The Heathrow Service Quality Rebate Scheme

An overview of how the scheme is implemented

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Heathrow

Making every journey better

Contents

Version	Date	Comments
1.0	29/6/10	
2.0	10/9/10	Updated post introduction of automated queue measurement
2.1	18/11/10	Updated definitions for queuing walktimes, AMD delay and "Queue time" as per amendments to Annex H

1. Introduction

This document sets out how Heathrow Airport Limited (HAL) implements the Service Quality Rebate (SQR) scheme as defined by the Civil Aviation Authority (CAA) in Annex H of its March 2008 price control decision[1].   The objective of the report is to provide an overview of:
- the background to the formation of the scheme;
- the key features of the scheme;
- how data for each standard is collected;
- the process for calculation and payment of rebates;
- where results are communicated;
- the elements of the scheme that are set and agreed with airlines; and
- the mechanisms available to make changes to the scheme.

Background

The CAA and the Competition Commission (CC) concluded at the price control review for Q4 (February 2003) that BAA's revenue from airport charges should reflect the quality of service provided. As a consequence the SQR scheme was implemented, providing the airport with a financial incentive to meet a set standard of service quality across a range of services.

The scheme was reviewed and extended by the CAA during the price control review for Q5 (March 2008) to include new measures, increased standards to existing measures and an increase to the amount of revenue at risk.

The CAA also introduced a bonus scheme in Q5 to further encourage high performance to the benefit of passengers. The bonus scheme is quite separate from the SQR scheme in that it forms part of the allowable price cap for the airport in the form of permission to levy higher airport charges so is not covered in detail in this document. Further details of how the bonus scheme works and its calculation can be found in the CAA's March 2008 decision, Annex C and is covered as part of the annual consultation on the level of airport charges.

In order to ensure the scheme is being implemented in the way it was intended, the CAA also set a requirement for independent audits of the scheme to be undertaken through the price control period 2008-13. The first audit of the scheme was undertaken by the CAA in July 2009 which has resulted in further consultation by the CAA on various components of the scheme.   A follow-up audit was undertaken by the CAA in August 2010 to report on the status of actions against deficiencies identified in 2009.   Additional audits in Q5 will be undertaken by the CAA as deemed necessary.

Key features of the scheme

In summary, the scheme has the following key features:
- provides an incentive to the airport to meet set standards of service quality;
- rebate payments are made monthly to airlines;
- the maximum amount of rebates that could be paid is 7% of airport charges;
- rebates are paid on performance in an individual terminal (apart from Control Posts and the Aerodrome Congestion Term which are calculated and paid for the airport as a whole); and
- there are some differences in the performance targets set between terminals.

The rebate scheme covers the following aspects of Heathrow's performance:
- Passenger facing elements
  - Departure lounge seat availability*
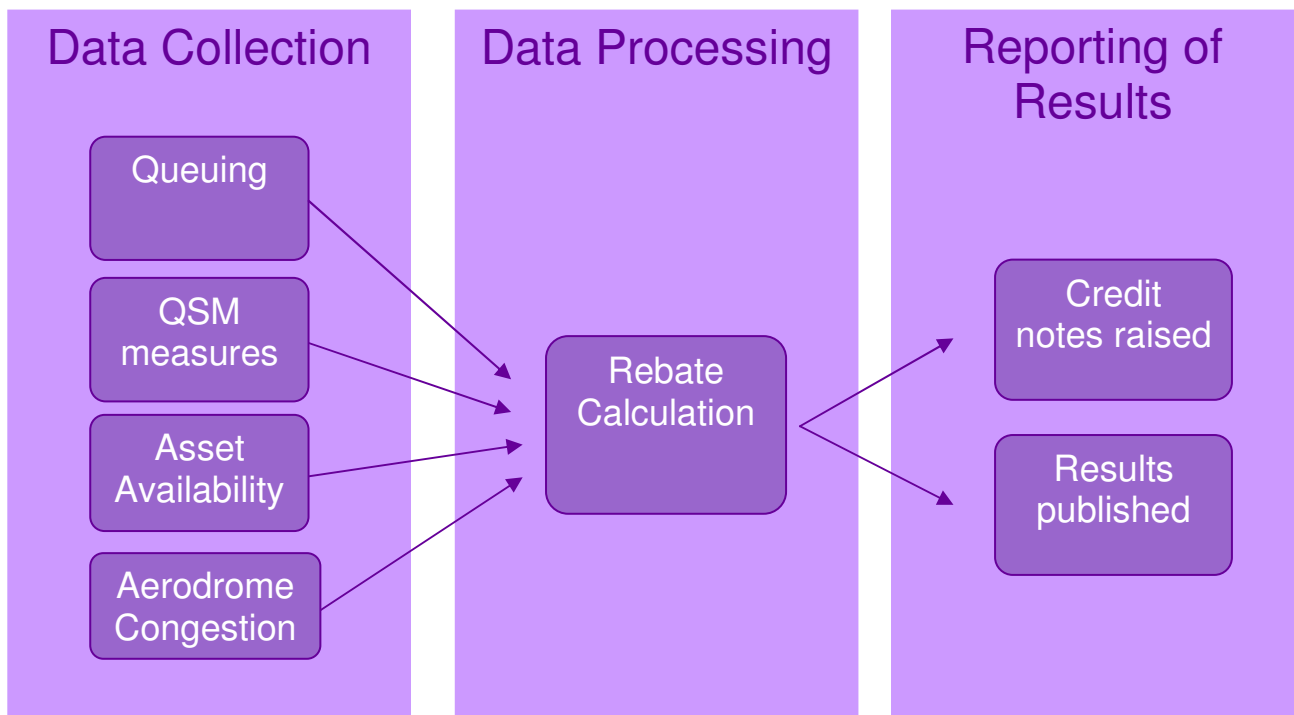 - Cleanliness*
  - Way-finding*

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[1] Economic Regulation of Heathrow and Gatwick Airports, 2008-2013, CAA decision, 11 March 2008; CAA

- Flight information*
- Central Security queues
- Transferring passenger queues
- Arrivals reclaim baggage
- Passenger sensitive equipment
- Terminal 5 Transit System
- Pier service

- Airline facing measures:
  - Stand availability
  - Jetty availability
  - Fixed electrical ground power
  - Pre-conditioned air**
  - Stand entry guidance
  - Staff search queues
  - Control posts queues
  - Aerodrome Congestion Term

* Measure of passenger's perception via the Quality of Service Monitor (QSM). All other standards are measurements of actual performance.
** Performance is monitored and reported but no rebate is payable.

The implementation of the scheme is broken down into three component activities as per the diagram below.

Data Collection	Data Processing	Reporting of Results
Queuing		Credit notes raised
QSM measures	Rebate Calculation	
Asset Availability		Results published
Aerodrome Congestion		

An explanation of how each of these activities is performed is set out in sections 2 to 4. Section 5 explains the elements of the scheme that are agreed with airlines and section 6 sets out how changes to the scheme can be made.

2. Data collection

2.1. Queuing measures

There are three different measures of queuing standards across the airport; passenger queues (for transferring and departing passengers), staff search queues and vehicle queuing at control posts. The standards for queuing measures and rebates payable in the event of failure are:

Element	Metric	Relevant time over[140] which performance counts for rebates	Standard$_l$	Rebate per month P$_{lj}$ (for all j)	Maximum annual rebate ANNMAX$_l$
Central security[141] queues	Times queue <5 minutes	05:00-22:30	95%	0.1283%	0.7698%
	Times queue ≤ 10 minutes		99%		
Transfer search	Times queue <10 minutes	05:00-22:30	95%	0.0633%	0.3798%
Staff search	Times queue <10 minutes	Period agreed locally for each terminal between airport and terminal AOC	95%	0.0633%	0.3798%
Control posts[142] search	Times < 20 minutes	Period agreed locally for each terminal between airport and terminal AOC	95%	0.0633%	0.3798%

Passenger queue times
Queue times for passengers are collected either by a member of staff manually observing and recording the queue time (the manual method) or by an electronic system that automatically calculates the queue time (the automated method).

A. The manual method
A member of staff monitors passengers moving through the search area by CCTV. At every 00, 15, 30 and 45 minute point of each hour the time is noted of the first passenger passing a designated entrance point, and the time when that passenger reaches the designated exit point (the start of the roller bed). The "queue time"[2] is then calculated by subtracting the start time from the end time. Another subtraction is made to account for the unimpeded walk time[3], with a further subtraction made to account for the AMD delay time[4]. The unimpeded walk time is the free flow transit time that a passenger would incur should there not be a queue, including any process time allowance (where applicable). If the resulting queue time is more than the queue standard, then that 15 minute period is recorded as a failure.

As the passenger selected is at random based on their entry time, it is not known which lane a passenger will eventually walk through. As a result all security lanes are captured by the measurement process, including fast track passengers.

B. The automated method
Two different types of technology are used at Heathrow to automatically measure queue times; a laser solution (which also utilises Archway Metal Detector (AMD) data) and Bluetooth detection.

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[2] As per Annex H (amended version August 2011) of the CAA decision: *"Queue Time" for central security queues and transfer search shall be the delay imposed by the queue for security including ticket presentation and facial capture, up to the point that the passenger reaches the security roller bed."*
[3] The unimpeded walk times, inclusion of any uni-queue or maze systems or process delay times and method of measurement are agreed locally for each search area between airport and terminal AOC with final endorsement at the joint airport-airline Service Quality Working Group.
[4] AMD Delay is a time taken from Laser only queue times to "move" the AMD in line with the end of the roller bed; this is the average time it takes passengers to disembark their items and walk through the AMD.

The laser solution works by identifying how many passengers entered and exited the search area every 5 minutes. To do this lasers are positioned at the entrance point to 'Count Into' the area and the AMD's are used to 'Count Out' (as shown in the diagram below). Every 5 minutes the system calculates the delay to the passenger with the longest experience in the area at that time by analysing how many people have entered and exited the area (by using the population calculated for the previous 5 minutes and adding the throughput in the current 5 minutes). The results for three 5 minute periods are then averaged to arrive at the performance for each 15 minute period.

Bluetooth detection works by capturing the unique Bluetooth signature ID from passengers' mobile devices where the passenger's device has Bluetooth enabled and set to discoverable. Bluetooth detector devices are installed at the entrance of the Security Search area usually on the ceiling and at each exit, either at the beginning of the x-ray preparation roller bed or again on the ceiling. The device is time stamped in and out to calculate an exact queue time for that passenger. The result for each 15 minute period is then calculated by averaging all samples received in that period.
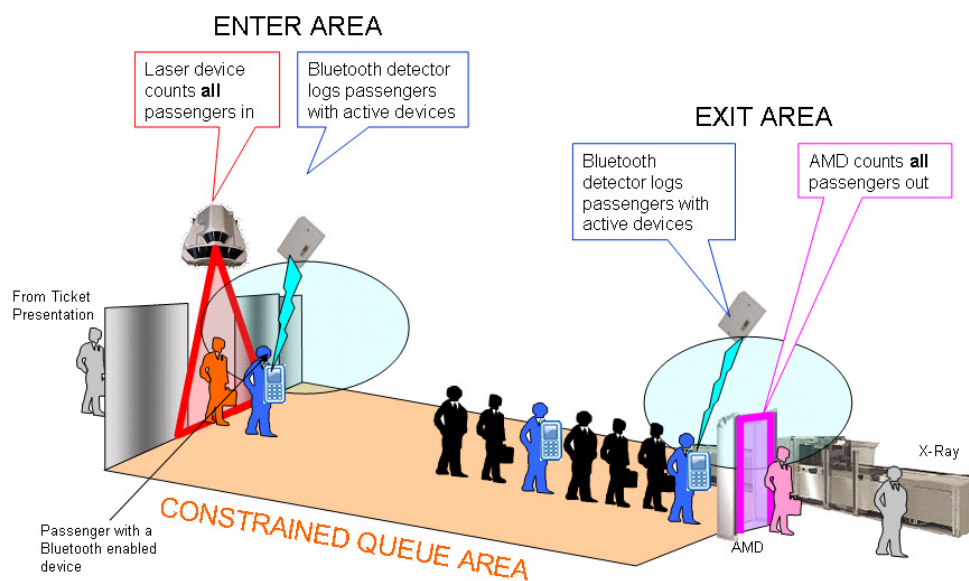
There are no passenger data confidentiality issues with the automated method. The laser system can not identify individual passengers as it only counts passengers transiting into and out of the area and the Bluetooth system can only track the identifier code of the Bluetooth device transiting the search area. The Bluetooth detector is not able to read the mobile number, personal details or listen in on phone conversations.

The "queue time" is then calculated for each 15 minute period by applying an algorithm which is based on the laser counts, Bluetooth data and a number of statistical settings unique to each search area, including the subtracted unimpeded walk time (as with the manual method). If the resulting queue time is more than the queue standard, then that 15 minute period is recorded as a failure.

If a passenger queue exceeds the entry point, 'top-up' times are manually recorded and added to the time generated by the automated system.

As with the manual method, all security lanes are captured by the measurement process, including fast track passengers.

In the event of system failure, the following back-up procedures come into effect:
i)   if the laser counters fail, queue times recorded by Bluetooth detectors only are used as published queue times;

ii) if Bluetooth detectors fail, queue times calculated by the laser counters are used as published queue times;

iii) in the event of both systems failing, or there being insufficient Bluetooth data when the laser system fails, then the manual method of measurement is put into operation.

iv) where the SQM times do not reflect actual passenger experience due to exceptional circumstances or UKBA embarkation checks, times will be manually over-ridden (as per the operating agreement with airilnes).

All instances of manual override or adjustment (required as a result of system failure or delays to passengers at UKBA desks[5]) are reported to the Terminal AOC monthly, after which any airline has 21 days to review CCTV footage to verify override times are accurate.

The number of breaches for both manual and automated methods are collated on a monthly basis and totalled to provide the percentage of times that queues were reported to be more than five or ten minutes (according to the relevant standard). The data is then sent to the finance team for calculation of any rebate due.

Staff search queue times

Queue times for staff are collected by an Operator in the Operational Monitoring Centre observing CCTV and manually recording the time taken for a member of staff to move from the back of the security queue to the roller bed at the front of the x-ray machine[6] . The data is captured and reported to the finance team in the same way as passenger queues.

Control Post queue times

The measure for control posts is the time taken for a vehicle to move from the back of the vehicle queue to the start of the control post process (i.e. as the vehicle moves into the control post sterile area). The time that the vehicle spends in the search area does not form part of the measurement.

Queue times for vehicles are captured via an automatic number plate recognition system. Queue times for all vehicles transiting through vehicular control posts are captured. Every 15 minutes a vehicle that joins the queue for a control post is selected for measurement. Cameras are positioned at a point equivalent to a twenty minute queue or more and at the control post sterile area. The first camera reads the vehicle number plate as the vehicle approaches the slip road approaching the control post. The second camera reads the number plate for the second time and matches it to the same vehicle number plate once it enters the sterile area in the control post. The time taken between camera 1 and 2 is recorded and the queue time per vehicle calculated. The queue data is downloaded from the automated system each day and collated in the same way as passenger and staff queues before being sent to the finance team for calculation of any rebate due.

2.2. QSM measures

The Quality of Service Monitor (QSM) is a continuous customer service monitor conducted amongst departing and arriving passengers. QSM is conducted at all BAA's UK airports and is used to provide management information on the performance of the airport. Face to face interviews are conducted with outbound/inbound passengers covering a range of questions, including way finding, queuing time, availability of seating and cleanliness.

Some of the QSM results are used for the purposes of the SQR scheme. These are:
• Departure lounge seat availability;

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[5] Currently only relevant in Terminal 4 where UKBA desks are positioned within the measurement area but are only in operation at certain times of the day.

[6] except for Terminal 1 "old domestics" post which is recorded by security officers in situ and Terminal 5 which is monitored by third party agency staff from the Terminal Service Centre (TSC)

- Way-finding (a weighted average of the QSM scores for three way-finding questions, weighted by the proportion of passengers using each form of way-finding);
- Flight Information (a simple average of the QSM scores for the three flight information questions which are asked of departing passengers); and
- Cleanliness (a weighted average of the QSM scores for five cleanliness questions, weighted by the proportion of passengers using each type of facility).

The standards for QSM measures and rebates payable in the event of failure are:

Element	Metric	Relevant time over[140] which performance counts for rebates	Standard$_l$	Rebate per month P$_{lj}$ (for all j)	Maximum annual rebate ANNMAX$_l$
Departure lounge seat availability	Moving average QSM score	(1) For 2008/9 period since and including April 2008: (2) for 2009/10 onwards, last 12 months.	3.8	0.0600%	0.3600%
Cleanliness			3.9	0.0600%	0.3600%
Way-finding			4	0.0600%	0.3600%
Flight information			4.2	0.0600%	0.3600%

Data is gathered electronically via handheld PDA's (CAPI – Computer Aided Personal Interview). Monthly interviews are weighted using data from Statistical Report System which records the actual passenger loadings by country of origin/destination. QSM data is weighted by country of destination (departing) and country of origin (arrivals). A second weighting is also applied on hour of day. This methodology ensures no one passenger group is under or over represented.

Analysis involves weighting schemes and derived score algorithms. The QSM scores are then calculated through a weighted average of the individual scores. The results applicable for the SQR scheme are then re-aggregated and passed through a separate set of algorithms to arrive at the four measures outlined above. These results are then weighted again by passengers per terminal. The rolling twelve-month average is calculated and sent to the finance team for calculation of any rebate due.

Sampling
Departing passengers are interviewed at the gate/gate area, immediately prior to boarding the aircraft. Interviewing in this location gives passengers the maximum opportunity to use services and facilities before they are interviewed. A typical departure interview takes around 7-10 minutes.

Arriving
Arriving passengers are interviewed on the Arrivals Concourse just before leaving the terminal building. Again, this interview location gives passengers the maximum opportunity to use services and facilities before they are interviewed. A typical arrival interview takes around 3-5 minutes.

Passenger Selection
Selecting passengers to take part in the survey is random and unbiased thus ensuring that every passenger has an equal opportunity to be interviewed. Interviewers follow a sampling ratio when selecting passengers within the gate room/area, i.e. 1 in 10 or 1 in 15 passengers. This ratio is dictated by the conditions at the gate at the time of interview. To be eligible for interview, passengers must be aged 18 or over.

How many passengers are interviewed?
Because it is not possible to interview all passengers travelling through the airport a sample of passengers need to be selected for interview – this is referred to as a 'quota'. In order to ensure that the interviews obtained over the year reflect the known profile of passengers travelling through the airport, passenger figures are used to structure the interview quota. This quota is set by country of destination for departing interviews and country of origin for arriving interviews. In

instances where the country quota is high (i.e. US destinations in Terminal 3) the sample may have a sub-quota for individual airport destinations (i.e. JFK New York).

2.3. Asset Availability measures

The standards for asset availability measures and rebates payable in the event of failure are:

Element	Metric	Relevant time over[140] which performance counts for rebates	Standard$_I$	Rebate per month P$_{IJ}$ (for all j)	Maximum annual rebate ANNMAX$_I$
Passenger sensitive equipment (general)	% time available	Period agreed locally for each terminal between airport and terminal AOC.	99%	0.0667%	0.4002%
Arrivals reclaim (baggage carousels)	% time available	Period agreed locally for each terminal between airport and terminal AOC.	99%	0.0667%	0.4002%
Passenger sensitive equipment (priority)	% time available	Period agreed locally for each terminal between airport and terminal AOC.	99%	0.0583%	0.3498%
Stands	% time available	Period agreed locally for each terminal between airport and terminal AOC	99%	0.0517%	0.3102%
Jetties	% time available	Period agreed locally for each terminal between airport and terminal AOC	99%	0.0517%	0.3102%
Pier service	Moving average % passengers served	(1) For 2008/9 period since and including April 2008: (2) for 2009/10 onwards, last 12 months.	As set out in paragraph H.16	0.0583%	0.3498%
Fixed electrical ground power	% time available	Period agreed locally for each terminal between airport and terminal AOC	99%	0.0383%	0.2298%
Pre-conditioned air	% time availability	Period agreed locally for each terminal between airport and terminal AOC	98%	0%	0%
Stand entry guidance	% time available and serviceable	Period agreed locally for each terminal between airport and terminal AOC	99%	0.0517%	0.3102%
Transit system	% time one car available	Period agreed locally between airport and terminal AOC	99%	0.0559%	0.3353%
	% time two cars available		97%		

The methodology for data collection of the asset availability measures varies depending on the asset being measured. Performance time for the following assets is captured via the fault management system (Maximo):
- Passenger sensitive equipment (e.g. lifts, escalators, travelators);
- Jetty availability;
- Fixed electrical ground power;
- Stand entry guidance system;
- Pre-conditioned air; and
- Arrivals baggage reclaim.

Data for the performance of the Terminal 5 track transit system, pier service and stand availability have different reporting systems which require a different data capture methodology. Each method is explained in more detail below.

Assets measured by Maximo
When a problem with an asset is identified; primarily through BAA staff carrying out regular inspections or monitoring via control rooms, or by third party staff; it is reported to the BAA fault

management team. The fault management team immediately raise a work order on the Maximo system for the reported problem against the relevant asset, and assign this to the relevant maintenance team.

The maintenance team respond and rectify the problem, and close the Maximo work order. The time taken from the fault being reported to the asset being rectified and returned to service is recorded as asset downtime, where the equipment was out of service.

The sum of all the downtime, along with any downtime due to planned maintenance work, within the operational day, is recorded against each asset. The monthly availability is calculated by subtracting the total downtime for all assets from the total available uptime, and expressed as a percentage of the uptime. The performance is then sent to the finance team for calculation of any rebate due.

Passenger sensitive equipment has two standards; one for "priority" assets and one for "general assets". Assets within the priority category are also counted against the general category to make the administration of the scheme easier. "Priority" assets for each terminal are agreed locally between the airport and the Terminal AOC and are set out in the Passenger Sensitive Equipment Service Quality Agreement.

Terminal 5 Track Transit System
The Track Transit System (TTS) is monitored by a Console Control Operator whenever the transit system is in operation. In the event of a failure in service (i.e. when a "train fail to depart" alarm is generated or whenever a train is not available to transfer passengers), the Operator alerts engineers and notes the start time of the incident in the TTS event log book along with a brief report of the nature of the incident.

If the downtime qualifies as a failure under the terms of the SQR scheme, it is given an incident or Maximo log number and the car / station details that are involved are also recorded along with the start / finish times and the number of minutes of downtime.

SQR recordable downtime is an incident that causes a stoppage to service due to a technical defect or failure, or a failure to have the operational team available to allow a safe and secure operation. Examples of downtime that do not qualify as a failure are:
- unattended packages (code 93); the train will be held at the station until the package has been confirmed as safe;
- spillage on a car; passenger spilling a drink or getting sick while being transferred on the train making the floor slippery or unsafe for passenger use. A single car may be put out of service and continue operating on the train until the cleaning team arrive; and
- trains held in the platform due to an incident in one of the terminal buildings and therefore stopping additional passengers entering a suspected unsafe area.

When the downtime incident has been resolved, (i.e. when the train is available to transfer passengers) the Operator notes the completion time. The duration between the start and finish times is recorded in the TTS event log book as a number of minutes. If an incident has been resolved and the train is shuttling under test but not allowing passengers to board the train, the completion time will not be recorded until the test has been complete and passengers are allowed to board the train. The start and finish times may be calculated or checked retrospectively by interrogating the alarm log on the TTS control desk.

The SQR recordable downtime is transferred from the log book and recorded on the TTS Key Performance Indicator (KPI) before being sent to the finance team for calculation of any rebate due.

Pier Service Availability

Pier service availability is a calculation by terminal of the number of passengers using remote stands compared to those using pier served stands. The performance is based on the total number of aircraft movements (i.e. both arrivals and departures).

The system used to collect the data on passenger numbers is BOSS. Within BOSS stands are listed as either pier or remote (if passengers are able to walk into the pier then the stand is classed as a pier served stand). The pier service calculations are completed by the Airport Stand Planning Manager and checked each month by the stand planning team members for their respective terminals before the data is sent to the finance team for calculation of any rebate due.

Stand Availability

Stand availability is a calculation of the monthly stand closure times for each terminal at Heathrow. The total number of stands for each terminal are multiplied by the number of qualifying hours that are available for the particular month. All stand closure times are recorded, closures during qualifying times are totalled and then the availability percentage is calculated for the month per terminal before the data is sent to the finance team for calculation of any rebate due.

2.4. Aerodrome Congestion Term

Aerodrome congestion is measured on an event by event basis with rebates payable when a "material event" has occurred which is the responsibility of the airport or its agents and which causes a "material operational impact" in terms of the number of air transport movements lost or deferred.

"Material events" are one, or a combination of more than one, of the following:
- radar and other critical air traffic control equipment or systems failure;
- tower staff shortages;
- tower industrial action;
- industrial action by Heathrow Airport Limited operational staff;
- closure of runways;
- closure of rapid exit taxiways, rapid access taxiways and other runway exit/access taxiways;
- closure of aircraft manoeuvring areas;
- runway or taxiway lighting system failures; or
- failure of other critical equipment e.g. fire tenders; or where bad weather has been forecast and has materialised and the "relevant bad weather equipment" (see below) is not available or has not been deployed.

A "Material Operational Impact" is defined as:
- for arrivals where:
  - a flow rate restriction (ATFM or local153) is applied which is less than the declared runway scheduling limit: and
  - the cumulative number of actual movements is less than the cumulative reference number of movements by at least four movements for any relevant measurement period during the period before the flow rate restriction is removed.
- for departures where the cumulative number of actual movements is less than the cumulative reference number of movements by at least four movements for any relevant measurement period during the period of the material effect.

"Relevant bad weather equipment" is defined as:
- equipment necessary in low visibility procedures:
  - Instrument Landing System (ILS), Instrumented Runway Visual Range (IRVR) system, Surface Movement Radar (SMR), Microwave Landing System (MLS)* and Advanced Surface Movement Guidance and Control System (ASMGCS)* (* where installed)

- o Operational availability of lighting and signage systems to enable Cat 2/3 operations to continue
- equipment required in the event of ice:
  - o Airfield (i.e. runways, taxiways and manoeuvring area) and aircraft stands anti/de-icing equipment and media, (as specified to the AOC)
  - o Operational availability and deployment of trained staff to operate the equipment
- equipment required in the even to of snow:
  - o Runway and taxiway snow clearance equipment (as specified to the AOC)
  - o Operational availability and deployment of trained staff to operate the equipment.

Data Collection

The airport maintains a log of all the events at the airport which it considers could have a potentially material effect on operations at the airport (the "Super-Log"). This includes ATFM and local restrictions imposed on Heathrow, material events relating to the departures runway (which may not necessarily have been linked to an ATFM or local restriction) and any other event that may be required to ensure a complete record is kept. The airport also provides a list of the anti/de-icing equipment and media and runway and taxiway snow clearance equipment in commission at the airport to the AOC prior to each Winter season.

In order to arrive at rebates for material events it is necessary to calculate the difference between the actual cumulative movements by hour in the measurement period and the reference or expected number of movements per hour over the same measurement period. The measurement period extends across the time taken up with the event itself and the time taken to recover from the event. Therefore, the cumulative flights deferred is the difference between the reference number of movements and the actual number of movements as measured at the end of each hour spanning the whole of the material event.

The reference flow calculations are based on the actual arrival and departure movements during the relevant hours and days in the preceding 8 weeks where there had been no material events or other significant factors which may have affected arrivals or departure rates. This data is supplemented by a consideration of other relevant factors that BAA considers appropriate in order to make best estimates.

Where there are co-incident causes of disruption and a material event has been made more severe by contributing causes beyond the control of the airport or its agents then the airport estimates the proportion of the effect which it considers to be solely associated with the material event and to strip out the impact due to the other contributing cause(s).

Once a month the airport meets with airlines and airport operations to report on:
- any new events that have been logged;
- the maximum number of movements deferred for each event;
- the assumptions supporting the expected level of arrivals or departures in each hour during the course of the event; and
- any estimate of the proportion of responsibility.

In the event of a rebate being due, the details of the event and number of movements deferred are reported to finance team for calculation of any rebate due.

In the event of parties being unable to agree the proportion of responsibility or any other point of disagreement, the issue will be escalated first to the Service Quality Working Group, followed by the Joint Steering Team. If the issue is still unresolved, the dispute resolution process will be followed.

2.5. Exclusions

As set out in Annex H of the CAA's decision, there are a limited number of circumstances when time will not be required to be counted towards the time when equipment is unavailable or when other standards are not met. These are:

• specific stands, jetties and FEGP to accommodate annual and five yearly statutory inspections, where this work is done in consultation with the airport AOC, and the period specified in advance, the exclusion not to be more than two days over any year (measured from 1 April –31 March) for any particular relevant asset. If works extend beyond any notified period, then any additional downtime would count against the serviceability standard;

• specific passenger sensitive equipment or arrivals reclaim baggage carousels to accommodate planned maintenance, where the work is done in consultation with the airport AOC, the period is specified in advance, the work falls in a dead-band month (as defined in Annex H of the CAA's decision and set out below), and the exclusion is not more than 30 days over any year (measured from 1 April –31 March) for any particular relevant asset. If works extend beyond a notified period, then any additional downtime would count against the serviceability standard. (If a specific asset is measured against both the general PSE standard and the priority PSE standard this exclusion applies to both);

• security queues for two hours following evacuations;

• closure of passenger-sensitive equipment (lifts, escalators, moving walkways) in areas immediately adjacent to security queues where it is considered by the relevant BAA managers that their continued use is likely to lead to unacceptable health and safety risks due to increased congestion;

• stands taken out of service to accommodate high security flights;

• closure of stands to ensure passenger safety during evacuation, emergency or safety incidents and relevant passenger sensitive equipment subject to the AOC agreeing after the event that such passenger service equipment was in the immediate vicinity of the stands or the incident;

• downtime where equipment is automatically shut down by fire alarm activation and the fire alarm activation is not due to a system fault with the fire alarm;

• passenger sensitive equipment where downtime is due to the activation of an emergency stop button or break glass, limited to equipment where there is back indication of serviceability and limited to 10 minutes for each occurrence in the case of false alarms;

• downtime to accommodate fire risk assessed deep cleans where an assessment of the equipment's condition has shown that a deep clean is needed to ensure a safe operation can be maintained and to reduce the risk of fire;

• equipment downtime due to damage of, or misuse to, baggage carousels, jetties, stand equipment (e.g. lighting) or fixed electrical ground power units likely to have been caused by airlines or their agents or to passenger sensitive equipment where an airline or airline agent has accepted responsibility or where the AOC agrees with the airport in writing that the likelihood is that the damage has been caused by an airline or its agent;

• downtime where a fault has been reported by airlines or their agents, but, when the engineers attend the site, no fault is found and the equipment is working;

- equipment or stands taken out of service whilst a major investment project is undertaken in the vicinity where this is done in consultation with users and the timing of work has been determined after consultation with the terminal's AOC, and the period specified in advance. If work extends beyond this period, then the additional downtime will count against the serviceability target;

- equipment or stands taken out of service for replacement or major refurbishment work, i.e. 're-lifting' work when the timing of work has been determined after consultation with the terminal's AOC, and the period specified in advance. If work extends beyond this period, then the additional downtime will count against the serviceability target; and

- for the aerodrome congestion term when:
  - where the material event is due to runways, taxiways, other aircraft manoeuvring areas, or associated airfield lighting taken out of service whilst a major investment project is undertaken in the vicinity and where this is done in consultation with users and the timing of work has been determined after consultation with the airport AOC, and the period specified in advance. If work extends beyond this period, then rebates will be payable if the work causes material events as defined above; or
  - where the material event is due to runways, taxiways, other aircraft manoeuvring areas, or associated airfield lighting taken out of service for replacement or major refurbishment work, i.e. 're-lifing' work, or NSL tower related works and when the timing of work has been determined after consultation with the airport AOC, and the period specified in advance. If work extends beyond this period, then rebates will be payable if the work causes material events as defined above.

Deadband months

Annex H of the CAA's decision allows for a period of time ("deadband months") over which the airport is able to undertake annual maintenance of passenger sensitive equipment or arrivals reclaim baggage carousels. The relevant deadband months are November, January, February or March (where Easter Sunday falls on or after 7 April) or a month agreed to in writing by BAA and the terminal AOC.

During this period those assets are exempt from availability measurement and subsequently exempt from having to pay any non-availability rebates. A timetable of planned maintenance work and corresponding downtime is provided to each terminal AOC for discussion and endorsement two months prior to the deadband period. This enables airlines to raise any concerns and endorse the overall plan.

3. Rebate calculation and payment

Each month the results for all of the SQR measures are collated and reviewed for approval by the airport's operational management. The results are then passed to the Finance department for input into an integrated spreadsheet model that calculates:
- results that are based on a moving annual average; and
- any rebates that are due.

Prior to publication of the month's results and any credit notes being raised for rebate payments due, a further independent review of the spreadsheet's output is carried out by a Senior Finance Manager.

Rebates are calculated monthly and paid to airlines as soon as possible after the end of each month. In each case (except aerodrome congestion), actual monthly performance is compared with the target and a rebate paid if the target is not achieved as per the standards and terms set out in Annex H of the CAA's decision.

The maximum amount of rebates currently payable is 7% of airport charges income. Rebates are based on a forecast of the total airport charges from passenger services in the relevant year and are calculated by terminal. Rebates are then allocated to the relevant airlines that used the terminal in the month (via a credit to their airport charges account) pro-rata with the airport charges incurred for passenger services in that month.

Airport charges from passengers services includes the following revenue:
- weight related charges for passenger flights including general aviation income;
- NATS weight related charges for passenger flights including general aviation income;
- departure charges for passenger flights; and
- aircraft parking for passenger flights.

Charges for non-passengers flights are not included.

As only forecast airport charges are used to calculate the rebate amount, at the end of the year (once the airport has published its audited accounts) a "wash-up" is undertaken to ascertain the difference between the forecast airport charges and actual airport charges. Where the amount of rebates paid during the course of the relevant year is less than the amount of annual rebates required, the airport pays any further amount due pro-rata to the rebates already paid in the course of the year, unless the airport and airlines agree that the sum is so small that to enforce payment would incur disproportionate handling costs for the relevant airlines.

In the event that the amount of rebates paid during the course of the relevant year is more than the amount of annual rebates required, the airport may recover the difference between the amount paid and the required amount from airlines pro-rata with the rebates paid.

4. Reporting of results

Monthly reports on performance under the rebate scheme are published as follows:
- in posters throughout the terminals;
- on BAA's website at www.baa.com; and
- reported at terminal AOC meetings.

As explained in section 3, rebates are paid monthly to airlines in the form of a credit note which is posted to each airlines account. A copy of the credit note is sent to airlines, either via electronic invoicing or by post, to the airline's accounts payable division.

5. Agreements with airlines

The CAA's statement of standards and rebates requires certain elements of the SQR scheme to be agreed between the airport and its airlines. These are:

- the relevant time over which performance counts for rebates for the following measures:
  - o passenger sensitive equipment (general and priority)
  - o arrivals reclaim baggage carousels
  - o stands
  - o jetties
  - o fixed electrical ground power
  - o pre-conditioned air
  - o stand entry guidance systems
  - o staff search queues
  - o control post queues
  - o track transit system
- the passenger sensitive equipment that is deemed to be a "priority asset" for the purposes of the SQR scheme; and
- the "Defined Method" of data collection for queue measurement, being either manual or automation.

Consultation on the detail of these agreements takes place at terminal AOC meetings with final endorsement at the joint airport-airline Service Quality Working Group. Agreements are then sent to the CAA for endorsement.

6. Changes to the scheme

The rebate scheme can be amended in one of two ways as set out below.

Agreement between the airport and airlines

Standards and rebates can be altered on an expedited basis if agreed by the airport and the Airline Operators Committee and notified in writing to be approved by the CAA. The process would be as follows:

(i)   The CAA would publish any proposed agreement between the AOC and the airport inviting objections from interested parties.

(ii)   The CAA would then allow 28 days for any objections.

(iii)   Unless the agreement raises significant issues, the CAA would expect to approve the agreement within 14 days of the end of the consultation period.

The CAA would expect to withhold approval only in limited circumstances where it concluded that the change was inconsistent with its statutory duties, for example where such agreements:

- no longer adequately addressed the CC public interest finding;
- did not give adequate weight to the interests of passengers as users; or
- on the basis of objections made the agreement did not seem to the CAA to represent the interests of users generally or which appeared unreasonably to discriminate against any user or class of user.

Changes by the CAA

Alternatively the CAA could revise the substance of the Statement. In these circumstances the process would be:

(i)   The CAA would publish proposals for consultation and invite interested parties to respond.

(ii)   It would allow an adequate period for written submissions, which would not be less than 28 days.

(iii)   Depending on the significance of the changes the CAA may then decide to hold meetings with some of the respondents.

(iv)   The CAA would publish a decision with reasoning together with any revised Statement.

Change may be instigated by the CAA on its own initiative or following representations from interested parties, where the CAA considers those changes have sufficient prima facie merit judged against its statutory objectives.

Suspension of security queues rebates

The CAA has decided to maintain the current 'force majeure' clause in the SQR regime. Under this clause, the CAA will be willing to consider the suspension of the security queue rebates for a limited period where the airport is subject to a significantly enhanced security direction from the Department for Transport and where it can be demonstrated to the CAA that this is such as to make meeting the existing standards patently unrealistic. For the avoidance of doubt, any application for a suspension will be subject to one or other of the two processes for change above.

Depending on the circumstances, the CAA may decide to backdate any suspension to the time at which the application is made, but the airport shall not act to anticipate such action by suspending payments unilaterally before such a decision is made.