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Subject: Re: trainProtectionElement, ETCS and balises  
Posted by [Torben Brand](#) on Sat, 14 Jul 2018 15:28:20 GMT  
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trainProtectionChange@nor:type

There is currently no attribute "type" under trainProtectionChange. There is clearly a need as the dormant development page for train protection systems value list shows (<https://wiki.railml.org/index.php?title=Dev:TrainProtectionSystems>).  
I strongly disagree to use code. As this is used for national internal systems and for our national UID's. Thus we will add a Norwegian extension with the optional attribute @type with string values.

The same value list is used by trainProtectionElement@trainProtectionSystem. We will not use <trainProtectionElement> in Norway as the physical train protection elements are all part of the balises used in ATC or ERTMS. They are already mapped under <balises>. But as we need to map the transition between the different systems at concrete borders we use <trainProtectionChange> to map those borders.

We will use the values: "none", "norD-ATC", "norF-ATC", "ETCS-L2"

I suggest to add this attribute to railML2.4 also. Alternative as an enumeration value from the value list in Dev:TrainProtectionSystems. We ask the infrastructure coordinator to add the value "none" and our national values into the list.