Major Projects Association

The Americans and the French: Do they do it better? An MPA seminar

held at the Institution of Civil Engineers, One Great George Street, London on 22 May 2002.

MPA events are confidential, although this summary has been compiled so as not to breach confidentiality. Full proceedings and entry to MPA events are available only to members.

Participants

More than 60 participants attended the seminar and the following organizations were represented:

Arup Project Management, Balfour Beatty Major Projects, Bechtel, BMCE Bank, Bovis Lend Lease, CMS Cameron McKenna, CSE International Ltd, Department of Trade & Industry, Freshfields Bruckhaus Deringer, Groupe Egis, Herbert Smith, High-Point Group Plc, Imperial College, Intrepid Energy North Sea Ltd, Kellogg Brown & Root, Lockheed Martin UK Ltd, Mott MacDonald, National Grid Company, Rolls-Royce Plc, SPRU, Strategic Rail Authority, Thames Water, University of Birmingham, University of Manchester Institute of Science and Technology, Union Railways, Washington Group International, Willis Ltd, WS Atkins

What the research shows: France v UK

Research on the values and behaviour of managers working at both ends of the Channel Tunnel was conducted to ascertain the national differences. The research found that:

- The French were more autonomous in decision-making
- The British favoured procedures for work coordination; the French were more fluid
- The British had greater feedback motivation and higher job involvement
- The French were more competitive, the British more collegial
- French engineers were individualistic, British engineers more supportive
- French engineers experienced higher levels of stress.

There is a commonly held perception among project practitioners in the UK that the Americans and the French have the edge when it comes to delivering projects. Is this belief based on any real evidence or is it simply a wistful feeling that greener pastures lie elsewhere?

The presenters at this seminar have helped to execute major projects, as project leaders, senior engineers or advisers. They offer their views on the strengths and weaknesses of project management in the UK, the US and France, citing projects in such a way that national differences are thrown into relief.

The evidence may be anecdotal, but it is distilled from the rich project experience of highly regarded members of the project community and carries considerable weight. Complementing these personal views, research into the national values and behaviour of French and British managers on the Channel Tunnel project is reported.

Professional education and organization

Education is where it all starts. Engineers are educated under very different systems and have different values.

An illustrious pedigree: France The French engineering profession has a long history: the Corps des Ponts et Chaussées was founded in 1716; the Ecole des Ponts in 1747. The French system of the *grandes écoles* is intellectually rigorous, highly competitive and correspondingly prestigious.

An empirical approach: the UK Engineering has always been taught in general-purpose universities in the UK, beginning in University College London in the 1840s. The British system is less individually competitive. The Institution of Civil Engineers was founded in 1818 in a pub in Holborn as a professional club for engineers. In 1897 it began to validate university courses; only in 1974 was ICE membership closed to non-graduates.

Influenced by the French model: the US The original US engineering schools used a French curriculum and a French influence still lingers. US engineers are licensed by the state and allowed to certify drawings. In the US, the engineer was liable not simply in tort; he was also criminally liable.

Obtaining approval and planning permission

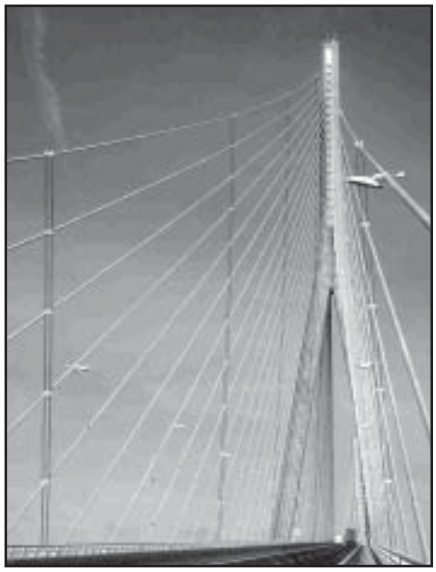
How do the planning processes in the three countries compare?

Democratic and slow-moving: the UK – a mammoth time-consuming process and a major barrier to progress; Terminal 5 approval process – 1993 to 2002; reform of planning process announced.

Buy-in at local level: the US – less protracted process; many projects determined by state legislatures who are responsive to the local population in their decision-making.

National characteristics in project management – in a word

- The French are flexible.
- The British are collegial.
- The Americans have drive and self-belief.
- But beware of generalizations – individual projects and their leaders defy easy classification.



Case study 1: Pont de Normandie

Project aim: to build a second bridge over the River Seine, to increase the competitiveness of the port of Le Havre.

Project progress: high interest rates halted the project in the 1970s, but it was relaunched in 1986 under inspirational leadership.

Project problems: approval issues; contractual issues; engineering issues (redesign; piling; artificial island for north pylon; temporary access bridge); environmental issues—all well handled, although costs had to be reduced.

Outcome: swift delivery of an elegant bridge that benefited from decisive leadership, creative engineering and innovative construction techniques.

Single-minded and swifter: France – a project is presented informally to the local authorities and local residents before the formal inquiry; if well handled, it is an effective process; politicians strongly support infrastructure projects to help the local economy; once approved a major project is almost never stopped.

Funding major projects

What is the approach to funding?

PFI and PPP: the UK – PFI and PPP continue to gather strength, alongside traditionally financed projects; off-balance sheet funding in the UK said to lead to inventiveness.

Federal funding and politics: the US – Most funding for large construction programmes has traditionally come from federal funds, the rest from bonds; as federal funding has to be re-approved annually, politics play a part; today, there is greater use of funding at a local level through taxation or floating bonds.

A range of approaches: France – France uses various approaches: public funds are used for national projects; semi-public motor way companies and Chambre de Commerce et d'Industrie and private concession companies are often used (but of the four private companies that once ran the autoroutes, three have collapsed); some projects privately financed (e.g. the Pont de Normandie).

However, the French are using concessions more and more, with either a semi-public body, like semi-public motorway companies and Chambre de Commerce et d'Industrie; or more recently after a real competition between private companies according to European rules.

Labour issues

How do labour problems compare?

UK labour issues – a shortage of engineers and site workers, extensive use of subcontractors and agency labour; the laziness of UK construction workers is a myth; productivity impaired by out-of-date equipment and lack of mechanized aids.

US strategies – labour shortages less pronounced; better use of the trades and craft workers; superior productivity as a result of union training programmes; more use of women workers.

Engineers in France – engineers held in greater esteem, which works to the advantage of recruitment and the prestige of the projects themselves.

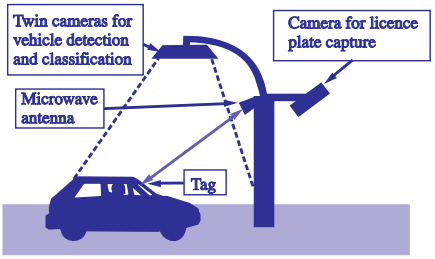
Case study 2: Melbourne City Link: An Australian project with a French touch

Project aim: to add two stretches of motorway to the existing network. As part of a joint venture, the French company Egis was to deliver an electronic toll collection system to collect tolls at highway speed using cameras and other devices, with prepayment through e-tags and daypasses.

Project progress: although the electronic system was highly innovative, funding was secured and the project was on track in September 1998.

Project problems: the rapid increase of mobile phones and Internet access made the toll accounting procedures out of date before the new motorway even opened. A late decision was made to update the toll strategy and use new media and outlets for prepayment of tolls.

Outcome: Impossible n'est pas français! Changes to the toll system were made. A year's delay on the civil engineering side provided a period of grace in which to implement the changes. The level of electronic transactions was high from the start and toll violations low; share price of the City Link has stabilized at over four times the 1996 price. The French touch contributed determination, technical expertise and quality leadership.



Toll collection*: an e-tag is placed on the windscreen of cars and trucks. Twin cameras located in gantries detect and classify vehicles. A beacon reads the e-tag and a camera takes a digital picture of the licence plates. If the electronic transaction goes through the system without problems, the picture is discarded. A picture of any violator's licence plate is sent to the central system for enforcement.*