

Hello newsgroup,

besides the previous question about accuracies, I received another suggestion from the same user and I'm happy to share it with you for discussion.

Mr. Pitz (Ansaldo) suggested the following improvement regarding linking and references between RailML elements. Let me cite from his email:

```
> There seems to be no references between data in your model. XML
> allows for reference to another part of the model and we feel like
> this might be necessary to have consistent reference between
> interlocking and infrastructure model. Did you consider this kind of
> syntax (<xsd:keyref name="signal_segmentId"
> refer="segmented" > <xsd:selector
> xpath="trackElements/signals/signal/location"/> <xsd:field
> xpath="segmentId"/>) ?
```

It seems to me that this way of referencing between elements offers additional ways of consistency checking (XML now knows that a number is a reference and not just an arbitrary number). On the other hand, introducing this syntax would require significant modifications in the XSD-file although the RailML-XML-file would syntactically not be affected. It's a change "behind the scenes".

Please give me your feedback: what do you think about introducing this syntax in RailML?

Best regards,
Volker Knollmann

--
Dr. Volker Knollmann
RailML Infrastructure Coordinator
EMail: coord@infrastructure.railml.org

Business contact:

Siemens AG
Industry Sector
I MO RA SPP SM21

Ackerstr. 22
38126 Braunschweig
Tel.: +49 (531) 226-2592
mailto:volker.knollmann@siemens.com

Subject: Re: Suggestion for improved references with RailML
Posted by [Joachim Rubröder railML](#) on Mon, 24 Nov 2008 13:53:44 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi,
references like that would be very useful for the timetable schema as well.

An example for the timetable period (in V1.1) would look like that:

```
<xsd:key name="timetablePeriodId">
  <xsd:selector xpath="/"
/timetable/timetablePeriods/timetablePeriod"/>
  <xsd:field xpath="@timetablePeriodID"/>
</xsd:key>
<xsd:keyref name="timetablePeriodRefId" refer="
timetablePeriodId">
  <xsd:selector xpath="/timetable/train"/>
  <xsd:field xpath="@timetablePeriodID"/>
</xsd:keyref>
```

A drawback is, that the key/keyref has to be located in an element and we only have one. So we will have to define all our key references in the root element "railml". But why not?

I think this would be a good feature for our release 2.0 together with the renamings to "id" and "xyRefId".

Best regards,
Joachim Rubröder

--

Joachim Rubröder
RailML Timetable Coordinator
EMail: coord@timetable.railml.org
