Subject: Re: Maximum train current - Proposal for extension of infrastructure scheme in railML 2.4

Posted by christian.rahmig on Mon, 29 Jan 2018 10:14:12 GMT

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Dear all,

I created a Trac ticket for the specific issue. It is available in [1].

[1] https://trac.railml.org/ticket/319

## Best regards

Christian

Am 29.01.2018 um 10:34 schrieb Christian Rahmig:

- > Dear Mr. Frenzke,
- >
- > thank you for bringing up the topic of maximum train currents that I
- > would like to comment on from railML.org side:
- > Am 28.01.2018 um 23:13 schrieb Dr. Thorsten Frenzke:
- >> Dear all,
- >>

>

- >> on some line sections with electric traction system the maximum
- >> allowable current and power of a train is limited by the electrification
- >> (see also EN 50388).
- >> This may have influence on acceleration, running times and energy
- >> consumption, especially of high speed trains and multiple unit
- >> formations.
- >>

>

- >> Up to now there is no railML-element or attribute for considering such
- >> limitations.
- > That is correct for railML 2.x. In railML 3.1 beta that had been
- > released on October 31, 2018, a first version of the maximum train
- > current topic has already been implemented.
- > An example based on this implementation in the infrastructure scheme
- > looks like this:
- > <electrification>
- > <energyCatenary maxPantoCurrentStandstill="800"</p>
- > maxTrainCurrentDriving="3000"/>
- > </electrification>
- >
- > The values are given in Amperes [A].
- >> Sometimes, e.g. in Germany, there are different maximum allowable

```
>> currents for passenger and freight trains.
>
> In order to allow for train category specific maximum train currents, a
> modification of the schema has been discussed. The adapted example would
> look like this:
> <electrification>
   <energyCatenary maxPantoCurrentStandstill="800">
    <maxTrainCurrentDriving maxCurrent="3000" trainType="passenger"/>
>
    <maxTrainCurrentDriving maxCurrent="1200" trainType="freight"/>
>
   </energyCatenary>
>
> </electrification>
>> Maybe it makes sense to add other optional attributes for this.
> I would like to direct this question to the infrastructure managers and
> electrification experts:
> Are there any further parameters that are relevant for the maximum train
> current? Any feedback is appreciated...
> Best regards
> Christian
Christian Rahmig - Infrastructure scheme coordinator
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