
Timely delivery of departing baggage

Airline response to HAL's proposal that this be a reputational measure

25th April 2022

As a point of principle, HAL should be financially incentivised for Timely Delivery of departing baggage

It is appropriate and entirely reasonable that this is a financial incentive:

- The airlines have funded billions of pounds of investment in baggage systems over the last few years and the product provided by these systems should fulfil its purpose: to accept, process and deliver bags to airlines for us to load onto our aircraft
 - The performance of these high value systems should be held to account from a financial perspective
- In consumers' eyes and from a legal perspective, airlines are responsible for bags which miss flights; we incur a significant cost when this happens (IATA average: EUR70 – EUR100 per bag); in effect, airlines are already financially incentivised for our operation (!)
- Once our agent puts a bag in the system, we have no control over its system journey and delivery, but rely completely on HAL
- Therefore, If a failure of, or inadequacy in HAL's systems causes a bag not to make it through the system, HAL should be subject to a rebate; note that this would be nowhere near the level of the cost incurred by airlines for being unable to fly the bag with the consumer

The fact that the operating cost for baggage systems is an ORC should not negate the case for a financial incentive

- HAL continue to be handsomely rewarded through the aero charges for the previous and ongoing capital investment in baggage systems
- ORCs are established as cost pass-through mechanisms where airlines have little ability to control service standards
- There are already financial incentives in place for other service aspects which are charged via ORCs, for example PCA and FEGP
- The current situation is perverse in that if HAL's system fails to deliver a bag which subsequently misses its flight, the airline still pays HAL to cover the cost of the operation, whilst simultaneously incurring the cost for repatriating the bag

It is reasonable to agree some exclusions from the measure, but any perceived difficulty in capturing these should not negate the overall case

- HAL has done a great deal of work to suggest the exclusions which should be made and the difficulties in capturing them, but this work has been done to rationalise why the measure should not be financially incentivised, rather than consider positively how exclusions can be agreed and captured to make the measure work
- Note that HAL's initial view was that *"there are **a few instances** where elements outside Heathrow's control may impact a bag's timely delivery (e.g. bags having to recirculate because the output has not been kept clear by the handler) in which case the timestamp for delivery is adjusted accordingly, or excluded as appropriate (e.g. being input too late)."***
- The airline community believes that we can continue to work with HAL to agree the list of reasonable exceptions, and assist with implementing the necessary approaches to capture them

**Source: OBR work in progress, joint response update, 13/8/21

HAL's presented concerns about the impact of the need to capture and agree exceptions can be reasonably refuted

HAL presented two primary concerns:

1. For some exclusions, prioritising a financial Timely Delivery measure adds some cost
 - *Some costs are inevitable to build a robust measurement process, but these are necessary to make the measure effective; any new measures would likely incur set-up costs*
2. For others, prioritising a financial Timely Delivery measure may not fully align with the End to End MCR outcome
 - *Any necessary changes in behaviour would be broadly straightforward, but entirely a positive improvement to operational management processes and can only benefit consumer outcomes*
 - *It seems incongruous that the need to increase focus on the system elements totally within HAL's control might detract from the end-to-end outcome*

Introduction to detailed response

As stated on the previous slides, the airline community regard it a point of principle that this measure be financially incentivised.

However, we have anyway taken the time over the next few slides to offer responses to HAL's presented detailed concerns about exclusions, gathered from conversations with airline operational baggage experts.

Extra burden on OOG

PREVENTION

Avoiding non-compliant bags in the system:

Now (& TD = Reputational)

The current protection to minimise bag jams is signage encouraging handlers (*and Check-in agents*) to put only compliant bags into the system, and take (*or ask passengers to take*) more awkward items to the appropriate OOG location.

If TD = Financial

Some manual oversight of product input could help reduce the amount of non-compliant product entering the system. The emphasis on (*and Opex investment in*) system protection could shift the interpretation of 'nearly-compliant' items to keep them out of the system – protecting the elements within HAL control, but increasing the burden on the manual OOG process which already has a disproportionately high MCR

- A proportion of bag jams are attributable to the system itself, clearly a key aspect upon which the measure should drive focus
- We challenge that the number incidents caused by non-compliant bags is actually very small
- The consumer should be perfectly entitled to transport non-prohibited items, even if they are **technically** non-compliant due to the requirements of the core baggage system
 - This is the very purpose for which the OOG process exists
- The airline community is keen to continue to work with HAL to improve bag compliance and the process to handle non-compliant bags

Bag-jam clearance takes longer

IDENTIFICATION

Non-compliant bags in the system:

Now (& TD = Reputational)

Any jammed bags are cleared as swiftly as possible by the MIT (*Manual Intervention Team*) and the system restarted (*with Technicians' help as required*).

If TD = Financial

If "Timely Delivery" is a Financial measure, then distinguishing whether a jammed bag is/isn't compliant determines whether the downtime & associated impact is/isn't down to HAL. The MIT and Technicians would therefore have to make that assessment, capture evidence, and report it accordingly. This would take time, so either add cost, or reduce responsiveness. The corresponding impact on upstream bags would similarly need to be established – a non-trivial data exercise.

- It is right and proper that the MIT are instructed to clear jammed bags as soon as possible
- But equally, it is worrying if bag jams are currently being cleared without taking note of the root cause, because this flies in the face of continuous improvement
- Given easy availability of technology (e.g. camera phones), it would be relatively straightforward for MIT staff to capture required evidence, with little impact on bag jam resolution time
- This additional time taken would anyway provide valuable information for the benefit of all parties
- The implementation of a financial incentive would of course maintain HAL's focus on clearing jams as soon as possible

Re-routing from changes mid-build

Now (& TD = Reputational)

Accepting requests for operational changes mid-build re-routes bags, incurring additional time for individual bags (& risk to Timely Delivery), in order to accommodate handler considerations. Requests include:

- Temporary closure (*or delay on opening*) bag output points to accommodate absence of handler resource or empty containers.
- Movement of a flight build to fit onto fewer laterals to fit available resource, or if there is an issue with road access.

Whatever the reasons are, a process would be required to capture the reason and identify the degree of impact. Often, there will not be a material impact... ..but there will always be a cost in determining this, and if so, the extent of the impact.

If TD = Financial

This risk to Timely Delivery could be addressed by reducing the flexibility to accommodate such on-the-day operational changes – protecting the new metric, but at risk to the end-to-end process

- Flexibility is an essential part of baggage operations; if the baggage system can't cope with a reasonable number of mid-build changes, it is not fit for purpose
- A good example of this required flexibility from T3IB: the batch build window is set for 100 mins in the plan, but once all product from the EBS has been called, the airline may want to switch to in-time build earlier than planned, to improve operational efficiency and improving the likelihood of the right consumer outcome
- In T3 [VS] and T2 (Menzies), very few changes are requested in normal operations; the handlers work constantly and closely with the MUP planner so that few changes are necessary
- We are very happy to work with HAL to monitor the number of, and reason for changes, and their impact

Lane fulls and congestion

Now (& TD = Reputational)

When handlers are unable to attend to chutes & laterals, the sorter acts as a short term buffer, only releasing the bags when the handler has started to clear the backlog.

For the specific bags unable to be delivered, the Western Campus (T3 & T5) can distinguish whether this is due to a Lane - full, or an issue with HAL's equipment, although this distinction is not currently possible Eastern Campus (T2 & T4).

The delay to bags whose access onto the sorter is hindered because of high occupancy is not currently apparent in any terminal.

If TD = Financial

Having Timely Delivery as a Financial measure would require assessment of dieback & re-routing associated with high sorter occupancy arising from Lane Fulls, or a blanket exclusion from the metric of upstream in-system bags during such periods.

- We accept that in the current circumstances, we are seeing more backlogs that normal, due to lack of resources
- In normal operations, the number of backlogs is small; note however that they are sometimes inevitable
- Note that a 'lane full' could be due to a lack of MUP/lateral capacity (i.e. the system is too small for the operations which HAL are scheduling); for example, LH report that they sometimes do not get enough MUPs to meet operational needs; this can inhibit the handler's ability to empty chutes in sufficient time
- The T3/T5 system already provides the insight necessary to register the need for an exception
- The lack of ability to provide this information for T2/T4 is frustrating and illustrates the inadequacy of the ageing systems; the requirement will presumably be addressed by future system improvements/replacements
 - We are happy to work with HAL to agree a reasonable approach to exclusions for these terminals

Bag Store overloaded by repeat requests for small batches

Now (& TD = Reputational)

The new baggage system serving T3 gives the handlers the flexibility to call down batches of bags from the store, allowing efficient activity when it best suits during the first part of the build period.

Repeat requests for small batches is not recommended, as it puts additional strain on the system & store (with batches overlapping, causing the remainder of the initial batch to return to the store). With batches prioritised over Time Critical product, this behaviour hinders release of the product on the threshold of Timely Delivery

If TD = Financial

This risk to Timely Delivery could be addressed by reducing the flexibility to request batches under a certain size - protecting the store's ability to release Time Critical product, but sometimes reducing the handler's ability to make fullest use of resource.

- Even if 'repeat requests for small batches are not recommended', this is the operational reality in T3
- Airlines/handlers don't do this to be difficult, but to ensure efficient baggage delivery and achievement of the consumer outcome
- The system therefore needs to accommodate this required flexibility
- We are happy to work with HAL to monitor operational behaviours and strive for improvement where possible

Undue compression hindering store release

Now (& TD = Reputational)

Forms of build “compression” reduce the build duration; Demand Driven Build (DDB) does so commensurate to the number of bags on a flight. This can make effective use of the available space, but where the system was not originally designed for this, it can put the bag store on the cusp of effective operation.

Wholesale use strains the system to help the operation e.g. resource considerations in T5 may drive to build on fewer laterals, by shortening build duration. This increases bag throughput in the store, stressing the system and potentially “sailing too close to the wind” with timely bag release compromised across flights. This occurred in 2018 when T5 shorthaul build times were reduced en masse.

If TD = Financial

There is an argument for HAL to take on the lateral planning in T5, like it does in other terminals. This allows the system to be duly protected, & also the Timely Delivery metric, but hinders responsiveness to operational considerations.

- BA is surprised that this concern has been raised, because they have for a long time worked collaboratively with HAL on DDB to make improvements to T5 operations and this has not been flagged
- There is no appetite whatsoever to relinquish T5 lateral planning to a third part; the current collaborative approach seems to work well
- Also note that build compression is a standard part of the operational requirement; this was ‘sold’ to airlines as the way to increase system capacity

Batches of poor tags overwhelm Manual Coding

Now (& TD = Reputational)

When automatic tag readers don't read a bag-tag, the unidentified bag is routed to Manual Coding for the identification by an operator. Bag orientation means there is always some proportion of clear tags that still need this intervention.

Transfer bags from some outstations can have tags where the printing is all poor quality, meaning a large slug of bags requiring manual input, overwhelming the capacity to do so, and causing system congestion.

If TD = Financial

Whilst the specific batch of bags requiring Manual Coding can be identified and excluded from the Timely Delivery dataset, identifying the bags impacted by such congestion requires more onerous analysis.

- Manual Coding is an unfortunate but essential part of standard baggage operations and any baggage system should be able to facilitate this
- This is not thought to be a significant issue; airline figures on the prevalence of such bags are being sought
- There should be sufficient resilience in the system to allow for a reasonable proportion of bags going to Manual Coding and mitigating the impact on other bags

Bag messages not received

Now (& TD = Reputational)

Bag Source Messages are the information that links the number on the bag tag to the characteristics of the bag, most crucially its destination.

When these are not received for incoming bags transferring through Heathrow, the bags require storing until that information is made available.

These bags would be excluded from the Timely Delivery dataset irrespective of whether the metric were Reputational or Financial

- The airline community is comfortable that bags without BSMs should be excluded from the measure

Skewed input overloads DCV system

Now (& TD = Reputational)

The rail-mounted cart system* transporting bags East-West between T5 concourses, to Head-of-Stand, and out to/from T3 is broadly symmetrical North/South.

Effective movement of loaded carts (& recirculation of empty carts) is compromised when loaded heavily on one side, but not the other, necessitating undue traffic on the low capacity North-South connections.

The original design was conceived with the users' Resource Management System stipulating input points for each flight's transfer bags to ensure appropriate balance, but this was not implemented.

Excessive imbalance causes DCV stoppages, which are time consuming to rectify (as each cart has to be manually positioned over a Linear Induction Motor to re-start) with downtime impacting Head-of-Stand bags – the very product that is on the threshold of Timely Delivery

* DCV "Destination Coded Vehicle"

If TD = Financial

Regulating and enforcing balanced use of the transfer inputs would require overhaul of airline Resource Management Systems, and associated culture change.

- BA teams are encouraged to enter bags into the baggage systems at the nearest input points
- There are occasions where this doesn't happen but no significant issues for the DCVs have been noted
- We would expect the baggage system to be able to cope with these changes

Flexibility (e.g. early check-in)

Now (& TD = Reputational)

When there are operational issues for the community, HAL will endeavour to support as appropriate.

An example is Lufthansa's current issues regarding Check-In in T2. HAL have accommodated their request to start the system up early to enable passengers for their initial flights to Check In from 3:30am, helping minimise the extent queues as they grow through the morning.

However, this early opening means that the system downtime is reduced, together with the overnight window for system maintenance. Less maintenance means more risk of system failure, with consequential impact on Timely Delivery

If TD = Financial

Making Timely Delivery a Financial measure will militate against flexibility like this that is of benefit to the passenger, in order to maximise maintenance, prioritising achievement of the Timely Delivery metric.

- In response to the example about LH early check-in, this is only requested on c.30 days per year, the sole reason being to assist with operational efficiency and improve consumer outcomes
- Surely HAL's system maintenance regime can be planned so that these requests can be accommodated?
- Aside from this and the examples mentioned in earlier slides, what other types of flexibility might be reduced?