

**THE STATES OF DELIBERATION**  
**of the**  
**ISLAND OF GUERNSEY**

**STATES' TRADING SUPERVISORY BOARD**

GUERNSEY AIRPORT HOLD BAGGAGE SCREENING SYSTEM UPGRADE

The States are asked to decide: -

Whether, after consideration of the Policy Letter entitled 'Guernsey Airport Hold Baggage Screening System Upgrade' of the States' Trading Supervisory Board dated 2<sup>nd</sup> March, 2020, they are of the opinion:-

1. To note the requirement for the urgent project to upgrade the Hold Baggage Screening system in accordance with Short List Option 2 (as set out in Table 4) including installing two new baggage scanning machines, modifying the conveyors and carousel, and extending an area of the terminal building to accommodate the new hold baggage screening system, at a maximum cost of £12.0million.
2. To agree that the Hold Baggage Screening system project is formally included within the capital portfolio (2017-2021), to be funded from the Capital Reserve, with a contribution of £150,000 from the Ports Holding Account and:
  - i. To approve the sum of a maximum of £665,000, charged to the capital vote for the Hold Baggage Screening system upgrade, to fund all necessary steps for the development of the design stage and proposals for the procurement of Short List Option 2, as set out in paragraph 6.2 of this Policy Letter;
  - ii. To delegate authority to the Policy & Resources Committee to approve the Outline Business Case and;
  - iii. To delegate authority to the Policy & Resources Committee to increase the capital vote for the Hold Baggage Screening system upgrade project, to a maximum of £12.0million, subject to the Policy & Resources Committee's approval of the Full Business Case.

The above Propositions have been submitted to Her Majesty's Procureur for advice on any legal or constitutional implications in accordance with Rule 4(1) of the Rules of Procedure of the States of Deliberation and their Committees.

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**ISLAND OF GUERNSEY**

STATES' TRADING SUPERVISORY BOARD  
GUERNSEY AIRPORT HOLD BAGGAGE SCREENING SYSTEM UPGRADE

The Presiding Officer  
States of Guernsey  
Royal Court House  
St Peter Port

2<sup>nd</sup> March 2020

Dear Sir

**1 Executive Summary**

- 1.1 The States of Guernsey recognises the importance of Guernsey Airport and the States' Trading Supervisory Board ('STSB') is mandated to ensure the efficient management, operation and maintenance of any States' unincorporated trading concerns and commercial interests, including Guernsey Airport.
- 1.2 The STSB, in accordance with its mandate, puts forward the following recommendations:-
1. To note the requirement for the urgent project to upgrade the Hold Baggage Screening system in accordance with Short List Option 2 (as set out in Table 4) including installing two new baggage scanning machines, modifying the conveyors and carousel, and extending an area of the terminal building to accommodate the new hold baggage screening system, at a maximum cost of £12.0million.
  2. To agree that the Hold Baggage Screening system project is formally included within the capital portfolio (2017-2021), to be funded from the Capital Reserve, with a contribution of £150,000 from the Ports Holding Account and:
    - i. To approve the sum of a maximum of £665,000, charged to the capital vote for the Hold Baggage Screening system upgrade, to fund all necessary steps for the development of the design stage and proposals for the procurement of Short List Option 2, as set out in paragraph 6.2 of this Policy Letter;
    - ii. To delegate authority to the Policy & Resources Committee to approve the Outline Business Case and;

- iii. To delegate authority to the Policy & Resources Committee to increase the capital vote for the Hold Baggage Screening system upgrade project, to a maximum of £12.0million, subject to the Policy & Resources Committee's approval of the Full Business Case.
- 1.3 In accordance with a Resolution of the States of Deliberation<sup>1</sup>, the STSB is required to seek approval of the States for any Ports Capital projects that exceed a £2million spend. Further, in light of a review of funding for this project, the STSB is seeking approval to finance the investment through the Capital Reserve.
- 1.4 The upgrade to the Hold Baggage Screening system is a critically important investment in the islands' future. The airport provides vital connectivity and an essential social and economic lifeline for the Bailiwick of Guernsey. Guernsey Airport provides lifeline services to the residents of Guernsey and Alderney, 364 days per year.
- 1.5 Changes to the way in which hold baggage is screened are set in EU Regulation. The most recent deadline to meet regulatory compliance for a new standard of hold baggage screening has now passed, and an extension is sought from the Aviation Security Regulator. The project background is outlined in sections 2.2 to 2.15 of this Policy Letter.
- 1.6 This Policy Letter sets out the proposals for the preferred option for the Hold Baggage Screening system upgrade, and outlines the rationale for the recommended solution; Short List Option 2. It also describes why this is deemed to be the most appropriate option, representing the best value for money.
- 1.7 This essential investment represents a significant capital outlay, which reflects the specialist nature of the works. The estimated cost for the preferred option at this stage of the project has been identified in a range £10.5million - £12.0million. Whilst this cost estimate includes appropriate contingencies and a set of assumptions, it can only be indicative until final design and procurement. In addition there are costs already expended on the project estimated at £150,000, these enabling costs have been funded by the airport to date. Further design and professional fees in the order of £515,000 are required prior to the final stage of the procurement process which will take place upon approval of the Full Business Case. The States is asked to approve a total sum of £665,000 for these fees.
- 1.8 Financial analysis concludes that funding of the project through the Ports Holding Account or through obtaining a loan would lead to a requirement to raise passenger charges which will have a detrimental effect on the wider economy. Increasing charges to cover a loan would have a negative impact on the cost of air travel. The efforts by the airport to hold its charges in 2018 and 2019 to play its part in facilitating increased numbers through the airport would be undermined. Therefore

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<sup>1</sup> Billet d'État XII of 2017, Article I, Resolution 9 - The Policy and Resources Plan Phase 2.

this Policy Letter is submitted as an urgent request for funding from the Capital Reserve. The urgency is dictated by deadlines for regulatory compliance on the new standard of Hold Baggage Screening systems currently being implemented at airports across the UK.

## **2 Introduction**

- 2.1 This Policy Letter provides further information and the recommendation to procure a new fully integrated Hold Baggage Screening system in order to meet regulatory compliance and provide a reliable and resilient service. The key findings of a Strategic Outline Case (SOC) for the project are explained, and the urgency of completing the project as soon as possible is described. This project is the most urgent project in a programme of works to upgrade the security provision at Guernsey Airport. At this stage, the remaining programme of security works is considered to be affordable within the existing Ports Capital Portfolio although it is acknowledged that some future loan funding may be required depending on the future prioritisation and phasing of that portfolio.
- 2.2 The existing Hold Baggage Screening Explosive Detection System (HBS EDS) was installed in 2004 as part of the new terminal development. The system comprises of a series of conveyor belts and a single ‘in-gauge’<sup>2</sup> x-ray device which is dedicated to screening of all bags which are checked in to an aircraft hold, through the check-in desks in the passenger terminal. Since its installation the existing device is estimated to have processed approximately 2.5million items of hold luggage, typically suitcases. The existing conveyor system servicing the scanner was installed in 2004, has been well maintained and upgraded, but is now coming to the end of its operational working life, with conveyor failures increasing in frequency and likelihood.
- 2.3 Guernsey Airport is classed as a UK ‘Domestic’ airport for the purposes of aviation security regulation and to that end the standards that apply are common throughout the UK. Those regulations change from time to time and such changes in the standard of screening devices used for hold baggage now require an upgrade to the x-ray device installed at Guernsey Airport. These changes are explained in more detail in paragraph 3.3.
- 2.4 The latest equipment required to be installed for hold baggage screening represents a significant step-change in technology. The devices now being specified are much larger and heavier than the devices they are replacing, they use slower scanning speeds and are similar to medical Computed Tomography (CT) devices, albeit set in a more ‘industrial’ environment. These changes have had a major influence on this project and limited the number of options for these upgrades. Consequently this has increased both the complexity and the cost of this project.

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<sup>2</sup> ‘In-gauge’ refers to the fact that the x-ray machine is in line with the conveyor belts and all hold luggage is automatically routed through this device.

- 2.5 The requirement to upgrade the existing Hold Baggage Screening system to the new standard was first noted by the (then) Public Services Department in 2015, following advice issued by the UK Aviation Security Regulator (the UK Department for Transport (DfT)) in 2014. The Board approved the submission of a bid for funding of these upgrades in the 2017 States Capital Investment Portfolio cycle.
- 2.6 The bid for funding from the Capital Reserve was eventually withdrawn as a proposal to fund the device through private investment was advanced. This followed the principles of a similar model adopted in the provision of security scanning equipment at the time of the opening of the airport terminal in 2004. At this time Guernsey Airport's security provider was responsible for the capital funding of security equipment and it recovered those costs through its monthly charging of services. Those costs were, and in part continue to be, recovered through a security charge levied against all passengers, which currently stands at £2.35 per passenger movement. This unitary charge is relatively high when compared to similar jurisdictions. By way of comparison the security charge at Jersey Airport is currently £2.09 and the Isle of Man charge is currently £1.00. More generally, airport dues and charges at Guernsey Airport, which include the above security levy, are relatively expensive when compared to other jurisdictions. The average passenger is charged nearly £10.00<sup>3</sup> per passenger movement when taking into account all elements of the fixed and variable charges applied. The last comparison of published rates undertaken in 2018 identified Guernsey Airport charges as being more expensive than Jersey and Southampton Airports.
- 2.7 Separately and following a routine retendering of the general provision of security services at the Ports in 2016, it was clear that future funding of capital procurements from within the security provision contract were no longer considered viable, particularly as the indicative contract duration was set over a five year term. In any case, the Board considered that the debt servicing of these provisions were not in the overall best economic interests of Guernsey Airport, or the States of Guernsey. To that end a decision to wholly fund security devices and systems through the Ports Capital Programme was made and in late 2016 the responsibility for future funding of capital equipment was taken back by the Guernsey Airport. As well as proving less costly, this decision had the benefit of enabling shorter contract periods for security provision and the ability to test the market on such provision more regularly. Our contractor did however retain a role for technical advice on the preferred solution for upgrading of the Hold Baggage System.
- 2.8 Work to specify the replacement scanning device was then commissioned and initial advice on potential solutions was provided. This advice led the STSB to advance proposals in accordance with those outlined as Short List Option 1 in Table 4. This led to the purchase of a 'Standard 3' CT scanner in July 2018, funded through the Ports Holding Account (PHA). The capital cost of this device was £600,000. This device

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<sup>3</sup> Based on an ATR72 travelling to or from the UK with 50 passengers.

remains available as a contingency in the event any additional regulatory requirements are identified before the main project works are completed.

- 2.9 For reasons explained elsewhere in this Policy Letter, Short List Option 1 is no longer considered to be acceptable. The original intention was to advance this option in order to minimise costs and expedite timelines. However, the impact on passengers and the potential for future proofing the investment had not been adequately understood at the time of the purchase of the equipment.
- 2.10 Following delivery of the new Hold Baggage Scanner, and ahead of the belt reconfiguration work being commissioned, feedback from a number of other airports which had embarked on similar upgrades began to indicate that the new CT scanners were not achieving theoretical maximum scan times and this would have negative impacts on check-in queues. It also became clear that the preferred solution identified was highly unlikely to provide sufficient resilience or redundancy and could lead to passenger delay and disruption particularly at peak times and during any technical malfunctions. At that time, the Airport was suffering from poor customer service in respect of its general aviation security provision, and the prospect of risking further deterioration in that service was deemed not acceptable to the Board. Feedback from other airports also identified that the core principle of providing redundancy through the provision of more than one CT scanner was essential.
- 2.11 In addition, modelling on the existing terminal baggage bay identified a number of constraints. These included limited access for the maintenance and replacement of equipment within the baggage hall, the need for existing baggage belts to operate at slower speeds to accommodate the more thorough processing time associated with new scanning technology, and the overall impact of this slower processing speed on customer service, particularly at peak travel times.
- 2.12 As a result of this additional information, Option 1 was revisited. An analysis of passenger numbers, baggage numbers and peak periods was undertaken by an industry subject matter expert. This advisor had direct experience of the installation of Hold Baggage Screening systems at a number of UK airports. The 'Guernsey Airport Passenger and Baggage Strategy 2019 – 2029' was commissioned in the summer of 2019 and modelled baggage numbers typically processed through the airport terminal. This data has been vital in informing the alternative option now being proposed.
- 2.13 By summer 2019, the initial deadline imposed by the UK DfT for compliance had passed and negotiations for an extension to the date of compliance with that authority were commenced, through the Office of the Director of Civil Aviation (DCA) in its capacity as the Licensing Authority for Guernsey Airport's operations. In seeking an extension to that deadline, Guernsey Airport was aware that a number of other UK airports had been granted alleviations to their dates of compliance. These negotiations with the local regulator continue in consultation with the UK DfT.

- 2.14 In a wider review of options, the Project Board accepted that any investment had to achieve improved processing performance specifically, as well as greater system resilience and allowances for additional future capacity, given that the investment was significant and would hold an asset life of at least 10 years.
- 2.15 Given the last approved date of compliance has passed and as any revised date remains unconfirmed, this project has to be considered urgent. Work continues on this project apace, so that a system which meets regulatory compliance, as well as the other project investment objectives, can be installed and implemented as soon as possible.
- 2.16 The new hold baggage scanner purchased in 2018 may provide a temporary compliant solution for Hold Baggage Screening should the regulator impose an immediate remediation deadline for 'Standard 3' compliance. The machine will have a resale value, and accordingly that investment is not yet written off by the Board.
- 2.17 Due to the sensitivities surrounding airport security, some detail of how the new technology differs from the current technology is omitted from this Policy Letter. A more detailed breakdown of the total capital sum has been withheld for commercial reasons, as the works are still to be tendered. A breakdown will however be provided in a separate briefing to States Members ahead of the debate.

### **3 Strategic & Legislative Context**

- 3.1 The STSB is mandated to ensure the efficient management, operation and maintenance of any States' unincorporated trading concerns, including Guernsey Airport.
- 3.2 The UK DfT regulates security standards at all UK and CI airports. Locally it acts through the Office of the Director of Civil Aviation (DCA) to apply those regulations under local law. It has the ability both in the UK and locally (through the DCA) to issue Deficiency or Remediation Notices to enforce changes in security provision. Rectification of such Notices would require changes to existing processes or equipment provision.
- 3.3 The DfT issued warnings to all airports in the summer of 2014, advising that UK airports needed to prepare for a change in standards to the way hold baggage on aircraft is screened. The change was to introduce enhancements to Hold Baggage Screening Explosive Detection Systems (HBS EDS) by 1<sup>st</sup> September 2018, through the installation of a new type of screening machine referred to as 'Standard 3'<sup>4</sup>. This instruction applied to all UK airports (including the three Crown Dependencies). Failure to achieve this change would represent a breach in UK DfT standards, with the possibility of a deficiency or remediation notice being issued. This could result in measures being implemented which would negatively impact the customer experience and/or significantly increase the cost of security provision, as alternative baggage checks may then be demanded.
- 3.4 Additionally, a reliable, compliant, working Hold Baggage Screening system is fundamental to a number of policy priorities of the Future Guernsey Plan:
- The installation of a reliable and efficient Hold Baggage Screening system is key in enabling the island's "robust, sustainable, reliable and affordable" air links in order to deliver a dynamic and growing economy, in accordance with the Air & Sea Links policy.
  - This project ensures that the Department for Transport Aviation Security regulations are met, in line with the International Standards Policy.
  - Guernsey Airport is a critical economic enabler, relevant to many strategies and policies under the Economic Development Policy. A compliant and reliable Hold Baggage Screening system is vital to the operation of the airport.

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<sup>4</sup> EU Regulation No. 1087/2001 requires all EU airports, member states and other countries to be compliant to Standard 3 level of Hold Baggage Screening (HBS). Standard 3 is a framework defined by the European Civil Aviation Conference (ECAC) and sets the minimum required levels of detection, applicable to HBS, explosive detection systems (EDS), liquid explosive detection systems (LEDS) and security scanners.

3.5 The Guernsey Airport Business Plan cites that “The Airport shall be operated in a commercial manner to maximise its financial performance, with emphasis being placed on providing services that are suitable and fit for a wide popular market through the provision of well-regulated facilities for the transportation of passengers and freight”. The key aspects of providing services that are suitable and fit as well as well-regulated are significant strategic considerations for this project.

#### 4 Summary of Project Business Case

4.1 In accordance with recognised practice, the Project has compiled a Strategic Outline Case which has been reviewed and approved by the Ports Board and the States Trading Supervisory Board. That Business Case has also been subject to an independent Project Assurance Review (PAR). A summary of that review is included at paragraph 8.4 of this Policy Letter. This section outlines the content of the Strategic Outline Case.

4.2 In reviewing the desired outcomes for this project the following Investment Objectives listed in Table 1 have been identified and then applied against a number of options which are listed in Table 3 of this Policy Letter.

**Table 1: Investment Objectives**

<b>Investment objective 1:</b>	For Guernsey Airport to have a regulatory compliant Explosive Detection (EDS) system for Hold Baggage Screening (HBS).
<b>Investment objective 2:</b>	For Guernsey Airport to have an HBS system that can meet demand in peak periods.
<b>Investment objective 3:</b>	For Guernsey Airport’s HBS system to be reliable and resilient.
<b>Investment objective 4:</b>	For Guernsey Airport’s HBS system to cease negatively affecting customer experience.
<b>Investment objective 5:</b>	For Guernsey Airport’s HBS system to be future proofed.

4.3 The scope of the project is to deliver a Hold Baggage Screening system which utilises the passenger throughput information ascertained by a specialist consultant, which provides a clear understanding of peak demand.

4.4 The project scope and cost estimates include the provision of a single storey extension to the terminal building which will house the new hold baggage system, with foundations of sufficient load bearing capacity to bear the potential heavier weight of future HBS machines (the current trend is that each new generation of scanning machine is heavier than its predecessor). The design of the building will allow for a straight ‘swap in’ of future models of hold baggage scanning machinery, which would be expected to have a larger footprint again than the ‘Standard 3’ machines to be installed.

- 4.5 The foundations should also take into account the opportunity to gain wider benefits by further development of the area that may be identified through an ongoing Master Planning exercise, which will take into account the strategic airside location of the existing baggage hall. Further options on the type and size of the building are being reviewed and will form part of the overall Full Business Case, subject to approval in due course.
- 4.6 The scope of this project has also taken into account both current, medium and potentially longer term implications of increases in passenger baggage volumes through the application of future targets which could take into account changes in the size or number of aircraft operating from Guernsey Airport.
- 4.7 The specialist technical report (Guernsey Airport Passenger and Baggage Strategy 2019 – 2029) as well as direction from the Ports Board, informed the Critical Success Factors for the project, outlined in Table 2.
- 4.8 The baggage numbers referred to throughout this Policy Letter relate to the number of bags processed per hour during peak travel times, in order to meet total annual passenger throughput numbers. At present the airport processes approximately 900,000 passengers/annum and to sustain this the HBS system must be capable of screening 580 bags/hour at peak times. In order for the airport to accommodate annual passenger numbers of 1.2million (being the current design capacity of the terminal and operating with the same profile of peak departure times), the HBS system must be able to process 636 bags/hour. Allowing for some future growth, passenger numbers amounting to 1.5million passengers/annum would require the processing of 850 bags/hour by the HBS system.

**Table 2: Critical Success Factors**

<b>Critical Success Factors</b>		<b>Related Investment Objectives / Categories</b>
A	An option will be excluded from consideration if it cannot provide a functioning 'Standard 3' HBS solution by the date agreed with the Regulator (or as set by the Airport).	Meets Investment Objective 1
B	An option will be excluded from consideration if the HBS solution cannot process 580 bags/hour by the date agreed with the Regulator (or as set by the Airport).	Meets Investment Objective 2
C	An option will be excluded from consideration if the HBS solution does not utilise equipment that is proven to operate to industry standards, and be appropriately maintained in Guernsey.	Meets Investment Objective 3
D	An option will be excluded from consideration if the HBS solution does not include at least two 'Standard 3' EDS machines that can be operated independently of associated equipment.	
E	An option will be excluded from consideration if the potential market of suppliers cannot evidence that they have the capacity to implement the HBS solutions by the date agreed with the Regulator (or as set by the Airport).	Supplier Capability
F	An option will be excluded from consideration if the potential market of suppliers cannot evidence that they have the skills and experience to implement the HBS solution in a regional airport, which is physically remote from the mainland UK.	Supplier Capability
G	An option will be excluded from consideration if the proposed HBS solution requires a permanent structure that cannot be built to a timescale that allows the solution to be implemented by the date agreed with the Regulator (or as set by the Airport).	Achievability
H	An option will be excluded from consideration if its operational cost requires an increase to airport charges of a scale that negatively impacts passenger numbers, and thus the Airport's business model.	Affordability
I	An option will be excluded from consideration if its impact will negatively impact on the Airport's role as an enabler of the Bailiwick's economy.	Value for Money

- 4.9 The Investment Objectives, Critical Success Factors and project scope were developed and ratified at two stakeholder workshops held on 21<sup>st</sup> October, 2019 and 4<sup>th</sup> November, 2019 and were subsequently endorsed by the Ports Board and the STSB in the Strategic Outline Case.

### **The Long List of Options**

- 4.10 The Long List of options has been developed utilising the specialist technical advice received, including the detail derived from the 'Guernsey Airport Passenger and Baggage Strategy 2019 – 2029'.

### **Evaluating the Long List of Options**

- 4.11 The Long List of options has been evaluated against the Investment Objectives and Critical Success Factors. Table 3 provides an explanation of each of the options, and outlines the findings of the assessment of each of the Long List options.

**Table 3: Long List Evaluation**

Long List Options for Scoping	Finding
<p><b>Option 1 – Do nothing</b></p> <p>Continue to operate the current in-gauge HBS machine with only standard servicing of the existing equipment and no additional maintenance, until the machine fails. Accept failure of the in-gauge and out-of-gauge machines in due course, and the fact that eventually there will be severe restrictions on the ability of passengers to travel with hold baggage, possibly not at all.</p> <p>No regulatory compliance.</p>	<p>The option to do nothing meets the fewest of the CSFs for the project. This option does not enable Guernsey Airport to provide a functioning ‘Standard 3’ HBS solution, and in time will not be able to process the minimum required bags per hour. This option does not provide resilience in the event of a breakdown of machinery as it does not meet the CSF of including at least two ‘Standard 3’ machines. This option will have a catastrophic effect on the Airport’s role as an enabler of the Bailiwick’s economy due to the severe restrictions on the ability of passengers to travel with hold baggage. <b>This option was discounted.</b></p>
<p><b>Option 2 – Status quo</b></p> <p>Maintain existing equipment.</p> <p>Accept regime of hand searching of bags.</p> <p>Unlikely to achieve regulatory compliance over a longer term.</p>	<p>The option to maintain the existing equipment does not meet the CSFs regarding the provision of a functioning ‘Standard 3’ system, with at least two ‘Standard 3’ EDS machines which can be operated independently of the associated equipment. A regime of hand searching some hold bags is likely to reduce baggage throughput from the minimum requirement of 580 bags/hour, to 100 bags/hour and such a drastic reduction in passenger throughput would negatively impact the airport’s role as an enabler of the Bailiwick’s economy. <b>This option was discounted.</b></p>
<p><b>Option 3 – Do minimum</b></p> <p>Just meet DfT requirements.</p> <p>Install the already purchased ‘Standard 3’ machine as in-gauge.</p> <p>Utilise existing conveyors, carousel and building.</p>	<p>Installation of the already purchased ‘Standard 3’ machine as a direct replacement for the existing screening machine does not enable the minimum bag throughput of 580 bags/hour to be met, and two ‘Standard 3’ EDS machines with the functionality to operate independently of the associated equipment are not provided. The low bag throughput would negatively impact the airport’s role as an enabler of the Bailiwick’s economy, however this option would achieve compliance relatively quickly and at comparatively low cost. <b>Option Shortlisted.</b></p>
<p><b>Option 4 – One machine solution, current footprint</b></p> <p>Install 1 new ‘Standard 3’ machine</p>	<p>Installation of one ‘Standard 3’ machine as in-gauge does not provide a solution that can meet the minimum baggage throughput requirement, nor does</p>

<p>as in-gauge with greater throughput capacity than the already purchased 'Standard 3' machine. Potentially modify conveyors and carousel. No building extension.</p>	<p>it provide two 'Standard 3' EDS machines which are capable of being able to operate independently of each other. The low bag throughput would negatively impact the airport's role as an enabler of the Bailiwick's economy. <b>This option was discounted.</b></p>
<p><b>Option 5 – Two machine solution, current footprint</b> Install two new 'Standard 3' machines (supporting both in-gauge and out-of-gauge) and potentially modify some conveyors and carousel within the existing building footprint. Utilise already purchased 'Standard 3' machine for interim solution, if required by DfT timeline.</p>	<p>Although more favourable than Options 1 – 4, this option is excluded because it does not enable the minimum required bag throughput of 580 bags/hour because the shorter conveyor lengths would not optimise bags for processing through the machinery. This would result in the machines not achieving their maximum throughput, and inefficiencies in the layout of the conveyor system will result in a higher 'reject rate' of bags which require manual intervention. This in turn would have a negative impact on the airport's role as an enabler of the Bailiwick's economy. <b>This option was discounted.</b></p>
<p><b>Option 6 – Two machine solution, extended footprint.</b> Install two new 'Standard 3' machines (supporting both in-gauge and out-of-gauge) and modify conveyors and carousel. Extend building. Utilise already purchased 'Standard 3' machine for interim solution, if required by DfT timeline.</p>	<p>Option 6 is the only one of the options presented which does not fail to meet any of the CSFs, and is therefore the preferred option for inclusion in the Short List. Option 6, to install two new 'Standard 3' machines with the modification of the conveyors and carousel, is the only option which allows for the minimum baggage throughput of 580 bags/hour which will ensure that peak passenger flows are not negatively affected. <b>Option Shortlisted.</b></p>

## **The Short List of Options**

- 4.12 Two options from the long list were carried forward for more detailed consideration and evaluation in the short list. The details of the shortlisted options are provided here in Table 4 for clarity.
- 4.13 Short List Option 1 is not the preferred option. This option does not meet the Critical Success Factors to meet minimum bag throughput numbers or provide a resilient solution. Additionally, due to the location of the existing control system, power supplies and control rooms, maintaining a suitable HBS during the installation of new equipment as described in this option would be extremely challenging.
- 4.14 The preferred option, Short List Option 2, is the only one of the Long List options which does not fail to meet any of the project's Critical Success Factors, and therefore the only viable option in terms of meeting the project's Investment Objectives, as well as the strategic priorities of the airport as outlined in the Guernsey Airport Business Plan, and the policy priorities of the States as described in the Future Guernsey Plan.

**Table 4: A Description of the Short List Options**

**Short List Option 1 (Long List Option 3) – ‘Do minimum’.**

This option entails installing the already purchased hold baggage scanning machine as a direct replacement of the current in-gauge machine. This option would largely use the existing area available in the ‘baggage out’ area of the terminal building, utilising the existing conveyors and carousels, although some significant reconfiguration would be required. This option does not involve the wholesale replacement of the existing system but rather the replacement of just the hold baggage scanning machine and some of the feeding belts. This option would make Guernsey Airport compliant with the new regulations, however implementing this option would be highly problematic for a number of reasons as outlined in Table 3 and paragraph 4.13.

This option has therefore been included in the short list as a benchmark to assess value for money, as it utilises the already purchased scanning machine, and is not the preferred option.

**Short List Option 2 (Long List Option 6) – the preferred option.**

This option involves installing two new compliant hold baggage scanning machines, supporting both ‘in-gauge’ and ‘out-of-gauge’. The conveyors and carousel would be modified with an extension to the building required in order for the system to work efficiently and meet the maximum peak bag throughput.

The preferred option entails carrying out the works in a manner which would not preclude the cost-effective construction of a permanent building, in such that foundations installed should be suitable for a permanent multi-storey building and services (electrical power, water, drainage, communications etc.) are installed that are specified sufficiently to accommodate a larger building in the future. This is the only option which meets peak passenger throughput numbers, provides resilience in the event of a breakdown, and is able to cater for some future growth in passenger numbers, or changes in peak demand.

- 4.15 The capital costs for the shortlisted options are shown in Table 5. For Option 1, these costs relate to the cost of the already purchased hold baggage scanning device, the installation and implementation of the new machine. It is of note that ongoing revenue costs will be disproportionately higher than for Option 2, and there would be negative implications on the service provided should Option 1 have been implemented.
- 4.16 The capital costs of Option 2 include architectural, mechanical and electrical design services, project management and other fees; surveys, two hold baggage scanners, conveyors and associated control systems, training, building extension and alterations and site facilitation. In relation to the building extension, a number of assumptions have been made in order to provide an estimated cost. These

assumptions are based on a similar construction and form as the main terminal building. Other lower cost options will be explored at the next stage of the project.

- 4.17 The costs outlined in Table 5 do not include operational expenditure costs, including maintenance over the 10 year lifespan of the machines, critical spares, utility costs and support costs.

**Table 5: Capital Costs for each of the Shortlisted Options**

<b>Option 1 – ‘Do minimum’</b>	
<b>Total</b>	<b>£1.5million - £1.8million</b>
<b>Option 2 – Two machine solution with building extension</b>	
<b>Total</b>	<b>£10.5million - £12.0million</b>

### **Benefits of the Preferred Option**

- 4.18 The main benefits of the preferred option can be summarised in that Guernsey Airport will have a regulatory compliant Hold Baggage Scanning Explosive Detection System (HBS EDS) which is reliable, resilient and can meet demand in peak periods. The system will be future proofed to account for increased passenger numbers, and will improve efficiencies providing better working practices for staff and stakeholders.
- 4.19 The key outcome of the benefits of the preferred option as detailed in the Strategic Outline Case, is the continued operation of Guernsey Airport, with continued or improved reputation and improved customer satisfaction. The beneficiaries identified are Guernsey Airport’s passengers, Guernsey Airport, the States of Guernsey, the Ports security contractor, baggage handling agents and airlines.

## **5 Next Steps – Procurement Strategy and Outline Business Case**

- 5.1 Phase 1 of the procurement process has commenced, with initial designs being sought from a limited number of DfT approved suppliers of aviation security scanners and hold baggage integrators.
- 5.2 The resulting responses from this phase of the procurement process will be used to further develop the Short List at Outline Business Case (OBC) stage. Further detailed options for analysis will be presented in the OBC. These options will be evaluated and the preferred option confirmed.
- 5.3 As this project is directly related to aviation security requirements, exemptions under local Planning legislation determine this be exempt from formal planning permission. The Board will however liaise with the Development and Planning Authority over its proposals.

5.4 To bring the project through these key stages will require specialist skills, supported by Client Project Management resources, with Airport Management staff oversight. Fees allow for project management resources to be contracted in to maintain the delivery timescales.

## 6 Funding of the Upgrade to the Hold Baggage Screening system

### Approximate Project Costs

6.1 The estimated costs to carry out design, approvals and procurement prior to contracting for construction and implementation is estimated to be £665,000. Table 6 below, provides a summary of these costs. The States are asked to approve a sum of £665,000 for the Hold Baggage Screening system upgrade funded from the Capital Reserve, to fund all necessary steps for the development of the design stage and proposals for the procurement of Option 2.

6.2 Approximately £150,000 has already been spent in developing the project to the current stage, which is included in Table 6. These fees to date have been funded by the Ports as project initiation cost.

**Table 6: Approximate Capital Costs to reach Contract Award stage**

<b>Project activity</b>	<b>Cost</b>
Professional Fees for project initiation (funded through PHA)	£150,000
Architectural services	£195,000
Mechanical & Electrical Services Designer	£130,000
Site & Mechanical & Electrical Surveys	£60,000
Quantity Surveyor	£20,000
Client Project Manager	£30,000
Specialist Technical Consultant	£30,000
Regulatory Authority Approval fees	£10,000
Contingency	£40,000
<b>Total</b>	<b>£665,000</b>

## Funding Options and Affordability

6.3 The STSB is sensitive to the issues which this request for urgent funding from the Capital Reserve could create. It has considered options for self-funding either by way of a loan or cash flow. These options include:

- Revenue raising measures through increased charges at the airport;
- Re-profiling of the current planned Ports Capital Portfolio;
- A combination of revenue raising and re-profiling of the Ports Capital Portfolio;
- Part-funding by the above measures in conjunction with a grant from the Capital Reserve.

The STSB is placing considerable effort into understanding the asset management requirements at all the ports, and by doing so is only now beginning to fully understand the scale of the considerable asset management challenge and associated Capital investment required to maintain essential services. Modelling of the Ports Capital Portfolio has identified a requirement for 60 other capital projects across the Ports, with predicted funding demands amounting to an estimated £20million between the period 2020 – 2023. Included in this sum is an estimated spend of £11million directly relating to major infrastructure projects. A further allowance of up to £2million per annum in capital spend is estimated for 2024 onwards and reflects a typical pattern of historic capital investment. The estimated spend up to 2023 has been prioritised and the STSB does not agree that it would be sensible to re-profile the capital portfolio further at this juncture.

6.4 There were three options considered to fund the Hold Baggage System upgrade solution and associated building works (“Project”). Funding the Project through utilising cash reserves held in the PHA has been immediately discounted based on projected cash outflows. The predicted balance of the PHA as at 31 December 2019 is estimated to be £6.4million.

6.5 The next option considered obtaining a loan facility and an increase to the security charge levy in order to fund the principle and interest repayments. Over the course of the useful economic life of the assets the Ports would incur capital cash outflows of up to £12.0million and revenue cash outflows amounting to £2.1million over 10 years. Paragraph 6.6 demonstrates that the impact of passing on these capital costs would be unsustainable.

6.6 In order to fund the capital costs of this investment, an additional security levy to cover loan repayments, interest and increased operational costs would amount to a significant increase of £1.84 to the current levy of £2.35 per passenger movement. This represents an increase of 78% over 10 years, assumes passenger movements remain at the levels experienced in 2019 and a loan interest rate charge of 3.625%

per annum. Security charges at other airports are significantly lower than this as outlined in paragraph 2.6 of this Policy Letter. There will be implications of such an increased charge; including impacts on airfares as these charges are passed on by airlines to passengers and potentially on the viability of existing routes. A significant increase to the security charge is not in the best economic interest of the airport or passengers, nor is it in line with Guernsey Airports Business Plan which aims to increase passenger numbers and states “that fiscal demands must be met in such a way so as to ensure that airport charges are sustainable and that the level of charging does not make regular travelling too expensive.”

- 6.7 More detailed funding models were reviewed for this project. This demonstrated that the impacts of loan funding, financed through an enhanced security levy as detailed in paragraph 6.6, versus the effect of Capital Reserve funding to be approximately equal. Both options clearly indicate that the Ports will need to continue to prioritize capital spend over the next 10 years and reduce it by at least £3.5million.
- 6.8 For the reasons outlined, the only feasible option available to fund the Project is to seek Capital funding up to £11.8million from the Capital Reserve, with the balance of £150,000 funded from the PHA.
- 6.9 The capital costs of the project (Option 2), estimated to be in the range £10.5million to £12.0million (including contingency), are proposed to be met by a capital vote from the Capital Reserve. The cost based on the proposed solution, represents the most advantageous option, which provides a reliable, compliant service capable of meeting peak passenger demand.
- 6.10 The States are asked, subject to the Policy & Resources Committee’s approval of the Full Business Case, to direct that Committee to approve a capital vote of a maximum of £12.0million for the Hold Baggage Screening system upgrade project, funded from the Capital Reserve, in accordance with Option 2, including, professional fees and contingencies.

## **7 Timescale and Implementation Plan for the Preferred Option**

- 7.1 It is aimed that the project will be completed by the end of September 2021, following the necessary procurement processes, regulatory and political approval timescales. In the short term (to 2021) it will be necessary to continue regular maintenance of the present Hold Baggage Scanning system.
- 7.2 It should be noted that should an extension to a September 2021 deadline not be granted by the Regulator, it may be necessary to implement a temporary hold baggage screening system. This temporary solution is being reviewed and would involve some use of the ‘Standard 3’ device already purchased. Costs associated with such a temporary solution will be mostly labour related, due to the necessity to manually feed hold luggage through the ‘Standard 3’ machine. For clarity, the costs of such a temporary system have not been included in the cost appraisal for this

project, but will be met by the airport, and if necessary recovered from a small increase in the existing security charge.

- 7.3 The Hold Baggage Screening Project has the following key milestones and outline target dates for delivery of the preferred option, listed in Table 7:

**Table 7: Key Milestones**

<b>Milestone activity</b>	<b>Target date</b>
Meeting of the States of Deliberation	22 <sup>nd</sup> April 2020
OBC approval	May 2020
PAR 2 Gateway Review	June 2020
FBC approval	August 2020
PAR 3 Gateway Review	September 2020
Enter into contract	October 2020
Project completion	September 2021
PIR (Project Implementation Review)	Mid 2022

- 7.4 There are a number of key milestones where there are risks that the project will need to manage and mitigate. In order for the project to move from one stage to the next, the requisite approvals will be required from the relevant Boards.

## **8 Consultation**

- 8.1 Both internal and external stakeholders were identified at an early stage of the project. To date, there have been a number of stakeholder briefings with key stakeholders. Workshops have been held with key stakeholders to determine the Investment Objectives and Critical Success Factors. Each of the Long List Options was appraised against the Investment Objectives and Critical Success Factors in order to determine the preferred option.
- 8.2 The Programme Board has included within its membership a Business Advisor to the Ports Board, as well as senior civil servants.
- 8.3 A Project Assurance Review has been undertaken, to review the SOC (including the development of the short list and the preferred option) and to provide assurance at this key stage of the project.
- 8.4 The review has confirmed an overall Amber/Red status. This status reflects a number of uncertainties identified at the time of the review, including the ultimate source of funding, how the design of the HBS will influence the building layout, Regulatory issues, further clarification on the Strategic Outline Case (SOC) and the costs and provision of additional project resources. The outcomes of this review are being actioned by the Project Team as a priority.
- 8.5 The SOC was considered and approved by the Ports Board on 13<sup>th</sup> January, 2020 and by the STSB on the 23<sup>rd</sup> January, 2020.

- 8.6 The Law Officers of the Crown are being consulted on the possible contracts with suppliers and contractors.
- 8.7 The Law Officers of the Crown have been consulted on this Policy Letter.
- 8.8 Security provision at Guernsey Airport is licensed by the States of Guernsey's Director of Civil Aviation (DCA). The DCA utilises the UK Civil Aviation Authority to undertake regular audits of security provision at Guernsey Airport against UK standards. The DCA has provided a letter of comment which is included at Appendix 1.
- 8.9 Following completion of the SOC, two further workshops have been carried out with key internal and external stakeholders in order to inform the Outline Business Case. The first of these workshops ratified, analysed and ranked the main project benefits and the second workshop ratified, analysed and ranked the main project risks.
- 8.10 Further consultation, workshops and stakeholder briefings will be arranged during the course of the project in accordance with the Project's Communication Strategy.

## **9 Conclusions**

- 9.1 In view of the current situation, and in line with regulatory requirements, work on the preferred option is continuing without delay, including the first stage of procurement for the hold baggage scanners and hold baggage integrators.
- 9.2 The preferred option, Option 2, will provide Guernsey Airport with a Hold Baggage Screening solution which is compliant with relevant regulation, meets peak passenger demand, is reliable and resilient.
- 9.3 The capital expenditure required for this project is not affordable if funded from the Ports Holding Account or through obtaining a loan. The States are therefore asked to approve a capital vote of a maximum of £12.0million funded from the Capital Reserve with a PHA contribution of £150,000.

## **10 Compliance with Rule 4**

- 10.1 In accordance with Rule 4(1), the Propositions have been submitted to Her Majesty's Procureur for advice on any legal or constitutional implications. She has advised that there is no reason in law why the Propositions should not be put into effect.
- 10.2 In accordance with Rule 4(2), the STSB is requesting that the States schedules debate of this Policy Letter at their meeting commencing on the 22<sup>nd</sup> April, 2020.
- 10.3 In accordance with Rule 4(3), the Propositions are clear about the financial implications to the States of the STSB's proposals and these are explained in much greater detail in this Policy Letter.

- 10.4 In accordance with Rule 4(4) of the Rules of Procedure of the States of Deliberation and their Committees, it is confirmed that the Propositions above received majority support of the STSB, noting that Deputy Roffey was elected to the Board on 26<sup>th</sup> February, 2020 and had not yet been briefed on the detail of this Policy Letter when it was published.
- 10.5 In accordance with Rule 4(5), the Propositions relate to the duties of the STSB to ensure the efficient management, operation and maintenance of any States' unincorporated trading concerns and commercial interests which the States have resolved to include in the mandate of the Board.
- 10.6 The preparation and agreement of the Propositions and content of the Policy Letter has involved consultation with the Policy & Resources Committee.

Yours faithfully

**States' Trading Supervisory Board**

P T R Ferbrache  
President, STSB

J C S F Smithies  
Vice President, STSB

S J Falla MBE  
J C Hollis  
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14<sup>th</sup> February 2020Head of Aviation Services  
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Guernsey  
GY8 0DS14<sup>th</sup> February 2020**GUERNSEY AIRPORT HOLD BAGGAGE SCREENING UPGRADE**

As the Director of Civil Aviation and as such, responsible for aviation security and safety matters in the Channel Islands, I write in respect of Guernsey Airport's requirement to upgrade its Hold Baggage Screening (HBS) Explosive Detection System in order to meet current regulatory compliance.

You will of course be aware that the United Kingdom Department for Transport (DfT) wrote to all UK airports in mid-2014 to advise of a requirement to upgrade to standard 3 HBS screening equipment by 1<sup>st</sup> September 2018. Guernsey Airport is classed as a UK 'Domestic' airport for the purposes of aviation security regulation and to that end the standards that apply are common throughout the UK and includes the Crown Dependencies.

I understand from updates received from you and with engagement with the Head of International Aviation Security, Policy and Regulation at the UK Department for Transport (DfT), that Guernsey Airport has sought an alleviation and is proactively engaged with the DfT and the Civil Aviation Authority to agree a further extension date for the implementation of a compliant solution to this requirement.

I am therefore writing to confirm the necessity for an upgrade to Guernsey Airport's Hold Baggage Screening Explosive Detection System (HBS EDS) to Standard 3, in order to meet regulatory compliance.

Please continue to keep this office apprised of progress as you continue with this essential project.

Yours Faithfully,



Dominic Lazarus  
Director Civil Aviation

**STATES OF DELIBERATION**  
**of the**  
**ISLAND OF GUERNSEY**

**STATES TRADING SUPERVISORY BOARD**

GUERNSEY AIRPORT HOLD BAGGAGE SYSTEM UPGRADE

Deputy Gavin St Pier  
The President, Policy & Resources Committee  
Sir Charles Frossard House  
La Charroterie  
St Peter Port

2 March 2020

Dear Sir,

**Preferred date for consideration by the States of Deliberation**

In accordance with Rule 4(2) of the Rules of Procedure of the States of Deliberation and their Committees, the STSB requests that the Propositions be considered at the States' meeting to be held on 22 April 2020.

It is important that the Policy Letter for the upgrade of the existing Guernsey Airport Hold Baggage System is considered as soon as possible, as we cannot rule out sanctions placed against the Airport in terms of its regulatory compliance, whilst the existing hold baggage system remains in use. Seeking endorsement of this project from the States within the current term would enable the next stages of the project to proceed without further delay and would demonstrate a clear commitment to the Aviation Security Regulator.

Yours faithfully,



P T R Ferbrache  
President  
States Trading Supervisory Board