

assetDNA CASE STUDY

Transactional Data Management System

ROYAL AUSTRALIAN NAVY FFGSPO



Project Scope

Software, Touchscreen, PDA Mobile App, Bespoke Data Integration Hardware Design & Development + Barcode Tagging services + Supply of COTS handheld PDA hardware + Technical Services

Technologies

Microsoft.net, C#, ASP.net MVC, Window Mobile, SQL Server

Services

Business Needs Analysis + Develop System Architecture & Technical Requirements + Software & Mobile application Design & Development + Testing + Training, Handover, Transition Services + Project Services

Solution Highlights

Integrates software, mobile apps, auto-ID technology [Barcode tagging]

Data translation services for feeding ships primary information systems

Replacement of error-prone manual engineering logs/reports with electronic, accurate data capture

Facilitates proof-of-presence

Improved round productivity [guides efficient inspection routes]

Faster, cleaner rounds & audits

Flexible, user-defined environment

Introduction

This case study showcases how Relegen developed, integrated & deployed a bespoke transactional data management system for the RAN's FFG vessels.

Business Challenges

Traditionally, rounds & watch-keeping events are manual, paper-based processes leading to poor data quality, duplicated effort & operational inefficiencies. To overcome this, the RAN appointed Relegen to develop a fully-automated means of capturing real-time operational data from watch-keeping rounds on-board the FFG fleet & replace all engineering paper-based logs.

Project Overview

Relegen delivered a fully-integrated software-tagging-mobile solution for ship staff to electronically collect, analyse & report on the condition & state of ship operational assets. The system was also integrated with key maintenance [AMPS] & propulsion control systems [PCS] to provide quality data & all stakeholders with a 'single point of truth' and vessel-wide view – the foundation that underpins ship operations and technical seaworthiness.

The comprehensive project demanded excellent project & stakeholder management services, requirements engineering, functional specifications, software & hardware design & build, user & integration testing, transition services & more.

Solution Benefits

This innovative system included many benefits including:

- A real-time, vessel-wide view of all operational assets
- Quality data – electronic data collection eliminates errors & alerts for unexpected entries
- Timely data analysis – accurate data is fed directly to primary systems
- Ensures compliance – auditable trail of who, what, where & when
- Increases staff productivity – system can enforce efficient inspection routes
- Cost savings – maintenance can be triggered on asset condition/usage rather than time elapsed
- Powerful analysis & reporting for better decision-making
- Robust, easy to use, requires minimal support
- Certified for use with RHFIE– threat risk assessed by CIOG, hardware FISSO approved, ABR published, reviewed by Navy legal to significantly reduce risk exposure in event of incident.

Conclusion

Relegen's highly-successful FFG TDMS project was recently replicated for the RAN's new Canberra Class Amphibious Assault Ships [LHD's] – the largest & most technologically advanced vessel ever inducted into the RAN.