

PFSS: STEERING A SAFER COURSE

Introducing the Path Following Steering System (PFSS), a solution designed to improve the safety and manoeuvrability of longer semi-trailers on UK roads.

Researched and developed by the Cambridge Vehicle Dynamics Consortium, the PFSS allows trailers to accurately follow the path of the tractor unit pulling them and reduce potentially hazardous situations such as tail-swing and cut-in. As well as the substantial safety benefits the system brings, it offers hugely

increased manoeuvrability in confined spaces, allowing trailers to be accurately steered in both forward and reverse gears.

This means that operators can overcome the challenges associated with accessibility of locations that are currently not truck and trailer combination friendly.

“What we have developed is an engineering solution that virtually eliminates excursions of the trailer from the path of the tractor unit, making these vehicles both safer and, operationally, much more efficient and effective.”

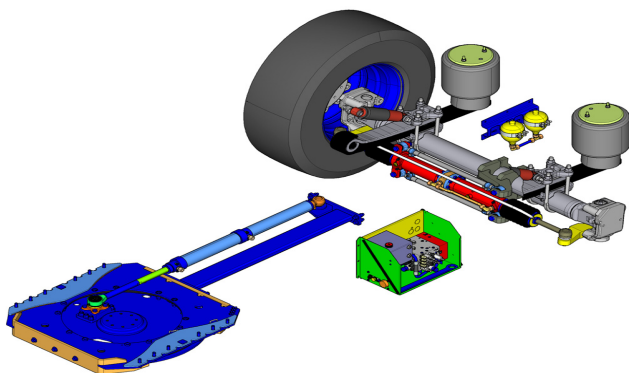
David Cebon,
professor of
mechanical
engineering at
Cambridge
University and
director of CVDC

Why use longer semi-trailers?

- Reduced road congestion
- Improved fuel economy
- Lower CO2 emissions

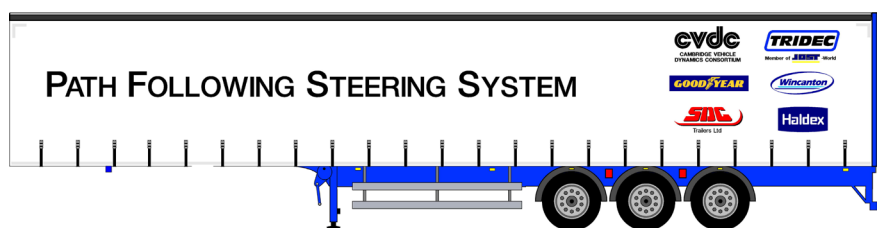
What will PFSS add?

- Improved road safety
- Reduced tyre and road wear
- Increased manoeuvrability and accessibility



A highly advanced system that incorporates light-weight electro hydraulic actuators that control the steering of each axle.

A computer reads signals from sensors on the vehicle and controls the actuators so that the trailer precisely follows the path of the towing point (fifth wheel) on the tractor unit.



About CVDC

The Cambridge Vehicles Dynamic Consortium is a collaboration between heavy truck industry companies including Goodyear, Haldex, SDC Trailers, TRIDEC, Wincanton and engineers from Cambridge University who have joined forces to develop solutions which maximise safety, minimise road damage and improve productivity and fuel consumption.

When will it be available?

Following the development of a commercial prototype, it will be deployed into live testing later this year with CVDC member Wincanton using it on its fleet of longer semi-trailers.

Find out more

For more information, please email: pfss@cvdc.org or visit www.cvdc.org

