
Subject: Re: railML 2.3 infrastructure extension proposal line sections

Posted by on Thu, 19 Jan 2017 18:28:18 GMT

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Dear Torben and Christian,

- > If the community agrees with me, I will hurry
- > to open a Trac ticket for implementation with railML v3.

We also distinguish between station tracks and line tracks in other countries, and we have many railML (IS 2.x) files where one railML<track> representing a "trough line track" goes through several stations and such "switches" between line and station track from home signal to end of station and so on.

Therefore, the requirement of Torben is comprehensible.

But, I am not convinced of (nor happy with) the solution

- > <trackGroups>
- > <NO:lineSection>
- > </NO:lineSection>
- > </trackGroups>

First, we should avoid that there is a need to make such distinction (as Christian wrote: North America...).

Secondly, there may be not "hard" or "exact" definition where a station begins or ends concerning a <line>. For instance, it may start at the home signal and end at the shunting limit marker board. On a double-track line, this may be different locations depending driving direction or which track is used. So, shouldn't this distinction (if at all) be made at <track>s rather than <trackGroup>s?

Last, so far, we have avoided creating a construct like a "station" in railML, by intention! (It is no mistake that you do not find a <station> in railML so far!) So, the <lineSection> should not lead to the "accidental definition" of a <station>... which then would many un-wanted discussions (such as: Why no reference from <lineSection> to <ocp>? Is it allowed that there is more than one <ocp> in one <lineSection>?).

Rather, I would prefer to describe exactly what is the functional (operational?) background behind <lineSection>. So my question would be: What is the operational background behind it?

With best regards,
Dirk.

Am 02.01.2017 um 17:29 schrieb Christian Rahmig:

> Dear Torben,

>

> Am 20.12.2016 um 18:26 schrieb Torben Brand:

>> [...]

>> trackGroups

>> In Norway we segment a line into line sections. They consist

>> of either stations (defined from home to home signal) or

>> paths (sections between stations; DE:freie Strecke).

>> There is a need to define which line section a track belongs

>> to. The idea is to define a line section as a group of

>> tracks.

>> Thus I have added the new element <NO:lineSection> under

>> <trackGroups>.

>> <NO:LineSection> has the attributes: @trackRef and @type.

>> @Type [datatype: enumeration] is preset to "station" or

>> "path", but allows other values, too ("other:").

>

> A line section (or section of line) is a structural unit that is used in

> other data models, e.g. RINF (see [1]), too. It can be seen as a

> component of a railway line and therefore represents some "meso level of

> detail" in the model of the railway network. If there is a need by

> several railML use cases (see [2]), I appreciate to integrate the line

> section into the railML data model, latest for version 3.

>

> Your proposed structure

>

> <trackGroups>

> <NO:lineSection>

> </NO:lineSection>

> </trackGroups>

>

> looks fine and reasonable. If the community agrees with me, I will hurry

> to open a Trac ticket for implementation with railML v3.

>

> The attribute @type (enumeration with "station" and "path") makes sense

> as well in those countries that distinguish between station tracks and

> path tracks (de: "freie Strecke"). However, it should not be forgotten,

> that some countries like the United States of America do not know this

> differentiation. Therefore, the attribute @type must remain optional and

> allow for other values, too.

>

> The reference to the contained tracks should not be done by an

> attribute, but by a sequence of child elements, similar to the current

> implementation of track references within the <line> element (see [3]).

> This will allow to reference an arbitrary number of tracks. An example

> may look like this:

>
> <trackGroups>
> <NO:lineSection type="path">
> <trackRef ref="tr01" />
> <trackRef ref="tr02" />
> </NO:lineSection>
> </trackGroups>
>
> Are there any further ideas or remarks regarding the usage of the line
> section entity? Any comments appreciated...
>
> [1]
> <http://www.era.europa.eu/Core-Activities/Interoperability/Pages/RINF.aspx>
> [2] http://wiki.railml.org/index.php?title=Dev:Use_cases
> [3]
> <https://www.railml.org/files/download/schemas/2016/railML-2.3/documentation/railML.html#Link2D3>
>
>
> Best regards
> Christian
>
