Recreation Vehicle Electric Brakes under UN R13

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The Recreation Vehicle Industry Association (RVIA) is the national trade association representing 400 recreation vehicle (RV) manufacturers and their component parts suppliers who together build more than 98 percent of all RVs produced in North America.
North America is the largest market for recreational vehicles in the world. Wholesale shipments in 2015 totaled 374,246. There are approximately 10 million units in operation.
North America produces the most RVs (almost twice as many units as the rest of the world combined on an annual basis). Industry reports in 2013 show that North America accounted for 63.8% of world production, followed by Europe for 27.4%.
Two main types of recreation vehicles ("RV"): **Motorized** (also known as "motorhomes" or "motor caravans") and **Towable** (also known as "travel trailers" or "caravans")
We are not addressing commercial trailers as shown here...
...here...
…or here.
Example of electric brake used on RVs:
CSA CAN3-D313 – Trailer Running Gear

- The North America recreation vehicle industry adheres to Standard CAN3-D313 (Trailer Running Gear) with regard to trailer braking performance.
- No reported safety issues with D313 – compliant systems
UN R13 and Annex 14

5.2.2.2. Trailers of category $O_2$ shall be equipped with a service braking system either of the continuous or semi-continuous or of the inertia (overrun) type. The latter type shall be permitted only for centre axle trailers. However, electrical braking systems conforming to the requirements of Annex 14 to this Regulation shall be permitted.
RV Electric Braking Dilemma

• UN R13 is the global type approval standard for trailer braking
• CP’s applying UN R13 require approval certification
• Paragraph 5.2.2.2. has been interpreted as restricting electric braking to O₂ trailers
• As a result RVIA has been unable to obtain Technical Service support to test O₃ trailers equipped with electric braking for R13 compliance
• Result is a *de facto* design restriction regardless of vehicle performance
• CAN 3D313 provides a basis for objective performance testing of trailers equipped with electric brakes in North America
• North American accident data do not indicate a safety issue with recreational vehicle braking
Questions

• Is it correct that an $O_3$ recreational trailer cannot be approved under UN R13?

• If not, can GRRF clarify R13?

• If so, would GRRF agree to establish a group to address the type approval of category $O_3$ recreational trailers equipped with electric brake systems?
Thank you for this opportunity.

RVIA stands ready to support GRRF, including vehicle testing to resolve this concern.
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