

Case Study

Western Sydney International Airport Terminal

Ampac protects the Western Sydney International Airport Terminal.

Western Sydney International Airport (WSI) is one of Australia's largest and most complex infrastructure projects, designed to serve as a critical gateway for international and domestic travel.

Location:	Sydney, NSW, Australia
Sector:	Airport
Solution:	FireFinder Plus , EvacuElite connected to Bosch Praesensa , ASD Wagner (Aspirating Smoke Detection System) & SmartView
Completed:	2025

The Project - WSI Terminal

As part of the WSI's stringent life safety requirements, Ampac was selected to deliver an advanced, integrated fire detection and emergency warning solution capable of covering large-scale, high-traffic public spaces while meeting the rigorous performance and compliance demands of an international airport.

The core of the WSI terminal's system is the Ampac **FireFinder Plus**, a high-speed, fully networked fire detection platform designed for reliability in mission-critical environments. Detection is supported by the **ASD Wagner System**, providing highly sensitive aspirating smoke detection for early warning in key operational areas.

The **EvacuElite** (EWIS) is deployed as a 7-node network, delivering clear, coordinated evacuation messaging and emergency communications across multiple terminal zones. The EvacuElite is fitted with our new Public Address and Interface Card (PAIC), a unique interface that integrates EvacuElite with the Bosch Praesensa public address and voice alarm system, ensuring high-quality audio coverage and seamless emergency announcements across all public and operational areas.

In addition, the FireFinder Plus network is integrated with Ampac's **SmartView Graphics System** via a secure cloud-based server, enabling remote, centralised monitoring of every fire panel on-site in real time. This provides operators with an intuitive, graphical interface for rapid incident location and system diagnostics, improving response speed and coordination.

Ampac was also selected to protect the other buildings that comprise the Western Sydney International Airport. Stay tuned for more information about the entire project in our upcoming case studies.

Ampac's support

Ampac's technical support team provided end-to-end assistance throughout the project - from design collaboration and integration planning to on-site commissioning support and training - ensuring the system was delivered on time and fully compliant with specifications.

Customer testimony

"The level of technical support we received from Ampac was outstanding. The team were responsive, knowledgeable, and genuinely committed to the success of the project. Their support made a significant difference in keeping the project on track."

Wayne Martin, Innovative Fire Services



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A unique solution

Bosch Praesensa & Ampac EvacUElite & FireFinder PLUS panel

Western Sydney International Airport's fire detection and evacuation system is Ampac's FireFinder PLUS and EvacUElite panel connected to Bosch's PRAESENSA public address and voice evacuation system, a certified solution to AS 4428.16:2020, Australia's fire safety standard for Emergency Warning Control and Indicating Equipment (EWCIE) .



Approved to AS 4428.16:2020 Grade 1,
AS 4428.4:2016, and AS 7240.4:2018

Why Bosch & Ampac?

- Proven performance in large-scale, critical infrastructure projects.
- Local compliance, global expertise.
- Seamless integration between Ampac's EvacUElite & Bosch's PRAESENSA.
- ActivFire-certified (certificate AFP3852).

Unique Aspects

- First major airport infrastructure project of its kind since Sydney Airport was built.
- Full greenfield site requiring coordination between multiple stakeholders from day one.
- Mandate for certified life safety compliance to the latest Australian standards (AS 4428.16).

Technical Highlights

- Certified AS 4428.16:2020 integrated solution ensuring full compliance with Australian life safety regulations.
- Decentralised system topology for maximum reliability and flexibility.
- Built-in redundancy across PRAESENSA amplifiers, System controllers, Call Stations, and network layers to eliminate single points of failure.
- Smart zoning and priority routing to ensure critical messages reach the right areas instantly.
- Integration-ready architecture; PRAESENSA connects directly with fire panels, BMS, and Flight Information Systems (FIS).
- Scalable design supports future terminal expansion.