## Rail in multi-modal context Interoperability – possibilities and limitations

Interoperability map for rail in multimodal land transport

PRIME 11, 16<sup>th</sup> November 2017 Josef Doppelbauer, Executive Director





## Interoperability map for rail in multimodal land transport

IOP	Rail only	Multimodal – Freight	Multimodal - Passenger
Technical/ assets	<ul> <li>&gt; TSIs/CSMs, ERTMS</li> <li>&gt; reduction of NTRs</li> <li>&gt; 4RP SSC and VA</li> <li>&gt; consistency of voluntary standards (e.g. EN, UIC)</li> <li>&gt; harmonized (e g 25t) track axle load, train length</li> </ul>	<ul> <li>&gt; dangerous goods provisions (technical)</li> <li>&gt; Line/vehicle codification for combined traffic</li> <li>&gt; ILU as Interop. Constituent?</li> <li>&gt; EU legal framew. alignment</li> </ul>	<ul> <li>&gt; PRM TSI</li> <li>&gt; EU legal framew. alignment</li> </ul>
Information/ Data	<ul> <li>&gt; TAF TSI</li> <li>&gt; PRM TSI Inventory of Assets</li> <li>&gt; Agency databases/ registers (EVR, ECVVR, ERATV, RINF, OSS) (for operations)</li> <li>&gt; line harmonization in RINF</li> </ul>	<ul> <li>TAF TSI</li> <li>multimodal data exchange</li> <li>reference data</li> <li>line harmonization in RINF</li> <li>RINF/TENtec harmonisation</li> <li>TENtec =&gt; cross-mode</li> <li>Database alignment rail/ road for operations</li> </ul>	<ul> <li>TAP TSI</li> <li>PRM TSI Inventory of Assets</li> <li>Ticketing+cross-acceptance</li> <li>multimodal data exchange</li> <li>reference data</li> <li>RINF/TENtec harmonisation</li> <li>TENtec =&gt; cross-mode</li> </ul>
Operational/ processes	<ul> <li>TSI OPE cross border</li> <li>language, oral standard messages</li> <li>Track axle load, train length</li> </ul>	<ul> <li>&gt; dangerous goods provisions (operational)</li> <li>&gt; Security</li> </ul>	<ul> <li>&gt; language, messages?</li> <li>&gt; Security</li> </ul>



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