
Subject: [railML3] Suggested extension for RBC

Posted by [Karl-Friedemann Jerosch](#) on Wed, 13 May 2020 16:06:32 GMT

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Dear all,

first let me introduce myself: I am Karl Jerosch and I am working in the ETCS trackside engineering department of Siemens Mobility Germany and I am participant of the railML workgroup "ETCS Track Net".

To extend the schema of railML.interlocking for RBC (Radio Block Center), the work group "ETCS Track Net" suggests to add the following information to be implemented in railML 3.2:

1.) new element <RBCs> as container for elements of kind <RBC>

2.) new element <RBC> providing information of one RBC with attributes:

- NID_C [integer 0, ..., 1023] according to UNISIG SUBSET-026 Section 7.5.1.86
- NID_RBC [integer 0, ..., 16382] according to UNISIG SUBSET-026 Section 7.5.1.96
- NID_RADIO [16 digits, each digit is a hex value with range of 0 to 9 or F] to provide the telephone number according to UNISIG SUBSET-026 Section 7.5.1.95
- NID_MN [6 digits, each digit is a hex value with range of 0 to 9 or F] to provide the GSM-R network id according to UNISIG SUBSET-026 Section 7.5.1.91.1

To detect automatically the RBC controlled area by software tools, information about the RBC border shall be provided in railML 3.2, either as new elements <RBCborders> and <RBCborder> or by using (and extending) the already existing infrastructure elements <borders> and <border>.

3.) a new element <RBCborders> as container for elements of kind <RBCborder> (or use of existing element <borders>)

4.) new element <RBCborder> with attributes (or use of extension of existing element <border>):

- reference to an element <RBC>
- location (relativ position in relation to a netElement)
- direction
- kind of transition with a list of 4 different values: "entry/exit/handover/accepting"

See also the following attachment which illustrates the suggestion:

https://forum.railml.org/userfiles/2020-05-08_siemens-railml-3-illustration-rbc-border.pdf

Does the community agree with the suggested extension of the data model in railML 3.2?

best regards

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