Subject: Harmonization with infrastructure aspects Posted by Susanne Wunsch railML on Thu, 05 Jan 2012 12:25:28 GMT View Forum Message <> Reply to Message

Dear Jörg and all interested in this thread,

wish you all a Happy new year and all the best for your business and family. :-)

Carsten provided a very comprehensive suggestion for more detailed definition of speed changes in the "Infrastructure" subschema. There are some topics that are also met in the "Rollingstock" subschema. That's the reason I ask here for any comments.

Susanne Wunsch <coord@common.railml.org> writes:

- > "Carsten Weber" <weber@irfp.de> writes:
- >> <xs:element name="axleLoad" minOccurs="0" maxOccurs="1">
- >> <xs:annotation>
- >> <xs:documentation>If any vehicle at the trains has a load at an axle
- >> higher than this value this speed limit has to be used.</xs:documentation>
- >> </xs:annotation>
- >> </xs:element>
- >

> Good idea. I would propose it as an attribute and bind it to the railML

- > type "tWeightTons".
- >
- > What is Jörg von Lingens opinion (as Rollingstock coordinator) about the
- > terminus? Rollingstock already uses "axleLoad" and "axleWeight" for some
- > related information.

Should we name the axle weight/load restriction for a speed profile "axleWeight" or "axleLoad"?

- >> <xs:element name="tiltingAngle" minOccurs="0" maxOccurs="1">
- >> <xs:annotation>
- > <xs:documentation>Tilting parameters for which this speed profile is >> calculated.</xs:documentation>
- >> </xs:annotation>
- >> </xs:element>

>

- > Good idea. I would spend a child element <tilting> for this and the
- > following kind of information. The attribute "angle" could be bound to
- > the railML type "tAngleDegQuadrant" for allowing 0° to 90°.

>

- > Does a speedProfile covers only one tilting angle value or a range of
- > values or some single values?

>

>> <xs:element name="tiltingSpeed" minOccurs="0" maxOccurs="1">

- >> <xs:annotation>
- >> <xs:documentation>Tilting parameters for which this speed profile is
- >> calculated.</xs:documentation>
- >> </xs:annotation>
- >> </xs:element>
- >
- > The terminus "speed" may be a bit misleading. I suppose, that is not
- > related to the "train speed" but to the "rate/speed of tilting", that
- > means the value of tilting degrees per second. I would call this
- > attribute "rate". Are there any other ideas?
- >
- > This attribute may be bound to the railML type "tSpeedDegreesPerSecond".
- >
- > There is another kind of information related to the tilting that comes
- > to my mind: the method of tilting. It could go into an attribute
- > "method" that is bound to an enumeration of "active", "passive",
- > "rollCompensation", "unknown", "other:anything".
- >
- > There is already a type "tTilting" in the rollingstock subschema. We
- > should coordinate these tilting issues with Jörg von Lingen (as
- > rollingstock coordinator).

Maybe we could reuse the "tTilting" type from rollingstock providing the attributes "maxTiltingAngle", "actuation" and "tiltingSpeed" for the speed profiles.

- >> <xs:element name="monitoringSystems" type="rail:eMonitoringSystems"
- >> minOccurs="0">
- >> <xs:annotation>
- >> <xs:documentation>One of the listed monitoring systems has to be used
- >> by the trainPartSequence to use this speed profile.</xs:documentation>
- >> </xs:annotation>
- >> </xs:element>
- >> </xs:sequence>
- >> </xs:complexType>
- >> <xs:complexType name="eMonitoringSystems">
- >> <xs:sequence>
- >> <xs:element name="MonitoringSystem" type="rail:tNationalSytemsType"
- >> minOccurs="1" maxOccurs="unbounded">
- >> <xs:annotation>
- >> <xs:documentation>type = tNationalSystemsType; Maybe it should be
- >> changed to a reference to a new base element monitoring system which would
- >> be referenced by vehicles, trainPartSequences, speedProfiles and
- >> trackElements. But also the defined types can be used as a
- >> key.</xs:documentation>
- >> </xs:annotation>
- >> </xs:element>
- >> </xs:sequence>

</xs:complexType> >>

>

- > That is an interesting idea. It touches Trac Ticket #111 [1]. >
- > railML currently requires heavy repetition of obviously equal data
- > applying the <trainProtectionElement> in <ocsElements>. Thomas Albrecht
- > already pointed it out in 2009. [2] But a change of this structure
- > requires a non-downward-compatible change, that we may do with next
- > major release according to our release policy. See also Trac ticket #23

> [3].

>

- If it would be a blocking issue, we may mark the current element as >
- "deprecated" and allow for a "definition list"/"library"/"catalog" of >
- train protection elements inside the <infrastructure> element. >
- >
- <trainProtectionSystem id="tpsLZB" name="LZB" >
- description="Linienförmige Zugbeeinflussung" xml:lang="de" >
- type="LZB" medium="inductive" monitoring="continuous"/> >

>

- Along the <track> we could define the <trainProtectionElement> >
- refering to one of the "definition list elements". >
- >
- The same way we could refer to various train protection systems from >
- within a <speedProfile>. >
- >
- Does this approach also work for different ETCS levels? >
- >
- This issues should be harmonized with the rollingstock implementation >
- (tNationalSystemsType). Contact: Jörg von Lingen. >

There is a parallel unequal implementation of command-control-system elements in railML.

- * The Infrastructure subschema defines <trainProtectionElement>s, <balise>s, <trainDetector>s and <trackCircuitBorder>s.
- * The Rollingstock subschema defines <etcs> with <specificTransmissionModule> and <nationalSystem> with the same intentions partly using the same basic railML types.

I'm sure, we should harmonize this aspect regardless of the annoying repetition effect in the Infrastructure subschema!

> [1] http://trac.assembla.com/railML/ticket/111

> [2]

> http://www.railml.org/web/index.php/previous-events.html?fil

e=tl files/railML.org/documents/events/slides/2009-10-06 tud resden albrecht-interlocking.pdf

> [3] http://trac.assembla.com/railML/ticket/23

Thanks for any help and kind regards... Susanne

Susanne Wunsch Schema Coordinator: railML.common

