Subject: Expansion proposals for the infrastructure-scheme
Posted by Martin Lehmann on Fri, 30 Apr 2010 11:51:10 GMT
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I am currently implementing an interface for reading railML infrastructure data in existing software. In connection with this I created same project-specific XML-elements and -attributes. These elements and attributes are used within the placeholders <any> and "anyAttribute".

While I was defining those elements and attributes, I recognized that some of those have universal, railML-relevant characteristics.

In my opinion the following (in railML missing) elements and attributes are general aspects which should be considered in future railML versions.

1. new element trackCondition:

The element group <trackElements> should provide an opportunity to define certain conditions for limited areas of the track. An element is proposed with which each user can describe his needed user-specific conditions, e.g. prohibition of the use of eddy current brake, main switch off, emergency

individually described with the attributes "type".

<!-in the file: "infrastructure.xsd" -->

< !--** -- >

<!-- trackElements -->

<xs:complexType name="eTrackElements">

<xs:sequence>

. <!-- existing elements -->

<xs:element name="trackConditions" type="rail:eTrackConditions" minOccurs="0" />

```
</xs:complexType>



<!-- trackConditions -->


<xs:complexType name="eTrackConditions">
  <xs:sequence>
    <xs:element name="trackCondition" type="rail:tTrackCondition"
minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>



<!-in the file: "infrastructureTypes.xsd"                    -->
< !--****************************************************** -- >
<!-- TrackConditions -->
< !--****************************************************** -- >


<xs:complexType name="tTrackCondition">
  <xs:complexContent>
    <xs:extension base="rail:tOrientedElement">
      <xs:attribute name="length" type="rail:tLengthM" />
      <xs:attribute name="type" type="xs:string"  />
    </xs:extension>
```

```
  </xs:complexContent>

</xs:complexType>
```

2. new attribute in <speedChange>:

The element <speedChange> should have the new attribute: "axleWeight". This attribute enables the railML user to define speed limits depending on the maximum axle weight of the trains.

Even the TAF-TSI provides that speed limits can be defined generally, for every train (depending on the train category - attribute "trainCategory" already exist in railML) or the train's maximum weight. So RailML should do that as well.

```
<!-in the file: "infrastructureTypes.xsd"                    -->

< !--********************************************************** -- >

<!-Speeds -->

< !--********************************************************** -- >

<xs:attributeGroup name="aSpeed">

  <xs:attribute name="trainCategory" type="rail:tTrainCategory" />

  <xs:attribute name="axleWeight" type="rail:tWeightTons" />

  <xs:attribute name="status" type="xs:string" />

  <xs:attribute name="vMax" type="rail:tSpeedKmPerHour" use="required" />

</xs:attributeGroup>
```

3. new attribute in <switch>:

The element <switch> should have the attributes: "stationOcpRef" and

"signalBoxOcpRef" (cf. my posting of the 23 Nov 2009).

4. Concerning to the element <balise>:

This element has an attribute called: "linkingAccuracy". In my opinion, this is an unfortunate choice of name because the declaration of an accuracy value always refers to a location or rather a position. As a conclusion the attribute should be renamed to something like "locationAccuracy" or "posAccuracy".

Kind regards,
Martin Lehmann
