



## airport logistics: design, improvement and management

Expectations of modern airports extend far beyond their core function as a transportation hub for passengers and freight. These days airports are considered to be shopping and meeting points, gateways to an area and country, and hosts to large events. Delivering a high-level of service to passengers, customers and stakeholders requires well designed, robust 'back-of-house' airport logistics operations.

o&i consulting has broad experience in improving airport logistics operations. We work with airports, their logistics providers, architects, and engineering companies to design and create a structured logistics environment.

Through early involvement in new facility designs, as part of RIBA design stages, we ensure that logistics flows are viable, functional and efficient.

For existing logistics operations, we analyse people, goods and vehicle movements to identify opportunities to increase storage, horizontal and vertical capacity and improve performance.

Gatwick, Heathrow, Manchester and Stansted airports are amongst the clients who have benefited from this expertise.

### our offering: airport logistics operations design and improvement

- End-to-end goods-in waste-away logistics process design, analysis and optimisation
- End-to-end logistics management strategies
- New terminal logistics design as part of RIBA design stages
- RIBA design support and analysis (in particular concept design and developed design stages 2 & 3)
- Modelling as is and to be flows for horizontal and vertical circulation, and vehicle, people and goods movements
- Demand analysis for consolidation centres, service yards, and terminal back-of-house infrastructure
- Modelling demand against design capacity
- Capacity planning and optimisation for GIWA infrastructure including service yards, corridors, lifts, storage
- Service yard and back-of-house layout planning and design
- Facilities requirements planning for GIWA operations
- Service yard vehicle and people management strategies
- Implementation of new processes, work methods, and operations planning and management strategies
- Independent advice to all stakeholders: including airport operators, logistics service providers, architects, engineering and consultancy companies, retailers

# airport logistics design & optimisation

## project experience

### Manchester: logistics management strategies

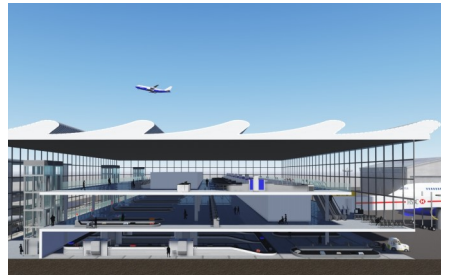
As part of the Manchester Airport Transformation Programme, o&i consulting assessed the capability of all existing and proposed logistics infrastructure and equipment to support Goods In and Waste Away (GIWA) demand at Terminal 2.

Our team recommended a series of process, facility and equipment, work method, and management solutions to improve operational efficiency and enable the terminal to continue to be serviced throughout terminal developments and beyond. These solutions included introducing a managed logistics service, capacity and demand management strategies and making more effective use of the consolidation centre to relieve the pressure on terminal infrastructure.



### Heathrow: consolidation centre process improvement

Our team led a capacity study of the Heathrow Consolidation Centre (HCC) to understand the life of the facility, determine whether the most suitable equipment was being employed, and identify and assess any opportunities for operational changes to improve retail logistics operations at the facility and its supply to Heathrow terminals.



### Stansted: GIWA review and solution development

As part of the Stansted Transformation Programme, o&i consulting was commissioned by Pascall + Watson to provide logistics expertise in the design of a fully integrated Good-In Waste-Away (GIWA) solution for the airport.

Following an 'as is' assessment, we developed a forecast of peak logistics volumes for the future facility and created a set of guiding principles for the design of GIWA flows at the new terminal. Reviewing the Stage 2 terminal design operations, o&i consulting advised the client on a number of areas including potential issues and risks for the GIWA flows, the feasibility of proposed layouts, facilities and movement paths, and where capacity shortfalls may exist.



### Logistics design and improvement:

Other clients benefiting from our airport logistics design and improvement capabilities include: Dubai, Gatwick and Sydney airports, HSI, Asendia and DHL



## about o&i consulting

o&i consulting is a niche operations consultancy, specialising in the aviation and logistics sectors. We apply industrial engineering and operational research skills to help our clients to fully understand their operation, improve the performance of their existing facilities, develop efficient new operations and create a positive customer experience.

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