

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

Pre Games

- Information gathering
- · Initial planning
- Design check-in operation

During Games

· Obtain travel itineraries of athletes & Olympic Family

48 hours before STD

Pre-print boarding passes and bag tags

24-36 hours before STD

- Handler team and athletes report to remote check-in locations
- · Handler completes passport checks, accepts and tags bags
- · Bags loaded onto vehicles, secured and delivered to airport for sort and build

Day of departure

- Baggage processed
- Passengers arrive at Games Terminal
- Passenger security procedures
- Passengers transported airside to departure lounge

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.

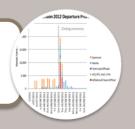
Numerous requests were received in the final hours of planning to adjust time slots to accommodate either the last round of competitions or other planned celebration /

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

- 16,000 Athletes
- 205 National Olympic Committees
- 3 Olympic Villages
- Port of departure
- Date of departure
- Airline of departure
- Flight departure
- identify demand



The security and sensitivity regarding accommodation block allocations, some teams not being pre-allocated to blocks, and the fact that departure travel plans were not identified until the week before the peak departure day meant it was unknown if each of the 10 handlers were required to be in I or all 10 check-in locations.

- 91 Airlines
- 10 Baggage handlers
- 10 Remote check-in handlers (representing 19 • 10 Check-in locations
 - 4 Terminals

check-in permutations



Each check-in handler team moved between the 10 check-in locations as required; visiting a check-in location once only. Each team move cost a 30 minute break in productive time. Some handlers were required to supply two teams to achieve the volume of check-in required in the time available; this was in addition to operating business as usual at Heathrow.

- 7 Bag sort locations
- Bags per passenger
- Out of gauge bag volumes
- Truck capacities
- Inability to mix truck loads
- Baggage sort & make-up
- baggage permutations







The constraints produced several cases where there were carriers and flights spread across several trucks - making the baggage sort process complex to plan and manage.



exceptional circumstances

- Manual check-in
- 24-36 hours before STD
- Global planning rules • Limited operational day
- · Off-site with a basic set up

Check-in locations were determined predominantly by the accommodation locations of the teams, it was inappropriate to request large volumes of passengers to move to alternative check-in locations with their bags. This was a factor outside of our control which had a large impact on the complexity and size of the planning, operational, and logistical task.



external factors defining the operational day

The operational day was driven by external factors:

- Time at which athletes would be willing to start check-in
- to get to the Closing
- Ceremony
- Availability of sort and make-up facilities at LHR, outside of the daily operation
- Complete check-in in time 2 hour road trip from Stratford to Heathrow

Matching the demands of check-in with the baggage sort and make-up requirements was a challenge. It was not possible to mix truck loads by terminal or handler. Therefore, with little volume from 10 locations, do you choose to move 40ft trucks around an Olympic Village, or accept very low utilisation out of each truck, requiring more trucks, drivers, vehicle staging and more vehicles through the airport control posts?



planning rules

- Global planning rules
- Manual off-site check-in
- Check-in 24-36 hours before departure
- Not permitted to mix truck work at the airport loads (bags to be segregated by sort location and handler if possible)
- Each check-in handler team to visit a check-in

- location once only
- · Check-in operation sequenced to produce the correct baggage handler
- Truck loads grouped by bag sort location (terminal), baggage handler & carrie
- Minimise the number of

There was no baggage storage available at the Village; bags were loaded directly onto the back of a truck and secured. The time planned for truck changes was closely managed on the day. In several cases truck changes occurred during a check-in period allocated to an individual handler to accommodate terminal or baggage handler changes.

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.

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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:

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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:

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