Subject: Infrastructure data for a train path finding tool Posted by Rüdiger Ebendt on Wed, 29 Jul 2020 11:59:39 GMT View Forum Message <> Reply to Message

Hi everyone,

I am Ruediger Ebendt, scientific staff member at the Institute of Transportation Systems, German Aerospace Center (DLR), Berlin site, Germany. DLR is one of the project partners of the project INDRES (e.g. see https://www.dlr.de/content/de/artikel/news/2019/02/20190603_ digitale-loesungen-fuer-kleine-eisenbahnunternehmen.html).

The project aims at developing the basics of a publicly accessible infrastructure data register for the target group of regional, secondary and connecting railways. One use case in this project is to export infrastructure data to a train path finding tool.

Our team would like to base the export interface on railML. A first part of the data we need to provide is related to the macroscopic network of lines (and track sections), stations and stops. When adressing this use case, we encountered the problem that it is not entirely obvious to us how to represent some of the concerned data in railML2.4 (more precisely, in the subschema infrastructure).

In the following, I would like to list these pieces of data, and kindly ask the community for suggestions on how to represent them. Respectively, additional comments or sharing of experiences in representing similar data in other use cases, are also greatly appreciated.

The list is (the original German terms are included in square brackets):

- suitability of track for double-decker trains [Ertüchtigung für Doppelstockfahrzeuge]
- related to suitability of track: codes of combined-transport load units [KV-Profile]
- train path pricing [Trassenpreis]
- loading limits [Grenzlasten]; dependent on length, per tractive unit, dependent on the type of railway coupling and direction, with or without banking
- train category dependent line closures [zugartabhängige Sperrungen]
- pre-signalling distance [Vorsignal-Abstand / Regel-Bremsweg der Strecke]

Many thanks in advance for your help!

Kind regards Ruediger Ebendt