Subject: ISO RailDax RINF mapping
Posted by Torben Brand on Fri, 28 Nov 2025 13:50:45 GMT
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The ISO RailDax projects aims to map towards 4 other standards: RINF, TAF/TAP, NeTEx and UN Locode. This is the forum post for the RINF mapping.

The mapping of selected RINF elements and attributes will be according to "RINF Application guide 3.1.0" [1] page 25 and railML3.3 wiki page IS:opOperation [2]. Relevant elements are for a high-level mapping.

Primary objective is a high-level mapping. The following selected elements a deemed relevant in a primary iteration:
• RINF "station type" and railML3.3 IS:opOperation under operational point.
• Speed profiles and railML3.3 CO:speedProfile
• Linear positioning systems (LPS) and railML3.3 RTM:linearPositioningSystem

The work will be conducted in dedicated ISO RailDax task groups and aligned in the regular joint SCTP/NEST working group meetings. There is no obligation on either party, but the mapping can result in suggestions for extensions or remodelling in either standard.
This forum post serves for transparency and feedback from the raiML community outside the task/working groups.
Preliminary results:

The 9 station types in RINF have been investigated and compared with potentially relevant attributes in railML3.3. Relevant items are the 8 enumeration values for opOperation@operatinalType and the 4 enumerations for opOperation@trafficType.
As operational points are defined with multiple traffic types in RINF (and in reality) we suggest to change the railML3.4 model to allow multiple traffic types in an operationalPoint.

RINF distinguishes the station types by functionality and size. The size aspect was deemed relevant towards number of physical elements (like for instance number of platforms) and not traffic volume.
As the ontology for RINF and TAF/TAP has been merged in TSI Telematics we propose a mapping between the RINF "station type" and TAF/TAP location/operational point/station type named LocationSubsidiaryTypeCode part of a primaryLocation according to "TAF TSI -- ANNEX D.2: APPENDIX F -- TAF TSI DATA AND MESSAGE MODEL" version 3.5.1 (15.12.2024) [3] page 949-952
Most of the (TAF/TAP) LocationSubsidiaryTypeCode enumerations can be mapped to railML3.3 elements. See separate forum post that will follow on this matter.

Details can be found on the ISO RailDax project teams site, upon request here or by contacting project leader Torben Brand.

[1] https://www.era.europa.eu/sites/default/files/2025-03/rinf_application_guide_3.1.0.pdf?t=1759385655
[2] https://wiki3.railml.org/wiki/IS:opOperation
[3] https://www.google.com/url?sa=t&rct=j&q=&esrc=s& amp;

amp;source=web&cd=&ved=2ahUKEwjg596C3NWQAxVSFBAIHRoy
B4sQFnoECAkQAQ&url=https%3A%2F%2Fwww.era.europa.eu%2Fsys
tem%2Ffiles%2F2022-11%2Fera_technical_document_taf_d_2_appen
dix_f.pdf&usg=AOvVaw0iyfK8PDUoKaKvux7-gzlw&opi=89978 449

Subject: Re: ISO RailDax RINF mapping
Posted by Mathias Vanden Auweele on Fri, 28 Nov 2025 16:33:41 GMT
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Hello Torben,

I think railML 3.x already allows to encode multiple traffic types for an operational point. Like so:

```
<operationalPoint id="123">
  [...]
  <opOperations>
    <opOperation operationalType="station" trafficType="passenger"/>
    <opOperation operationalType="station" trafficType="freight"/>
  </opOperations>
</operationalPoint>
```

But you always need to combine it with the operationalType. I don't know why operationalType and trafficType were originally combined, but I'm assuming that you might want to state something like:

```
<operationalPoint id="123">
  [...]
  <opOperations>
    <opOperation operationalType="station" trafficType="passenger"/>
    <opOperation operationalType="depot" trafficType="freight"/>
  </opOperations>
</operationalPoint>
```

So the OP is a station for passenger trains and a depot for freight. But it's not a depot for passenger trains and not a station for freight.
