

## Summary of lessons learned from monitoring the performance of partnering during the West Bay Coastal Defence and Harbour Improvements Scheme

### Science Summary SC000021

A study of how the partners worked together during a large coastal reconstruction project has provided some important lessons for managing similar projects in the future. The civil engineering consultants HR Wallingford led the research and the lessons are summarised in this report. Open book accounting, regular meetings of all partners, joint working and continuous monitoring were shown to be invaluable to the success of the project, especially when problems arose during construction. A contract with inbuilt partnering arrangements worked well.

The project selected for study was the £18 million reconstruction of Bridport Harbour, West Bay in Dorset, and its associated flood and coastal defences. Construction works ran from 2002 to 2005. The collaborative research on the partnering process was funded under the DTI 'Partners in Innovation' scheme and financially supported by Defra, the Environment Agency, West Dorset District Council and Costain.

Bridport Harbour serves the local fishing community and is also a holiday resort. Its reconstruction was prompted by serious wave damage to the harbour. The project was managed using an ECC (Engineering and Construction Contract) Design and Construct contract (Option C) with target price formulation and inbuilt partnering arrangements.

During the project, some major physical problems were encountered that tested the contractual and working arrangements. These included storm damage to the part-completed West Pier during the first winter, and the discovery of poor condition of the existing East Pier, which demanded a re-design and reprogramming of the construction works. Completion of the project cost around 50% more than the original tender, and took 11 months longer than planned.

A partnering workshop was held at the start of the contract, to identify each partner's needs and agree a common plan. A non-contractual Partnering Charter was drawn up. Three further partnering workshops were held during the course of the project, to review achievements

and plan future initiatives. Throughout the project, conventional monitoring of costs and time were complemented by independently monitoring measures of communication, decision making, openness and trust, respect and equality, leadership and sense of humour.

The partnering team identified the following components as the most significant to delivering effective partnering in a risky construction environment:

- A positive atmosphere, including openness and trust, respect and equality, working together on problem solving and decision-making, and good relationships with suppliers and subcontractors.
- Practical measures to allow joint working, including shared offices, common engineering and financial documentation, a communal filing room, open correspondence and weekly meetings.
- An open approach to cost control, including open book accounting, flexibility in running the contract, early warning and compensation event meetings, and efficient decision making.
- A flexible approach to programming and any necessary re-sequencing
- Effective design, value engineering and risk management. This involved good inter-personal relationships between designers, client and contractors, a weekly design team meeting, minimising paper work, the use of an integrated design and construction programme, and careful risk and opportunity management.
- Effective working with other stakeholders. The site had a permanent public information centre and a coherent site partnering team.
- Monitoring of objectives. This process, laid out in the Partnering Charter, encouraged parties to keep to their partnering objectives and provided a

useful reminder of aspects of site organisation requiring attention.



**Completed scheme, December 2004**

ECC Option C provided a fairer and less contentious basis for this high risk design and construct scheme than more traditional forms of contract. It allowed considerable challenges to be dealt with directly and efficiently, without protracted dispute. Open book accounting and straightforward partnering arrangements enabled all the organisations to commit to the necessary changes, as the scheme evolved.

Hopefully, the approach to partnering described here will be applied by the Environment Agency, and its consultants and contractors, when managing similar projects in the future.

**This summary relates to information from Science Project SC000021 reported in detail in the following outputs:-**

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**Project manager:** Laurie Neale, Science Department

**Research Collaborator:** Department of Trade & Industry

**Research Contractor:** HR Wallingford, Howbery Park, Wallingford, OX11 0BH ([j.simm@hrwallingford.co.uk](mailto:j.simm@hrwallingford.co.uk))

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