

Make Your Strategy Strong



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About ZAP

ZAP delivers tailored business solutions that streamline operations, automate workflows and improve visibility across field service, asset-intensive and operational industries.

From workforce mobility to enterprise process automation, ZAP helps organisations modernise operations and improve business performance.

Document Review Management Solution

Transforming Design Documentation Review for
Engineering Projects

Ventia Australia has been awarded the O&M Services, as a part of Spark consortium to deliver the Primary Package of the North East Link Project (NELP) motorway in Melbourne Victoria in 2021.

During the Design and Construction (D&C) phase, the Operations and Maintenance (O&M) Services team is actively involved in reviewing design documentation to ensure the asset can be operated, maintained, inspected, and renewed safely and efficiently over the 25-year operating period. The review encompasses 302 design packages and provides O&M input on maintainability, operational access, safety, reliability, lifecycle performance, handover requirements, and compliance with project standards.

Business Challenges

The Design Review team presented several operational and administrative challenges. Each design package progresses through a staged review process, beginning with Concept Design and continuing through Preliminary Design, Draft Certified Design, Certified Design, and Issued for Construction. At each stage, the O&M Services team reviews the design, records comments, identifies operational or maintenance risks, and works with the design and construction teams to close out issues before the package advances to the next stage. This presented the following challenges

- Managing Design Packages through their lifecycles
- Manage each stage within its lifecycle from receipt to review and submission to the D&C team
- Record, track and manage the External Design Review (EDR) and Internal Design Review (IDR) through each Package Stages and related response, actions and resolutions.
- Track the Design Comments beyond the D&C Phase for the O&M purposes.
- Double handling of information across O&M Services design teams
- Contract KPIs are calculated on monthly basis
- Document Management across the Packages and Stages

Why DRMS?

DRMS was purpose-built to address the unique operational requirements of Design Review process in the Engineering and construction businesses, delivering:

- Increased operational efficiency
- Reduced administrative overhead
- Better workforce productivity
- Scalable digital transformation capability





Technology Benefits

Centralized Platform

A single integrated solution replacing fragmented manual processes.

Real-Time Field Connectivity

Live communication and Services update between design teams.

Scalable Architecture

Designed to support growing operational demand and teams' expansion.

Improved Decision Making

Accurate operational and administrative data available in real time.



The Solution — DRMS

To support effective the Design Review management and operational excellence, ZAP designed, developed and implemented DRMS, an integrated web platform tailored specifically for the O&M Services, the system were in use from November 2022 till December 2024



Key Deliverables

End-to-End Process Automation

- Established the Solution processes to address the Contract and business needs and requirements
- Automated Design Review For each Package
- Automated Design Review For each Stage
- Automated the management of the Design Comments through the Design activities within D&C Phase
- Established a framework to track and access the Design Comments in the O&M Phase
- Reduced manual administration and duplicate data entry

Workforce Enablement

- Real-time communication between the O&M Design Review Teams
- Reduced unnecessary travel and paperwork to report on the delivered Services
- Provide a collaborative secured platform

Business Outcomes & Achievements

Operational Improvements

- Successfully managed over 300 Packages and their related over 3,800 stages
- Successfully managed over 70,000 design documents
- Successfully managed over 600 ERD and over 1,500 IRD
- Successfully managed over 350 Review Cycle for over 80 Management Plan and Project Documents
- Significant reduction in manual processing and administration
- Improved visibility and transparency across the O&M Service Design teams

Increased Productivity

- Accurately record, track and report on Design Review activities
- Reduced teams time to prepare the related reports
- Streamlined the Document Management
- Enhanced team efficiency