

# **FALCON III: DEFINING A PERFORMANCE-BASED STANDARDS FRAMEWORK FOR HIGH CAPACITY VEHICLES IN EUROPE**

**CC DE SAXE<sup>1</sup>, K KURAL, S KHARRAZI, F SCHMIDT, C VAN GEEM,  
R BERMAN, J WOODROOFFE and D CEBON**

<sup>1</sup> CSIR Built Environment, 627 Meiring Naudé Road, Pretoria, 0081  
Wits University, School of Mech. Eng., 1 Jan Smuts Ave., Johannesburg 2000  
Tel: 012 841 4013; Email: [cgsaxe@csir.co.za](mailto:cdsaxe@csir.co.za)

## **ABSTRACT**

The FALCON project (“Freight and Logistics in a Multimodal Context”) is a collaborative effort funded by the Conference of European Directors of Roads (CEDR), and has set out to address ambitious carbon emission reduction targets set by the European Commission. A primary goal of the project is to define a potential Performance-Based Standards (PBS) framework for cross-border road freight transport in Europe. First, a representative fleet of heavy vehicle combinations carrying modular loading units was formulated in collaboration with industry. The fleet was then simulated against a wide range of potential performance standards sourced from various countries. These findings together with expert opinion were then used to draft recommendations for a PBS framework for Europe.