Subject: Extension of tElementWithIDandDesignator and additional elementNumber
Posted by Heidrun Jost on Wed, 29 May 2019 17:08:34 GMT
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Dear all,

in the functional infrastructure a designator and an external element
are defined within railML 3.

Thales need this in the same way for the interlocking: The designator is
already defined. We propose to change the maxOccurs to “unbounded” and
to add the designator also with an unbounded occurrence.

We are also need an elementNumber for interlocking elements defined at
EntityIL. As discussed with the IL coordinator (Mr Jörg von Lingen) this
should have the type nonNegativeInteger.

Is it possible to extend the data model in that way?

Best regards,
--
Heidrun Jost
Software Engineer
Transportation Systems
Thales Deutschland GmbH

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Subject: Re: Extension of tElementWithIDandDesignator and additional elementNumber
Posted by Joerg von Lingen on Fri, 31 May 2019 03:23:52 GMT
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Dear all,

the change for <designator> (0..*) as child of EntityIL will be in next version.

The question of <external> I see connected with the discussion in
https://www.railml.org/forum/index.php?t=msg&th=657& start=0&

Motivated by the requests from Thales and the railML2.4nor extensions I shall extend the
<TrackAsset> like this

```
<xs:complexType name="TrackAsset">
  <xs:complexContent>
    <xs:extension base="rail3:EntityIL">
      <xs:sequence>
```

```
        <xs:element name="assetName" type="rail3:Name" minOccurs="0"
maxOccurs="unbounded"/>
        <xs:element name="belongsToOcp" type="rail3:EntityILref" minOccurs="0" maxOccurs="1"/>
      </xs:sequence>
      <xs:attribute name="elementNumber" use="optional" type="xs:nonNegativeInteger"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

This will be the base type for <TvdSection>, <MovableElement>, <SignalIL>, <LevelCrossingIL>, <RestrictedArea>,
<LogicalDevice> and <PermissionZone>

in addition the will be a new base type <RouteObjects> for <PartialRoute>, <Route>, <Overlap>, <RouteRelation>,
<ConflictingRoute>, <CombinedRoute>

```
<xs:complexType name="RouteObject">
  <xs:complexContent>
    <xs:extension base="rail3:EntityIL">
      <xs:sequence>
        <xs:element name="objectName" type="rail3:Name" minOccurs="0"
maxOccurs="unbounded"/>
        <xs:element name="belongsToOcp" type="rail3:EntityILref" minOccurs="0"
maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="objectNumber" use="optional" type="xs:nonNegativeInteger"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Similar to the extensions of asset elements there shall be an extension to <SignalBox> adding these child elements

```
  <xs:element name="hasName" type="rail3:Name" minOccurs="0" maxOccurs="unbounded"/>
  <xs:element name="belongsToOcp" type="rail3:EntityILref" minOccurs="0"
maxOccurs="unbounded"/>
```

Please give me your opinion on these extensions.

Regards,
Jörg von Lingen - Interlocking Coordinator

Heidrun Jost wrote on 29.05.2019 19:08:
> Dear all,
>
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>
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