
Subject: [railML2] Clearer modelling of the signal designation
Posted by [Tobias Bregulla](#) on Sat, 25 Jan 2020 13:50:13 GMT
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Good afternoon,

we want to extend our infrastructure export from GPSinfradat by the signal designation (unique identifier of a signal per operating point). In doing so, I noticed a contradiction between the railML rules and the example on the corresponding Wiki page.

According to the wiki entry for the signals (see <https://wiki2.railml.org/index.php?title=IS:signal>), the general rules for @code (machine-readable designation for exchange) and @name (established human-readable designation) also apply there. In the example for the signal, however, the designation is given at @name, which in my opinion is not correct and hinders the data exchange.

For explanation: it is about the designation "20ZS3" attached to this German combination signal (<https://upload.wikimedia.org/wikipedia/commons/2/2e/Ks-Signa I.jpg>), which is also used in site plans and many other documents.

In our opinion, the current wiki example should be described as follows:

```
<track>
  <ocsElements>
    <signals>
      ...
      <signal id="sig2630123" dir="up" pos="18597" type="combined"
function="home" ruleCode="DE:ESO:HV"
code="A1" name="ESig A1"
description="Einfahrsignal des Bf Boppard" xml:lang=de
ocpStationRef="KBOP" absPos="109647">
<geoCoord coord="50.237850 7.576116"
epsgCode="urn:ogc:def:crs:EPSG::4326"/>
      </signal>
      ...
    </signals>
  </ocsElements>
</track>
```

In this example, the designation "ESig A1" could be logically formed (not mandatory, only as a suggestion) from the function function="home" --> entry and type="combined" --> main signal in a project-specific way.

What does the community think about this? Could the example be adapted according to this usage?

Best regards,

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Tobias Bregulla
Bahnkonzept Dresden/Germany

Subject: Re: [railML2] Clearer modelling of the signal designation

Posted by [Torben Brand](#) on Tue, 25 Feb 2020 09:21:53 GMT

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Excellent suggestion!

Since there is no <designator> in railML2 except for OCPs We in Norway use @code for the designator @entry value. The register is then a fixed national register ("Banedata"). @code then forms a unique individual identifier (UID). In railML3 this will be fixed.

I would, though, suggest changing the value in your example from @code="A1" to something that resembles a UID. Since A1 probably is not unique.

I would also take the opportunity to focus this thread on the clear modelling of the board value (which is also highly applicable for railML3):

We handle the @name as described in the wiki "Established, human-readable short string, giving the object a name. Not intended for machine interpretation, please see our notice on human interpretable data fields.". So, the @name value follows no semantic constraint and is thus variable in it's semantics and not machine readable and interpretable. But we need to model the specific text on the board bellow the signal in a precise way. Shall this be done with a second signal (on the same @pos) with @switchable="false" and @name=[board text value] ("20 ZS3" in the example above). Or do we need an extension attribute @boardValue="string"?

Subject: Re: [railML2] Clearer modelling of the signal designation

Posted by [Thomas Nygreen](#) on Wed, 26 Feb 2020 15:59:16 GMT

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Dear Tobias,

I do not think that the example violates the rules. "A1" is a human-readable signal name. As Torben points out, the name does not follow any semantic constraints. Therefore, another name might be equally valid and informative to a human user. For a specific purpose, such as mirroring the text on the identification board attached to the signal post, there should be a specific modelling. I will leave the more detailed discussion to my colleague Christian.

Best,
Thomas

Subject: Re: [railML2] Clearer modelling of the signal designation
Posted by [christian.rahmig](#) on Wed, 26 Feb 2020 19:00:01 GMT
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Dear Tobias, dear all,

Tobias Bregulla wrote on Sat, 25 January 2020 14:50
[...]

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In this example, the designation "ESig A1" could be logically formed (not mandatory, only as a suggestion) from the function function="home" --> entry and type="combined" --> main signal in a project-specific way.

What does the community think about this? Could the example be adapted according to this usage?

Yes, you are right. The best practice example on wiki page <https://wiki2.railml.org/index.php?title=IS:signal> does not match with the attribute description for @name and @code. The best practice example has to be modified as suggested by you, but also

for the other two signals "Va" and "N2".

Best regards
Christian

Subject: Re: [railML2] Clearer modelling of the signal designation
Posted by [Ferri Leberl](#) on Fri, 28 Feb 2020 14:56:16 GMT
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Dear All,
I just adapted the examples under <https://wiki2.railml.org/index.php?title=IS:signal#Signal>
I hope, it matches your point.
Yours, Ferri

Subject: Re: [railML2] Clearer modelling of the signal designation
Posted by [Thomas Nygreen](#) on Wed, 04 Mar 2020 16:30:53 GMT
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Dear all,

I deleted @code from the signal example, as the way it was used is not in accordance with Dev:identities.

I considered editing the codes into something random, but I concluded that it would not contribute anything to the example.
