

Commercial Vehicle Working Group

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Cars and light vans
amount to 27 million.

The Scale of the Problem

The UK parc of heavy
commercial vehicles
(i.e. operating mass >
3.5t) is 450 000.

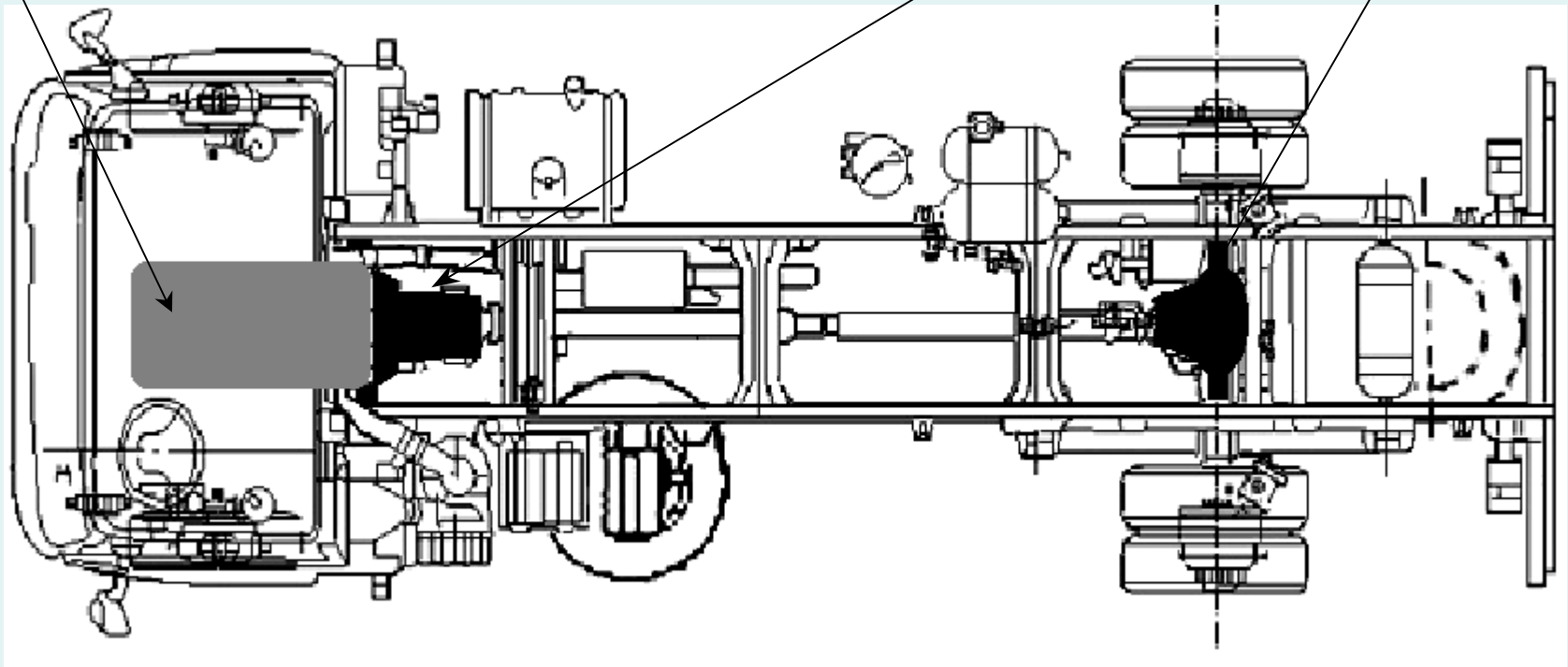


Commercial Vehicle Power Train

Diesel Engine

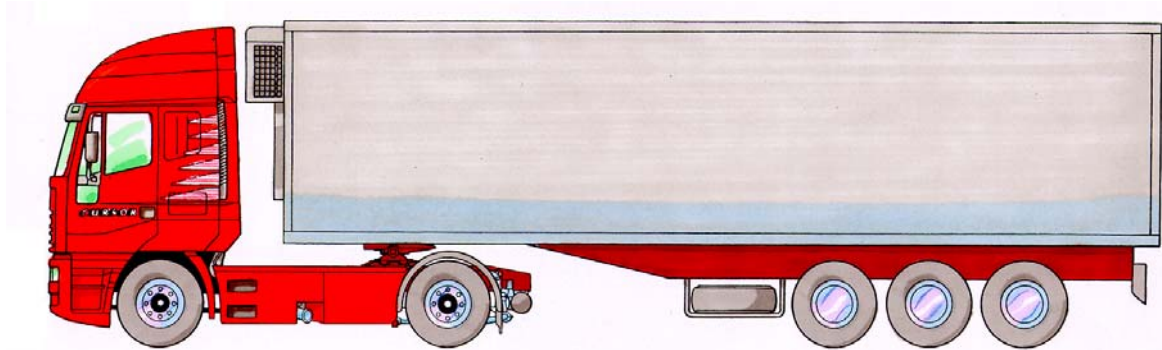
Mechanical Transmission

Driven Rear Axle



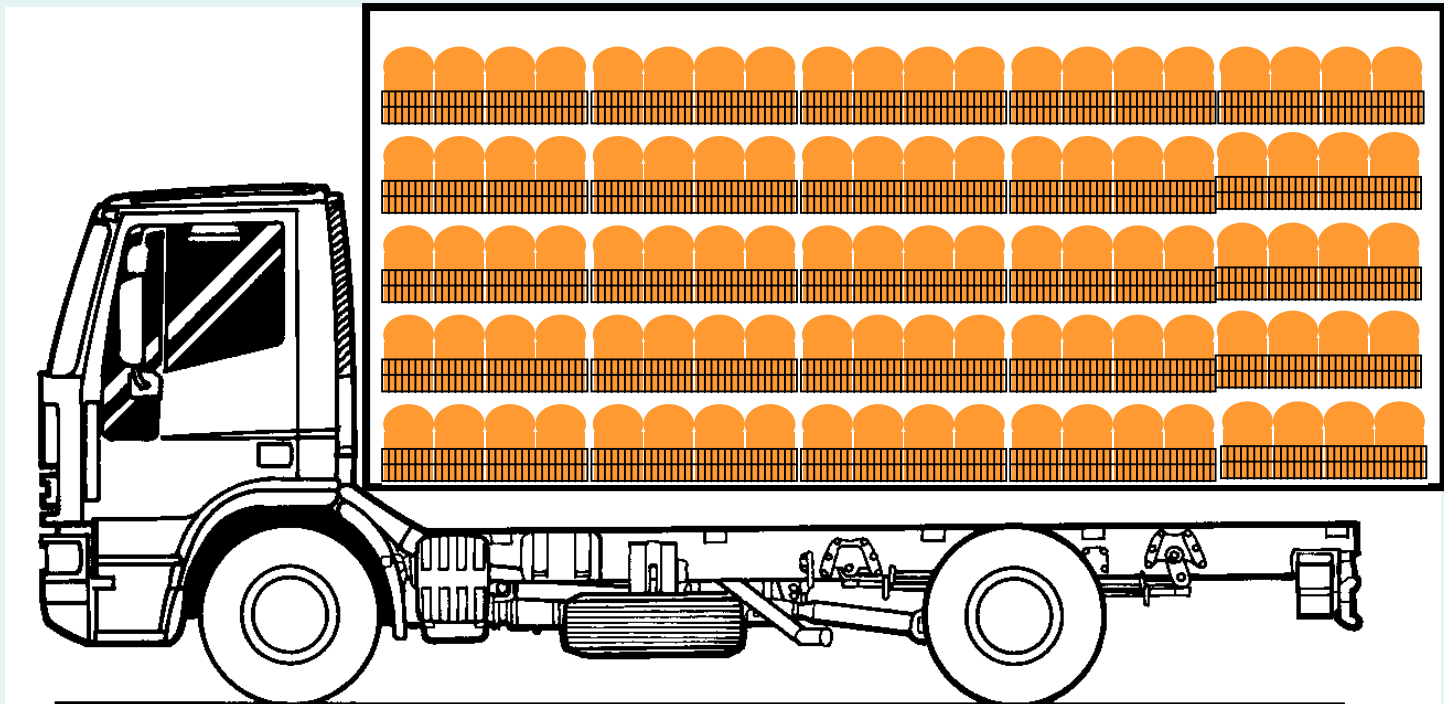
Fuel Consumption

- 40 t operating mass.
- Payload = 29 t.
- Fuel consumption = 10 mile/gall.



Commercial Vehicles

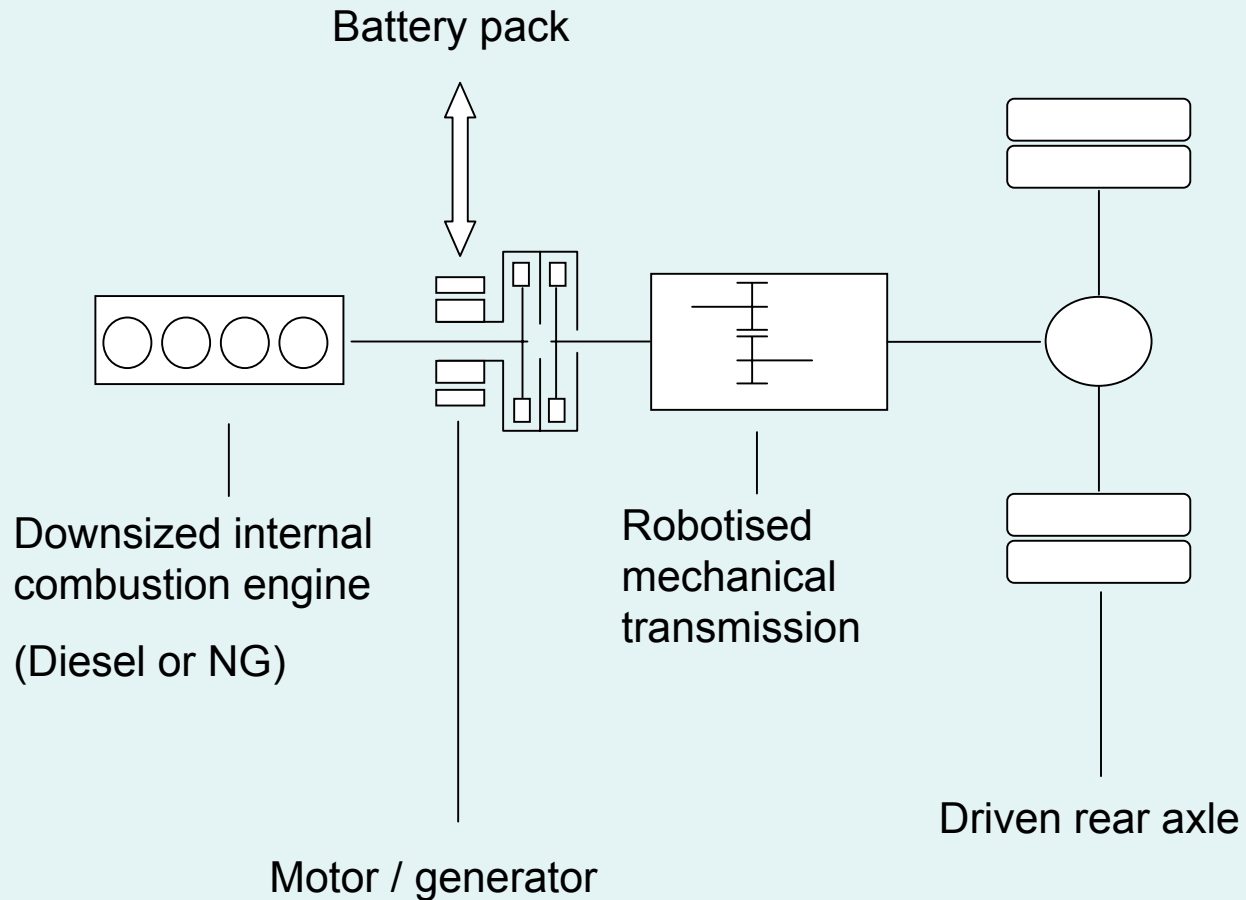
- Objective is to transport payload.
- Fuel cost is an important overhead - to be kept as low as possible



Alternative Power Trains

- Substitution of power unit (i.e. alternatively fuelled)
- Introduction of IC engine hybrid-electric
- Generally, alternatives to the basic commercial vehicle powertrain have negative implications on payload

Mild Hybrid Concept



2004 Objectives

- Develop a strategy for determination of CO₂ emissions for commercial vehicles to reflect payload issues.
- Develop a rationale to permit CO₂ emission ranking of alternative power train technologies.
- Provide advice to Government on fiscal strategies to promote technologies giving real and useful CO₂ emission benefits.