

UNECE Regulation 13 (braking)

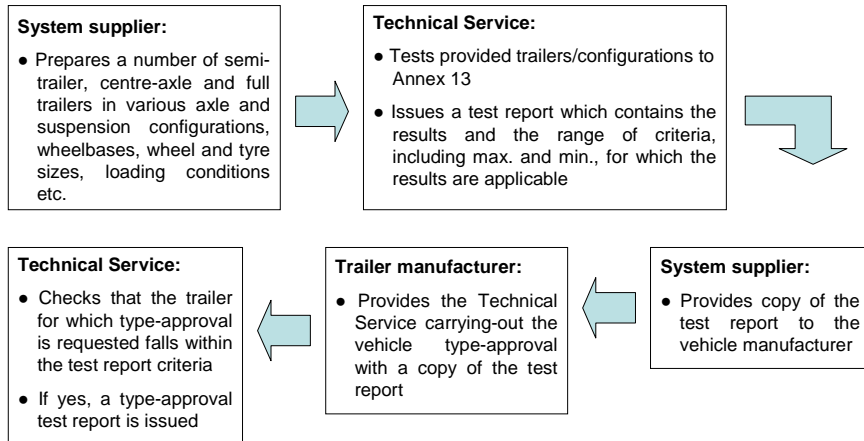
Proposed amendment to extend Annex 19 and Annex 20 to cover motor vehicles, especially a vehicle stability function

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- Currently Annex 19 (performance testing of braking components) and Annex 20 (alternative procedure for the type approval of trailers) provide an alternative method for the type-approval of a trailer braking system.
- Rather than testing an individual trailer with regard to its braking system, a braking system test report may be used to show that the trailer, for which type-approval is requested, meets the requirements.
- The testing and issuing of component/system test reports is carried-out by a Technical Service at the request of the component/system manufacturer.
- The component/system test reports are submitted by the vehicle manufacturer at the time of trailer type-approval to the Technical Service carrying-out the type-approval and may be rejected if considered not to be appropriate for the trailer under consideration.

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ABS example (introduction of a new anti-lock braking system for semi-trailers, centre-axle trailers and full trailers)



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- Type-approval of a braking system to UN ECE Regulation 13 can only be obtained by the vehicle manufacturer, and the use of Annex 19 and Annex 20 does not change this.
- The use of Annex 19 and Annex 20 only provides the trailer manufacturer with an alternative method, which may or may not be utilised.
- If the component/system test reports are not considered appropriate for the trailer, for which type-approval is being requested, the Technical Service carrying-out the type-approval can reject them.

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- Earlier documentation with regard to expanding the use of Annex 19 and Annex 20, as an alternative procedure, for the type approval of motor vehicles especially with regard to a vehicle stability function.
 - GRRF 64th Session (September 2008)
 - ECE/TRANS/GRRF/64/11 - proposed draft amendment for consideration of the principle
 - GRRF 65th Session (February 2009)
 - ECE/TRANS/GRRF/2009/15 – 64/11 as working document
 - ECE/TRANS/GRRF/65/05 – background information
 - GRRF 66th Session (September 2009)
 - ECE/TRANS/GRRF/66/21 – amendment to working document 2009/15

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- Utilising the methodology of Annex 19, a vehicle stability function would be tested and evaluated in terms of a “vehicle framework” (reference ECE/TRANS/GRRF/66/21) covering:
 - Vehicle type, axle configuration, steering axles, lift axles, suspension type (pneumatic, mechanical, mixture), wheelbase, track, wheel type (single, twin), wheel size, tyre size, gearbox type (manual, automated manual, semi-automatic, automatic), engine management system
 - Braking system (pneumatic/electrical/electronic components and layout), anti-lock braking system configuration, foundation brake type
 - Vehicle stability function components – sensors (function, limitations, part no. identification), controllers (hardware, software, part no. identification), modulators (function, part no. identification)

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Only if the vehicle, for which type-approval was requested, fitted within the “vehicle framework” as defined in the vehicle stability function test report could the test report be used in the vehicle type-approval process.

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