
Subject: [railML 3.1] Simplification of area engineering over more than one netElement element

Posted by [Heidrun Jost](#) on Mon, 09 Apr 2018 10:17:58 GMT

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Hi,

I'm Heidrun Jost from Thales and intend to use the new railML3.1.

From my point of view the usage of areas (like speeds, gradient curves, restriction areas) is more complicated as in railML2.3.

For better understanding the following example.

I have a long track consisting of 7 "netElements". For the definition of speed along the track we need for each "netElement" an own "associatedElement" container.

Now, in railML 3.1 the following definition applies:

```
<speeds>
  <speedSection id="sps01" vMax="240" isTemporary="false">
    <linearLocation id="sps01_lloc01" applicationDirection="normal">
      <associatedElement netElementRef="TS1" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
measure="0.00"/>
          <linearCoordinateEnd positioningSystemRef="lps01"
measure="100.000"/>
        </associatedElement>
      <associatedElement netElementRef="TS2" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
measure="100.00"/>
          <linearCoordinateEnd positioningSystemRef="lps01"
measure="300.00"/>
        </associatedElement>
      <associatedElement netElementRef="TS3" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
measure="300.00"/>
          <linearCoordinateEnd positioningSystemRef="lps01"
measure="400.00"/>
        </associatedElement>
      <associatedElement netElementRef="TS4" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
measure="400.00"/>
          <linearCoordinateEnd positioningSystemRef="lps01"
measure="700.00"/>
        </associatedElement>
      <associatedElement netElementRef="TS5" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
```

```

measure="700.00"/>
    <linearCoordinateEnd positioningSystemRef="lps01"
measure="800.00"/>
    </associatedElement>
    <associatedElement netElementRef="TS6" keepsOrientation="true">
        <linearCoordinateBegin positioningSystemRef="lps01"
measure="800.00"/>
        <linearCoordinateEnd positioningSystemRef="lps01"
measure="900.00"/>
        </associatedElement>
        <associatedElement netElementRef="TS7" keepsOrientation="true">
            <linearCoordinateBegin positioningSystemRef="lps01"
measure="900.00"/>
            <linearCoordinateEnd positioningSystemRef="lps01"
measure="1000.00"/>
            </associatedElement>
        </linearLocation>
    </speedSection>
</speeds>

```

I propose the following syntax to shorten the XML definition. I believe, this is better readable:

If we allow a net Element list the definition would be shorter:

```

<speeds>
    <speedSection id="sps01" vMax="240" isTemporary="false">
        <linearLocation id="sps01_lloc01" applicationDirection="normal">
            <associatedElement netElementRefList="TS1 TS2 TS3 TS4 TS5
TS6 TS7" keepsOrientation="true">
                <linearCoordinateBegin positioningSystemRef="lps01"
measure="0.00"/>
                <linearCoordinateEnd positioningSystemRef="lps01"
measure="1000.000"/>
            </associatedElement>
        </linearLocation>
    </speedSection>
</speeds>

```

Best regards,

--

Heidrun Jost
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Transportation Systems
Thales Deutschland

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Email: heidrun.jost@thalgroup.com

Subject: Re: [railML 3.1] Simplification of area engineering over more than one netElement element

Posted by [christian.rahmig](#) on Mon, 23 Apr 2018 14:10:28 GMT

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Dear Heidrun,

I took your topic with me into the "2nd railML 3.1 Workshop" in Berlin last week.

Concluding the discussion the proposal has been seen sceptical from most of the workshop participants: Although some lines "can be saved" in the export file, it was highlighted that new problems and inconsistencies may arise from the shortened topology location. In particular, listing references in the attribute @netElementRefList has been criticized, also because of resulting validation problems.

However, what about the rest of the community? @all: Do you have any opinion about the proposal from Heidrun? Any feedback is highly appreciated...

Best regards
Christian

--

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railML.org (Registry of Associations: VR 5750)

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Am 09.04.2018 um 12:17 schrieb Heidrun Jost:

> Hi,

>

> I'm Heidrun Jost from Thales and intend to use the new railML3.1.

>

> From my point of view the usage of areas (like speeds, gradient curves, restriction areas) is more complicated as in railML2.3.

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```

>
> Now, in railML 3.1 the following definition applies:
>   <speeds>
>     <speedSection id="sps01" vMax="240" isTemporary="false">
>       <linearLocation id="sps01_lloc01" applicationDirection="normal">
>         <associatedElement netElementRef="TS1" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="0.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="100.000"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS2" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="100.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="300.00"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS3" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="300.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="400.00"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS4" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="400.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="700.00"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS5" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="700.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="800.00"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS6" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="800.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="900.00"/>
>         </associatedElement>
>         <associatedElement netElementRef="TS7" keepsOrientation="true">
>           <linearCoordinateBegin positioningSystemRef="lps01"
> measure="900.00"/>
>           <linearCoordinateEnd positioningSystemRef="lps01"
> measure="1000.00"/>
>         </associatedElement>
>       </linearLocation>

```

```
> </speedSection>
> </speeds>
>
> I propose the following syntax to shorten the XML definition. I believe,
> this is better readable:
>
> If we allow a net Element list the definition would be shorter:
> <speeds>
> <speedSection id="sps01" vMax="240" isTemporary="false">
> <linearLocation id="sps01_lloc01" applicationDirection="normal">
> <associatedElement netElementRefList="TS1 TS2 TS3 TS4 TS5
> TS6 TS7" keepsOrientation="true">
> <linearCoordinateBegin positioningSystemRef="lps01"
> measure="0.00"/>
> <linearCoordinateEnd positioningSystemRef="lps01"
> measure="1000.000"/>
> </associatedElement>
> </linearLocation>
> </speedSection>
> </speeds>
>
> Best regards,
```
