

Opera House leads by Exemplar

THE Sydney Opera House may be one of the world's most recognisable buildings but the amount of effort required to keep the facility running at its optimum level often goes unnoticed.

It may surprise many that the full operating and maintenance cost of a modern hospital takes just one or two years to equal the design and construction cost of the facility itself.

Achieving best value in construction is important but designing, owning and operating a facility over its life is critical in achieving maximum value in its use and minimising ongoing operation and maintenance costs.

The delivery of these services, maintenance, cleaning, air conditioning, lighting and water supply, described as Facility Management (FM), is a relatively poorly recognised industry.

The FM industry evolved during the 1980s as a result of businesses outsourcing activities such as the management and maintenance of buildings.

Today, it contributes around \$13.4 billion (2002/3) in direct and indirect GDP to the local economy and employs around 172,000 people or 2.1 per cent of the country's workforce.

As a result of the industry's growing impact, an Australian Government funded FM Action Agenda was launched in April this year.

It listed 20 recommendations to identify and overcome barriers to the development and fulfilment of the industry's potential.

An important uptake of a number of these recommendations is the Cooperative Research Centre (CRC) for Construction Innovation Sydney Opera House Facility Management Exemplar Project.

Collaborating with FM specialists Transfield Services and Rider Hunt and research support provided by the University of Sydney and CSIRO, the project aims to benefit both the Sydney Opera House (SOH) and the wider FM community.

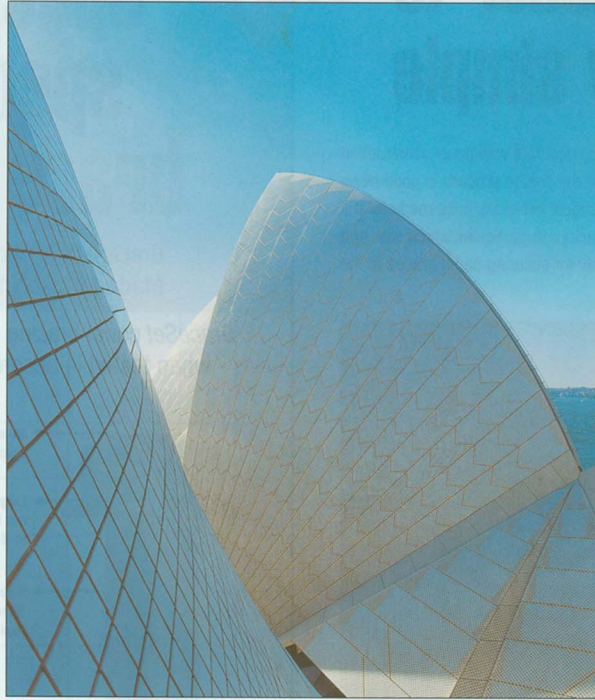
Three key research themes

Says Dr Keith Hampson, CEO of the CRC for Construction Innovation, "The SOH Exemplar Project will drive an extensive industry dissemination program throughout 2006, up-skilling the FM industry through key education and training outcomes."

Three key research themes are being investigated: digital facility modelling (DFM), procurement and benchmarking under the umbrella of integrating these into the Strategic Asset Maintenance (SAM) Plan and the Business Objectives of SOH.

The aim is to highlight how the interaction between business objectives and the effective delivery of FM services can act as a business enabler.

The first stage of the project is already underway. DFM is a key component of SAM Plan in providing interaction



A goal of the Sydney House is to procure a full set of 3D/4D electronic plans and specifications for the whole of the facility (Courtesy Sydney Opera House.)

between business objectives and delivery of FM services.

Development of advanced DFM for SOH FM will help in defining a generic functional brief on the implementation of interactive and online tools for new or existing facilities.

The FM Exemplar project will study the potential of DFM for the SOH in order to support its operational and strategic FM practices.

Currently, documentation pertaining to the SOH is paper based and there is not a consolidated set of base drawings that can be used to plan ongoing maintenance or new developments.

Paul Akhurst, acting facilities director at SOH believes that "the FM Exemplar project will enhance the SOH facilities team's understanding of how we contribute to the experience of all our customers and enable us to demonstrate and improve our effectiveness through the development of business-oriented benchmarking, information management, planning tools and processes."

Participants collaborating on this project are: Queensland University of Technology, University of Sydney, CSIRO, Transfield Services, Rider Hunt, Sydney Opera House, Facility Management Association Australia, Queensland Government Public Works, Woods Bagot and Brisbane City Council.