
Subject: Re: <track>@mainDir

Posted by [Thomas Nygreen JBD](#) on Wed, 18 Apr 2018 17:47:32 GMT

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christian.rahmig wrote on Mon, 16 April 2018 16:51

Am 14.04.2018 um 15:23 schrieb Torben Brand:

> We use mainDir for three things:

> 1. to indicate on a macroscopic level if the line is single

> (mainDir="none") or double track (mainDir="up" or "down")

Actually, reasoning is only possible in one direction: if there is a single track line, it cannot have a main driving direction and the usage of @mainDir="none" is recommended (see [1]). It is not possible to conclude from the main driving direction whether a line is single track or double track. The remaining question in particular: how to distinguish between single track line and double track line without preferred main direction?

I am not sure that Torben is correct in this case. It is rather the number of connections between two OCPs that determine if the line is single or double track.

However, there will always be operational rules or practices in addition to those represented in railML. In Norway we have no double track lines without preferred main direction. Neither do we have double tracks with mandatory track directions, but the performance will in many cases be degraded by running on the left track. The operational rules and practices will differ from country to country, and so will the amount of information you can interpret from the values of mainDir. The value itself does however have the same meaning in all countries.

christian.rahmig wrote on Mon, 16 April 2018 16:51

> 3. to indicate the position of the track in a mesoscopic

> level (mainDir="up" track on the right side in increasing

> mileage)

Sorry, but I do not understand the meaning of this usage scenario. Could you please provide an example for a track with mainDir="up" and mainDir="down" following your proposal? From my current understanding, this approach does not work since the rule "driving on right side" is not unique among European railway lines and even can differ along a single railway line. However, maybe your examples may convince me ;-)

I do not have a relevant railML example at hand, but again, this is a case of differing practices. A renderer for drawing schematic line plans must always have a set of national drawing rules. And in this nation we always drive on the right side under normal operations. For a renderer, or a macroscopic simulator or infra parser, it is much simpler to look at the track's mainDir than to lay out the full topology to determine which track is to the right (or left) and thereby used in increasing (or decreasing) mileage.

Best regards
Thomas
