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Subject: [railML3]: Referencing between IS and IL  
Posted by [Jörg von Lingen](#) on Tue, 19 May 2020 07:29:42 GMT  
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Hi,

in railML3 we use a lot of referencing to other elements in order to enhance the information. In <assetsForInterlocking> we have at the moment only references into <functionalInfrastructure> of IS when there is a physical representation of the element at trackside. All other references are strictly inside IL part. However, there are some physical items which are not in IL but would be needed there without adding additional information, e.g. <bufferStop> would be used as <routeExit>.

Subsequently it is not always that way the references from functional interlocking items like <route> are limited to IL elements. Thus it was suggested to have for each element in <functionalInfrastructure> of IS a counterpart in IL. This would limit the area of possible reference targets.

SAMPLE:

```
bufferStop <-- bufferStopIL
signalIS <-- signalIL
  routeStart --> signalIL
  routeExit --> bufferStopIL
```

Would you appreciate this change or would you strictly avoid such "auxiliary" elements without any additional information?

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Best regards,  
Joerg v. Lingen - Interlocking Coordinator

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Subject: Re: [railML3]: Referencing between IS and IL  
Posted by [Jörg von Lingen](#) on Mon, 25 May 2020 12:52:48 GMT  
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Hi,

in addition to the first post considering the actual list of functionalInfrastructure it might be questionable, to have a counterpart in IL schema for really each of that elements. Thus only few out of the list may be really useful in IL part.

Regards,  
Jörg von Lingen - Interlocking Coordinator

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File Attachments

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1) [FunctionalInfrastructure.jpg](#), downloaded 273 times

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Subject: Re: [railML3]: Referencing between IS and IL  
Posted by [Jörg von Lingen](#) on Wed, 13 Jan 2021 05:21:53 GMT  
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Dear all,

in consequence of the first post about this topic in the interlocking schema the element <trackIL> was introduced, which has a 1:1 relation to a <track> in IS. At the same time a <tvSection> has a 1:n relation to <trackIL>.

The second step to cleanup the references in IL shall be the introduction of <endOfTrack> which defines a limit of the signalBox either by a physical "obstacle" (bufferstop) or the end of supervision by a final trainDetectionElement. This <endOfTrack> element would be needed as possible <routeExit> or <routeEntry>.

The proposal is to have a type attribute with enum (physical, endOfSupervision) and a <refersTo>@ref into IS depending on the named type, i.e. "physical" ref to <bufferStop> and "endOfSupervision" ref to <trainDetectionElement>.

See also attached illustration.

Regards,

Jörg von Lingen - Interlocking Coordinator

Joerg von Lingen wrote on 25.05.2020 14:52:

> Hi,

>

> in addition to the first post considering the actual list of functionalInfrastructure it might be questionable, to have

> a counterpart in IL schema for really each of that elements. Thus only few out of the list may be really useful in IL part.

>

> Regards,

> Jörg von Lingen - Interlocking Coordinator

>

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## File Attachments

1) [railML-ref.pdf](#), downloaded 364 times

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