

## services: passenger security screening

o&i consultants have an international track-record of assisting airport and terminal operators in designing and improving the performance of their passenger security screening facilities.

By applying production and demand-driven planning techniques, we assist clients in uncovering 'hidden' passenger search capacity and maximising the use of available capacity, whilst adhering to security requirements. This not only reduces congestion and improves the customer experience, but also reduces operating costs and enables clients to defer expensive capital expenditure programmes. Our core capabilities in this area include:

### process improvement

Our solutions eliminate waste, improve communication and more effectively use planned queues to increase passenger and item throughput at existing facilities. In designing processes we pay careful attention to aviation and national security requirements processes. Our aim is to provide an efficient, regulated and security compliant passenger flow through the terminal.

### demand-driven planning

Our planning solutions provide clients with the ability to align screening facility and resource capacity to expected demand, to consistently meet agreed service standards. We transfer the skills to 'flex' capacity to more precisely match workload requirements and react to unforeseeable events during the operational day.

### facility layout design

o&i consulting develops processes and layouts that incorporate current and future processing and technology requirements. Our team works closely with the airport management and security service providers to utilise the experience of the local team when designing operations.



### service overview

- End-to-end passenger screening process optimisation and throughput increase
- LAGs strategies and process design
- Queue structure design and queue management strategies, incorporating LAGs processes
- Demand-based lane allocation and resource planning
- Demonstration of improved screening processes and planning techniques
- Transfer of skills, tools and knowledge to local teams
- Management of process improvement and implementation projects
- Working with operations teams, airport management and security authorities to ensure that optimised processes comply with aviation regulations

# project experience: passenger screening

Our team designs, plans and optimises passenger screening operations; examples of our work include:

## BAA

An o&i consultant carried out the role of interim continuous improvement manager at Terminal 3, Heathrow Airport, focussing on the passenger security screening operation, for a six month period. He was responsible for the baseline measurement of existing processes, followed by development and trialling of new processes and operational layouts designed to improve throughput rates and customer service, whilst maintaining high levels of security compliance.

## Dublin Airport

At Dublin Airport we developed strategies to optimise the existing passenger security screening process and successfully demonstrated the effect of these strategies within the airport departure process. The airport company implemented our recommendations. Prior to the implementation of the new EU security regulations, we also advised the airport company on taking a production approach to integrating the new requirements.

## Qantas Airways

o&i consultants completed a passenger security screening study, layout design and process design at Qantas' Perth and Sydney Airport domestic terminal operations. They provided an improved, standard passenger security screening design, ensuring that this was transferable between airport sites. The process and layout incorporated current and future processing and technology requirements. The client received 2D and 3D diagrams of layout designs, including equipment and staff roles.

## Other passenger screening projects have included:

- BAA: Passenger screening process improvements with productivity increases of up to 30%
- Belfast City Airport: Screening area layout design
- Brussels Airport: Passenger screening area relocation
- Budapest Airport: Transfer passenger search efficiencies
- Copenhagen Airport: Layout design of new screening area
- Gatwick Airport: Staff search, passenger screening and vehicle screening surveys
- Sydney Airport: Passenger screening process study, improvement recommendations and solution development



## o&i consulting

o&i consulting's team applies operational research and industrial engineering skills and its aviation and distribution industry experience to design, plan and improve airport, airline, air cargo, parcel delivery and logistics operations.

We help clients to get the best out of their existing facilities, develop efficient new operations and create a positive customer experience.

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