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B-triples have been operating in most parts of Australia for some time. However, industry take-up has been hindered by inconsistent state and territory policies on how these vehicles should look (specifications), where they can operate and other conditions.

At the direction of the Council of Australian Governments, the NTC has developed a nationally consistent framework for modular B-triple operations, in consultation with government, industry and community stakeholders.

Following approval from transport ministers in May 2012, the modular B-triple vehicle specification is now the nationally agreed standard for B-triples across Australia.

What are modular B-triples?

Comprising a prime mover and three semi-trailers, Modular B-triples are an extension of the common B-double combinations. In terms of mass and dimensions, modular B-triples are comparable with Type 1 road trains (i.e. double road trains, or A-doubles).

Modular B-triples have 12 axles and are a maximum of 35 metres in length. They are allowed to operate at General Mass Limits (with a Gross Vehicle Mass of 82.5 tonnes) and at Concessional Mass Limits (with a Gross Vehicle Mass of 84.5 tonnes).

Modular B-triples are called as such because they can easily be broken down into other configurations, such as a B-double, as they are assembled from standard B-double equipment.

Above: Modular B-triples are an extension of B-double combinations, with an additional trailer.

Where do they operate?

Consistent with the approach currently used for B-double and road train operations, modular B-triples now have access to the current Type 1 road train network across Australia by applying for a "Class 2 Modular B-triple Authorisation Notice" from the relevant state or territory road authority.

This network is commonly used by double road trains, or A-doubles. The NTC has found that modular B-triples have a superior safety performance and create less wear on the roads than these vehicles. The analysis also found that they do not cause any more strain to bridge infrastructure than the A-double vehicles.
Figure 1: Australian Double Road Train Routes (Type 1 road train network) in 2011

Modular B-triples: the benefits

Productivity

Australia’s freight task will triple over the next twenty years – from 503 billion tonne kilometres in 2008 to 1,540 billion tonne kilometres in 2050.¹

Improved productivity is the key to reducing the effect of the growing freight task on road safety, the environment and the amenity of our communities.

The wider uptake of modular B-triples can boost the productivity of Australia’s transport industry, as these vehicles are able to safely carry more freight, reducing the amount of freight vehicle movements.

Did you know?

By 2030, an estimated $1.1 billion (Net Present Value) in savings is expected to be made by operating modular B-triples in Australia. This figure comes from both reduced vehicle numbers and kilometres travelled.

Safety

Modular B-triples have a superior safety performance in comparison with the double road train, which also operates on the Type 1 road train network. The modular B-triple vehicle specification meets 16 stringent safety standards and four infrastructure standards to ensure the vehicle can stop, turn and travel safely.

Did you know?

With modular B-triples running on the existing Type 1 road train network, the NTC estimates up to 25 lives could be saved by 2030.

Environment

As the demand for road freight grows, congestion, air and noise pollution grow as well. This not only impacts upon the health of the environment but also the quality of life of our towns and cities. The introduction of modular B-triples is one way to manage the growth in road freight sustainably. These vehicles mean fewer trucks are required to complete the nation’s freight task, resulting in fewer emissions.

Did you know?

The NTC estimates that by 2030, Australia could save 1.1 million tonnes of CO2 emissions by running modular B-triples on the Type 1 road train network.

For further information, please contact:

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Note: The NTC is an independent statutory body charged with improving the productivity, safety and environmental performance of Australia's road, rail and intermodal transport system.