

# Examination paper of project management essay sample

[Engineering](#), [Project Management](#)



The construction sector in recent times has not been noted for its high levels of performance. Firms like BAA, who own and operate airports including Heathrow and Gatwick – London's two major airports – rely heavily on their suppliers, including their construction suppliers, for their own performance. Where construction projects are delayed, the financial consequences can be disastrous. Furthermore, the disciplines of working on airport premises, including the security issues, play a significant part in the daily working lives of project staff. New firms bringing new staff onto the airport sites invariably require time to bring them up to speed with the appropriate ways of working. Particular problems include:

Security – all personnel with access to airside parts of the airport (i. e. past passport control) must be security vetted and trained. The vetting process takes six weeks, so firms must prepare project staff in advance;

Deliveries – getting materials into the airport is problematic, due to significant congestion and lack of availability of areas for storage;

Constant use of terminal buildings by passengers – the closing of areas causes problems with passenger capacity. The firms are required to work with the constraints of passengers using the areas around where the work is being carried out and physical and noise intrusion must be kept to a minimum;

The commercial activities (shops and restaurants) are the economic lifeblood of the business, with large ground-rents. The objective of projects involving these areas is not simply to complete works on time but as early as possible, so that the areas can start to generate rental incomes.

The traditional approach to managing fit-out projects (changing internal layouts to accommodate different facilities and in particular new retail facilities) was that every contract was different, and would be negotiated with different contractors. These would then employ their own sub-contractors to carry out parts of the work. The approach that has worked far better for all concerned has been through the appointment of lead contractors, with long-term contracts – in most cases 10 years – to be the prime supplier of fit-out services to B. A. A. This particular contract was awarded to MACE. As part of the agreement, BAA has paid for MACE staff to attend training programmes.

This has extended further, with help being offered to their suppliers – of both materials and labour – for development. Where particular problems are identified, the supplier can be asked to take part in an improvement programme. Satisfactory completion can result in similar long-term deals (tied to continual improvement) being offered to those suppliers. In some cases the problems – particularly with designs for areas – have been the responsibility of BAA. The mechanisms are now in place to identify these problems and to introduce new practices to avoid them in future.

- 1) Summarise the arguments for such a policy of partnering with a major supplier such as BAA and MACE have done here.
- 2) Carry out further research to identify further examples of partnering in projects. How well do they appear to be working?

## Caselet 2

### The Big Dig

Any project that involves tunnelling is risky. Any project that involved tunneling under a city whilst trying to keep that city fully operational, is very risky. When that city is bottom in the USA, it is in a risk category all of its own. This does not, how – ever, excuse the financial performance of this project, the results of which are exceptional and even make the performance of previous ‘ stars of disaster’ such as the Channel Tunnel, look good. During the 1950s, the Commonwealth of Massachusetts commissioned new roads as part of a national road-building frenzy that took place at that time.

The result was a partly elevated freeway that cut the city off from its old harbour and over time coped increasingly less well with the volumes of traffic that were trying to use it. For many years, the project had been the subject of much politicking and had been rejected by a number of national administrations. In 1993, it was given the go-ahead. At this time the budget was \$US2. 6 3

### IIBM Institute of Business Management

#### Examination Paper of Project Management

billion, an enormous sum of money for an 8-mile tunnel, but given the technical complexity of the task, this was considered acceptable. Gradually the costs rose, until in 1998, the estimated final cost was 410. 4 billion. By mid-2000 this had risen to \$13 billion and by mid-2001 to over \$15 billion. It was still considered a technical success, but both politically and

economically, it was a disaster. In project management terms it is also a disaster – a 500 per cent-plus overrun on budget can only be described as ‘talented’.

How did such a financial disaster occur? The first is a feature of many large ‘political’ projects – that the ‘real cost’ would not be politically acceptable. The original budget was deliberately deflated to make the project happen. The second is technical risk – that of the tunnelling process. The ground through which the tunnelling is being carried out is reclaimed land that was originally under the sea. The tunnelling process being used was also new, presenting a degree of technical novelty.

- 1) How might the project be considered a technical success but an economic, political and project management disaster?
- 2) Suggest how the 500 per cent-plus overrun might have come about.