



o*i*perations in practice

the newsletter of o&i consulting



contents:



check-in challenge

planning airport check-in to accommodate the demands of a major sporting event



being independent

we look at some of the benefits that the involvement of an independent party can bring to a project



self-boarding first

o&i consulting helps Heathrow Airport to a world first in introducing self-boarding technologies



check-in challenge

Airport check-in planning for a special event can involve a unique set of planning parameters, restricted resource, unfamiliar facilities and many risks. This article shares some of the complexities and challenges o&i consulting experienced when planning check-in for a major sporting event.

We have been involved in planning check-in operations for many different airports, with many different complexities. However, none of these scenarios quite compare to the unique experience of establishing a check-in operation for Olympic and Paralympic athletes at the Athletes’ Villages.

‘typical’ check-in planning

Check-in plans for a typical airport operation are created based on a schedule, a set of planning rules and subsequently an allocation of work against resources i.e. desks and people. Passengers present themselves in a ‘known’, predictable arrival pattern before the scheduled departure time, and the check-in environment, facilities and passenger characteristics are familiar to staff.

the challenge of check-in planning for the Olympics

A large proportion of Olympics Family members, media, and visitors choose to leave the host city on the days immediately following the Olympics closing ceremony. “This often creates a peak departure wave unlike anything the host

city airport has ever experienced,” explains David Calder, Director of o&i consulting. “As a result, the airport is faced with the challenge of finding a solution for processing a high volume of additional passengers and bags whilst continuing normal operations and meeting service expectations.”

At Heathrow, the solution to successfully handling the peak demand expected after the 2012 Olympics was to segregate the athletes and their baggage from the business as usual activity in the terminals. The enabler for its success was to ensure athletes’ bags were checked-in at their accommodation in the Athletes’ Village, secured, transported to the airport and sorted the night before the peak operational day. The athletes would then enter the airport through a dedicated Games Terminal to complete passenger security screening and emigration checks before being transferred to the airside departure lounge of the appropriate terminal on the day of departure.

remote check-in operation

In order to manage peak Olympic departure demand, a remote check-in operation was designed to take place at the Athletes’ Village. Designated areas were set up in ten of the athletes’ accommodation blocks as temporary check-in and baggage acceptance locations.

Prior to the event, trials were completed at the Village with representatives from the ground handlers and logistics companies to help define global planning rules; for example, the manual check-in transaction duration, and the time required to move between and set up at the different check-in locations.

the vision

The aim was to provide an exceptional level of service to thousands of athletes by enabling them to check-in and handover their bags to their airline at their accommodation block the day before they travel. This would pave the way for a smooth transition to the dedicated Games Terminal, without having to personally carry their bags to the airport. For the airport this would relieve baggage handling constraints on the peak departure day and enable the dedicated Games Terminal to easily accommodate the athletes. The Games Terminal was designed around a high

take-up rate for remote check-in and therefore did not have the capacity for 100% check-in and baggage handling.

where do you start?

We collected and structured initial planning data long before the event to determine capacity requirements for each element of the operation. We then went on to develop facility requirements and design processes for the remote operation and temporary facilities. The diagram below illustrates, in a simplified form, the process that the remote check-in operation followed.

However, providing a remote process on this scale, with tight security requirements, and unique demand characteristics, created an extraordinary scenario for what could be described as the most challenging set of planning parameters on which to create a check-in plan. On the following page we highlight the extent of this task.

remote check-in planning process

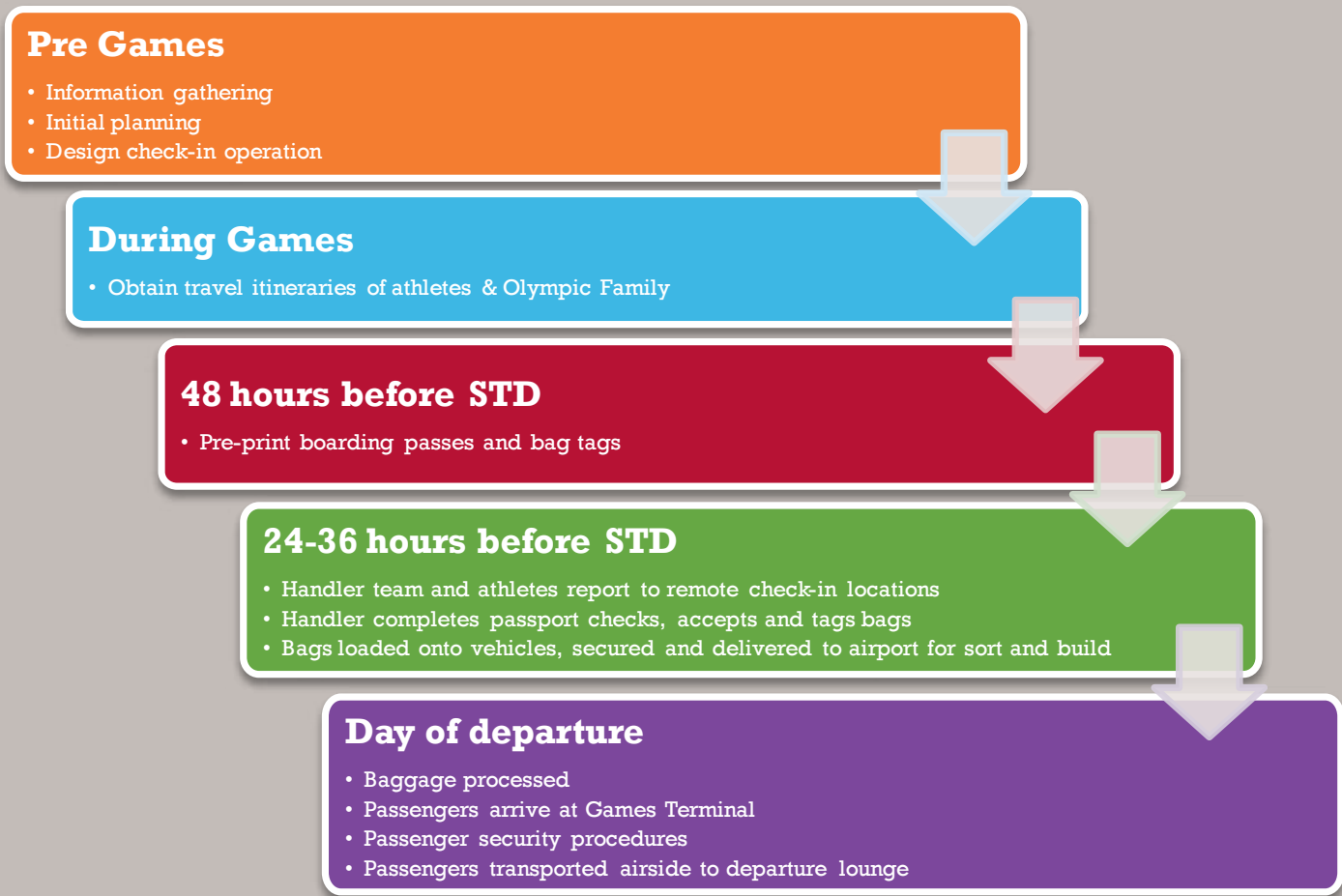


Figure 1: This high level process is an indication of the steps - with associated timings - involved in planning, developing, preparing for and successfully managing a remote check-in operation in these circumstances.

a challenging set of planning parameters

Planning for the comprehensive yet still inexhaustive list of parameters, shown below, could not be successfully achieved using existing planning software. This unique task required a bespoke planning model, designed specifically for this purpose.

We took a heuristic approach to planning check-in for the Olympic peak departures.

We developed a solution which satisfied all of the preliminary requirements, and then set to improve on the plan by optimising resources (handler teams or trucks) and accommodating additional requests. For example a check-in

time slot was communicated to each of the participating National Olympic Committees for each flight they had athletes travelling on.

Numerous requests were received in the final hours of planning to adjust time slots to accommodate either the last round of competitions or other planned celebration /

marketing events scheduled. We were able to honour many of these additional requests.

The nature of the environment and the event provided a number of complexities for the planning process. The diagram below introduces some examples of those additional challenges.

some of the planning parameters and challenges associated with check-in planning for a major sporting event

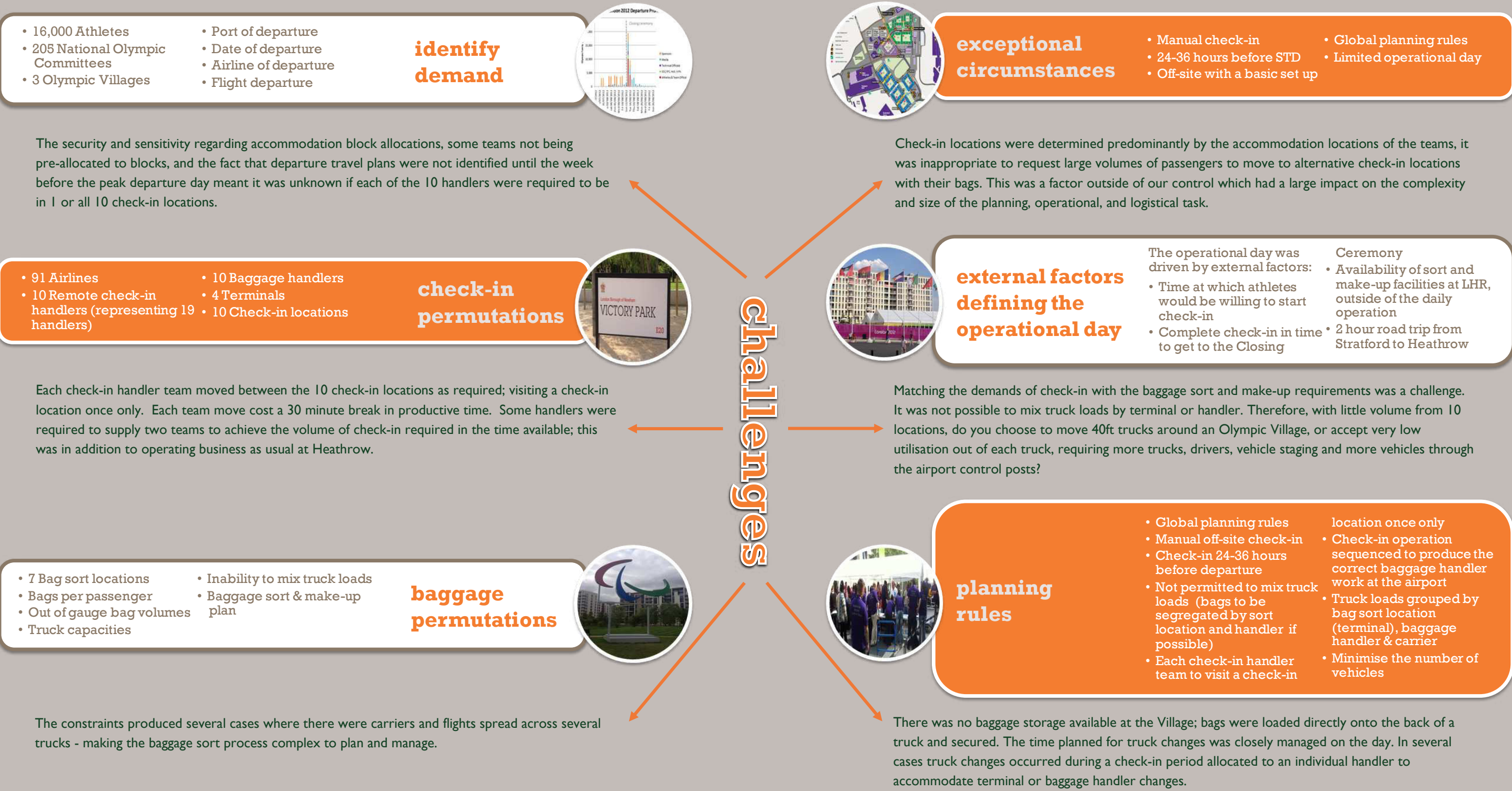


Figure 2: The diagram provides examples of the planning parameters associated with planning check-in at a remote location to spread the peak check-in passenger and baggage demand created following the closure of a major sporting event. The parameters are shown in the white and orange boxes. The text below each parameter highlights some of the challenges that arose when considering these planning parameters.

cont. from article on previous page

rising to the challenge

This complex task required exceptional preparation, a dynamic planning methodology, good communications with stakeholders, and a strong team. As a result, o&i consulting was able to create and deliver a remote check-in plan that:

- removed the baggage handling constraint expected for Heathrow on the peak departure day by checking in,

sorting and building sufficient bag volumes the night before. This provided the benefit of protecting the business as usual departure flows at the airport while high numbers of athletes were departing.

- provided the athletes with an easy and effective check-in solution that enabled them to enjoy the unique departure experience provided by the Games Terminal.

final thought

A robust check-in plan is essential for an airport during a major sporting event, however it can only be successful if it is underpinned by effective processes, facilities and management. Strong, active management will ensure that the planning and preparation are translated into a well-performing live operation.

If we can help you with check-in planning for everyday or unique circumstances, or if you would like to learn more about o&i consulting's successful planning methodologies, please contact:

Fiona Rees at fionarees@oandiconsulting.com

operations delivery for major sporting events

Check-in planning is just one of the areas of expertise that o&i consulting can offer when preparing an airport to manage the demand created by a major sporting event.

We have experience of helping airport operators to prepare and deliver operational changes for the Olympic Games. We worked with Sydney, Athens and Heathrow Airports in the

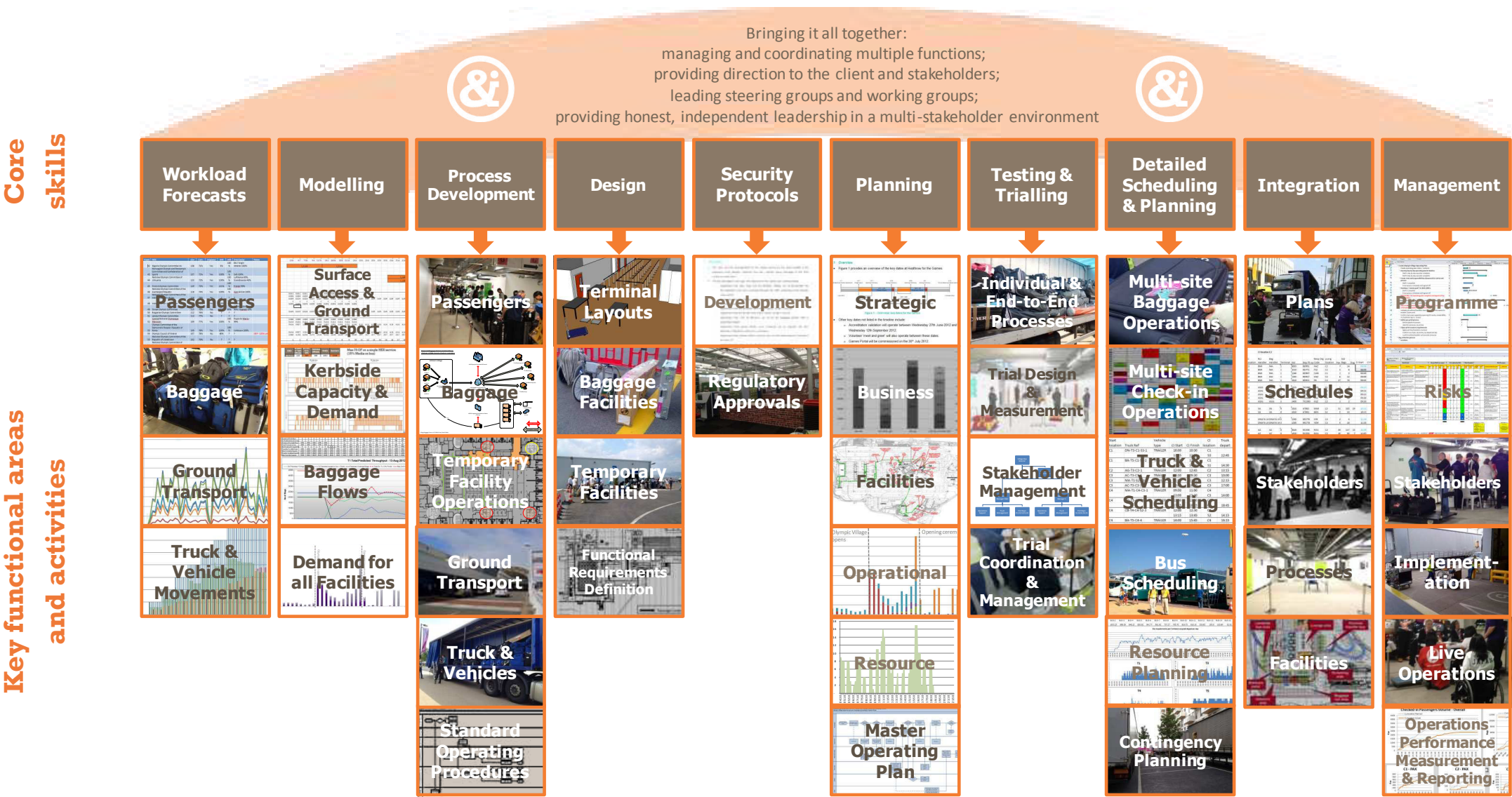
lead up to and during the Games in their host cities. In delivering airport operations for London 2012, o&i consulting was commissioned by the airport operator to provide event-driven planning on the largest scale, operations implementation expertise, operations management skills, and its expertise in supporting other airports.

The diagram below illustrates the skills and experience we offer, and importantly how we manage and coordinate the functions and stakeholders to implement end-to-end operational change and enable the airport operator to deliver the live operation, successfully, impressively and on-time.

These skills are relevant for other large-scale logistical

challenges and operations improvement in an aviation environment. Please contact us if you would like to discuss a sporting event coming to your airport, or other operational changes you are currently facing:

David Calder at davidcalder@oandiconsulting.com



o&i consulting delivers end-to-end operational change



being independent

Bringing in someone who understands the aviation environment but is distanced from the day-to-day detail and politics that are often associated with airport facility and operations development projects can be beneficial from many perspectives.

Experience and Knowledge:

An external resource can bring knowledge of best practice and experience of performing similar projects. They can provide experience of stakeholder management and new techniques, as well as knowledge of the entire airport industry, other areas of the aviation sector, and other transportation fields, rather than just knowledge of one company and one way of working.

Focus:

An experienced third party can help to work through the sea of detail that may cloud a project, and provide focus on the core elements that need attention and that will help to drive the project forward.

Objectivity & Collaborative Working:

These are crucial elements in multi-stakeholder projects where each party is protecting its own interests. An independent body can provide unbiased benchmarking, and can deliver a fair set of results when comparable products and services are being assessed.

An independent will work collaboratively with all stake-

holders, will help to prioritise and provide balance amongst parties, while maintaining focus on the project objectives.

Time:

By helping to resolve conflict, rationalise project details, and introduce alternative ways of working, an external body can help to make better use of project time and focus on project deadlines.

Cost:

While there is an inevitable cost involved with engaging a third party, this may be absorbed by the fact that an independent body can help to move a stagnant project forward and identify cost savings.

o&i consulting has been brought in as an independent party on many occasions: for peer reviews, for operations reviews, and for large multi-stakeholder projects. We are recognised for our detailed knowledge of the functioning of aviation operations, the role of each stakeholder, and managing complex projects.

We work across the entire aviation industry, with airline, airport and ground handler clients, which means we are able to understand the view points of each party and their business objectives - being impartial but understanding the whole picture.

If an independent view may benefit you, please contact:

David Calder at davidcalder@oandiconsulting.com

first to board

o&i consulting has worked with Heathrow Airport to achieve another world first. Passengers are experiencing a new, innovative 'self-boarding' trial solution in Terminal 1 in conjunction with South African Airways. Neville Coss has been leading the process development and solution design, and managing the trial that uses biometric data to facilitate passengers to board their flight.

The new 'self-boarding gate' solution combines an automatic barrier which uses the travel document as the boarding token, and captures an infra-red biometric of the passenger's face to validate their identity against the image collected at check-in. This information is seamlessly communicated over a common use platform to the airline boarding application to confirm eligibility to board.

The trialled solution is designed to meet the intricacies of the airline operational requirements (passport, visa

validations), control authority requirements including passenger and baggage reconciliation (UK AAA), and the airline boarding activity.

Self-boarding products help to enhance the passenger airport and airline experience, as well as providing the passenger with more choice and control over their journey through the airport.

This technology means that a passenger's identity needs to be checked by airline staff only once during the entire

departure process; therefore helping to speed up the boarding activity for the passenger. As a result, airline staff are able to spend more time with customers who require or desire greater assistance.

Heathrow's Terminal 1 Director Ian Hanson said, "We are working in partnership with our airlines to trial this technology which should help make our passengers' journeys smoother and simpler. Since its introduction we have had positive feedback from both airlines and passengers."

Neville Coss, Director of o&i consulting, has been working with Heathrow Airport on the development of self-boarding products and processes for over 2 years. "We have worked closely with airline, airport, IT and control authority stakeholders to find the right solution for Heathrow," said Neville. "I am pleased that the trial has been well received."

To understand more about self-boarding and how we can help you realise your ambitions, please contact:

Neville Coss at nevillecoss@oandiconsulting.com



o&i consulting realises self-boarding products and processes in an airport environment. With a broad understanding of the process, available technologies, and engaging many stakeholders, we provide end-to-end support and management from concept design to commissioning and live operation.

o&i consulting: services

o&i consulting has expertise and experience in designing, planning and improving airport, airline, air cargo, parcel delivery and logistics operations.

Our core capabilities are:

operations planning

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

operations improvement

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

operations design

- conceptual design for passenger, baggage, cargo, catering, parcel and logistics facilities
- detailed design
- process design and re-engineering
- facilities requirements and layout
- 3D artistic drawings, models and visualisation

We are pleased to offer support

We invite you to contact us at:

clairemorgan@oandiconsulting.com

+44 (0)7909 576 915

o&i consulting ltd.
117 a Guildford Street
Chertsey, Surrey
KT16 9AS, UK

www.oandiconsulting.com