The Sydney Opera House
FM Exemplar Project: Leading Change in Australian FM

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CRC for Construction Innovation

and

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Sydney Opera House

Sustainability and Facility Management Forum
3 key questions

1. Who are we?
2. What’s this project about?
3. Leading change in Australian FM?
1. Who are we?
Researchers

We build bridges!

Research Users

CHARGE!

The bridge is ours!
CRC’s in the Innovation Cycle

Cooperative Research Centres Program (CRCs)
The Research Continuum

- Economic, Social, Environmental Benefit
- Public
- Private
- Cooperative Research Centres Program (CRCs)
- Risk: High → Low
- Time to Produce Benefit: Short → Long
- CRC Construction Innovation Building Our Future
Public-Private Partnerships in R&D

- Build innovative networks of industry, government and researchers for applied outcomes
- Research skills training for industry
- Respond to global challenges with national and international partnerships
The CRC for Construction Innovation

Over 300 people across Australia contributing to the CRC vision
Our Vision

To lead the Australian property and construction industry in collaboration and innovation
Industry Partners

John Holland

ARUP

Rider Hunt

Bovis Lend Lease

dem

WOODS BAGOT
Government Partners

Queensland Government
State Development and Innovation

BSA
Building Services Authority

Brisbane City

Building Commission

Queensland Government
Department of Public Works

Queensland Government
Department of Main Roads

CRC Construction Innovation
Building Our Future
Research Partners

The University of Newcastle
RMIT University
The University of Sydney
University of Western Sydney
CSIRO
QUT
CRC Construction Innovation
ACIF Alliance

1. Air Conditioning & Mechanical Contractors Association
2. Association of Consulting Architects Australia
3. Association of Consulting Engineers Australia
4. Australian Institute of Building
5. Australian Institute of Quantity Surveyors
6. Construction Industry Engineering Services Group
7. Engineers Australia
8. Facility Management Association of Australia
9. Master Builders Australia
10. National Electrical and Communications Association
11. Planning Institute of Australia
12. Property Council of Australia
13. The Royal Australian Institute of Architects

200,000 members across Australia
2. What’s this project about?
A unique opportunity

• To leverage iconic nature of SOH’s national and international profile in promoting FM best practice
• To showcase methodologies for measuring and managing economic, social and environmental impacts of FM across recommendations contained within the Australian FM Action Agenda

  1. Performance Benchmarking
  2. Strategic Asset Management and Procurement
  3. Digital Facility Modelling
Sydney Opera House – FM Exemplar Project

Project Leader: Jason Morris, Rider Hunt

Research Coordinator: Lan Ding, CSIRO
Aim

Develop World’s Best Practice in three key research areas: procurement, benchmarking and digital facility modelling – in a business alignment context

Achieve a conceptual framework for future integrated FM systems. The framework to include the structure, process and relationship between procurement, benchmarking and digital facility modelling

Deliver guidelines in procurement, benchmarking and digital facility modelling to support SOH strategic asset maintenance and operational plans
Benchmarking

Objectives

Establish benchmarking standards and systems for the FM community and specifically for SOH

Achieve world’s best practice by analysing similar relevant benchmarking schemes, identifying and incorporating their useful features into a proposed system for adoption by SOH
Benchmarking

Examples of the Similar Buildings

*Iconic buildings*

- St Basil’s, Red Square, Moscow
- The Tower of London
- The Leaning Tower of Pisa
- The Empire State Building, NY

*Opera Houses*

- La Scala
- Covent Garden
- Paris - Bastille
Procurement

Objectives

Define procurement process and strategies required by SOH
Define service assessment and analysis of contractors
- Financial criteria
- Performance criteria
Establish potential automation of procurement process

Scope

Maintenance task
- Electrical services
- Cleaning and waste
- Air conditioning

Partnering/Subcontract
- Performance of contractors
- Sharing of risk
Business Alignment

Aim

Control of the impact of the Facility Management functions on Sydney Opera House core business process
Study the potential of Digital Facility Modelling (DFM) for the Sydney Opera House (SOH) to support its operational and strategic Facility Management (FM) practices
3. Leading change in Australian FM?
Industry Dissemination

- Extensive series of national seminars and workshops – Feb 2006 and Nov 2006
- Held in conjunction with FMA
- Complementing the Australian Government’s Action Agenda

You will hear about it!
Where do we want to be?

- Leading the Australian industry in collaboration and innovation
- International leadership for our research and industry partners
Planning for future success

• Delivering benefits through high impact research
• Strengthened industry linkages – ACIF + FMA
• 2nd International Conference:
  – Clients Driving Innovation: Moving Ideas into Practice
our Second International Conference...

Clients Driving Innovation — *moving ideas into practice*
12-14 March, 2006 on the Gold Coast

... see you there!

Image courtesy of Tourism Queensland
www.construction-innovation.info