Do you feel that you are currently operating close to capacity?
Are you concerned about how you will manage until new capacity is in place?
How will operational and service performance be affected?

Our practical approach to improving capacity and asset utilisation combines our core industrial engineering and operational research skills with expert knowledge of international best practice and technology trends. Looking at individual areas of airport ground operations and end-to-end departure and arrival processes, we measure, observe, and analyse live operations and historical performance to determine where there are opportunities to optimise use of available capacity. When designing operations and preparing to trial and implement change, o&i consulting works with all stakeholders to ensure we achieve an effective solution that is accepted by all parties.
optimising airport capacity & asset utilisation

project experience

Heathrow Airport: passenger security process design and implementation

o&i consulting led a project to assess the impact of the future screening of LAGs and identify appropriate process solutions at Heathrow Airport. Our team managed a survey to determine the volume of LAGs carried through the airport and therefore the size of the challenge created by the new legislation. Based on the results of the survey, we led the process of identifying the optimum equipment and process for screening LAGs in the future, and set up and managed a series of trials to assess different equipment types. o&i consulting also played a central role in the implementation of new processes, and provided post-implementation support to identify areas for improvement following the introduction of the new procedures.

Qantas Airways: passenger screening process design

o&i consultants developed an improved passenger security screening layout and process for Qantas Airways’ domestic terminal operations, ensuring it was transferrable between airport sites and could be established as a company-wide ‘standard’. The design incorporated current and future processing and technology requirements. It ensured optimal use of space and improved throughput while maintaining the required security regime.

London City Airport: arrivals logistics

Based on a detailed study and analysis of live arrivals operations, we identified constraints and recommended operations improvement strategies, appropriate to LCY’s operations, to enable the airport to achieve its desired service proposition.

British Airways: ramp & baggage processes

For over two years, o&i consulting provided process engineering support to British Airways in its preparations for the commissioning of Terminal 5, Heathrow Airport. Members of our team led the development and implementation of ramp and baggage handling processes, working closely with operational management and trade unions to ensure processes were lean and robust.

Pulkovo Airport: terminal capacity improvement

The client received a set of solutions that ensured capacity at the existing terminals was maximised at appropriate levels of service and adhered to security requirements. Solutions included improving operational layouts, the planning and allocation of facilities, and process flows. As part of our solutions, we also modelled scenarios to move airlines between terminals to balance flow and reduce peaks, and make better use of available capacity.

easyJet: turnaround performance

Our team analysed the airline’s live turnaround operation to identify opportunities to improve processes and planning based on the critical path. Based on our recommendations the airline was able to operate more efficiently and consistently achieve shorter turnaround times.

Sydney Airport: check-in strategy

In assisting the airport in the development of a future check-in strategy, o&i consulting conducted a study of the most recent developments in airport technology and airline preferences. Members of our team performed capacity analysis in order to determine the number of facilities required for each forecast planning year under different scenarios based on industry trends, airport technology and airline preferences. The analysis focused on the next 10 years and provided an outlook for a further 10 years.

Melbourne Airport: check-in capacity improvement

o&i consulting developed and demonstrated solutions to increase peak check-in capacity for Melbourne Airport. We developed a check-in counter allocation methodology, designed to achieve target service levels for queue durations while making optimal use of available check-in counter capacity. We also improved the flow of passengers through the concourse and queue management.

Sydney Airport: baggage capacity planning & modelling

o&i consulting led a baggage handling system demand and capacity study at the international terminal to ensure future planned BHS developments were appropriate in terms of both scale and timing. A key element of this project was the development of a capacity modelling tool to assess BHS constraints and pinch-points and enable Sydney Airport to conduct future capacity assessments.
o&i consulting is a niche operations consultancy, specialising in the aviation, logistics and service sectors. Our team works with clients to help them deliver excellence in their operations; we measure, design, plan and improve passenger, baggage, cargo and parcel operations.

Clients often engage us to design practical solutions to operational issues or to ensure planned change is implemented in a way which delivers maximum benefit. We achieve this by designing new processes and improving existing ones, providing detailed layout designs, and developing achievable, efficient operating plans.

In large development projects, we support clients and partners with our specialist skills, enabling them to successfully integrate change, and create future-oriented, efficient facilities and operations.

Our offering includes:

**operations planning**

- analytics & modelling
- capacity & demand planning
- passenger, baggage, cargo & parcel flow modelling
- resource planning & rostering
- allocation planning
- gate allocations
- stand planning
- forecasting
- operations planning for major sports events
- contingency planning

**operations improvement**

- capacity & demand analysis, planning and improvement
- productivity analysis & improvement
- process (re)engineering
- rostering & resource allocations
- flow management
- facilities layout (re)design
- queue design & management
- solution implementation
- process & procedure training
- introduction of new technologies

**operations design**

- conceptual design for passenger, baggage, cargo, parcel and logistics facilities
- detailed design
- spatial planning
- process mapping
- process design
- passenger flow design
- facilities requirements
- layout design

**contact us**

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