
Subject: Suggestion towards new attributes and sub element for <doors>

Posted by [Torben Brand](#) on Mon, 11 Jun 2018 13:09:39 GMT

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Jernbanedirektoratet needs for a better capacity planning to map the following attributes and sub element of the vehicle doors. Thus we suggest the following new attributes under <doors>:

@openingTime - Time from stand-still of the vehicle to the flow of passengers can start through the doors. This is estimated to be at a door gap of 80cm.

@closingTime - Time after closing signal is given on the last door to the vehicles can be put in motion.

@minimumStopTimeDoors - minimum time between vehicle stops and starts the motion with doors opening and closing.

Thus we suggest the following new sub element under <doors> with attributes:

<passengerFlowSpeed>

@FlowSpeed - average/planned number of passengers per second that can flow through the doors and vestibules of the vehicle at given platform heights

@platformHeight - platform height in millimetres for a given flow speed.

Subject: Re: Suggestion towards new attributes and sub element for <doors>

Posted by on Tue, 12 Jun 2018 16:40:35 GMT

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Dear Torben,

I welcome the improvement of railML concerning better capacity planning, especially the @openingTime, @closingTime and @flowSpeed information.

Please consider that modern vehicles have moveable door sills which can be moved out (electro-mechanically). The door sills cannot always be used - it depends on the platform edge and also winter conditions. From my opinion, the @openingTime should depend on whether the door sills are moved out or not.

I don't understand the @minimumStopTimeDoors value.

a) Shall this be a minimum total stop time, so from scheduled arrival until scheduled departure, including a minimum passenger flow?

or

b) Shall this simply be the sum of @openingTime + @closingTime, so excluding any passenger flow?

In case of (a), I would not regard it as generally accepted for railML. The minimum passenger flow, in general, depends on the station (frequency of passenger usage of a station). In case of very rarely used stations, there can even be scheduled stops with a "too low" passenger flow time (time for alighting and boarding). This time delta can be as low as zero, in case of a series of stops on request which are not likely used altogether.

In case of (b), I would decline it because of redundancy.

So, currently I have some concerns about @minimumStopTimeDoors.

Dirk.

Subject: Re: Suggestion towards new attributes and sub element for <doors>

Posted by [Torben Brand](#) on Thu, 14 Jun 2018 08:02:36 GMT

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Thank you, Dirk, for valuable input and good questions.

Jernbanedirektoratet appreciates that you think the suggested extensions are a good idea.

I have to admit that @minimumStopTimeDoors was not good enough defined. I will refine it to:
@minimumStopTimeDoors - technical minimum time of the vehicle between vehicle stops and starts the motion with doors opening fully and closing with no passenger exchange. The value @minimumStopTimeDoors would then be the sum of: @openingTime + time to fully open doors + technical latency time (a system/process time) of the vehicle between the doors being fully open and starting to close + @closingTime.

Times mentioned in this extension suggestion are only for rolling stock description.

The following times are not part of the rolling stocks properties and are not meant to be handled here:

- Time used for the departure procedure is not part of any of the times as this is independent of the vehicle (use of flags, lights, GSM-R calls, button on train or on platform operated by either driver, conductor or dispatcher).
- Passenger flow times are defined as part of <TT:ocpTT/stopDescription/stopTimes @minimalTime> being ocp and time (rushhour) dependant. Minimal time available for the passenger exchange would then be = stopTimes @minimalTime - @minimumStopTimeDoors - departure procedure time (not covered by railML so far)

Subject: Re: Suggestion towards new attributes and sub element for <doors>

Posted by on Thu, 14 Jun 2018 08:36:39 GMT

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Dear Torben,

I understand your definition of @minimumStopTimeDoors. But I think that we should use a different term in railML. I think we should avoid "StopTime" in the term because so far, "stopTime" already relates to the difference between arrival and departure (of the same stop).

Please look at the following picture:

I think you want to describe the Door Opening Time (difference between arrival and start of passenger flow) and Door Closing Time (difference between end of passenger flow and start of departure procedure). I think in general, it is not important how much of these times go to door movement, latency, or possibly door sills.

So I would recommend to use @DoorOpeningTime and @DoorClosingTime only, may be with a @minimum... prefix. We should clarify in Wiki that these times shall include any possible latency etc.

With best regards,
Dirk.

Subject: Re: Suggestion towards new attributes and sub element for <doors>
Posted by [Torben Brand](#) on Tue, 03 Jul 2018 10:45:00 GMT

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Dear Dirk and RS community,

I retract my suggestion for @minimumStopTimeDoors. We might model it as a nor: extention if it is needed after all. I ask for all other suggestions to be implemented in railML2.4RS. I think we should not use the element term also in the attribute term, as this is redundant. For example use @openingTime and not @doorOpeningTime under element <doors>.

I thank Dirk for the extensive description for the composition of the regular stop time. We model similar, but not quite the same. This as in Norway the departure procedure starts 20 seconds before the published departure. So that in Norway published departure is equal to actual departure in a situation with no delay. We will come back to this issue at a later stage.

Subject: Re: Suggestion towards new attributes and sub element for <doors>
Posted by [Joerg von Lingen](#) on Fri, 03 Aug 2018 03:28:16 GMT

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see changeset [809] (<https://trac.railml.org/changeset/809/railML>) and ticket #335 (<https://trac.railml.org/ticket/335>)

Dr.-Ing. Jörg von Lingen - Rollingstock scheme coordinator

Torben Brand wrote on 03.07.2018 12:45:

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>

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