Economic Commission for Europe

Inland Transport Committee

Working Party on Intermodal Transport and Logistics

Fifty-fifth session
Geneva, 6–7 November 2012
Item 7 (c) of the provisional agenda

European Agreement on Important International Combined Transport Lines and Related Installations (AGTC): Amendment proposals (minimum infrastructure and performance standards)

Working Party on Rail Transport

Sixty-sixth session
Geneva, 8–9 November 2012
Item 4 (c) of the provisional agenda

European Agreement on Main International Railway Lines (AGC Agreement): Amendment proposals (minimum infrastructure and performance standards)

Review of the technical characteristics of the AGC and AGTC rail networks

Note by the secretariat

I. Mandate

1. Following a review of the technical characteristics of the European Agreement on Main International Railway Lines (AGC) and European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) Agreements at its joint meeting in 2011, based on secretariat document ECE/TRANS/WP.24/2010/2–ECE/TRANS/SC.2/2010/1, the Working Party on Intermodal Transport and Logistics (WP.24) and the Working Party on Rail Transport (SC.2) have invited the European Commission to comment on the validity of the minimum infrastructure standards in the AGC and AGTC Agreements as far as the territory of the European Union is concerned (ECE/TRANS/WP.24/129, paras. 37–41 and ECE/TRANS/SC.2/216, paras. 11–14).

2. The secretariat reproduces below information received from the European Commission for consideration by the Working Parties (paras. 3–6 below).
II. Coherence with European Union (EU) law

3. The annex to the present document contains a comparison of technical specifications of the AGTC and AGC Agreements against European Union (EU) law, in particular the Technical Specifications on Interoperability (TSI) related to the subsystem infrastructure ("TSI Infrastructure").

4. The following main observations can be made:

• The AGC Agreement prescribes 4.2 m for the distance between track centres for a design speed of more than 300 km/h nominal minimum speed, whereas the TSI Infrastructure requires 4.5 m. Since the value of this parameter in the current AGC Agreement is not adapted to the design of new high speed lines it ought to be aligned to that of the TSI.

• The AGC and AGTC Agreements are based partly on outdated references and definitions which need aligning with TSIs and European (EN) standards. For instance, nominal minimum speed, which is the term used in the TSI to define the 300 km threshold indicated above, and design speed, the term used by the AGC Agreement to define the same threshold, are not the same.

5. Besides the above-mentioned technical inconsistencies, it has to be noted that the AGC and AGTC Agreements were elaborated at a time when no common strategic vision existed in the EU. The concept of trans-European networks for rail has since then been developed and needs to be taken into account for any subsequent modification of the AGC and AGTC Agreements.

6. Consequently, EU member States will consider the EU competence in the process of negotiating changes to the said international Agreements.

III. Guidance to the secretariat

7. In accordance with article 16 (AGTC) and article 12 (AGC), any amendment proposed to Annex III (AGTC) and Annex II (AGC) shall be considered by WP.24 (AGTC) and SC.2 (AGC), both serviced by the secretariat.

8. In view of the above and taking account of information received earlier by Contracting Parties and international organizations, the Working Parties may wish to provide guidance to the secretariat whether a revision and update of the technical infrastructure parameters contained in annexes III and II of the AGTC and AGC Agreements respectively should be pursued and concrete amendment proposal prepared for consideration and decision at its next sessions in 2013.

9. In particular, guidance is needed whether the existing technical infrastructure parameters of the AGC and AGTC Agreements should be aligned with the relevant TSI applicable in the EU and/or whether additional parameters should be developed for possible inclusion into the AGC and AGTC Agreements.

10. For some time already, the Joint 1435/1520 Working Group of the European Railway Agency (ERA) and the Organization for Cooperation between Railways (OSJD) seek to integrate the technical specifications of the two systems into one.

11. In this context, it should be recalled that the Working Parties had noted in 2011 that the scope of the TSI, specifically TSI Infrastructure, went well beyond the objective and minimum requirements enshrined in the pan-European AGC and AGTC Agreements. Thus, all TSI parameters may not necessarily need to be considered for inclusion into the AGC and AGTC Agreements, but keeping a limited number of infrastructure parameters...
may be an option (ECE/TRANS/WP.24/129, para. 40 and ECE/TRANS/SC.2/216, para. 12).

12. The AGTC and AGC Agreements specify that its technical infrastructure parameters “... are to be regarded as important objectives to be reached in accordance with national railway developments plans. Any divergence from these values should be regarded as exceptional.” (Annexes III and II respectively). The agreements also stipulate that the AGTC and AGC networks shall conform or will be brought in conformity with these parameters “... in future improvement work to be carried out in conformity with national programmes.” (Article 3 in both agreements).

13. The AGTC Agreement is applicable in 32 UNECE member States of which 19 are members of the EU.

14. The AGC Agreement is applicable in 27 UNECE member States of which 17 are members of the EU.

15. In accordance with the so-called Interoperability Directive 2008/57/EC the application of the TSI is mandatory in EU member States.
## Annex

Comparison of technical rail infrastructure parameters at the pan-European level

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<tbody>
<tr>
<td><strong>Vehicle loading gauge (minimum infrastructure gauge)</strong></td>
<td>UIC B UIC C1 UIC C1 UIC B UIC C1</td>
<td>Gauge GC (new lines) or GB (upgrade renewal)</td>
<td>Gauge GC, GB (new lines) or GB, GA (upgrade, renewal) depending on TSI categories of line</td>
<td>Gauge GC, DE3, GB, GA, G1 depending on type of traffic</td>
<td>Minimum requirement in the TSIs allowing for larger gauges</td>
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<tr>
<td><strong>(Minimum) distance between track centres</strong></td>
<td>4.0 m 4.2 m 4.2 m 4.0 m 4.2 m</td>
<td>&lt;4.0 m (≤230 km/h) 4.0 m (230 –≤250 km/h) 4.2 m (250 –≤300 km/h) 4.5 m (&gt;300 km/h)</td>
<td>Depending on gauge (open point due to aerodynamic effects) &lt;3.5 m (≤160 km/h) 4.0 m (160 –≤250 km/h) 4.2 m (250 –≤300 km/h) 4.5 m (&gt;300 km/h)</td>
<td></td>
<td>Recommended to increase to 4.5 m for ≤300 km/h nominal minimum speed</td>
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<tr>
<td><strong>Nominal minimum speed</strong></td>
<td>160 km/h 300 km/h 250 km/h 120 km/h 120 km/h</td>
<td>≥ 250 km/h (new lines)</td>
<td>100–200 km/h depending on TSI category of line 80–350 km/h depending on type of traffic</td>
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<td>Minimum requirement in the TSIs allowing for higher speeds</td>
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<tr>
<td></td>
<td>New lines</td>
<td>New combined transport lines</td>
<td>2008/217/EC HS INF TSI</td>
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<td></td>
<td>Existing lines</td>
<td>Passenger and goods traffic lines only</td>
<td>2011/275/EC CR INF TSI</td>
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<tr>
<td>Authorised mass per axle</td>
<td>Values given for some types of vehicles at specific speeds</td>
<td>EN line category at maximum associated speed (km/h) for types of vehicles depending on TSI categories of line (Annex E)</td>
<td>EN line category at maximum associated speed (km/h) for types of vehicles depending on types of traffic (Annex E)</td>
<td>Consistent requirements</td>
<td>Recommended to align with EN line categories as defined in EN 15528</td>
</tr>
<tr>
<td>Test train (bridge design)</td>
<td>UIC 71</td>
<td>UIC 71</td>
<td>LM71</td>
<td>LM71</td>
<td>Consistent requirements</td>
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<tr>
<td>Maximum (rising and falling) gradient</td>
<td>_</td>
<td>35 mm/m with 12.5 mm/m</td>
<td>35 mm/m (passenger traffic) 12.5 mm/m (freight traffic)</td>
<td>Consistent requirements</td>
<td></td>
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<tr>
<td>Minimum platform length in principal stations</td>
<td>400 m</td>
<td>400 m</td>
<td>Depending on business case</td>
<td>Depending on business case</td>
<td>Consistent requirements</td>
</tr>
<tr>
<td>Minimum useful siding length</td>
<td>750 m</td>
<td>750 m</td>
<td>750 m (train length)</td>
<td>750 m, 600 m, 500 m, 400 m, 300 m and 250 m depending on TSI category of line</td>
<td>Minimum requirement in the TSI allowing for longer train length</td>
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