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Advanced Train Management System (ATMS) Increased rail capacity, operational flexibility and improved safety

NJMS



# **Advanced Train Management System (ATMS)**

# Australia's Smart Rail Solution

Every day, Australia's rail freight system moves more than one hundred million dollars worth of natural resource exports.

Industry estimates demand requirements for moving freight in Australia will at least double over the next ten years.

To satisfy this growth, Australian train network managers face new costs as high as \$50 billion to build additional track and support signalling equipment.

The smart solution to reducing this investment burden is ATMS, a new train management technology that will secure more capacity out of existing track.

Lockheed Martin and the Australian Rail Track Corporation (ARTC) have partnered to develop and deploy a seamless train control system that improves Australia's international competitiveness.

ATMS is a seamless in-cab signalling system that will affordably and safely increase rail capacity.

#### **Efficient**

Advanced in-locomotive technology provides real-time precise location of trains, allowing ARTC to double -- or even triple -- the amount of freight traffic that can travel on the existing rail network.

#### **Affordable**

ATMS lowers operational and maintenance costs by eliminating trackside signalling and greatly reducing complex trackside infrastructure. Control centres monitor and manage all traffic on the ARTC interstate network, decreasing transit times and saving fuel for rail operators.

### Safe

Safety is increased though continuous monitoring of train movements, wayside devices and the communications network. Train crews are advised of speed restrictions, warned when approaching speed limit maximums and are made aware of track work locations. The ATMS system enforces movement and speed authorities, resulting in safer operations across the interstate network.



## **ATMS Features:**

- Advanced digital communications technology using the Telstra 4G network
- Remote monitoring and control of trains and control points
- On-train location system accurate to three metres
- Wayside signals rationalised
- Meets Australian regulatory requirements
- Train integrity, fuel management, health monitoring
- Portable configuration for deployment flexibility
- Control centres maintain real-time network situational awareness

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http://www.lockheedmartin.com/us/products/advanced-train-management-system.html

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