



Case Study

"The ability of HSD to integrate with various Department of Education and Training (DE&T) systems, develop automated business solutions and construct robust and efficient applications made them an easy choice for this project."

Robin Purchase,
Project Manager of
the PRMS Audit 2000

HSDfm provides a foundation for Department of Education's maintenance programme

A unique audit data collection tool from Australian developer HSD has revolutionised delivery of maintenance to Victorian schools.

In 2000 the Facilities Branch of the Victorian Department of Education, Employment & Training (DEET) was faced with an urgent mission: to develop a five-year plan for maintenance of schools throughout the state. To meet this challenge, DEET needed to capture data on existing conditions as quickly as possible, identify and prioritise maintenance needs, then analyse this data to create a plan for maintenance programs both state-wide and on an individual school basis.

The Challenge

Auditing some 1,650 schools within the required timeframes is a significant task, and the Department had formed a panel of three principal contractors across four Audit Zones. To support these contractors, as well as on-going facilities management strategies and activities, DEET needed a centralised information system to collect, manage and report on the facilities audit data. Given the short timelines for the project, Russell Collier, Assistant General Manager of the Facilities Branch, could not afford to take risks with a system vendor.

Russell turned to Hammond Street Developments (HSD), who had helped with the first Physical Resources Management System Audit – or PRMS Audit – in 1995. More recently, HSD had delivered a custom solution for DEET's School Compliance Audit Project, and the Department had confidence in its ability to deliver within tight deadlines and budgetary restraints.

"The ability of HSD to integrate with DEET's systems, develop automated business solutions and construct robust and efficient applications made them an easy choice for this project," Russell said.

The Solution

HSD developed a comprehensive management system for the audit project – *HSDfm* – integrating it with the Department's existing business systems. With the ability to manage 1,650 audits by 50 auditors from three contracting firms across four zones, it centralises the information for access by all stakeholders.

HSDfm comprises four principal components:

- ▶ The **Maintenance Data Collection** (MDC) system is used by the inspectors who perform the maintenance audits.
- ▶ The **Audit Management System** (AMS) interface is used by the Facilities Branch to manage the audit schedule and workflows, and for reporting.
- ▶ **Business Automation Systems** automate file management and communications, handling the many thousands of emails, Excel spreadsheets and Access databases created and updated by DEET and its contractors during the PRMS Audit with minimum administrative overhead.
- ▶ An integrated **Web Portal** provides schools and regions with secure and timely access to audit results.

Importantly, the MDC system enables full mobility. The auditors use ruggedised hand held Pen Activated Computers to present an electronic plan of each school. Unlike PDAs, the computers enable the deepest level of detail to be obtained: as each building or room element is assessed, the nature and scope of any required maintenance is identified down to the sub-element level. *HSDfm* automatically provides an estimate, although in unusual circumstances the auditor can manually override the estimated cost.

On return to base, the auditors can submit completed audits to – and retrieve new assignments from – the central *HSDfm* database and workflow management systems.

HSDfm provides DEET with:

- ▶ a flexible interface for contractors to maintain audit schedules and extract data
- ▶ transparent compliance with business rules from other DEET systems and processes
- ▶ integration with standard applications such as Microsoft Office and AutoCAD
- ▶ management tools to keep firm control of the audit process
- ▶ a web interface for efficient dissemination of information to stakeholders
- ▶ the detailed information needed for developing and managing maintenance programs, prioritising activities and conducting ad-hoc audits



The Result

The Department dramatically reduced the length of the PRMS Audit – from 12 months in 1995 to just three months in 2000 – by using *HSDfm*. As well, the entire audit project was able to be managed by a single DEET staff member, instead of the five required for the 1995 audit.

By integrating with commonly-used business applications, such as Microsoft Office, *HSDfm* streamlined data management and communications during the audit process, which greatly reduced administrative effort – and therefore costs – for all parties.

DEET's auditing contractors also reported benefits from using *HSDfm*. To quote John Pierce, Project Manager for Sinclair Knight Merz, "We were able to audit the schools at a rate much higher than we ever anticipated. This significantly improved the bottom line result of the audit project."

HSDfm enabled the collection of the PRMS Audit data in a consistent and uniform manner, even though the Department had three contractors conducting the audit. As a result, the data is easier to analyse, which in turn makes it simpler to develop effective maintenance programs – both on a state-wide basis, and at the individual school level.

On-going Business Benefits

Since the audit process, *HSDfm* is delivering:

- ▶ **Control** – comprehensive, detailed data within *HSDfm* enables the Department to fully understand maintenance priorities and costs on which it can base its maintenance planning, and keep within its annual budget.
- ▶ **Flexibility** – having all the data for any item gives the Department the control to select items on a priority system defined in its business rules. For example, if it wishes to replace all heaters in all schools, it has the information to hand.
- ▶ **Cost Savings** – by streamlining and automating management of its maintenance program, the Department is able to take advantage of volume purchasing – which reduces its overall maintenance costs.

At an individual school and region level, stakeholders also have access to information, which enables them to plan their own maintenance activities at a local level. And – importantly – they can see that maintenance delivery across all schools is fair, and based on the level of priority and the size of the budget for the year.

"We were able to audit the schools at a rate much higher than we ever anticipated. This significantly improved the bottom line result of the audit project."

John Pierce,
Project Manager for
Sinclair Knight Merz



Hammond Street Developments (HSD) Pty Ltd

ABN 32 074 649 595

PO Box 5062, Ringwood, Victoria, 3134

Tel: +613 9875 5900

Fax: +613 9877 5699

Web: hsd.com.au

Email: info@hsd.com.au