Subject: Re: Modelling transition bends
Posted by Christian Rahmig on Mon, 01 Dec 2014 21:11:14 GMT
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Dear everyone,

Am 01.09.2014 11:46, schrieb Christian Rahmig:
> Dear railML users,
>
> with the ticket #251 (cf. [1]) we re-opened the topic of modelling
> transition bends, which was already "discussed" here in the forum some
> years ago (cp. [2]).
>
> [...]

at the last railML.org conference in Paris on 07.10.2014, I presented a solution for the transition curve problem, which is applicable to railML 2.2 (see [1]).

In particular, there are two possible approaches based on <radiusChange> element (see [2]):

(1) add further description of the radiusChange using the description attribute. Thus, the type of the curve can be described. If not empty, possible values can be:

* UA_cubicParabola
* UA_parabola4
* UA_clothoide
* UA_WienerBogen
* UA_BlossBogen
* UA_Sinusoide
* UA_Cosinusoide
* UA_other
* UE, which marks the end of the transition curve.

(2) model the length of a transition curve between two other elements using a new optional parameter named transitionLength:

* transitionLength = 0 is a direct connection between straight lines and circular arcs
* transitionLength > 0 is a connection with a transition bend of a certain length

Alternatively to (1), it could be also possible to put the name of the transition curve element in a new optional parameter geometryElementName, which would specify the linear track geometry element starting at the marked point (radiusChange).

Any comments appreciated...

[1]
http://documents.railml.org/events/slides/2014-10-08_rahmig- railmltransitionbends.pdf
[2] https://trac.railml.org/ticket/251

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