<xs:documentation>A manually generated prognosis for testing purposes.</
xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
</xs:attribute>
<xs:attribute name="version" use="required" type="sourceSoftwareVersion">
  <xs:annotation>
    <xs:documentation>The Version of the used tool as unformatted string.</xs:documentation>
  </xs:annotation>
</xs:attribute>
</xs:complexType>
</xs:element>

```

## Element thirdParty

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Diagram			
Properties	content:	complex	
Used by	Element	prognosis	
Model	description{0,1}		
Children	description		
Instance	<pre>&lt;thirdParty name="" version="" xmlns="http://gaslab.zib.de/kwpt/prognosis"&gt;   &lt;description&gt;{0,1}&lt;/description&gt; &lt;/thirdParty&gt;</pre>		
Attributes	QName	Type	Use
	name	restriction of xs:string	required
	version	sourceSoftwareVersion	required
		The Version of the used tool as unformatted string.	
Source	<pre>&lt;xs:element name="thirdParty"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element name="description" minOccurs="0"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;An optional description of the source system or content.&lt;/ xs:documentation&gt;         &lt;/xs:annotation&gt;         &lt;xs:simpleType&gt;           &lt;xs:restriction base="xs:string"&gt;             &lt;xs:maxLength value="4096"/&gt;           &lt;/xs:restriction&gt;         &lt;/xs:simpleType&gt;       &lt;/xs:element&gt;     &lt;/xs:sequence&gt;     &lt;xs:attribute name="name" use="required"&gt;       &lt;xs:simpleType&gt;         &lt;xs:restriction base="xs:string"&gt;           &lt;xs:maxLength value="32"/&gt;         &lt;/xs:restriction&gt;       &lt;/xs:simpleType&gt;     &lt;/xs:attribute&gt;     &lt;xs:attribute name="version" use="required" type="sourceSoftwareVersion"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The Version of the used tool as unformatted string.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:attribute&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>		

## Element thirdParty / description

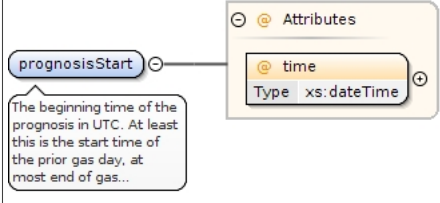
Namespace	http://gaslab.zib.de/kwpt/prognosis				
Annotations	An optional description of the source system or content.				
Diagram					
Type	restriction of xs:string				
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> </table>	content:	simple	minOccurs:	0
content:	simple				
minOccurs:	0				
Facets	<table> <tr> <td>maxLength</td><td>4096</td></tr> </table>	maxLength	4096		
maxLength	4096				
Source	<pre>&lt;xs:element name="description" minOccurs="0"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;An optional description of the source system or content.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:simpleType&gt;     &lt;xs:restriction base="xs:string"&gt;       &lt;xs:maxLength value="4096"/&gt;     &lt;/xs:restriction&gt;   &lt;/xs:simpleType&gt; &lt;/xs:element&gt;</pre>				

## Element prognosis / gasDay

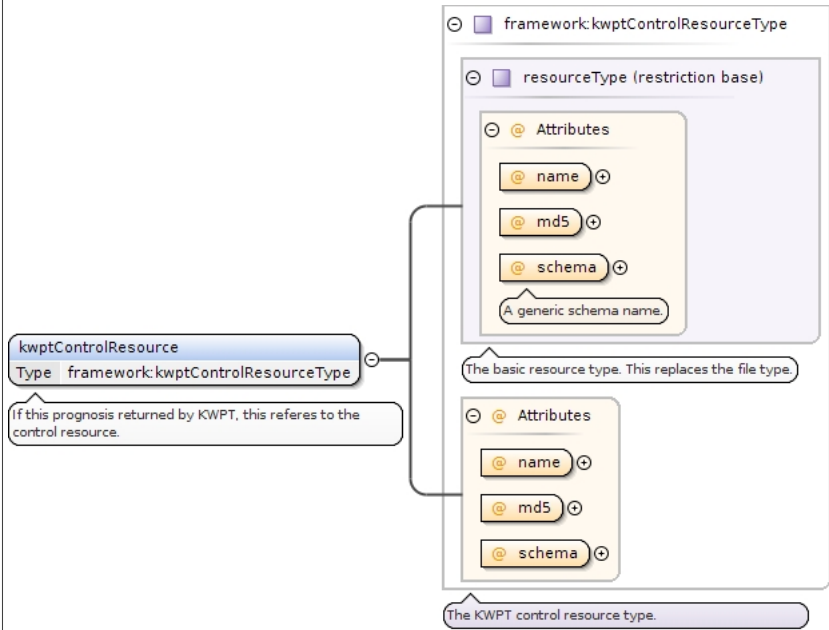
Namespace	http://gaslab.zib.de/kwpt/prognosis																														
Annotations	Basic information to the gas day being prognosed This xml format is intended to be used to exchange prognosis data from and to phil.																														
Diagram																															
Type	gasDayType																														
Properties	content:	complex																													
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr></thead><tbody><tr><td>date</td><td>xsd:date</td><td>required</td><td></td></tr><tr><td colspan="4">The date of the gas day.</td></tr><tr><td>gasDayLengthInHours</td><td>gasDayLengthInHoursType</td><td>required</td><td></td></tr><tr><td colspan="4">The length of the gas day. Usually this will be 24 hours. But due to daylight saving it could be 23 or 25 hours.</td></tr><tr><td>gasDayStartHourInUTC</td><td>gasDayStartHourInUtcType</td><td>required</td><td></td></tr><tr><td colspan="4">The hour in UTC time when the gas day begins. In winter time it's 5 o'clock and during daylight saving 4 o'clock.</td></tr></tbody></table>	QName	Type	Use		date	xsd:date	required		The date of the gas day.				gasDayLengthInHours	gasDayLengthInHoursType	required		The length of the gas day. Usually this will be 24 hours. But due to daylight saving it could be 23 or 25 hours.				gasDayStartHourInUTC	gasDayStartHourInUtcType	required		The hour in UTC time when the gas day begins. In winter time it's 5 o'clock and during daylight saving 4 o'clock.					
QName	Type	Use																													
date	xsd:date	required																													
The date of the gas day.																															
gasDayLengthInHours	gasDayLengthInHoursType	required																													
The length of the gas day. Usually this will be 24 hours. But due to daylight saving it could be 23 or 25 hours.																															
gasDayStartHourInUTC	gasDayStartHourInUtcType	required																													
The hour in UTC time when the gas day begins. In winter time it's 5 o'clock and during daylight saving 4 o'clock.																															
Source	<pre>&lt;xs:element name="gasDay" type="framework:gasDayType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Basic information to the gas day being prognosed This xml format is intended to be used to exchange prognosis data from and to phil.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;</pre>																														

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

## Element prognosisStart

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Annotations	The beginning time of the prognosis in UTC. At least this is the start time of the prior gas day, at most end of gas day minus one hour.		
Diagram			
Properties	content:	complex	
Used by	Element	prognosis	
Attributes	QName	Type	Use
	time	xs:dateTime	required
Source	<pre>&lt;xs:element name="prognosisStart"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The beginning time of the prognosis in UTC. At least this is the start time of the prior gas day, at most end of gas day minus one hour.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:complexType&gt;     &lt;xs:attribute name="time" type="xs:dateTime" use="required"/&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>		

## Element kwptControlResource

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Annotations	If this prognosis returned by KWPT, this refers to the control resource.		
Diagram			
Type	kwptControlResourceType		
Type hierarchy	<ul style="list-style-type: none"> <li>resourceType</li> <li>kwptControlResourceType</li> </ul>		
Properties	content:	complex	
Used by	Element	prognosis	

Attributes	QName	Type	Use	
	md5	md5Type	required	
	name	resourceNameType	required	
	schema	restriction of schemaNameType	required	
Source	<pre>&lt;xs:element name="kwptControlResource" type="framework:kwptControlResourceType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;If this prognosis returned by KWPT, this refers to the control resource.&lt;/   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>			

## Element boundaryObjects

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Diagram			
Properties	content:	complex	
Used by	Element	prognosis	
Model	boundaryObject*		
Children	boundaryObject		
Instance	<pre>&lt;boundaryObjects xmlns="http://gaslab.zib.de/kwpt/prognosis"&gt;   &lt;boundaryObject id=""&gt;{0,unbounded}&lt;/boundaryObject&gt; &lt;/boundaryObjects&gt;</pre>		
Source	<pre>&lt;xs:element name="boundaryObjects"&gt;   &lt;xs:complexType&gt;     &lt;xs:annotation&gt;       &lt;xs:documentation&gt;A list of boundary object with prognosed values.&lt;/xs:documentation&gt;     &lt;/xs:annotation&gt;     &lt;xs:sequence&gt;       &lt;xs:element ref="boundaryObject" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;/xs:sequence&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>		

## Element boundaryObject

Namespace	http://gaslab.zib.de/kwpt/prognosis			
Annotations	Prognosed data for a single boundary node.			
Diagram				
Properties	content:	complex		
Used by	Element	boundaryObjects		
Model	prognosedValues+			
Children	prognosedValues			
Instance	<pre>&lt;boundaryObject id="" xmlns="http://gaslab.zib.de/kwpt/prognosis"&gt;   &lt;prognosedValues hour=""&gt;{1,unbounded}&lt;/prognosedValues&gt; &lt;/boundaryObject&gt;</pre>			
Attributes	QName	Type	Use	
	id	ambiguousIdentifier	required	
Source	<pre>&lt;xs:element name="boundaryObject"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Prognosed data for a single boundary node.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;</pre>			

```

<xs:complexType>
  <xs:sequence>
    <xs:element ref="prognosedValues" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attribute name="id" type="framework:ambiguousIdentifier" use="required"/>
</xs:complexType>
</xs:element>

```

## Element prognosedValues

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Diagram			
Properties	content:	complex	
Used by	Element	boundaryObject	
Model	amountOfPower , pressure{0,1}		
Children	amountOfPower, pressure		
Instance	<pre>&lt;prognosedValues hour="" xmlns="http://gaslab.zib.de/kwpt/prognosis"&gt;   &lt;amountOfPower predefined="" processed="" unit="" value=""&gt;{1,1}&lt;/amountOfPower&gt;   &lt;pressure predefined="" processed="" unit="" value=""&gt;{0,1}&lt;/pressure&gt; &lt;/prognosedValues&gt;</pre>		
Attributes	QName	Type	Use
	hour		required
	The hour from prognosis start (hour 1) up to 49 hours.		
Source	<pre>&lt;xs:element name="prognosedValues"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element ref="amountOfPower"/&gt;       &lt;xs:element ref="pressure" minOccurs="0"/&gt;     &lt;/xs:sequence&gt;     &lt;xs:attribute name="hour" use="required"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The hour from prognosis start (hour 1) up to 49 hours.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:attribute&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>		

## Element amountOfPower

Namespace	http://gaslab.zib.de/kwpt/prognosis
Annotations	The amount of power prognosed with additional prognosis specific parameters.



Diagram	<div><div><div><div><div>amountOfPowerType</div><div>Base Type   framework:powerType</div></div><div><div>framework:powerType (extension base)</div><div><div>framework:unitType (extension base)</div><div><div>Attributes</div><div><div>value</div><div>The value.</div></div></div></div><div><div>The base for all unit types.</div><div><div>Attributes</div><div><div>unit</div><div>A power unit (no default).</div></div></div></div><div><div>Power type.</div><div><div>Attributes</div><div><div>predefined</div><div>Type predefinedValuesType</div><div>This field contains information about the usage as a test case.</div></div><div><div>processed</div><div>Type processedInformationType</div><div>This field can contain information about any post-processing of the prognostic data.</div></div></div></div></div></div><div><div>amountOfPower</div><div>Type amountOfPowerType</div><div>The amount of power prognosed with additional prognosis specific parameters.</div></div></div></div>																																				
Type	amountOfPowerType																																				
Type hierarchy	<ul style="list-style-type: none"><li>unitType<ul style="list-style-type: none"><li>powerType<ul style="list-style-type: none"><li>amountOfPowerType</li></ul></li></ul></li></ul>																																				
Properties	content: complex																																				
Used by	Element prognosedValues																																				
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr></thead><tbody><tr><td>predefined</td><td>predefinedValuesType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">This field contains information about the usage as a test case.</td></tr><tr><td>processed</td><td>processedInformationType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">This field can contain information about any post-processing of the prognostic data.</td></tr><tr><td>unit</td><td>powerUnit</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">A power unit (no default).</td></tr><tr><td>value</td><td>xsd:double</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">The value.</td></tr></tbody></table>	QName	Type	Use		predefined	predefinedValuesType	required			This field contains information about the usage as a test case.			processed	processedInformationType	required			This field can contain information about any post-processing of the prognostic data.			unit	powerUnit	required			A power unit (no default).			value	xsd:double	required			The value.		
QName	Type	Use																																			
predefined	predefinedValuesType	required																																			
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unit	powerUnit	required																																			
	A power unit (no default).																																				
value	xsd:double	required																																			
	The value.																																				
Source	<pre>&lt;xs:element name="amountOfPower" type="amountOfPowerType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The amount of power prognosed with additional prognosis specific parameters.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>																																				

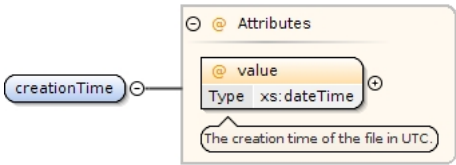
## Element pressure

Namespace	http://gaslab.zib.de/kwpt/prognosis
Annotations	The pressure prognosed with additional prognosis specific parameters.

Diagram	<p>The diagram illustrates the structure of the <code>prognosticPressureType</code> schema type. It is a base type for <code>framework:pressureType</code>, which is an extension base for <code>framework:unitType</code>. <code>framework:unitType</code> has two attributes: <code>value</code> (type <code>xsd:double</code>) and <code>unit</code> (type <code>pressureUnit</code>). <code>prognosticPressureType</code> has two attributes: <code>predefined</code> (type <code>predefinedValuesType</code>) and <code>processed</code> (type <code>processedInformationType</code>). The diagram also shows the <code>pressure</code> element type, which is a <code>prognosticPressureType</code> and has the documentation: "The pressure prognosed with additional prognosis specific parameters."</p>																																				
Type	prognosticPressureType																																				
Type hierarchy	<ul style="list-style-type: none"><li>unitType<ul style="list-style-type: none"><li>pressureType<ul style="list-style-type: none"><li>prognosticPressureType</li></ul></li></ul></li></ul>																																				
Properties	content: complex																																				
Used by	Element prognosedValues																																				
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr></thead><tbody><tr><td><b>predefined</b></td><td>predefinedValuesType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">Contains information on whether the prognosis has been overridden by the "measured" values.</td></tr><tr><td><b>processed</b></td><td>processedInformationType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">This field can contain information about any post-processing of the prognostic data.</td></tr><tr><td><b>unit</b></td><td>pressureUnit</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">A pressure unit (no default).</td></tr><tr><td><b>value</b></td><td>xsd:double</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">The value.</td></tr></tbody></table>	QName	Type	Use		<b>predefined</b>	predefinedValuesType	required			Contains information on whether the prognosis has been overridden by the "measured" values.			<b>processed</b>	processedInformationType	required			This field can contain information about any post-processing of the prognostic data.			<b>unit</b>	pressureUnit	required			A pressure unit (no default).			<b>value</b>	xsd:double	required			The value.		
QName	Type	Use																																			
<b>predefined</b>	predefinedValuesType	required																																			
	Contains information on whether the prognosis has been overridden by the "measured" values.																																				
<b>processed</b>	processedInformationType	required																																			
	This field can contain information about any post-processing of the prognostic data.																																				
<b>unit</b>	pressureUnit	required																																			
	A pressure unit (no default).																																				
<b>value</b>	xsd:double	required																																			
	The value.																																				
Source	<pre>&lt;xs:element name="pressure" type="prognosticPressureType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The pressure prognosed with additional prognosis specific parameters.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>																																				

## Element creationTime

Namespace	http://gaslab.zib.de/kwpt/prognosis
-----------	-------------------------------------

Diagram				
Properties	content:	complex		
Attributes	QName	Type	Use	
	value	xs:dateTime	required	
	The creation time of the file in UTC.			
Source	<pre> &lt;xs:element name="creationTime"&gt;   &lt;xs:complexType&gt;     &lt;xs:attribute name="value" type="xs:dateTime" use="required"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The creation time of the file in UTC.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:attribute&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt; </pre>			

## Simple Type(s)

### Simple Type sourceSoftwareVersion

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Annotations	A restricted string to represent the version of the software used to generate the prognosis file.		
Diagram			
Type	restriction of xs:string		
Facets	maxLength	32	
Used by	Attributes	source/@version, thirdParty/@version	
Source	<pre>&lt;xs:simpleType name="sourceSoftwareVersion"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;A restricted string to represent the version of the software used to generate the prognosis file.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:string"&gt;     &lt;xs:maxLength value="32"/&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>		

### Simple Type predefinedValuesType

Namespace	http://gaslab.zib.de/kwpt/prognosis		
Annotations	Contains information on whether the prognosis has been overridden by the nomination input values.		
Diagram			
Type	restriction of xs:string		
Facets	enumeration	noPreset	The value was not fixed externally.
	enumeration	fixed	The value was fixed externally.
	enumeration	prognostic	The prognosed value was fixed externally, but it can be altered by the game.
Used by	Attributes	amountOfPowerType/@predefined, prognosticPressureType/@predefined	
Source	<xs:simpleType name="predefinedValuesType">		

```

<xs:annotation>
  <xs:documentation>Contains information on whether the prognosis has been overridden by the
nomination input values.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="noPreset">
    <xs:annotation>
      <xs:documentation>The value was not fixed externally.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="fixed">
    <xs:annotation>
      <xs:documentation>The value was fixed externally.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="prognostic">
    <xs:annotation>
      <xs:documentation>The prognosed value was fixed externally, but it can be altered by the
game.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>

```

## Simple Type processedInformationType

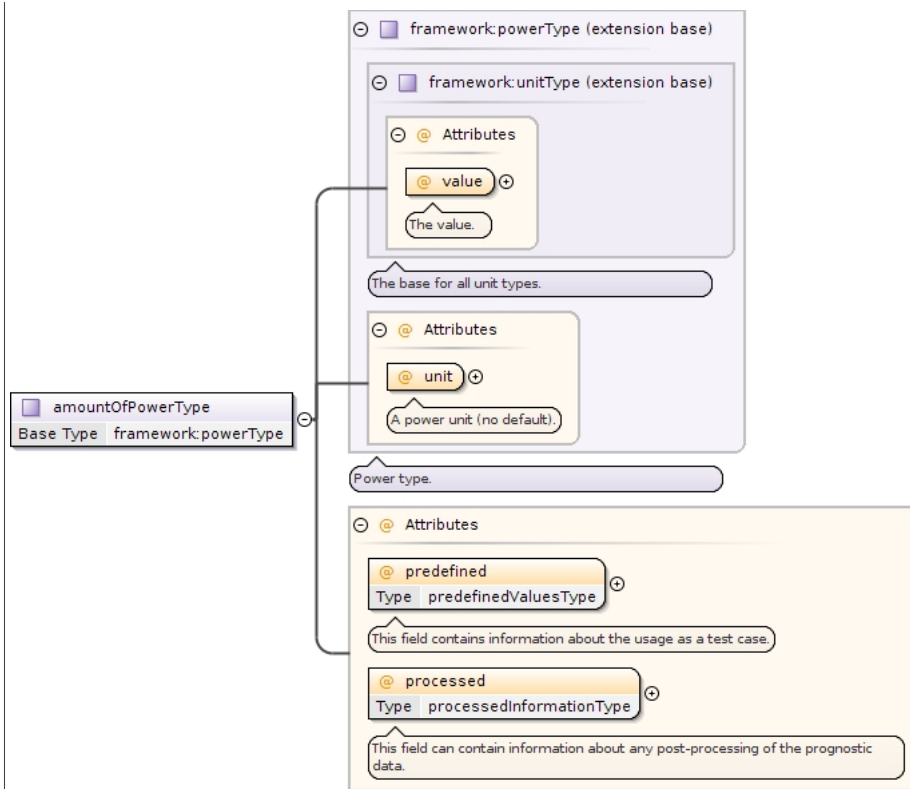
Namespace	http://gaslab.zib.de/kwpt/prognosis
Annotations	A basic type to store processing information.
Diagram	
Type	restriction of xs:string
Facets	maxLength 1024
Used by	Attributes amountOfPowerType/@processed, prognosticPressureType/@processed
Source	<pre> &lt;xs:simpleType name="processedInformationType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;A basic type to store processing information.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:string"&gt;     &lt;xs:maxLength value="1024"/&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt; </pre>

## Complex Type(s)

### Complex Type amountOfPowerType

Namespace	http://gaslab.zib.de/kwpt/prognosis
-----------	-------------------------------------

Diagram



Type extension of `powerType`

Type hierarchy

- `unitType`
- `powerType`
- `amountOfPowerType`

Used by Element `amountOfPower`

Attributes	QName	Type	Use	
	<b>predefined</b>	<code>predefinedValuesType</code>	required	
		This field contains information about the usage as a test case.		
	<b>processed</b>	<code>processedInformationType</code>	required	
		This field can contain information about any post-processing of the prognostic data.		
	<b>unit</b>	<code>powerUnit</code>	required	
		A power unit (no default).		
	<b>value</b>	<code>xsd:double</code>	required	
		The value.		

Source

```

<xs:complexType name="amountOfPowerType">
  <xs:complexContent>
    <xs:extension base="framework:powerType">
      <xs:attribute name="predefined" use="required" type="predefinedValuesType">
        <xs:annotation>
          <xs:documentation>This field contains information about the usage as a test case.</xs:documentation>
        </xs:annotation>
      </xs:attribute>
      <xs:attribute name="processed" use="required" type="processedInformationType">
        <xs:annotation>
          <xs:documentation>This field can contain information about any post-processing of the prognostic data.</xs:documentation>
        </xs:annotation>
      </xs:attribute>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

## Complex Type prognosticPressureType

Namespace	http://gaslab.zib.de/kwpt/prognosis																																						
Diagram																																							
Type	extension of pressureType																																						
Type hierarchy	<ul style="list-style-type: none"><li>• unitType<ul style="list-style-type: none"><li>• pressureType<ul style="list-style-type: none"><li>• prognosticPressureType</li></ul></li></ul></li></ul>																																						
Used by	Element	pressure																																					
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr></thead><tbody><tr><td>predefined</td><td>predefinedValuesType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">Contains information on whether the prognosis has been overridden by the "measured" values.</td></tr><tr><td>processed</td><td>processedInformationType</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">This field can contain information about any post-processing of the prognostic data.</td></tr><tr><td>unit</td><td>pressureUnit</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">A pressure unit (no default).</td></tr><tr><td>value</td><td>xsd:double</td><td>required</td><td></td></tr><tr><td></td><td colspan="3">The value.</td></tr></tbody></table>	QName	Type	Use		predefined	predefinedValuesType	required			Contains information on whether the prognosis has been overridden by the "measured" values.			processed	processedInformationType	required			This field can contain information about any post-processing of the prognostic data.			unit	pressureUnit	required			A pressure unit (no default).			value	xsd:double	required			The value.				
QName	Type	Use																																					
predefined	predefinedValuesType	required																																					
	Contains information on whether the prognosis has been overridden by the "measured" values.																																						
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	A pressure unit (no default).																																						
value	xsd:double	required																																					
	The value.																																						
Source	<pre>&lt;xs:complexType name="prognosticPressureType"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="framework:pressureType"&gt;       &lt;xs:attribute name="predefined" use="required" type="predefinedValuesType"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;Contains information on whether the prognosis has been overridden by the "measured" values.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:attribute&gt;       &lt;xs:attribute name="processed" use="required" type="processedInformationType"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;This field can contain information about any post-processing of the prognostic data.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:attribute&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;</pre>																																						

```

</xs:extension>
</xs:complexContent>
</xs:complexType>

```

**Namespace:** ""

**Attribute(s)**

**Attribute source / @name**

Namespace	No namespace		
Type	restriction of xs:string		
Properties	use:	required	
Facets	enumeration	Kassandra	The prognosis from KWPT.
	enumeration	DAISY	The prognosis from DAISY.
	enumeration	boundaryValueScenario	A boundary value scenario generated by Phil.
	enumeration	manuallyGenerated	A manually generated prognosis for testing purposes.
Used by	Element	source	
Source	<pre>&lt;xs:attribute name="name" use="required"&gt;   &lt;xs:simpleType&gt;     &lt;xs:restriction base="xs:string"&gt;       &lt;xs:enumeration value="Kassandra"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;The prognosis from KWPT.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:enumeration&gt;       &lt;xs:enumeration value="DAISY"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;The prognosis from DAISY.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:enumeration&gt;       &lt;xs:enumeration value="boundaryValueScenario"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;A boundary value scenario generated by Phil.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:enumeration&gt;       &lt;xs:enumeration value="manuallyGenerated"&gt;         &lt;xs:annotation&gt;           &lt;xs:documentation&gt;A manually generated prognosis for testing purposes.&lt;/xs:documentation&gt;         &lt;/xs:annotation&gt;       &lt;/xs:enumeration&gt;     &lt;/xs:restriction&gt;   &lt;/xs:simpleType&gt; &lt;/xs:attribute&gt;</pre>		

**Attribute source / @version**

Namespace	No namespace
Annotations	The Version of the used tool as unformatted string.
Type	sourceSoftwareVersion
Properties	use: required
Facets	maxLength 32
Used by	Element source
Source	<pre> &lt;xs:attribute name="version" use="required" type="sourceSoftwareVersion"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The Version of the used tool as unformatted string.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt; </pre>

**Attribute thirdParty / @name**

Namespace	No namespace
Type	restriction of xs:string
Properties	use: required

Facets	maxLength	32
Used by	Element	thirdParty
Source	<pre>&lt;xs:attribute name="name" use="required"&gt;   &lt;xs:simpleType&gt;     &lt;xs:restriction base="xs:string"&gt;       &lt;xs:maxLength value="32"/&gt;     &lt;/xs:restriction&gt;   &lt;/xs:simpleType&gt; &lt;/xs:attribute&gt;</pre>	

**Attribute thirdParty / @version**

Namespace	No namespace	
Annotations	The Version of the used tool as unformatted string.	
Type	sourceSoftwareVersion	
Properties	use:	required
Facets	maxLength	32
Used by	Element	thirdParty
Source	<pre>&lt;xs:attribute name="version" use="required" type="sourceSoftwareVersion"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The Version of the used tool as unformatted string.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>	

**Attribute prognosisStart / @time**

Namespace	No namespace	
Type	xs:dateTime	
Properties	use:	required
Used by	Element	prognosisStart
Source	<pre>&lt;xs:attribute name="time" type="xs:dateTime" use="required"/&gt;</pre>	

**Attribute amountOfPowerType / @predefined**

Namespace	No namespace		
Annotations	This field contains information about the usage as a test case.		
Type	predefinedValuesType		
Properties	use:	required	
Facets	enumeration	noPreset	The value was not fixed externally.
	enumeration	fixed	The value was fixed externally.
	enumeration	prognostic	The prognosed value was fixed externally, but it can be altered by the game.
Used by	Complex Type	amountOfPowerType	
Source	<pre>&lt;xs:attribute name="predefined" use="required" type="predefinedValuesType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;This field contains information about the usage as a test case.&lt;/ xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>		

**Attribute amountOfPowerType / @processed**

Namespace	No namespace	
Annotations	This field can contain information about any post-processing of the prognostic data.	
Type	processedInformationType	
Properties	use:	required
Facets	maxLength	1024



Used by	Complex Type amountOfPowerType
Source	<pre>&lt;xs:attribute name="processed" use="required" type="processedInformationType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;This field can contain information about any post-processing of the prognostic data.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>

### Attribute prognosticPressureType / @predefined

Namespace	No namespace
Annotations	Contains information on whether the prognosis has been overridden by the "measured" values.
Type	predefinedValuesType
Properties	use: required
Facets	enumeration noPreset The value was not fixed externally.
	enumeration fixed The value was fixed externally.
	enumeration prognostic The prognosed value was fixed externally, but it can be altered by the game.
Used by	Complex Type prognosticPressureType
Source	<pre>&lt;xs:attribute name="predefined" use="required" type="predefinedValuesType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Contains information on whether the prognosis has been overridden by the "measured" values.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>

### Attribute prognosticPressureType / @processed

Namespace	No namespace
Annotations	This field can contain information about any post-processing of the prognostic data.
Type	processedInformationType
Properties	use: required
Facets	maxLength 1024
Used by	Complex Type prognosticPressureType
Source	<pre>&lt;xs:attribute name="processed" use="required" type="processedInformationType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;This field can contain information about any post-processing of the prognostic data.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>

### Attribute prognosedValues / @hour

Namespace	No namespace
Annotations	The hour from prognosis start (hour 1) up to 49 hours.
Properties	use: required
Used by	Element prognosedValues
Source	<pre>&lt;xs:attribute name="hour" use="required"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The hour from prognosis start (hour 1) up to 49 hours.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:attribute&gt;</pre>

### Attribute boundaryObject / @id

Namespace	No namespace
Type	ambiguousIdentifier
Properties	use: required
Facets	minLength 1

	maxLength	22
	pattern	[a-zA-Z]{1}[a-zA-Z0-9_]*
Used by	Element	boundaryObject
Source	<xs:attribute name="id" type="framework:ambiguousIdentifier" use="required"/>	

**Attribute creationTime / @value**

Namespace	No namespace	
Annotations	The creation time of the file in UTC.	
Type	xs:dateTime	
Properties	use:	required
Used by	Element	creationTime
Source	<xs:attribute name="value" type="xs:dateTime" use="required"> <xs:annotation> <xs:documentation>The creation time of the file in UTC.</xs:documentation> </xs:annotation> </xs:attribute>	