



Pictures: Rio Tinto

THINK BIG: A Rio Tinto train on its way from an iron ore mine in the Pilbara area of Australia to the port of Dampier

Australia's iron railway

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Did you know there is an 800-mile long private rail network in Australia devoted to the transport of iron ore to the coast?

I certainly didn't until I read about it in a six-page article in the *Rio Tinto Review* which I receive as a shareholder.

The railway began in 1966 as a single-track line, hauling iron ore from Mount Tom Price mine in the Pilbara region of north-west Australia to the port of Dampier.

Today it has 90 locos and 7,000 iron ore wagons – with a lot more to come – and it also serves the port of Cape Lambert.

In 2002 it hauled 98million tonnes of ore. By 2012, with several new mines in addition to the 11 currently operating, it is hoped to transport 320million tonnes.

Today one iron ore train, 1.5 miles long, requires just two towing locos, plus a rear end shove from several "bankers" to get the train over the initial Hamersley Ranges.

After that it is mostly a downhill run to the coast. The fleet of trains has swelled from 14 to 30 and is now heading towards 50.

There is a fast and smart system in place to re-schedule trains on the run when things go wrong, the prime driver of the schedules

being to get the required blend of ore to the right stockpile ready to be loaded on the right ship that's coming over the horizon. The operational nerve centre is like an airport control tower.

There are few signals. Trains are mostly controlled by transponders and track circuits that keep watch and transmit required data to drivers.

The feasibility of auto-drive trains is now being explored in main-line trials, partly due to skilled staff recruitment difficulties and improved technology.

The railway tries to be as green as possible, laying fresh rail in a way to minimise its impact on the landscape and the region's natural flows of water, fauna and flora.

Strict measures are imposed to prevent bushfires and to check the spread of invasive weeds along the rail corridor.

The article in *Rio Tinto Review* was written by Julian Cribb, Adjunct Professor of Science Communication at the University of Technology, Sydney.

Railwatch co-editor Ray King writes: The iron ore industry employs 9,000 people in the Pilbara area and there is increasing demand for iron ore from both China and Japan.

Currently four heavy duty railways are associated with the various



LOADED: A Rio Tinto train at the Mount Tom Price mine

iron ore mines. Australian newspapers report that another new line is being built in Pilbara by Fortescue Metals which also wants to open up other private operators' lines for third-party freight trains.

Fortescue wants access to the Rio Tinto line to allow the development of its Mindy Mindy iron ore deposit.

But it says other stranded iron ore deposits, owned by small mining explorers, could become viable if access to existing infrastructure was allowed.

Fortescue has lodged an application with the National Competition Council, seeking to gain access to Rio Tinto's Robe River railway, which runs from Rio's Mesa J (Deepdale) mine site to the port at Cape Lambert. In early February

Rio Tinto took delivery of the first 10 of a batch of 40 new locomotives which will both expand the existing fleet and allow some 30-year-old locos to be retired.

The company also plans to buy 1,200 new wagons in 2008.

Rio Tinto's rail chief Richard Cohen said: "By the end of 2008 our fleet will have expanded from 86 to well over a hundred locomotives, with significant positive flow-on effects arising from a more modern fleet."

"Along with innovations such as Automatic Train Operation and the Remote Operations Centre, the new locomotives demonstrate how our rail system, which is one of the largest privately owned heavy haulage networks in the world, is at the cutting edge of technological advancement."