
Subject: Re: Double switch crossing: 'crossingRef' attribute for the fictive switches
Posted by _____ on Tue, 02 Oct 2012 17:21:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dear Christian,

> But still I am a big fan of the idea of grouping infrastructure
> elements. Therefore I want to suggest an alternative approach, which
> defines macroscopic infrastructure elements such as diamond crossings or
> turntables and let them refer to microscopic elements.

In general, I totally agree with you.

In particular, I would prefer not to force it to very special (limited)
macroscopic elements.

The theory is in my opinion:

1. There is a limited number of natural microscopic elements: tracks, points, may be crossings (but even not necessarily crossings - could be two tracks). We should be able to enumerate all allowed microscopic elements.
2. There is a much more greater possible number of macroscopic elements, and may be we do not even know all possible macroscopic elements.

That's why I would prefer to use your 'grouping' idea in a very much generic way:

- No pre-defined macroscopic element type 'doubleSwitchCrossing'/'diamondCrossing' or 'turntable' or such.
- Macroscopic elements can refer to other macroscopic elements - there can be a hierarchy just as we have allowed it with OCPs (which I think is very good generic).

Your example would then be:

```
<macroscopicTrackElement id="kr01" type="crossing" >  
  <elementRef type="track" ref="s01s03">  
  <elementRef type="track" ref="s02s04">  
</macroscopicTrackElement>
```

```
<macroscopicTrackElement id="dkw01" type="diamondCrossing" >  
  <elementRef type="macro" ref="kr01"> <-- one macroscopicTrackElement  
to another  
  <elementRef type="switch" ref="s01">  
  <elementRef type="switch" ref="s02">  
  <elementRef type="switch" ref="s03">  
  <elementRef type="switch" ref="s04">  
  <elementRef type="track" ref="t01c01">
```

```
<elementRef type="track" ref="t02c01">
  <elementRef type="track" ref="c01t03">
    <elementRef type="track" ref="c01t04">
</macroscopicTrackElement>
```

The attribute <macroscopicTrackElement>."type" is the compromise: It is pre-defined, but it is an enumeration which can always and easily be extended (and which can allow non-predefined enumeration values).

With this generic principle of grouping infrastructure elements, I think we are very flexible, very general and therefore have much advantages compared with the current infrastructure model, so that it is worth the effort of change. I would welcome such a change in 3.0.

Best regards,
Dirk.
