

# Operating airports safely and securely

The safety and security of our airports is a critical priority for us, to safeguard the well-being of the 150 million passengers and tens of thousands of employees of BAA and airport partners, contractors and suppliers.

## Health and safety

### The issue

Ensuring the health and safety of employees is an obligation of any responsible business. For BAA, as well as ensuring the health, safety and security of our employees, we are responsible for the well-being of everyone using our airports, including 150 million passengers, as well as contractors and our business partners.

Health and safety risks in our airports range from potential slips and falls in public areas to risks associated with complex procedures such as moving aircraft, fuel and heavy equipment. Construction work during airport developments also creates significant safety risks.

### Our approach

The safety of our passengers and staff is one of our highest priorities.

We maintain safe operations at our airports through good governance, a strong senior management commitment to safety, and the application of ISO-based and regulator-approved safety management systems, standards and procedures. We aim to ensure that everyone in our business from board level to those on the ground understands that health and safety is a shared responsibility and that every person is individually accountable.

Our aspiration is to minimise and where possible eliminate health and safety risks posed to all our employees, passengers, contractors and those visiting our airports. This section outlines how we try to meet this aspiration.

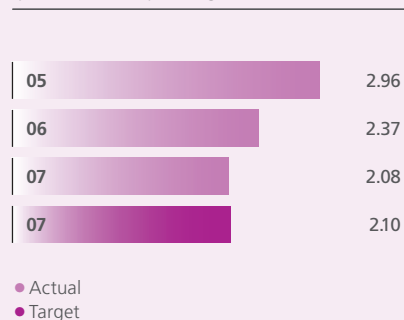
Our Safety Management System is at the core of our health and safety activities. We have recently introduced a new set of standards and operating procedures to improve and simplify our system.

We continually evaluate health and safety risks and maintain a risk register to help prioritise our efforts. We have plans in place to deal with the most serious safety risks, such as fires and other emergencies.

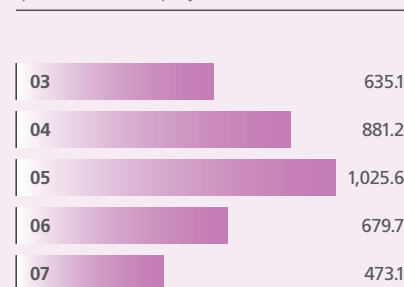
We invest in training and encourage an open culture, where all health and safety incidents are investigated and lessons are shared widely to prevent recurrence.

We have programmes to help the health and well-being of our staff and reduce the risk of occupational illness and sickness absence. These include occupational health services at our airports, providing pre-employment medical screening, health monitoring and promotion campaigns, and a referral service including specialist physiotherapist and mental health support. We do not discriminate against future employees on medical grounds, although in some jobs, for instance in the fire service, employees must pass a fitness test. Medical treatment services and dedicated paramedic support are deployed at our major airports in the south-east for passengers and staff.

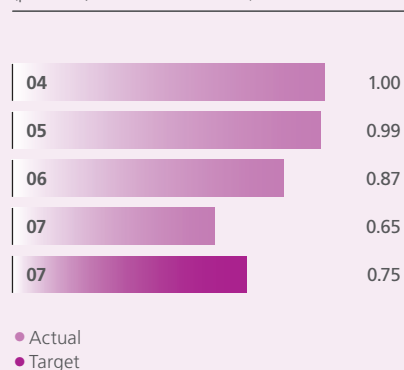
**Figure 25: Passenger Category 3 accidents<sup>14</sup>**  
(per 1,000,000 passengers)



**Figure 26: Employee reportable incident rate<sup>15</sup>**  
(per 100,000 employees)



**Figure 27: Employee lost-time injury rate**  
(per 100,000 hours worked)



<sup>14</sup> A Category 3 accident is a health and safety event within BAA control resulting from damage or failure of BAA equipment or assets; managed processes or systems; or BAA staff.

<sup>15</sup> Excludes those employed on Terminal 5 and other BAA construction projects.



See our security section on page 55 for further details of our approach to passenger safety.

## Health and safety governance

BAA's board and executive committee have ultimate responsibility for health and safety, including assessing the thoroughness of safety systems and setting annual targets. During 2007, we implemented improvements in our health and safety governance system in response to an independent review conducted towards the end of 2006. For instance, we revised the document which sets out the board and executive committee's collective and individual roles and responsibilities in this area.

Regular audits by independent technical experts assess compliance with our health and safety policies, standards, legal and other regulatory requirements.

Each of our airports has a dedicated health and safety department which works with line managers to ensure all activities at the airport are undertaken safely. Managers are responsible for leading safety efforts and ensuring their team members understand their individual health and safety responsibilities.

In 2007, we combined our management systems for health, safety and the environment into one system, called the Managing Responsibly System (MRS). The updated system is designed to be more effective and efficient and is aligned with the international standards ISO 14001 and BSI OHSAS. We will implement this system across the business in 2008.

## Our performance

Our targets for 2007 were:

- 2.10 Category 3 accidents per million passengers
- 0.75 lost-time injuries per 100,000 hours worked.

An ongoing aspiration for BAA remains to achieve zero serious injuries to our employees, passengers and contractors and those visiting our airports. Serious injuries include any which are reportable under UK Health and Safety Law. While minimising serious injuries remains an overall goal for BAA, a specific target has not been set as was reported in error in our 2006/07 corporate responsibility report.

## Passengers

We report passenger accidents to capture both the total number and their severity. Accidents are graded depending on the level of injury sustained by the passenger.

Over the last year, the passenger accident rate improved by 12%, and 30% over the last two years. We bettered this year's target of 2.10 accidents per million passengers, achieving a rate of 2.08. This improvement is as a result of a number of initiatives across our airports including:

- poster campaigns
- improved signage directing passengers along the safest routes (for example, a lift instead of an escalator)
- improvements made through our ongoing airport refurbishment programme.

## Employees

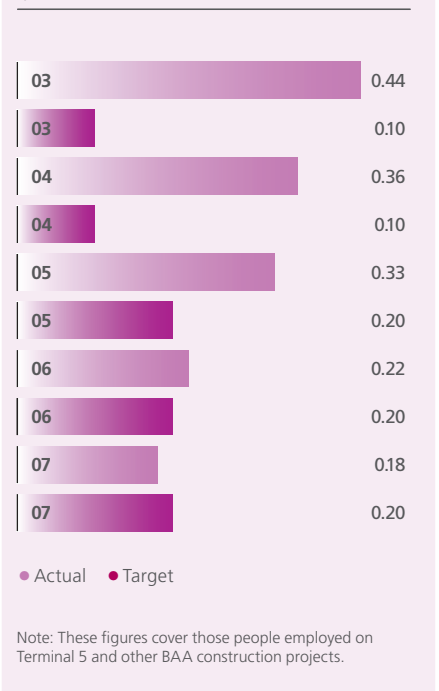
We use two measures to monitor the safety of our employees: the reportable injury incidence rate – a standard category of serious injury as defined by the UK Health and Safety Executive (HSE) – and the lost-time injury rate – as defined by BAA.

In 2007 the number of reportable injuries reduced by 30% from 2006 to 473.1 injuries per 100,000 staff. The industry averages reported by the HSE are 811.7 for the air transport industry and 776.7 for supporting and auxiliary transport activities<sup>16</sup>.

Of BAA's reportable injuries, there were three major injuries to BAA direct employees, a decrease from eight in 2006/07. This is equivalent to 30.2 major reportable injuries per 100,000 staff, below the industry averages reported by the HSE of 57.7 for the air transport industry and 100.8 for supporting and auxiliary transport activities<sup>17</sup>.

There were 128 lost-time injuries (injuries resulting in time away from work) to our employees in 2007 – an improvement of 25% on the lost-time injury rate per 100,000 hours worked for 2006. The main causes of lost-time injuries are musculo-skeletal injuries and stress. We bettered our target of 0.75 injuries per 100,000 hours worked, achieving a rate of 0.65. Our lost-time injury target for 2008 is 0.62. The lost-time injuries rate has improved

**Figure 28: Construction: reportable accident frequency rate**  
(per 100,000 hours)



due to the increased availability of physiotherapy services for employees, as well as a change in managerial accountability. Line managers in some areas of the business are required to inform senior managers of any lost-time injuries.

We sincerely regret that there was one fatality resulting from our operations this year at Terminal 5 in a contractor-controlled area. A supervisor of a lift installation team was working in the base of a lift shaft when he suffered fatal injuries following a controlled movement of the lift that the team were installing.

Each accident has been fully investigated and the lessons learned have been communicated across the business.

**Table 10: Reportable injuries per 100,000 employees by Standard Industrial Classification (SIC) Group**

	2005/06	2006/07
Air transport	911.2	811.7
Supporting and auxiliary transport activities	848.5	776.7
BAA	725.0	566.7

The table above compares BAA's performance with HSE published figures for selected Standard Industrial Classification (SIC) groups for the financial year 2006/07. HSE figures are provisional.

<sup>16</sup> and <sup>17</sup> Provisional figures for year ending March 2007.

## Case study



## The BAA fire service – keeping our airports safe

The BAA fire service plays a key role in maintaining health and safety at our airports. It offers a world-class service and has an average response time of just two minutes and 20 seconds – significantly faster than legal requirements. While accidents are infrequent, they can involve large amounts of aviation fuel, which when ignited can reach 1,000 degrees Celsius in 90 seconds. This makes a rapid response time vital.

To maintain response time performance, we invest more than £2 million annually in the latest equipment and training. We use infrared cameras and global positioning systems, so that we can quickly pinpoint incidents.

Our firefighters receive around 300 hours of training each year. Each of our airports has a state-of-the-art training simulator, where scenarios can be played out. This prepares our

firefighters for the many different situations they may face while maintaining safety at our airports.

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## Construction health and safety – employees and contractors

There were 31 reportable injuries to employees and contractors working at Terminal 5 and other large BAA construction projects in 2007. The reportable injury rate dropped by 21% to 326.7 per 100,000 staff. This is below the construction industry average of 865.3 as reported by the HSE<sup>17</sup>.

## Fire safety

In order to maintain a good fire safety culture our fire safety professionals work with the Local Fire Authority and Airport Fire Service. Performance standards are available to all employees responsible for fire safety and include guidance documents and a fire risk-assessment process. These documents have recently been updated to meet the requirements of new English and Scottish fire safety legislation.

## Health and safety training

During 2007 we ran 46 health and safety training courses. These included training needed for specific jobs, such as manual handling, as well as general health and safety training for all staff.

A new set of training courses was also introduced during 2007, including a new induction DVD, an in-house fire safety course and a conflict management course. We now have flexible contracts with six expert organisations which deliver the necessary training.

## Health and well-being

During 2007 we launched a nurse-led absence call centre at Heathrow. This service provides professional support and assistance to employees who are unwell and can help them to return to work more quickly. The service has been well received by staff and unions at Heathrow and has had a positive effect on short-term reported sickness.

We offer an employee assistance and specialist mental health support service to help employees to deal with stress and reduce stress-related absence. We are also introducing a physiotherapy service to help reduce illness and absence from musculo-skeletal diseases.

## Our plans

We will deliver our health and safety strategy through annual work-plans. These will be agreed and revised each year by the governance committees at each BAA UK business and will include specific measurable activities for each business and health and safety team.

Our targets for 2008 are:

- 1.87 Category 3 accidents per million passengers
- 0.62 lost-time injuries per 100,000 hours worked
- 0.20 fires of significance per million passengers
- 7.57 false alarms of significance per million passengers.

We define fires and false alarms of significance as those that occur in business-critical locations (for example, baggage halls), involve a passenger evacuation or are of a serious nature (for instance, involving gas).

Business units will also set their own local KPI targets.

## Security

### The issue

Events such as those on 11 September 2001, have highlighted the risks to aviation of terrorist attacks. The International Civil Aviation Organisation (ICAO) and the EU have introduced additional security measures to minimise these risks.

In the UK it is the Government's responsibility to establish mandatory security rules and processes for airports in response to security threats. Since the serious security alerts in August 2006, increased demands for screening passengers, aircrew and employees have been placed on UK airports. The alleged terrorist attack on Glasgow Airport in June 2007 was a further test of the security system. The challenge for airports is how to implement an increasingly complex set of rules to protect the safety of passengers, employees and partners while maintaining smooth and efficient airport operations, with minimal disruption to travel.

Airports also have an important role in keeping people safe from other causes of injury and criminal activity, ranging from theft of high-value cargo to theft of passenger property. Like any business, they must also protect their employees and assets.

<sup>17</sup> Provisional figure for year ending March 2007.



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## Our approach

Ensuring the safety and security of passengers, our employees and partners is our highest priority and is critical to the success of our business. Nearly half of our employees work in security. Searching passengers and hand luggage is the most visible form of security at our airports, but our employees are involved in many other aspects of security behind the scenes. These include:

- Securing airport perimeters
- Searching airport employees (not just those working for BAA)
- Providing the infrastructure for hold baggage to be screened
- Managing access to secure areas.

The threat level will remain high for the foreseeable future and we are working with government agencies to reduce risks to our airports. Additional security measures in place since August 2006, such as requirements to screen laptops, and restrictions on hand luggage and carrying liquids, have meant longer waiting times for passengers at the majority of European airports and we have consequently seen a reduction in customer satisfaction at our airports (see page 44).

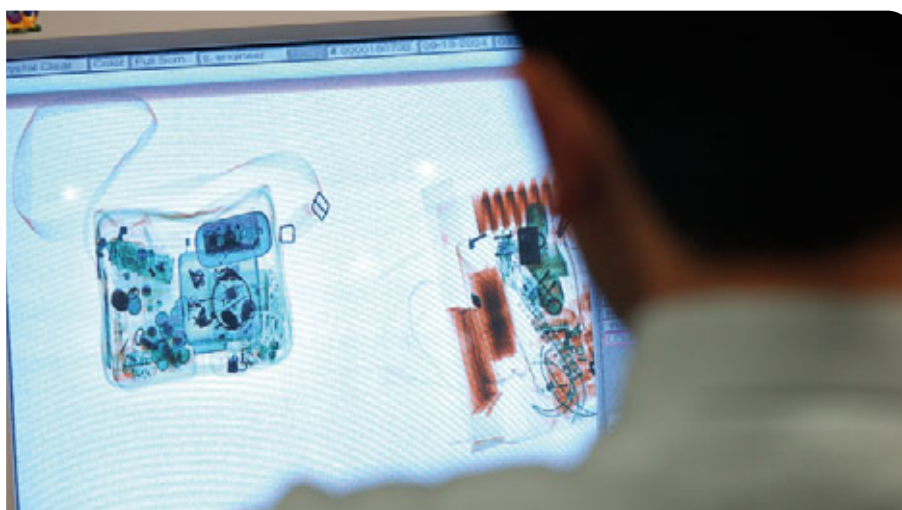
We have invested to improve security and minimise disruption for passengers. Between August 2006 and December 2007 we recruited 2,000 additional security staff. We have also opened 22 new security lanes across our seven airports, improved the layout of existing facilities and, by April 2008, we will have installed the latest screening technologies at all airports. This has reduced queuing times from the peak in the aftermath of the new regulations and made security areas more pleasant environments for passengers and our employees.

The attack on Glasgow Airport in June 2007 highlighted the need to protect the public areas of airports as well as restricted areas. In 2007 we reviewed our forecourt physical protection measures in line with national guidelines.

Transparency about business practices helps build trust with our stakeholders. However, the details of our security systems and plans must remain confidential, to avoid compromising security.

### Identifying risks

We have a systematic risk management process. This enables us to identify risks and to develop plans to deal with the consequences of any of those risks materialising and to resume normal business operations as quickly as possible. Multi-agency risk assessments of our forecourts and public areas are carried out to identify vulnerable areas and implement



appropriate protection measures. We also consult with the DfT and other agencies before any major airport development.

Careful co-ordination between all organisations involved in airport security, including the police, border agencies, airlines and cargo handling companies, is vital to ensure everyone is working to an integrated airport security plan. We provide two channels for agencies to share information on security threats and criminal activity at our airports: the Airport Security Committee and the MATRA Group (Multi-Agency Threat and Risk Assessment).

In 2007, we reviewed policing plans in conjunction with airport police commanders and police authorities.

### Training and awareness

A highly-trained and engaged security team is our best resource for tackling security threats. We train our security personnel to levels exceeding those mandated by the Government.

Everyone who works at our airports has a role to play in ensuring high standards of security. We have programmes to ensure non-security personnel remain vigilant and are able to recognise potential risks. Our airports take different approaches including providing special DVDs, training sessions and security awareness leaflets.

In 2007, we conducted awareness campaigns to help improve vigilance in restricted areas of our airports. This included giving a leaflet to everyone applying for a pass for restricted zones and classroom and computer-based training for all staff.

Before anyone can work in restricted areas at our airports they are vetted thoroughly in

line with Government guidelines. People who complete this process successfully are given electronically-coded photo ID cards which limit their access only to the areas of the airport relevant to their jobs.

### Technology

We use the latest technology to help our teams to maintain security and minimise disruptions to journeys. In 2007 we updated the screening technology at all of our airports. This included archway metal detectors, explosives trace detection equipment, and x-ray screening equipment, which is used in conjunction with body and cabin baggage searches conducted by hand.

We are always looking to enhance the technical capabilities of our security systems. We work closely with the DfT and technology manufacturers to make sure we have the right technology to meet the changing security threat and to reduce waiting times. In 2007, we began a strategic partnership with security technology manufacturer Smiths Detection.

In 2007, we trialled new systems designed to make the screening process more efficient and to reduce waiting times. This included:

- An automated tray return system at Glasgow
- New liquids testing equipment at Stansted
- A system to allow passengers to keep laptops in their bags at Heathrow
- Queue measurement using laser and Bluetooth® technologies.



### Crisis management

Our company-wide strategy for continuity planning and crisis management is tested every year, with each airport carrying out exercises to test different scenarios. Our head of business continuity planning co-ordinates activity across BAA, working with specially-appointed managers at each of our airports.

We also work with the UK Government to respond to risks on a national basis. We do this through the London Regional Resilience Forum, the Scottish Emergencies Co-ordinating Committee as well as other Government resilience teams. How we responded to the attack on Glasgow Airport is a testament to the preparedness of our plans.

### Measuring effectiveness and efficiency

We measure the effectiveness of our security processes and use an independent organisation to audit and test our security arrangements. We also assess perceptions of our security systems by interviewing passengers and monitoring complaints. In a process called Quality Service Monitoring (QSM) people are asked to rate security in four areas:

- Staff vigilance
- Staff helpfulness
- Waiting time
- Thoroughness of check.

Read the results of our QSM for 2007 on page 45.

We also monitor the efficiency of our security processes by measuring flow rates and queuing times. We are installing equipment which automatically measures queuing times in passenger search areas.

### Other security issues

We use CCTV cameras at our airports to deter and detect criminals and in some areas we use automatic number plate recognition, linked to the police national computer.

We have conducted risk assessments involving the relevant security agencies. As a result we are changing some of our forecourts and layouts of our terminal buildings to make them more secure. We also raise awareness among travellers and employees of the need to be vigilant by displaying posters around our terminals and through public address announcements.

### Advocating effective security

We work with national and European governments to ensure that security legislation can be efficiently and effectively applied at airports.

We also use our expertise and practical experience on the ground to inform the decisions of regulators. For example, in 2007 we conducted trials at our airports to help the Government assess the feasibility of reducing restrictions on the number of items of passenger hand luggage.

### Our plans

Our objective is to remain at the forefront of industry best practice and to work with all security stakeholders to achieve the best results for passengers.

We aim to reduce security queuing times for departing passengers to five minutes or less for 95% of the time, at the majority of our airports (see page 46 for more details).

In 2008 we aim to transform security check points at our seven UK airports, by:

- completing the installation of new, advanced screening technologies
- improving passenger communications, including new videos to help passengers understand security rules and facilitate their passage through security
- improving the physical environment of the security areas and introducing new security staff uniforms
- standardising operating procedures and security training programmes across our seven UK airports.

We also aim to work with the UK Border and Immigration Agency to deliver an automated clearance service, using biometrics to fast track passengers through immigration.