Subject: Re: railML 2.3 infrastructure extension proposal operational properties of an OCP
Posted by christian.rahmig on Mon, 02 Jan 2017 16:29:08 GMT
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Dear Torben,

Am 20.12.2016 um 18:27 schrieb Torben Brand:
> [...]
> propOperational
> In Norway trains are by default only allowed to enter a
> station one by one, due to safety reasons. If a station is
> equipped/designed with simultaneous entry features
> (NO:samtidig innkjør) trains may enter simultaneously. This
> is necessary to know for the capacity planner, timetable
> planner and train driver. The element <propOperational> is extended
> with the new
> attribute @NO:samtidigInnkjør [datatype: enumeration]. The
> attribute has 4 Norwegian preset values and the values
> "partial" and "none". The precise values of the value
> "partial" needs to be defined in another system/model.

The reasons for having the attribute seem clear to me. Can you tell us what are the four Norwegian preset values for this parameter? Further, instead of "partial", which is rather unspecific, I would prefer having more concise values instead. Are there any other railways that make use of such an attribute? If yes, I have no objections against creating a Trac ticket and implementing this attribute with the next release.

> The attribute @operationalType is extended with the value
> "siding". In Norway a "siding" is an additional track on the
> path (section of line between stations). It is not a station
> according to Norwegian definition as it does not have a
> main-home signal. Thus the path on the siding needs to be
> blocked during the operation of entering and leaving the
> siding. PS. There is a trackType under track with value
> "sidingTrack" This is described in the Wiki as: "This is a
> siding"

Yes, railML already allows to specify a track as being a siding track by setting <track type="sidingTrack">. However, what is missing is an operational representation of the siding as you request it. Therefore, your suggestion to add the enumeration value "siding" for the attribute @operationalType seems to be valid. Is there anybody among the railML community who needs to model sidings outside of stations, too?

> The attribute @operationalType is extended with the value
> "halt". In Norway we need to separate between a halt within

> a station and outside the station (on the path). I suggest
> to use the existing operationalType "stopingPoint" with
> halts within the station (As this correlates with the
> Norwegian name "stoppested"="stoppingplace"). And the new
> operationalType "halt" for halts on the path.

An operation control point <ocp> is located on a track indirectly via the <crossSection> element. The track itself can be classified as a station track or a main route track via its attribute @type. Thus, it is possible to distinguish between an OCP within a station and an OCP outside the station (de: "freie Strecke"). Consequently, it is not absolutely necessary to introduce a new enumeration value "halt" for <ocp><propOperational>@operationalType. Your example may look like this:

```
<track id="tr01" type="stationTrack">
  <trackTopology>
    <crossSections>
      <crossSection id="cs01" pos="123.4" ocpRef="op01">
      </crossSection>
    </crossSections>
  </trackTopology>
</track>
....
<ocp id="op01">
  <propOperational operationalType="stoppingPoint">
  </propOperational>
</ocp>
```

However, the solution is complex and it requires <track> elements in order to locate the OCP via their <crossSection> elements. Your proposed attribute adaptation would work also without tracks and it would assign the feature directly to the OCP. Therefore, I am open for more opinions on this issue to find a practical solution.

> It needs to be defined if a station is remote controlled (by
> CTC). Thus we have added the new bolean attribute
> @NO:remoteControlled. Later extensions could define which
> remote controller (CTC) is controlling the interlocking
> controller.

Accepted. Instead of a boolean attribute, it might be useful to define an enumeration attribute in order to specify the type of controlling. On the other side, the detailed definition of station control should be done in the <controller> element and therefore your suggested solution with the boolean attribute seems to fit well.

Best regards
Christian

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Christian Rahmig - Infrastructure scheme coordinator
railML.org (Registry of Associations: VR 5750)
Phone Coordinator: +49 173 2714509; railML.org: +49 351 47582911
Altplauen 19h; 01187 Dresden; Germany www.railml.org

Subject: Re: railML 2.3 infrastructure extension proposal operational properties of an OCP
Posted by Claus Feyling on Sun, 07 May 2017 16:54:08 GMT
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Hello Torben, Christian & other listeners,
Me too, I would support "NO:remoteControlled" being a boolean value for Norwegian purposes. The source for setting train routes is either station-controlled (using the signalman's panel or a computer system at or near the station) or remote controlled (comprising a more flexible CTC system with pretesting of route setting, train describer functions, maybe automatic route setting functions, maybe SPAD alarm functions etc etc.. The two forms of control are mutually exclusive in the Norwegian case, so a boolean seems fine.

Subject: Re: railML 2.3 infrastructure extension proposal operational properties of an OCP
Posted by on Thu, 18 May 2017 15:51:04 GMT
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Dear Christian and Torben,

>> The attribute @operationalType is extended with the value
>> "siding". In Norway a "siding" is an additional track on the
>> path (section of line between stations). It is not a station
>> according to Norwegian definition as it does not have a
>> main-home signal. Thus the path on the siding needs to be
>> blocked during the operation of entering and leaving the
>> siding. PS. There is a trackType under track with value
>> "sidingTrack" This is described in the Wiki as: "This is a
>> siding"
>
> Yes, railML already allows to specify a track as being a siding track by
> setting <track type="sidingTrack">. However, what is missing is an
> operational representation of the siding as you request it. Therefore,
> your suggestion to add the enumeration value "siding" for the attribute
> @operationalType seems to be valid. Is there anybody among the railML
> community who needs to model sidings outside of stations, too?

Yes, of course. In Germany (and other countries), we have the same type

of sidings. In Germany they are called Anschlussstelle und Ausweichanschlussstelle depending on interlocking and operational rules. It is an <ocp> but not a station. In both cases, the line track has to be blocked between the adjacent stations during the operation of entering and leaving the siding.

Currently we model such an <ocp> as follows:

```
<ocp id=...>
  <propOperational orderChangeable='false'
ensuresTrainSequence='false' />
  <propService goodsLoading='true'/>
  <propEquipment>
    <summary hasHomeSignals='false' hasStarterSignals='false'/>
  </propEquipment>
```

We do not model the siding itself since there can be no train operation at it (just shunting). The train begins and ends at the main track at the <ocp>.

The intention of "sidingTrack" is to model any non-main track, independently whether in stations or line-side. "Non-main track" means tracks with no train operation, just shunting.

I think it's not necessary to explicitly distinguish between a siding of a station or a line-side siding. Torben has already suggested to create a possibility to assign track elements to <ocp>s. This implements the solution to distinguish the two kinds of sidings.

Best regards,
Dirk.