

Proposal for draft amendments to Regulation No. 13:

Background Information on working document ECE/TRANS/WP.29/GRRF/2009/15

(Extension to the scope of ECE Regulation 13 Annexes 19 and 20 to include as an option motor vehicle stability control systems (EVSC))

- The 11 Series of Amendments to ECE Regulation 13, which entered into force 11th July 2008, requires a "Vehicle Stability Function" (EVSC) to be fitted to specified M, N and O category vehicles according to a phased time scale.
- The "Vehicle Stability Function" requirements are given in Annex 21, which specifies for vehicle type-approval a:
 - dynamic manoeuvre demonstration on one vehicle with and without the Vehicle Stability Function enabledalso,
 - as an alternative to carrying-out dynamic manoeuvres for other vehicles and other load conditions, fitted with the same vehicle stability system, the results from actual vehicle tests or computer simulations may be submitted.
- Today for O vehicle category (trailers), Annex 19 allows a Technical Service to produce a test report on the performance of trailer braking system components, e.g. ABS, and for these test reports to be used in the type-approval of the vehicle via Annex 20. Using this process, the Technical Services have been producing ABS test reports for over 10 years without any problems.
- Under the 11 Series of Amendments, the Vehicle Stability Function has been added to Annex 19 and Annex 20 as a function to be evaluated. This extension was considered necessary as it was impossible for the trailer manufacturer to carry out a check of the roll-over function at the time of type approval.
- The use of Annexes 19 and 20 is not mandatory – it is an option. It provides an alternative to a carrying-out vehicle braking test at the time of vehicle type-approval, which is particularly advantageous to low volume vehicle manufactures as it removes repetitive and time consuming tests particularly in the case of electronic control systems (ABS).
- The work required for an Annex 19 component test report is organised by the component supplier and the resulting Technical Service test report is provided as a free-of-charge service to the vehicle manufacturer.
- ECE/TRANS/WP.29/GRRF/2009/15 proposes to extend the scope of Annexes 19 and 20 to cover motor vehicles, in addition to trailers, specifically with regard to verification of the

Vehicle Stability Function for the purpose of waiving the test at the time of vehicle type-approval.

- At this stage, ECE/TRANS/WP.29/GRRF/2009/15 is only to establish the acceptance, or otherwise, of this approach. If this proposal is considered to have merit, the technical content of the proposal would be developed further by interested parties and a working document submitted for consideration at a future GRRF. The technical content shown in the proposal ECE/TRANS/WP.29/GRRF/2009/15 is only a “starting point” for any subsequent discussions.
- Only the vehicle manufacturer is able to obtain a vehicle type-approval, and the application of Annexes 19 or 20 can not and will not change this. The motor vehicle manufacturer would be free to use or disregard any Vehicle Stability Function test reports in the vehicle type-approval process.
- The Technical Service test report would provide the motor vehicle manufacturers with an alternative to either conducting a demonstration on all new vehicle types or using an approved simulator, as is the case with trailers.
- The test report would be for a specific, clearly identifiable, Vehicle Stability Function within a brake control system. The range of vehicle types and vehicle configurations included within the issued test report will have been verified by the Technical Service in accordance with the specified Annex 19 criteria.
- As with the validation of the simulator, the tests conducted in generating the results for the test report would be much more comprehensive than the vehicle type-approval “demonstration” as required by Annex 21. Therefore, the test report will provide a much more in-depth analysis of the Vehicle Stability Function than that obtainable from a single demonstration.
- While the cost of the actual demonstration is not especially high, there are very significant vehicle costs incurred due the amount of safety equipment (roll-cage, outriggers, anti-jack-knifing device) needed to ensure driver and test engineer safety. This is especially so in the case of a bus if it is fitted with outriggers as the necessary structural modifications make it un-saleable. This cost is the same irrespective of the size of the manufacturer and while in Western Europe/European Union Member States there are 7 major truck and bus manufactures for which the demonstration costs are relatively small, there are over 25 smaller manufacturers of M₂, M₃, N₂ & N₃ trucks and buses for which the demonstration costs could be very significant burden.
