
Subject: train protection systems

Posted by [Joerg von Lingen](#) on Wed, 07 Jan 2015 07:45:32 GMT

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Hi all,

w.r.t. the harmonisation of and semantic rules for the train protection systems

I found one rule which cannot be formally proofed:

The values of "trainProtectionMedium" and "trainProtectionMonitoring" shall be consistent with "type" in <nationalSystem>.

As this seems to be a fixed 1:1 relation I would propose to extend the accompanied file TrainProtectionSystems.xml by this information to allow a formal check.

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Best regards,
Joerg v. Lingen

Rollingstock Coordinator

Subject: Re: train protection systems

Posted by [Christian Rahmig](#) on Mon, 09 Feb 2015 09:24:37 GMT

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Dear Joerg,
dear everyone,

Am 07.01.2015 um 08:45 schrieb Joerg von Lingen:

> Hi all,

>

> w.r.t. the harmonisation of and semantic rules for the train protection systems

> I found one rule which cannot be formally proofed:

> The values of "trainProtectionMedium" and "trainProtectionMonitoring" shall be
> consistent with "type" in <nationalSystem>.

>

> As this seems to be a fixed 1:1 relation I would propose to extend the
> accompanied file TrainProtectionSystems.xml by this information to allow a
> formal check.

that's indeed a good idea. If I understood you correctly, you propose to extend the current structure in TrainProtectionSystems.xml to something like this:

```
<trainProtectionSystems ...>
  <trainProtectionSystemsAtTrack>
    <name />
```

```
<validFor />
<medium />
<monitoring />
</trainProtectionSystemsAtTrack>
<trainProtectionSystemsOnVehicle>
  <!-- [...] -->
</trainProtectionSystemsOnVehicle>
</trainProtectionSystems>
```

<medium> defines the physical medium of the train protection system and shall provide a value of the current enumeration tTrainProtectionMedium (cable, inductive, radio, mechanical, optical...).

<monitoring> defines the coverage of a train protection system and refers to the values of the enumeration tTrainProtectionMonitoring (intermittent, continuous).

Any comments on this proposal are very welcome...

Best regards

--
Christian Rahmig
railML.infrastructure coordinator

Subject: Re: train protection systems
Posted by on Fri, 08 May 2015 17:22:56 GMT
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Dear Joerg and Christian,

I can possibly help to clarify this matter a little bit. Probably these "medium" and "monitoring" go back to the very roots of railML when we (at Fraunhofer Dresden / TU Dresden then) filled the first structures with all we knew - with or without practical background...

If so, and if there was no usage of these values in the years since then, we possibly can omit at least the "monitoring". It is very theoretical and has never had a real background. It is only that we did teach the students things about Zugbeeinflussungsanlagen from a German point of view like

- PZB = punktförmig; induktiv, mechanisch, optisch...
- LZB = linienförmig, Kabel oder Schiene...
- ATP = punktförmig, magnetisch
- Krokodil...

We should avoid the "monitoring" = [intermittent, continuous] since

Zugbeeinflussungsanlagen like ZUB (HF-Technik, Induktionsschleifen) and ETCS (radio) are hybrids, they are a kind of semi-continuous. I think nobody here (in railML) needs this rather academic information.

We can possibly also discard the "medium" if we have a certain attribute for type/model/series such as "PZB80". "I60", "LZB90", "LZB500", "ZUB121" a. s. o. If so, everybody can deduce the "medium" from the type. Also, some types (as ZUB121) can have several mediums (HF-Balisen and Induktionsschleifen).

Best regards,
Dirk.
