Evaluation of air bag pressure sensors/gauges as load weighing devices for use on timber haulage trucks

PROJECT TEAM
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OBJECTIVES
The objective of the project is to test the cost-effectiveness and accuracy of using load-weighing devices fitted to the truck air suspension system.

ACTIVITIES PLANNED
Trucks vary in configuration, and load sensors can be placed at different locations. The most common truck configurations are 5-axle (42 t g.v.w) and 6-axle (44 t g.v.w). All trucks and trailers are now air suspension as opposed to spring leaf suspension, which provides a higher design gross vehicle weight (d.g.v.w).

Weighing devices available on the market will be investigated, following which sensors will be purchased or leased. The devices will be fitted to haulage vehicles. A sawmill with a fully tested and calibrated weighbridge will be chosen, whereby the weight of the truck will be recorded in the forest when it is loaded and when it arrives and departs the sawmill (to determine payload weight). All tests will follow normal daily operations. Monitoring of truck movements will be observed over a four week period.