

see directly below

Best regards,
Joerg v. Lingen

Rollingstock Coordinator

On 12.05.2017 12:28, Torben Brand wrote:

- > I thank the RS coordinator for quick and thoughtful work. I
- > have these additional comments:
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- > There is sometimes a need to define the mean deceleration
- > differently over different speed bands. For instance 0,6
- > m/s² from 0 to 70 km/h and 0,4 m/s² from 71 to 200 km/h.
- > The amount of bands is not defined. Thus we also need to
- > allow a function table to describe multiple mean
- > deceleration values.

The idea was to use the <decelerationTable> which is a sub-element of <vehicleBrakeOperation>. The type "tCurve" allows a valueTable $y=f(x,z)$ to just include such information.

- >
 - > The suggested element <VehicleBrakeOperation> needs to be
 - > defined both under vehicle and formation.
- Indeed. The idea was to have the same type at both parts. But during the discussion I only implemented one.

- >
- > The brakes deceleration values under <VehicleBrakeOperation>
- > are the drivers normal behaviour under the different train
- > protective systems. The question is if we need to define
- > what braking curve a "normal" driving behaviour corresponds
- > to? For instance at Jernbanedirektoratet we assume the
- > driver drives according to the permitted curve (P) under
- > ETCS and the blink indicator curve in ATC under normal
- > behaviour. When the train is considered delayed the driver
- > drives 100% according to the "normal" curve. If the train is
- > not delayed the train driver drives more relaxed to arrive
- > on time to the next OCP. This is either calculated in the
- > simulation tool or there is a relaxation value in form of a
- > percent performance value of the "normal" deceleration
- > values (for instance 90%).

Again, the suggested <decelerationTable> allows description of a three-dimensional function. Its parent element <vehicleBrakeOperation> shall

appear per each @brakeSupervision value.

- > I suggest to add a further attribute @brakingCurveType under
- > <VehicleBrakeOperation>. Set values are "Indication",
- > "Permitted", "SBI", "EBI" and "other:" (SBI:Service brake
- > intervention, EBI: Emergency brake intervention) Alternatively the braking curve
- > modeled can be under a
- > @description attribute.

In case other deceleration curves are needed it would be better to enhance the tBrakeSupervision type. Otherwise there has to be the full <VehicleBrakeOperation> for each combination of @brakeSupervision and @brakingCurveType.
