



Transportation Security Administration

Electronic Baggage Screening Program TSA Funding of Checked Baggage Inspection System Project Costs Version 2.0

Submitted by:

James Stephens
James Stephens, Planning Branch Manager
Electronic Baggage Screening Program
Office of Security Capabilities
Transportation Security Administration

Date:

8/2/16

Reviewed by:

Walter Dickey
Walter Dickey, Deputy Program Manager
Electronic Baggage Screening Program
Office of Security Capabilities
Transportation Security Administration

Date:

8/2/16

Approved by:

Mario N. Wilson
Mario Wilson, Program Manager
Electronic Baggage Screening Program
Office of Security Capabilities
Transportation Security Administration

Date:

8/2/16

Table of Contents

Section A.	Introduction	3
Section B.	CBIS Project and Funding Application Eligibility	3
Section C.	Allowable, Allocable and Reasonable Costs	5
	Typical Costs for TSA Checked Baggage Inspection System Projects.....	6
C.1	Design Costs.....	6
C.2	Construction Costs.....	6
C.3	Project Management, Construction Management, and Contingency Costs	11
C.4	Unallowable Costs	12
Appendix.	Revision Summary	14

Section A. Introduction

49 U.S.C. §44923 authorizes the Transportation Security Administration (TSA) to make other transaction agreements with Project Sponsors for:

1. Projects to replace baggage conveyer systems related to aviation security;
2. Projects to reconfigure terminal baggage areas as needed to install explosive detection systems;
3. Projects to enable the Under Secretary to deploy explosive detection systems behind the ticket counter, in the baggage sorting area, or in line with the baggage handling system; and
4. Other airport security capital improvement projects.

TSA utilizes Other Transaction Agreements (OTAs), as funding instruments, to reimburse Project Sponsors for eligible aviation security projects. Project Sponsors may obtain any additional information, guidance, and applications for funding at: <http://www.tsa.gov/for-industry/electronic-baggage-screening>.

The Office of Security Capabilities (OSC) within TSA is responsible for managing the Electronic Baggage Screening Program (EBSP). EBSP's mission is to satisfy the requirements of the Aviation and Transportation Security Act (ATSA, Pub.L. 107–71 November 19, 2001). ATSA requires that all checked baggage be screened using explosive detection technology. EBSP's mission is to deploy and maintain screening technology in support of ATSA requirements.

EBSP develops an annual spend plan, by prioritizing and then selecting aviation security improvement projects that meet the Program's mission. EBSP selects projects that will achieve the maximum increase in security capability within the funding appropriations set by Congress.

The Planning Guidelines and Design Standards (PGDS) for Checked Baggage Inspection Systems (CBIS) detail TSA's requirements and documented best practices for implementing a high performance and cost-effective CBIS. The PGDS is available at <https://www.fbo.gov/spg/DHS/TSsaw/HQTSA/HSTS04-15-I-OSC001/listing.html>.

TSA is not a party to the contracts a Project Sponsor executes with third parties in support of a TSA CBIS project. The Project Sponsor (including its appropriate procurement authority) is the responsible contractual authority for establishing and administering the contract agreements and is responsible for all contractual matters, including evaluation and award of contract, resolution of claims and disputes, and settlement of litigation issues. The Project Sponsor is the responsible authority, without recourse to TSA, regarding the settlement and satisfaction of all contractual and administrative issues arising from procurements entered into in support of a TSA CBIS project. This includes, but is not limited to, disputes, claims, protests of award, source evaluation, or other matters of a contractual nature.

Section B. CBIS Project and Funding Application Eligibility

Project Sponsors applying for facility modification funding should be aware that, while such an application may be submitted during any design phase, they will be required to have obtained TSA

approval of the 100% Detailed Design Phase as defined in the PGDS. Additionally, they must have obtained bids, determined the prospective winning bidder, and provided bid information to TSA before TSA will make a final decision regarding facility modification funding.

The Design and Facility Modification OTA Applications are the primary vehicles through which TSA invites communication from Project Sponsors regarding project needs and funding requests, thereby providing a controlled manner for Project Sponsors to submit funding requests. This process allows for proper tracking and handling of funding requests and subsequent communications between TSA and Project Sponsors.

Project Sponsors should be aware of the following while making an OTA application submission:

- TSA will accept all OTA applications on a continuous or rolling basis.
- The initial requirement for applying for a CBIS project is for the Federal Security Director (FSD) to acquire a Requirements Management Advisory Group (ReMAG) number prior to the Project Sponsor submitting the current In-line Support Application Form through the FSD.

Project Sponsors will be strongly encouraged to coordinate with local and headquarters TSA entities via TSA Project Coordinators as early as possible when CBIS projects are being considered and conceptually planned. Early notification assists TSA in justifying federal funding for the EBSP.

TSA Project Coordinators will also notify airports as early as possible when a TSA-initiated project is being forecasted or considered at their location.

Projects submitted to EBSP for funding are typically categorized as:

1. New In-line – A new inline puts a full in-line or mini-in-line system where there was no inline system before (previous screening might have been purely standalone, or might have had Explosive Detection System (EDS) units entrance integrated, but no bag tracking and no integration on the exit side).
2. Recapitalization – A recapitalization project will be limited to the shunt (or Baggage Handling System (BHS) conveyor belt) before and after the EDS.
3. Checked Baggage Resolution Area (CBRA) Upgrade of Existing In-line – A CBRA upgrade improves the bag flow and ergonomics in the CBRA for an existing in-line system; it does not touch any other part of the system; it does not change the number or type of EDS, does not change the layout of the CBIS, and does not increase capacity or improve efficiency of any part of the system other than the CBRA.
4. Efficiency Project for Existing In-line – Efficiency projects upgrade previously constructed CBIS. The CBIS is modified to the latest EBSP recommended design standards. Efficiency projects also address inefficient BHS performance to improve system operation and potentially increase the capacity of the system. Similar to new CBIS construction, Efficiency projects must achieve cost reductions and result in a decrease in the total number of EDS or TSA staffing requirements. EBSP's investment in

an Efficiency project must be forecasted to achieve a positive financial return after a TSA cost vs. benefit evaluation.

As a general rule, costs are eligible for funding if they are essential to the design and construction of the CBIS, CBRA, and the on screen resolution (OSR) room. Replacements of BHS components not part of one of the categories above, such as life-cycle replacement, are not eligible for funding.

The Project Sponsors may apply for design project funding prior to the start of any design engineering. For projects that Project Sponsors have already completed a portion of the project design without funding from TSA, the Project Sponsor may apply for funding of the remaining design costs. The Project Sponsor must submit a quote from their designer including all allowable costs for the design effort in order for TSA to make a final determination regarding funding for a Design OTA.

The Project Sponsors may submit their application for Facility Modification project funding during any Design phase; TSA recommends that this be coordinated between the Project Sponsor and TSA as part of the design process. TSA will not proceed towards finalizing a Facility Modification OTA until the 100% Design Phase has been successfully completed, bids are obtained and provided, and TSA conducts its own internal cost analysis.

Project Sponsors must note that any project costs incurred prior to receiving a fully executed OTA from TSA are ineligible for reimbursement. As every project is unique, Project Sponsors must be cognizant of the terms and conditions associated with their respective OTA in order to ensure that potential costs meet the requirements for reimbursement.

TSA will retain a certain percentage of invoiced amounts until certain project milestones are completed. The OTA will provide specific milestones and the percentages to be retained. If a Project Sponsor's system is required to repeat integrated site acceptance testing (iSAT), this may impact retainage.

Section C. Allowable, Allocable and Reasonable Costs

Cost share is dependent on the project category and hub type, and it will be stipulated in the OTA. Project costs are eligible for inclusion in a Facility Modification OTA if they:

1. Are essential to the checked baggage inspection system solution, and;
2. Are considered allowable, allocable, and reasonable according to OMB Circular A-87, or OMB Circular A-122 depending on the Project Sponsor's business structure, and;

Available at: http://www.whitehouse.gov/omb/grants_attach/#which
http://www.whitehouse.gov/omb/circulars_a87_2004/
http://www.whitehouse.gov/omb/circulars_a122_2004/

3. Have received EBSP concurrence after the design review process, and;
4. Have received approval from the TSA Contracting Officer.

Project Sponsors must also review project costs to ensure conflicts do not exist with any additional federal grants that the Project Sponsor has or intends to accept. In some instances, Federal Aviation Administration grants may preclude the reimbursement of TSA project costs, and vice versa. Project Sponsors should consult their legal counsel and the appropriate federal agencies for guidance.

When reviewing project costs for eligibility, EBSP considers:

- If the cost is allowable. Project costs may be considered for reimbursement if they conform to the terms and conditions of the OTA to include all legal references listed in this policy and the OTA;
- If the costs can be allocated to the TSA project. Any project costs considered for reimbursement must be directly attributed to only the TSA CBIS project. A project cost must be chargeable to a TSA project objective necessary for the operation of the CBIS;
- If the cost is reasonable. A cost is considered reasonable if in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.

(See *generally*: Federal Acquisition Regulations Subpart 31.2, Contracts with Commercial Organizations, for further guidance.)

Typical Costs for TSA Checked Baggage Inspection System Projects

C.1 Design Costs

- TSA will only reimburse design fees that can be directly apportioned to the TSA “allocable” portion of the CBIS project, pursuant to Table 1 in this document.
- TSA will not reimburse for design fees in excess of 6 percent of the estimated construction costs unless specific justification is provided and approved in writing by the TSA Contracting Officer at the time of the OTA negotiation.
- TSA will reimburse for project management costs associated with the design portion of a CBIS project, up to the level of 2 percent of the design fees. TSA will not reimburse for any other costs associated with the design portion of a CBIS project.

C.2 Construction Costs

1. Basic interior wall construction only and limited to areas directly supporting the baggage screening operation to include CBIS areas, including the CBRA areas and OSR room(s). Costs in excess of basic finishes are not allowable.

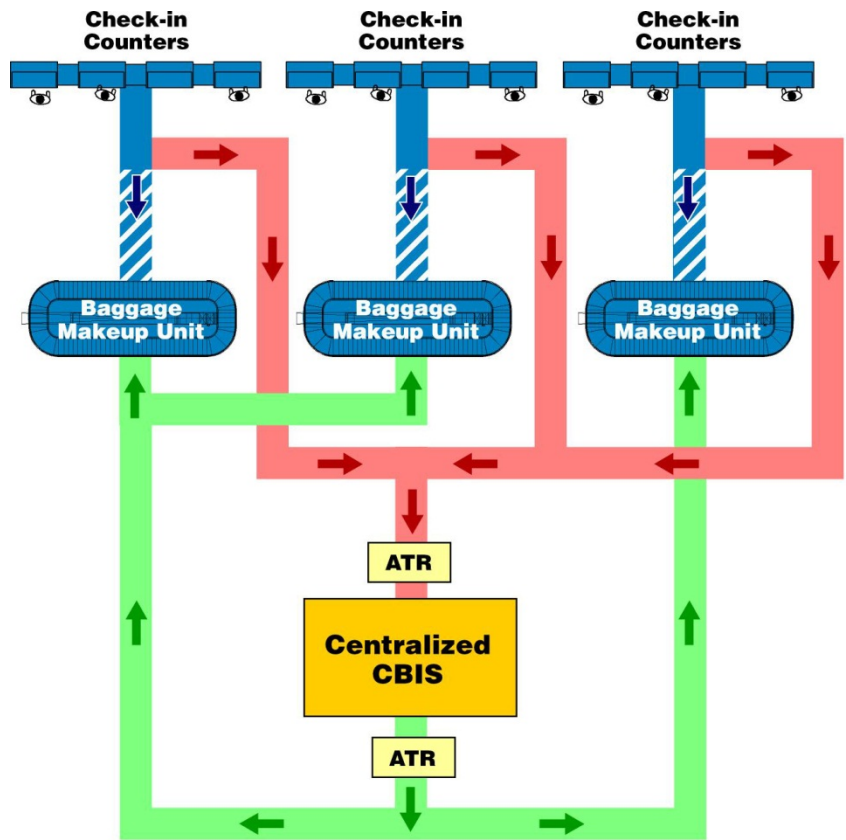
Interior construction is defined as:

- Interior wall construction as a result of space reconfiguration(s) to accommodate and support TSA screening operations
- Installation of electrical and communications systems, including:

- Circuit panels
 - Telephone or communication junctions
 - Transformers and other electrical components required to support TSA
 - Installation of heating ventilation and air conditioning (HVAC) of the OSR room, CBRA, and other areas that will be staffed by TSA field personnel. The exact extent of the HVAC cost that will be considered eligible for TSA reimbursement is assessed on a case-by-case basis.
 - Installation of uninterruptable power supply (UPS) and HVAC systems and/or enclosures within existing spaces to support EDS machine operation.
 - When UPS/HVAC units are required by an EDS manufacturer, TSA will purchase and maintain the units
 - When UPS/HVAC units are not required by an EDS manufacturer, TSA will not reimburse for or maintain the units
 - Sprinkler systems and alarms as required by local fire and safety codes
 - Insulation, drywall, acoustical ceiling tiles, and sound baffles associated specifically with the CBRA and/or OSR room noise attenuation
 - Interior construction in support of Occupational Safety and Health Administration (OSHA) requirements for spaces inhabited by Transportation Security Officers
 - Floor reinforcement in the CBIS, including CBRA and OSR areas to meet structural load requirements if applicable.
2. Demolition and site preparation of the existing conditions to support EDS installation, CBRA and OSR construction.
 3. Basic lighting, fixtures, switching, and appurtenances in CBIS areas, including the CBRA, and the OSR room that meet current minimum National Electrical Code, International Building Code, and OSHA requirements for lighting (lumen per square foot) for office space and to support allocable computers, conditioning units, printers, and other ancillary equipment. If allocable to the CBIS, OSR room, or CBRA, the costs for the following may be eligible for reimbursement:
 - New power drops
 - Associated transformers
 - Electrical panels or subpanels
 - Communication and network wiring

- Network and/or communications exchanges
4. Basic furnishings within the CBRA and OSR room only, such as adjustable height work stations, chairs, non-powered gravity rollers or other “no-lift” devices.
 5. The costs of design or construction of dual mainlines feeding the CBIS are allowable only if the rated throughput of the CBIS exceeds the capacity of a single mainline. The costs of dual mainlines for the purpose of redundancy, in systems where a single mainline has sufficient capacity to feed the CBIS at its rated throughput, are not allowable.
 6. Automatic tag readers (ATRs) are allowable by TSA if installed pre-EDS and used to support bag tracking in a security zone. Eligibility and the exact amount of allocable cost will be determined on a case-by-case basis. If the ATRs are post EDS and only used for reading International Air Transport Association bag tags for the purposes of identifying bag destination and associated passenger(s) for baggage reconciliation, then the ATR costs are non-allowable. Figures 1 and 2 show high-level block diagrams exemplifying allowable ATRs in centralized and de-centralized sortation configurations.

Figure 1
DIAGRAM OF ALLOWABLE ATRS (DECENTRALIZED SORTATION)

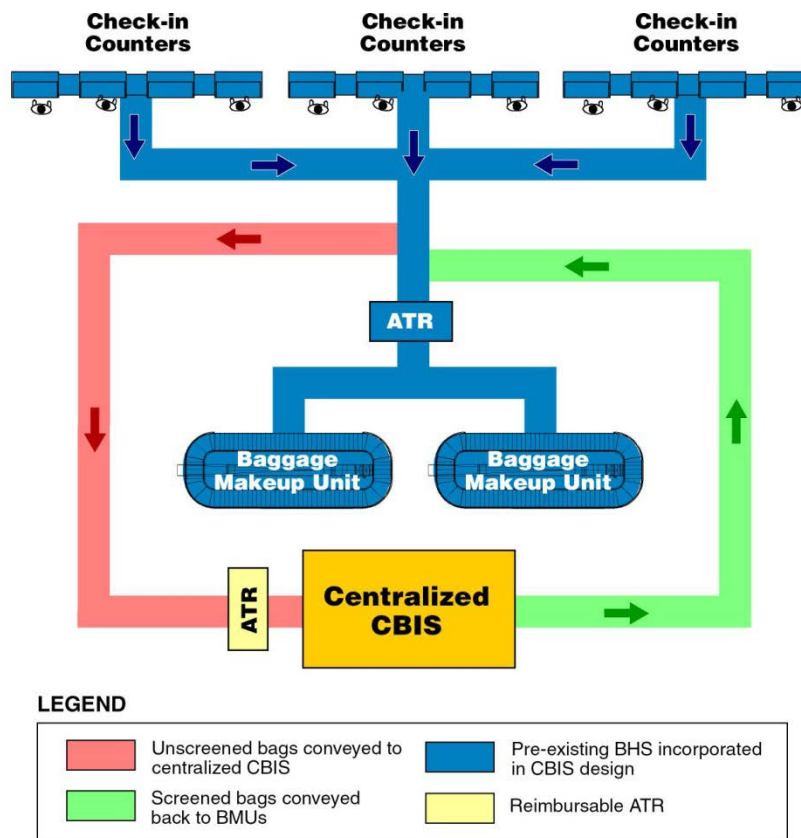


LEGEND

	Unscreened bags conveyed to centralized CBIS		Pre-existing BHS to be removed
	Screened bags conveyed back to BMUs		Reimbursable ATR
	Pre-existing BHS incorporated in CBIS design		

PGDS500 F-0240

Figure 2
 DIAGRAM OF ALLOWABLE ATRS (CENTRALIZED SORTATION)



PGDS500 F-0241

7. Sortation cost may be considered allocable for systems where bags from multiple ticket counter inputs are screened in a common matrix and sorted back to the original delivery system. Conveyor sections required to intercept bags on original delivery lines, deliver to CBIS, and return back to the original conveyance will be considered for reimbursement. TSA will not reimburse for a host Baggage Sortation Message to a sort controller for the purpose of individual air carrier sort functions.
8. Telephone, radio, intercom, airport-only cellular phones, or other voice communications may be considered if essential for TSA CBIS, including CBRA and OSR operations.
9. Closed Circuit Television at the following locations:
 - The divert point going into the EDS shunt
 - The EDS entrance
 - The exit of the EDS
 - The machine clear bag divert point

- The point where the OSR line merges into the mainline
 - Last chance divert point
10. BHS monitors up to 60” in the OSR room and/or in the CBRA.
 11. Programmable logic controllers (PLC) if the addition of an in-line screening system requires a modification and/or addition to current systems. TSA will only consider allowing for the programming to integrate and control the in-line screening portion of the BHS, and will only consider the costs of that portion of the controls necessary to support CBIS, OSR, and CBRA operations.
 12. Replacement, relocation and / or upgrade of the existing CBIS necessary to support integration of the EDS machines on a case-by-case basis within the TSA-designated areas.
 13. Unavoidable phasing costs identified and agreed to by TSA in the design review process to support EDS installation, CBRA and OSR construction.
 14. Security Technology Integration Program (STIP) requirements. STIP provides for connectivity of security technology such as EDS, Explosive Trace Detection, and primary and secondary EDS workstations to the TSA network (see PGDS for general connectivity requirements; TSA will also provide any current STIP requirements documents to a Project Sponsor upon request).

C.3 Project Management, Construction Management, and Contingency Costs

1. Allowable project management and construction management costs are outlined in Table 1: Allowable Fee Percentages.

Table 1 ALLOWABLE FEE PERCENTAGES	
Description	Allowable Percentages of Total Project Costs
Project Management	2%
Construction Management	4%-6%
Escalation	See PGDS Appendix F.4
Construction Administration	2%
Contingency – Design	See PGDS Appendix F.3.1 and Table 2 below
Contingency – Construction	5% of Projected Construction Cost, see PGDS F.3.2

2. TSA will only reimburse project management, construction management, and escalation costs that can be directly apportioned to the TSA “allocable” portion of the CBIS project up to the levels defined in Table 1 unless specific justification is provided and approved in writing by the TSA Contracting Officer at the time of the negotiation (i.e., rates varying from those identified directly in the OTA will not be accepted).
3. Project management, construction management, and construction administration costs are reimbursable as detailed in the terms and conditions of the OTA, which must be prior to OTA award. Otherwise, such expenses will not be considered allowable and reimbursed.

4. The inclusion of design contingency funds is only allowable for projects with combined Design/Facility Modification OTAs. The inclusion of construction contingency funds is only allowable for projects with Facility Modification OTAs or combined Design/Facility Modification OTAs.
5. Design contingency amounts shall correspond to the level of project design in accordance with Table 2: Allowable Design Contingency Percentages by Design Phase.

Table 2 ALLOWABLE DESIGN CONTINGENCY PERCENTAGES BY DESIGN PHASE	
Overall design completion (percent)	Contingency (percent)
<30%	20%
>30-70	15
>70-90	10
>90-100	5
100	0

6. Design contingencies shall be applied to the sum total of the direct construction costs, including labor, material, and equipment costs. Design contingencies shall be applied as a cumulative markup as indicated in the Current Working Estimate (see current version of the PGDS).
7. TSA will allow construction contingencies of up to 5% of the total projected construction budget for allocable items. However, contingency will not be added into the base budget for negotiation.
8. In order to invoice TSA for any of the contingency funds, a change order must be submitted to TSA outlining the change in condition that requires the additional funding and supplying the necessary supporting documentation, including modified plans and specifications for the change. Further, Project Sponsor should submit a cost estimate, meeting all requirements of this document, with the change order justifying the change in cost. Access to the contingency funding will only be provided based on written approval of the proposed change order by TSA's Contracting Officer. If the change does not include a modification of the contract, written approval from TSA's Contracting Officer Representative is accepted.

C.4 Unallowable Costs

The following list presents examples of items which costs are considered unallowable for reimbursement under an OTA agreement with TSA. This list does not represent a complete list of unallowable items. TSA's requirements for the design of CBIS are presented in the PGDS for CBIS.

1. Design and construction costs for TSA-leased spaces.
2. Construction costs for centralized BHS control rooms.
3. Costs for extended warranties.

4. Costs for CBIS operations and maintenance.
5. Costs incurred outside of the OTA period of performance.
6. Spare parts and storage areas for spare parts.
7. Replacement of PLC components and PLC programming. See Section 3.1.1.10 above for more details on PLC eligibility.
8. Laptop computers used for maintenance of the BHS.
9. BHS components outside of the CBIS area (including, but not limited to):
 - a. Baggage reconciliation systems (carousels or sortation systems).
 - b. Baggage System Management (BSM) data providers and/or BSM systems.
 - c. Manual encoding systems.
 - d. Replacements of ticket counter conveyors and sortation area conveyors.
 - e. Replacement of inbound and outbound sortation conveyors.
10. TSA does not allow costs to retrofit an existing CBIS as a result of airline mergers or relocations within an airport unless such construction is proven to be cost-beneficial to TSA, as determined by TSA's cost analysis. TSA does not support allocation of BHS system costs borne by airlines or airports outside of the OTA process.
 - a. The costs of mainlines in excess of the capacity needed to feed the CBIS at its rated throughput are not allowable.
11. An automatic recirculation loop (not including the automatic reinsertion lines in the CBRA), either pre-EDS screening or post-EDS screening.
12. Unless stated as a requirement in the OTA, dynamic simulation modeling is an unallowable cost.
13. TSA does not allow costs for additional iSAT beyond the initial test.
 - a. The Project Sponsor's cost for additional iSAT will be borne by the Project Sponsor and will not be reimbursed by TSA.
 - b. TSA's cost for additional iSAT will be deducted from the OTA retainage.
14. TSA does not allow costs for resubmittals of any design phase if TSA rejects the initial submittal for that design phase and requires a resubmittal due to non-compliance with the PGDS and/or this Funding Policy Memo.
15. TSA does not allow costs for re-design work the airport elects to do after TSA approves a design.

16. TSA will not reimburse airports for airport profit or the general costs of government.
17. TSA will not reimburse for costs incurred by the airport or its contractors or agents to perform work not in compliance with TSA requirements as stated in the OTA.
18. TSA does not allow costs for repair of any equipment the airport sponsor purchases or any equipment for which they are reimbursed.

Appendix. Revision Summary

VERSION	COMMENT
2.0 - Throughout	- Updated URL links to connect with new TSA web pages - Letter of Intent (LOI) references removed - References to “Airport Sponsors” changed to “Project Sponsor” - Eliminated references to the ILDT, since all requirements set forth in this document are for the Project Sponsor
2.0 - Section B - Paragraph 1 - Paragraph 6	- TSA will only sign a Facility Modification after a project has completed their 100% design review and the Project Sponsors have gone to bid, determine a prospective bid winner and provided their bid information to TSA. - Optimization projects will now be referred to in the document as “Efficiency project” to align with EBSP nomenclature
2.0 - Section C - Intro - C.1 - C.2 - C.3	- Added cost share language - Added Design Costs section, moved various info from C.1.2 to the new section - Added “pursuant to Table 1 in this document”. - Removed CBRA Table References - Added dual mainline language to state circumstances under which a dual mainline is considered allowable for a TSA CBIS project. - Added language to reflect the COR can approve change requests (which do not include modification of contract). - Amended Construction Administration percentage, removed Design Fee. - Added number 3 to the list (design fees, project management, construction management, and construction administration reimbursement). - Added “which must be negotiated prior to OTA award. Otherwise, such expenses will not be considered allowable and reimbursed”.

• C.4	• Added items to the list of “Unallowable Costs”: Automatic Recirculation Loop, Dynamic Simulation, additional iSATs beyond the initial test, CBRA tables and design resubmittals. • Added language to state that additional iSAT costs will be the responsibility of the Project Sponsor and they will be deducted from the OTA retainage. • Added number 5 to the list “Costs incurred outside of the OTA period of performance”. • Added item to the list of “Unallowable Costs” regarding airport-elected re-design after TSA approval and repair of any equipment airport sponsor purchases or is reimbursed for. • Added number 16 to the list (TSA will not reimburse airports for profit or the general costs of government). • Deleted bullet on unallowable CBRA table costs.
---	--