
Subject: Re: Use railML to model parts of a large network
Posted by [Jörg von Lingen](#) on Sat, 22 Jun 2024 05:32:40 GMT
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Dear all,

for splitting of infrastructure you have to consider the perspectives in order to get consistent and complete data for routes and each and everything. Splitting at arbitrary positions will mostly not work.

ETCS perspective

The splitting shall be done at RBC borders. The RBC does know (control) any infrastructure only until the border balise. Thus it authorises MA only until its border (handing over RBC). Any information beyond this border will be provided by the accepting RBC. This will allow MA across the border.

The relation from RBC to interlockings (SignalBox) is always 1:n. Thus one signalbox communicates only with one RBC.

Interlocking perspective

From history a relay interlocking did cover at least one station. Thus the station routes did end at the station border. This is achieved with the construct of virtual signal "Line Interface" which is located at the position of the home signal. Thus any exit route (operational from exit signal to first block signal) is for the interlocking from exit signal to line interface as first part and from line interface to first block signal as second part. Thus there can be an easy split at station border. In case of internal interface (station and open line controlled by same signalbox) the transfer of permissions at line interface is handled internally without additional configuration data. In case of station and open line controlled by different signalboxes the line interface is replaced by virtual signal "Block Interface". The exchange of information between the two systems is defined in IL-element <interface>. Such block interface is often located at one station border. But it can be also at any detection element on the open line. Than again each system knows (Controls) only the route part until the border. Every information needed from beyond the border is to be transmitted via the interface. Due to the features of open line there is no need to consider special data for overlaps or flank protection. The open line has neither of them.

Subsequently the splitting shall be done at signalbox borders.

In case the signalbox border is located within a station (station block) the information of overlap and flank protection has to be transferred via signal "blockInterface" as defined in <interface>.

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