Subject: [railML3] Booster transformers in RailML
Posted by Georg Boasson on Wed, 11 Oct 2023 11:37:18 GMT
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Bane NOR would like to include booster transformers (norwegian: sugetrafo) into the RailML.

The booster transformer might be included in the electrificationSection since it will always be a part of an electrification section. There will either be one or zero booster transformers and no other info is needed.

A proposal is to add a new attribute (boosterTransformer: flag, true/false) into the child element phaseSeparationSection (0..*) for this purpose
(https://wiki3.railml.org/wiki/IS:phaseSeparationSection).
Any thoughts? Is there any precedence?

Subject: Re: [railML3] Booster transformers in RailML
Posted by Jörg von Lingen   on Tue, 17 Oct 2023 05:51:30 GMT
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Dear all,

there are special configurations of electrification sections using additional transformers:
1) booster transformers to drain the traction currents from the rail into a return feeder
When used these booster transformers are located at insulated sections within the catenary. Thus it might be enough just to mark the electrificationSection with isInsulatedSection="true" also with boosterTransformer="true". This will implicitly give the location of the booster transformer. But maybe there are some electrical data needed in addition like nominal current or power of such transformer.

2) autotransformers in electrification systems like 2x25kV AC to reduce voltage drop by splitting it in catenary and negative feeder
When used these autotransformers are distrbuted over an electrification section without any separation in catenary. Thus the need of an additional element with relation to an electrificationSection and a spotLocation is suggested to get their location and needed electrical data.

At the moment no other railML user has requested such information yet.

Dr.-Ing. Jörg von Lingen - Interlocking scheme coordinator
railML.org (Registry of Associations: VR 5750)
Phone Coordinator: +49 351 87759 40; railML.org: +49 351 47582911
Altplauen 19h; 01187 Dresden; Germany   www.railml.org