
Subject: [railML3] speed at level crossing

Posted by [christian.rahmig](#) on Fri, 09 Oct 2020 11:24:06 GMT

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Dear all,

in the railML use case working group "ETCS" we recently discussed how to model the allowed speed for a level crossing that is in unprotected mode.

The idea is to reference a <speedSection> element from the <levelCrossing> with the attribute @linkedSpeedSection (see [1]).

The interesting question for you:

Is the speed at level crossings in unprotected mode direction dependent? If yes, we have to conclude that it should be possible to refer to more than one <speedSection> from the <levelCrossing>.

Any comment is highly appreciated...

[1] <https://trac.railml.org/ticket/377>

Best regards

Christian

Subject: Re: [railML3] speed at level crossing

Posted by on Fri, 09 Oct 2020 13:44:33 GMT

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Dear Christian,

without being aware the full options in the r3 model, with a view from r2, I would say:

- > Is the speed at level crossings in unprotected mode
- > direction dependent?

Yes, it surely can be, practically. The modelling depends on whether a <speedSection> applies unconditionally or whether there can be more <speedSection>s at the same place where the lowest applies.

In general, there may be other reasons for direction-dependant speed limits at the very same place of the level crossing. So the resulting permitted speed may be different even in case the unprotected LC itself does not need a direction-dependence. So if there are several speed profiles allowed and the linked <speedSection> is not necessarily the ultimate, it could be enough to link only one.

However, even then I cannot imagine that the LC itself is surely direction-independent when unprotected in all cases and all countries. Local rules should apply then. Can railML foresee all

local rules? The motorist must have a chance to see the train for a certain time before the train enters the LC. The visibility of the track from the street can easily be direction-dependent. I think it's on the safe side to allow more than one <speedSection>.

Best regards,
Dirk.

Subject: Re: [railML3] speed at level crossing
Posted by [Luca Agazzani](#) on Thu, 19 Nov 2020 16:52:17 GMT
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Dear Christian,
I just join railML community and i would like to bring my experience, based mainly on italian signalling.
For what concern LX, in my experience, regardless the direction, at least two different <speedSection> would be needed in case of level crossing unprotected: one if there is an error on the barriers of the level crossing and the other if there is an error on the road signals.

Best regards,
Luca

Subject: Re: [railML3] speed at level crossing
Posted by [christian.rahmig](#) on Tue, 08 Dec 2020 09:47:26 GMT
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Dear Luca and Dirk,

thank you for your replies. I conclude that we need the possibility to reference more than one <speedSection> from a <levelCrossingIS> being in unprotected mode. Therefore, a (repeatable) child element is required. I adapted the Trac ticket #377 [1] accordingly.

[1] <https://trac.railml.org/ticket/377>

Best regards
Christian
