

Stansted Generation Two

Master Plan Options Operating Costs Appraisal

The Brief

Stansted International is Europe's fastest growing airport endorsed by the UK Government's recent white paper.

The £4bn project, which was due to involve a new terminal building, a second runway and the associated road and rail links, was in the phase of preparation for the formal planning application due at the end of 2005. One of BAA's key design principles was the requirement to balance the need for operating efficiency and good customer service with value for money.

The design was suited to the operation of low-cost point-to-point services and was a modular development to allow for phased construction in line with capacity requirements.

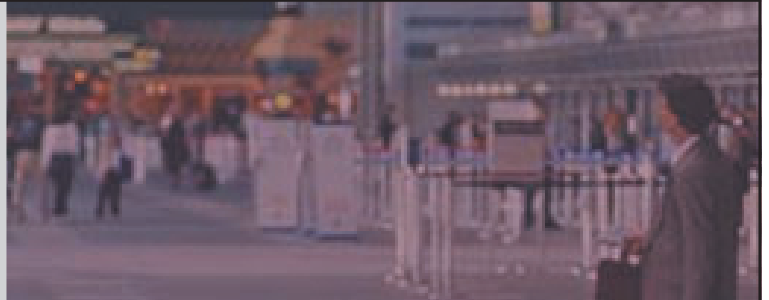
Stakeholders:

- British Airport Authority
- Nicholas Grimshaw and Partners
- Turner and Townsend Group

FORWARD

GROUP

- Aviation
- PFI
- Built environment



Services Provided

- Operating strategy definitions
- Operating cost forecasting
- Options appraisal
- Briefing

Our Approach

Forward Group was commissioned to analyse, evaluate and rank the operating effectiveness for each of twenty-three master plan development options. The following ten typically highest operating activities were identified and evaluated:

- Airside transportation
- Aircraft fuel for taxiing
- Baggage systems, processes and operations
- Control Authority & Emergency Services
- On airport heavy rail
- Airline operational staff
- Terminal operations staff
- Retail staff and associated logistics
- Car parking coaching operations
- Landside transportation

The Results

The operating costs comprised of one or more of the following; personnel, fuel, maintenance and facilities. The costs were evaluated as being affected by system/solution, number of facilities, size, location, distance and assumed operating strategy. Each of the options was evaluated and ranked as a range of operating costs between None, Low, Medium or High. The operating activities were also given a weighting.

The following results were determined:

- 6 options achieved low operating costs
- 14 options achieved medium operating costs
- 3 options achieved high operating costs

Determining the operational effectiveness of each option in this quantified and qualitative manner allowed an informed decision to be made for the selection of five schemes to be taken forward to the next stage of the development appraisal.