



**U.S. DEPARTMENT OF TRANSPORTATION**  
**FEDERAL AVIATION ADMINISTRATION**  
National Policy

**ORDER**  
**3000.22A**

Effective Date:  
09/05/2014

**SUBJ:** Air Traffic Organization Outcomes-Based Technical Training

---

This order prescribes standards and requirements for the design, development, revision, and evaluation of Air Traffic Organization (ATO) technical training. All persons involved in the design or development of ATO technical training are required to be familiar with and comply with this order.

A handwritten signature in black ink, appearing to read "Joseph Teixeira".

Joseph Teixeira  
Vice President for Safety and Technical Training  
Air Traffic Organization

## Table of Contents

<b>Chapter 1: General Information and Requirements .....</b>	<b>1</b>
1-1 Purpose of This Order.....	1
1-2 Background.....	1
1-3 Definition of Technical Training .....	1
1-4 Audience .....	1
1-5 Where Can I Find This Order.....	1
1-6 Cancellation.....	1
1-7 Scope .....	1
1-8 Delegation of Authority.....	2
1-9 Authority to Change This Order .....	2
1-10 Congressional Restrictions .....	2
1-11 Explanation of Changes.....	2
<b>Chapter 2: Roles and Responsibilities .....</b>	<b>4</b>
2-1 Vice President for ATO Safety and Technical Training.....	4
2-2 Technical Training Directorate .....	4
2-3 FAA Academy .....	5
2-4 Training Development Workgroup .....	5
<b>Chapter 3: Policy, Processes, and Procedures for ATO Training Functions .....</b>	<b>8</b>
3-1 Training Policy Development and Oversight.....	8
3-2 Training Design and Development Requirements.....	8
3-3 Evaluation .....	12
3-4 Testing .....	14
3-5 Course File .....	16
<b>Chapter 4: Instructional Systems Design (ISD) .....</b>	<b>17</b>
4-1 Planning.....	17
4-2 Overview of ISD Process .....	17
4-3 Analysis .....	17
4-4 Design.....	18

4-5 Development ..... 18

4-6 Implementation or Delivery ..... 19

4-7 Evaluation ..... 19

**Chapter 5: Validation of Training ..... 20**

5-1 Validation ..... 20

5-2 Conducting Validation ..... 20

5-3 Participation ..... 22

**Chapter 6: Local and Regional Training ..... 23**

6-1 Local and Regional Design, Development and Delivery ..... 23

6-2 Audience ..... 23

6-3 Outcomes-Based Training ..... 23

6-4 Systematic Approach to Training Design and Development ..... 23

6-5 Course File ..... 24

**Appendix A: Glossary and Acronyms ..... 25**

Glossary ..... 25

Acronyms ..... 27

**Appendix B: Section 508 Determination and Certification for EIT Purchase Requests ..... 29**

## Chapter 1: General Information and Requirements

**1-1 Purpose of This Order.** This order defines the requirements for the design and development of Air Traffic Organization (ATO) outcomes-based technical training, from identification of the training need through delivery, evaluation, and revision of the training curricula.

**1-2 Background.** In 2011, the Federal Aviation Administration (FAA) Administrator convened an FAA Independent Review Panel (IRP) to review air traffic controller hiring sources, screening, selection and facility assignments; instructor selection, training content, and delivery for controllers; organizational structure; and professional standards. In the Final Report on the Selection, Assignment and Training of Air Traffic Control Specialists (delivered September 22, 2011), the Panel produced a comprehensive set of observations and recommendations on air traffic controller selection, assignment, and training.

**a.** Among the key observations reported, the IRP Report recommended that the ATO adopt an outcomes-based model of learning for the FAA Academy and develop a plan to restructure the curricula over the next five years. As stated in the report, *“Traditional teaching methodology focuses on what is being taught rather than what is being learned. Outcomes-based learning shifts the focus to the student and on what is being learned.”*

**b. Outcomes-Based Training** is designed based on the job tasks and associated knowledge, skills, and abilities the learner is expected to perform on the job after they complete the training (as opposed to what can be performed only in a classroom). An *outcome* is a clear, observable demonstration of learning that reflects any or all of the following:

- 1) What the learner knows.
- 2) What the learner can actually do with that knowledge.
- 3) How well the learner can demonstrate skills proficiency.

**1-3 Definition of Technical Training.** Technical training is instruction intended to prepare employees to perform the tasks specific to their job using applicable tools, equipment, and processes within the air traffic controller and technical operations technician workforces.

**1-4 Audience.** This order applies to all personnel involved in the design, development, validation, revision, and evaluation of ATO technical training.

**1-5 Where Can I Find This Order?** This order is available on the FAA Directives website at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/).

**1-6 Cancellation.** This order cancels FAA Order 3000.22, *Air Traffic Services Training*, dated May 7, 1998.

**1-7 Scope.** This order applies to all national ATO technical training. Each ATO job specialty has a training order that specifies training requirements for that workforce to achieve certification in the

respective job. National training for each specialty must comply with that specialty's training order as well as with any relevant bargaining agreements.

**a. Order JO 3120.4.** This order prescribes instructions, standards, and guidance for the administration of technical training for air traffic controllers. All persons involved in air traffic technical training are required to be familiar with and comply with this order.

**b. Order JO 3000.57.** This order establishes the procedures and assigns responsibility for the administration of the Air Traffic Organization (ATO) Technical Operations Training and Personnel Certification Programs. It provides general guidance for the management, planning, conduct, and evaluation of the Technical Operations Training and Personnel Certification Programs.

**1-8 Delegation of Authority.** The ATO Chief Operating Officer has delegated the responsibility for administering the national technical training program for the operational workforces to the Vice President of ATO Safety and Technical Training (AJI-0).

**1-9 Authority to Change This Order.** The Vice President of ATO Safety and Technical Training has the authority to approve changes and revisions to this order.

**1-10 Congressional Restrictions.** The ATO complies with Section 408 of the 2012 Consolidated and Further Continuing Appropriations Act (Public Law 112-55). None of the funds made available in this or any other Act may be obligated or expended for any employee training that:

**a.** Does not meet identified needs for knowledge, skills, and abilities bearing directly upon the performance of official duties,

**b.** Contains elements likely to induce high levels of emotional response or psychological stress in some participants,

**c.** Does not require prior employee notification of the content and methods to be used in the training and written end of course evaluation,

**d.** Contains any methods or content associated with religious or quasi-religious belief systems or "new age" belief systems as defined in Equal Employment Opportunity Commission Notice N-915.022, dated September 2, 1988, or

**e.** Is offensive to, or designed to change, participants' personal values or lifestyle outside the workplace.

**1-11 Explanation of Changes.** This revision of Order 3000.22 addresses these changes:

**a.** Incorporation of:

1) Outcomes-based training.

2) Re-organization of Technical Training under the office of AJI-0.

**b. Inclusion of:**

- 1) Training development roles and responsibilities.
- 2) Requirements for design, development, and evaluation of national technical training and recommendations for design and development of local and regional technical training (Chapter 6).
- 3) Requirements for compliance with Section 508 of the Rehabilitation Act (29 U.S.C. 794d).

**c. Elaboration on the types of training events (Table 1).****d. Removal of:**

- 1) Section 1-4. Statutory and Regulatory Authorities.
- 2) Chapter 2. Financial Planning and Management.
- 3) All forms and figures in Chapter 3: Congressional Restrictions.
- 4) Figure 4-2. Validation Process Chart.
- 5) Chapter 5. Training Resources.
- 6) Chapter 6. Career Planning and Development.

## Chapter 2: Roles and Responsibilities

**2-1 Vice President for ATO Safety and Technical Training.** The Vice President for ATO Safety and Technical Training must:

- a. Provide oversight for ATO training and development programs, ensuring all technical training is developed following the Instructional System Design process and applicable standards.
- b. Ensure compliance with statutory and regulatory requirements, and the FAA Human Resource Policy Manual (HRPM).
- c. Comply with equal employment opportunity laws, regulations, and agency guidance when developing, offering, and providing training and development activities.
- d. Ensure the ATO workforce receives technical skills training and development necessary to achieve agency and ATO mission requirements and strategic objectives.

**2-2 Technical Training Directorate.** The Technical Training Directorate is the owner of all ATO national technical training, whether developed for Air Traffic Control or Technical Operations. The Technical Training Directorate must:

- a. Develop, recommend, and maintain training policies, programs, standards, systems, and procedures to meet ATO program requirements, applicable Federal laws, and Office of Personnel Management (OPM), FAA, and Department of Transportation (DOT) regulations.
- b. Coordinate the development of annual training requirements across the ATO, including training mandated from outside of the ATO.
- c. Establish strategic direction for the overall training program.
- d. Ensure all national technical training impacting ATO employees are evaluated for effectiveness.
- e. Establish measurements for defining the effectiveness of new national training initiatives and report out on actions taken in a semi-annual Training Performance Report.
- f. Establish standards and requirements for the design and development of ATO technical training.
- g. Require that all training adhere to standards and requirements, whether developed internally or externally.
- h. Ensure that all training complies with any Letters of Authorization or Agreement (LOAs) and agreements with any applicable labor union through consultation with national union representatives.

**2-3 FAA Academy.** The FAA Academy will:

- a. Deliver Air Traffic Control and Technical Operations training, as applicable.
- b. Administer end of course (Level 1) evaluations and post-course questionnaires (Level 3) for courses taught or facilitated by Academy personnel.
- c. Propose major revisions to the Technical Training Directorate.
- d. Perform revisions on content as designated by the Technical Training Directorate.

**2-4 Training Development Workgroup.** The Training Development Workgroup is a group of people designated to build a particular technical course, workshop, or briefing (or combination thereof). The group must be composed of members who ensure both the technical accuracy and instructional soundness of training and training materials, and can manage the training development project lifecycle. This means the workgroup consists of, at a minimum, a project manager, an Instructional Systems Specialist (ISS), and a subject matter expert (SME). However, depending upon the scope of the project, one person may fulfill more than one role (for example, an ISS also performing the duties as the Project Manager), there may be multiple people filling a single role (for example, having multiple SMEs), or other stakeholders in the training may be included.

**a. Project Manager.** The Technical Training Directorate (the Directorate) representatives are responsible for completing project management tasks, such as:

- 1) Provide input for determining FAA/contract resource needs and provision of technical Government Furnished Information (GFI) and/or Government Furnished Equipment (GFE).
- 2) Assist with writing Statement of Work (SOW) requirements.
- 3) Provide vendors with technical GFI (content, rules, orders, etc.).
- 4) Ensure travel requests for SMEs are submitted for approval.
- 5) Ensure timely response to vendors' technical issues.
- 6) Monitor and report to management on project progress, to include cost and schedule.
- 7) Serve as a point of contact to program offices for training projects.
- 8) Review content to ensure adherence to contract specifications and acceptance criteria.
- 9) Conduct oversight of project for technical content.
- 10) Clarify technical issues between ISS/SMEs and vendor.

11) Recommend to AJI management an acceptance or rejection of the final training product(s).

**b. The Instructional Systems Specialist (ISS)** is responsible for ensuring instructional soundness of a training product. The ISS must design and develop, or oversee design and development of courses, workshops, and briefings using Instructional Systems Design (ISD). ISD is the science and psychology of sound instruction that uses the A D D I E model: **A**nalyzing the problem, **D**esigning a training solution, **D**eveloping the training material, **I**mplementing the solution, and performing **E**valuations throughout the process.

1) ISS oversight includes, but is not limited to, these tasks:

- a) Matching training outcomes to job tasks.
- b) Analyzing and recommending appropriate delivery media.
- c) Selecting instructional strategies.
- d) Designing assessment.
- e) Reviewing instructional materials.
- f) Reviewing all training documentation.
- g) Participating in all validation activities.
- h) Performing various analyses (for example, front-end analysis, root-cause

analysis).

2) In addition, the ISS will:

- a) Clarify design issues between the Project Manager, SMEs, and vendor.
- b) Review content to ensure adherence to contract specifications and acceptance

criteria.

c) Address vendor questions.

d) Review, provide comments, and report on contract training deliverables for conformance to FAA Instructional Systems Design and training material standards.

**c. Subject Matter Experts (SMEs).** A SME is a representative of the specialty (Air Traffic or Technical Operations) for whom training will be developed and ensures the technical accuracy of the training. SMEs are responsible for:

1) Providing expert input regarding the completeness and accuracy of the technical content of training materials.

2) Providing specific information from technical documents and interpretations of policy.

- 3) Provide a technical evaluation of the content of a final training product.
- 4) Reviewing, providing comments, and reporting on the technical accuracy and completeness of contract training deliverables.

## Chapter 3: Policy, Processes, and Procedures for ATO Training Functions

**3-1 Training Policy Development and Oversight.** The Technical Training Directorate is responsible for the creation and maintenance of technical training policy for the ATO. The Directorate works closely with operational units to ensure that policies meet their needs, and does not issue any policy without proper coordination through the operational units. The Directorate also ensures that FAA training and development policies meet Federal requirements as outlined in the HRPM. Design and development of all courses, workshops, and briefings must follow a systematic approach.

### 3-2 Training Design and Development Requirements.

**a. Job Tasks.** The job tasks from the Curriculum Architecture (CA) Job Task Analysis (JTA) approved and accepted by the Directorate must form the basis of training. The JTA specifies the tasks learners are expected to perform on the job and ensures that technical training complies with Congressional requirements as stated in Chap. 1 para. 10 in this order.

**b. Objectives.** Objectives specify the intended outcomes of training. Each course or workshop objective must be traceable to the job tasks or associated knowledge, skills, and abilities found in the CA JTA.

**c. Instructional Strategies.** Instructional strategies, including the use of simulation, must be appropriate to the associated objective and job task being taught.

**d. eLearning Levels of Interactivity.** The training directorate provides guidance that states the requirements for levels of interactivity. Anyone developing web-based technical training for the ATO must build the content interactivity within these definitions.

**e. Simulation Fidelity.** The training directorate provides guidance that states the requirements for levels of fidelity for simulation. Anyone developing technical training simulation for the ATO must build the simulation within these fidelity definitions.

**f. Revisions.** Revisions to training may result from a request by the group that sponsors or requests the training (the customer), regularly scheduled evaluation by the training organization, or the need for routine updates. The Directorate must carefully control revisions to ensure the instructional integrity and continuity of previously developed content. The Directorate is responsible for all revisions but may delegate the responsibility for minor and administrative revisions to the FAA Academy or another organization. The Directorate is responsible for coordinating with the operational customer prior to the revisions being implemented.

1) **Major revisions** occur to make a significant change to the training. Major revisions go through all phases of the ISD process, however some phases may be abbreviated. See Chapter 4, Instructional Systems Design, for an overview of ISD. Major revisions result from one or more of the following conditions:

- a) Modified, added, or deleted training outcomes or instructional objectives.

- b) Necessary design changes (for example, more or fewer exercises, simulations, etc.).
- c) Changed training delivery method.
- d) Major changes to resources (for example, new equipment, major equipment modifications, or major required adjustments to staffing levels).
- e) Changes to the tests or pass/fail standard.
- f) Changes in length by 10% of the training delivery time or changes in length of 4 hours or more.

2) **Minor revisions** to training include, but are not limited to:

- a) Refining materials for spelling, grammar, references, etc.
- b) Updating technical content due to a minor equipment change or changes to orders or references, when these changes do not affect accomplishment of the objectives, require adding or deleting any objectives, or change the length.
- c) Routine updates of automated information (for example, database or programming) used in training throughout the training curriculum.

3) **Administrative revisions** do not require coordination with the Technical Training Directorate. Administrative revisions to training include, but are not limited to:

- a) Typos.
- b) Non-technical content.

NOTE: Minor revisions and Administrative revisions together are often referred to as “maintenance.”

4) **Impact on Other Training.** The training directorate must determine the impact of the revision on other courses, workshops, briefings, or curricula. If there is a potential impact, representatives from the Directorate will determine if those materials will require any revision.

**g. Copyrighted Material.** SOWs, or similar contract vehicles for technical training, must include the following requirements:

- 1) No copyrighted material (for example, training content, images or graphics, photographs, videos, audio clips, articles, or websites) may be used without written permission from the author or owner.

2) All material developed for the FAA is the sole property of the FAA and will not be used by the contractor for any purpose other than that specified in the contract.

3) At final delivery, the contractor will provide written verification of compliance with these requirements.

**h. Types of Training Events.** The Technical Training Directorate develops or oversees development of three types of training events: courses, workshops and informational briefings. *Table 1, Types of Training Events*, describes the design elements required for each type of learning event. ATO Safety and Technical Training (AJI) will catalogue learning events into the FAA-identified learning management system on the basis of these design elements.

**Table 1. Types of Training Events**

	<b>Course</b>	<b>Workshop</b>	<b>Briefing</b>
<b>Description</b>	A training event structured by measurable objectives that is designed for a particular target audience.	A structured training event designed for a particular target audience.	An organized body of information delivered to learners.
<b>Purpose</b>	Performance improvement/change.	Provide practice and/or hands-on activities for skill improvement or acquisition.	Disseminate information.
<b>Type</b>	Instructional	Experiential	Informational
<b>Instructional Objectives</b>	Required	Required	Recommended
<b>Structure</b>	Objective driven.	Objective or activity driven.	Topic driven.
<b>Evaluation of Training Materials</b>	Required for technical content and instructional design.	Required for technical content and instructional design.	Required for technical content; recommended for instructional design.
<b>Interactivity</b>	Includes interaction via exercises, case studies, scenarios, etc.	Includes interactions, such as hands-on activities, opportunities to collaborate.	Little or no interaction.
<b>Assessment</b>	Written and/or performance tests for all designated objectives.	Assessment of objectives is recommended; there may be subjective feedback.	No testing or feedback.
<b>Validation</b>	Required.	Recommended.	Not Applicable.

**i. Section 508 Compliance.** Section 508 of the Rehabilitation Act (29 U.S.C. 794d), as amended by the Workforce Investment Act of 1998 (P.L. 105-220), August 7, 1998: Section 508 requires Federal agencies to ensure that people with disabilities have the same access to Electronic and Information Technology (EIT) or Information and Communication Technology (ICT) as those

without disabilities. Any information and electronic technology, including web-based training, must be designed in a way that is not only accessible to individuals with disabilities, but works with assistive technology, provides alternatives or alternate means to access, and does not override use of an operating system's accessibility features. The law applies when FAA develops, procures, maintains, or uses EIT/ICT for either its employees or members of the public.

1) The FAA requires that all EIT/ICT training content be compliant with Section 508 in accordance with the existing law. Compliance resources for text alternatives and other Section 508 guidance are available on the FAA eLearning Community of Practice site (<https://ksn2.faa.gov/faq/learn/WBT/default.aspx>) and include, but are not limited to:

- a) FAA Section 508 Guidelines for eLearning.
- b) FAA eLearning Design and Style Guide.
- c) Technical Specifications for Content Developers Guide.
- d) Digital Video Production and Distribution Recommendations In Support of Training for the FAA.

2) **Exceptions.** There are situations where EIT/ICT is partially or completely exempt from complying with Section 508. The only applicable exception for ATO technical training is "Fundamental Alteration."

a) **Fundamental Alteration** (§1194.3 –e). The law does not require a "fundamental alteration in the nature of a product, its service or its components." In other words, compliance with Section 508 would alter a product that is designed for a specific use and the only way to make it compliant would be to alter the product to a degree that it would no longer be able to provide that use.

b) **Example of an Exception.** When simulating an air traffic controller radar scope, there are a number of elements that are color-coded and each color has specific meaning or purpose. These elements would be difficult or impossible for an individual with color blindness to differentiate. Making them accessible to a person with color blindness, however, would alter the depiction so that it would no longer be usable for air traffic controller training.

c) **Exception Limitations.** When a Fundamental Alteration exception applies to a portion of an EIT/ICT product, the rest of the product must be Section 508 compliant.

d) **Process.** If an EIT/ICT product has one or more sections that require fundamental alteration exception, a representative from the Directorate will complete and sign Department of Transportation form DOT F 4260.1, Section 508 Determination and Certification for EIT Purchase Requests, indicating the portions of the training that require the exception, and attach a document that describes the exception, explains why compliance would cause a fundamental alteration, and the planned provisions for persons with the affected disability. The manager of the

representative may request review of the documentation by the Office of General Counsel prior to signing the form. Once signed, the manager will maintain all documentation in the file.

**j. Impact on Operations.** The Technical Training Directorate ensures that planning for all national training programs considers time impacts on work operations.

**k. Instructional Systems Design.** Anyone developing technical training must follow a standard Instructional Systems Design approach (see Chapter 4 for a detailed description) and ensure development of specified training documentation, unless waived. When a training organization elects to procure training, they must work with the vendor to ensure effective completion of appropriate phases of the Instructional System Design model.

**3-3 Evaluation.** Learning and development is a capital investment and should have an evaluative process to ensure the FAA is benefiting from its training expenditures. All evaluation standards must comply with the Government Performance and Results Act of 1993 and meet Congressional Training Restrictions for end of course evaluation of agency-sponsored training.

**a. Training Evaluation Program.** The Directorate oversees a comprehensive evaluation program and establishes standards for national technical training. The Directorate shall be responsible for evaluating training against the program standards and for recommending action. The evaluation program is founded on the industry-standard Kirkpatrick four level model of training evaluation, and places emphasis on the first three levels. The levels are:

- 1) Level 1 Reaction – how learners react to the training.
- 2) Level 2 Learning – learner achievement of instructional objectives.
- 3) Level 3 Behavior – the extent to which the learner applies the new knowledge and/or skill on the job.
- 4) Level 4 Results – the extent to which the training affected the organization (for example, reduced errors, increased production, etc.).

**b. Evaluation Types.** There are two types of evaluation covered in this order:

1) **Formative Evaluation.** Formative evaluation encompasses those methods undertaken during training development (forming) that determine the technical accuracy and completeness of a product and whether the design, instructional strategy, and materials are likely to result in learners being able to achieve objectives and outcomes. All national technical training must include formative evaluation. The validation requirements presented in Chapter 5 is used for formative evaluation.

2) **Summative Evaluation.** Summative evaluation encompasses those methods of judging the value/effectiveness of training after a training program has been in place and active for a period of time. All national technical training must include summative evaluation. The Directorate

oversees the administration of the end of course and post course evaluation systems for national technical training.

**c. Evaluation Data.** The FAA has an online system that provides the following two surveys for evaluation data:

1) **End of course evaluation** provides learners with an opportunity to evaluate the training they have attended across a variety of dimensions that are of interest to the learner (for example, pace of instruction, quality of materials) or for which they may have valuable information (for example, incorrect or missing information, equipment malfunctions). Encompasses primarily Level 1 and may include student feedback on the effectiveness of the training.

2) **Post course evaluation** provides learners and their immediate managers an opportunity to evaluate the degree to which learners have applied training effectively on the job or to further training situations. Encompasses primarily Level 3.

**d. Summative Evaluation Intervals.** A summative evaluation examines all aspects of training currently in delivery and may be initiated for either of these reasons:

1) **Periodic** – At intervals, the Directorate will evaluate training to determine if it requires changes. The review may result from observations of the training taking place, evaluation data, and/or issuance of new procedures (or guidance) that affect the training.

2) **Ad Hoc** – An internal ATO organization or an external agency charged with oversight or evaluation of FAA operations may request a specialized evaluation of particular courses, workshops, or briefings.

**e. Summative Evaluation.** At least one instructional systems specialist and the operational customer or a designated subject matter expert will conduct the evaluation. Segments of the evaluation are conducted by either an ISS, SME, or both.

1) Evaluation consists of the following elements:

a) **End of Course Evaluation.** The team will review end of course evaluation data and any analyses of that data, and/or conduct analysis of the data.

b) **Post Course Evaluation.** The team will review post course evaluation data and any analyses of that data, and/or conduct analysis of the data.

c) **Audit/Observation.** The team will observe all or selected parts of the training, depending on length and identified need for review, or they may waive observation. Observation must comply with any collective bargaining agreements.

d) **Review of Test Scores.** The team will review test scores and any analysis of test scores and conduct test item analysis, as needed.

e) **Technical Review.** The operational customer or designated subject matter expert will review the training for accuracy of technical content.

f) **Instructional Design Review.** The instructional systems specialist will review materials for adherence to the course design guide.

2) **Evaluation Outcomes.** At the conclusion of the evaluation, the evaluators will recommend one of the following outcomes documented in an evaluation report:

- a) Continue the training as is.
- b) Continue the training with minor revisions, which the Directorate can delegate to the Academy or other organization.
- c) Continue the training following a major revision, which the Directorate will complete.
- d) Discontinue the training if no longer required.
- e) Discontinue the training and replace with other existing training(s).

**3-4 Testing.** Testing determines the level of knowledge or performance that individual learners gained from training. Training that requires test validity and reliability include those that have safety critical training outcomes and those with outcomes that management will include in their consideration for placement, promotion, or certification (also called high stakes decisions). Testing is predominantly used in courses, but may be used in workshops.

**a. Testing of Objectives.** All objectives will be tested. Tests must measure objectives at a level appropriate for the objective (for example, performance tests for performance objectives).

**b. Testing Strategy.** A testing strategy lists all tests to be administered in a course (or workshop) and the type of each test. For courses that use a cumulative final score, the test strategy describes the weight of each test, usually as a percentage of a cumulative final score. The testing strategy specifies the grading method for each type of test, and whether there will be non-graded tests.

- 1) The course design guide must include the testing strategy for each course (or workshop, if appropriate).
- 2) The testing strategy must include:
  - a) A plan for conducting inter-rater agreement on graded performance tests.
  - b) A list of all tests used in the course and how they are weighted (if applicable).
  - c) How and if remediation will be permitted.

**c. Testing Blueprint.** Testing blueprints show the design details of the individual test items and scenarios in terms of how they align with the job tasks and objectives used to design the course.

- 1) All tests will have a test blueprint.
- 2) A test blueprint must show
  - a) Alignments of tests items to objectives and job tasks.
  - b) Correct and incorrect response(s) for test items
  - c) Assessment tools or performance standards for performance items

**d. Minimum Passing Score.** To receive credit for a course, learners must score at least 70%. This applies to both written and performance tests, including performance of scenario problems. AJI will have the final authority to approve a higher minimum passing score if a request and justification is presented.

**e. Test Score Recording.** Administrators will ensure all test scores or results are recorded in a manner that allows for future item analysis, preferably in an electronic medium.

**f. Remediation.** Remediation includes all plans and activities instructors can use to assist learners who do not achieve the minimum score on written or performance tests. The testing strategy must specify whether remediation will be allowed and if so, how it will be accomplished.

- 1) If remediation permits retaking a test, test re-administration must employ an alternate test with comparable test items.
- 2) Under certain circumstances, as determined by AJI, a course Completion or Incompletion may be recorded after the initial remediation with no additional remediation required. (ie. CPC training on a system that is already in use but no training has been provided, or training that does not effect the safety of the NAS).

**g. Test Validity, Reliability, and Integrity.** A valid test is one that accurately measures the learner's performance as identified in the original job tasks. A reliable test consistently achieves similar results over time and across other variables, such as instructors. Test integrity is the degree to which a test is considered secure and has measures that prevent cheating and easy memorization of test questions and answers.

- 1) All tests must be shown as valid as part of the training validation and reliable for subsequent evaluations.
- 2) When testing for courses with safety critical outcomes and/or high stakes decisions, tests must be both highly valid as part of the training validation and reliable for subsequent evaluations and have a good degree of integrity.

**h. Using Tests for Selection Purposes.** When testing for hiring and employee selection, tests must be both valid and reliable in accordance with the Uniform Guidelines on Employee Selection Procedures (29 CFR 1607), the current editions of the Standards for Educational and Psychological Testing, the Principles for the Validation and Use of Employee Selection Procedures, and relevant professional assessment practices.

**i. Test Review.** SME's and ISS's will review tests periodically for relevancy and accuracy, and if required, for validity and reliability as part of evaluation, discussed in section 3-3 of this Chapter.

1) The organization administering tests must be able to provide individual student test results and composite test results for multiple classes (for example, the number of students who got each item correct/incorrect) for test reviews.

**3-5 Course File.** The Directorate will establish the file for all training documentation and training materials.

## Chapter 4: Instructional Systems Design (ISD)

**4-1 Planning.** Planning involves determining the type of learning event (*see Table 1, p. 13*), and estimating resource requirements and constraints.

a. New training development or revision begins with the receipt of a training proposal which provides justification for requested training, a list of the tasks, functions or topics to be trained, a general description of the target learner population, and the estimated number of learners. If the development or revision is to be part of an existing curriculum, the Directorate will determine if it will have any effect on other training in the curriculum.

b. During the planning phase, the Directorate develops a business case for a project by stating the benefits of the learning event to the organization, the consequences of failing to develop the learning event, the estimated resource requirements, and any risks that could have a negative effect on development.

c. During the planning phase, the Directorate will determine the appropriate type(s) of analysis to be conducted. The purpose of analysis is to clarify the overall scope and goals of new training or redesign of existing training.

**4-2 Overview of ISD Process.** ISD, the science and psychology of sound instruction that uses the ADDIE model, is a systematic but flexible process used to plan, analyze, design, develop, implement, and evaluate training in an effective and efficient manner. The application of a systematic approach to training ensures that training and the required support materials are developed in an effective and efficient manner to match training needs in a rapidly changing environment.

**4-3 Analysis** involves identifying the tasks, skills, and knowledge to be trained, the outcome and objectives needed to achieve it, a clear description of the learners who will receive the training, including their current knowledge and skills related to the training topic, and learning context and constraints.

**a. Output:**

1) Produced in the form of an analysis report, this document specifies, but is not limited to, the tasks, skills, and/or knowledge requirements for a particular job, operation of equipment, or safety-critical operation, and may include a needs analysis or gap analysis, audience analysis, and other types of analyses.

2) May also include a Training Development Plan (TDP) when the scope of the development project is large and/or complex. The TDP document specifies how training will be developed and delivered (for example, general instructional methods and media), the training outcomes and a general outline of the training, prerequisites, materials, equipment required, and anticipated costs.

a) Based on project scope and with Directorate approval, the project manager and ISS may waive the Training Development Plan.

**4-4 Design** involves creating a blueprint for instruction.

**a.** Using data gathered from the analysis phase, the instructional designer creates a design plan called a Course Design Guide (CDG), in collaboration with subject matter experts for the training that includes:

- 1) Outcomes.
- 2) Instructional objectives with clear traceability to the job task and proficiency as defined in the Curriculum Architecture Job Task Analysis.
- 3) Testing strategy.
- 4) Topics and other content needed to teach the objectives.
- 5) An outline of the topics associated content, assessment, and resources to be taught.
- 6) Instructional strategies and media choices for each objective.

**b.** There must be a CDG for every course and workshop. Should changes in the design become necessary during development, the developer must update the CDG to accurately describe the design of the training.

**c. Output:** A CDG that includes the bulleted items listed previously, as well as clear traceability to the appropriate Job Tasks as defined in the Curriculum Architecture.

**4-5 Development** involves creating all aspects of instructional and learning materials necessary to execute the learning strategy described in the course design guide. All developed materials are tested and evaluated to validate content and that the activities and materials are ready for use by the learner.

**a.** If procurement of Commercial-Off-the-Shelf (COTS) training is proposed, representatives of the Directorate will assess the materials to ensure they meet the design requirements.

**b. Output:** Completed instructional materials which may include, but are not limited to:

- 1) Lesson plans.
- 2) Instructor materials.
- 3) Learners' guide which may include case studies, exercises, handouts, labs, etc.
- 4) Storyboards, videos, graphics, simulations.
- 5) Learning assessments.

- 6) Performance assessment activities, such as problems or scenarios.
- 7) Programmed training, if training will be delivered via self-paced web based training.
- 8) Course Report (documentation of the validity of the course or workshop – see Chapter 5).

**4-6 Implementation or Delivery** refers to the actual delivery or distribution of instruction in a way that ensures learners will be able to achieve the outcomes stated in the course design guide on the job.

**a. Output:**

- 1) Training delivered to learners.
- 2) End of course evaluation by learners.
- 3) Tests or other assessment of learning or performance.
- 4) Record of learner completions and other training metrics.

**4-7 Evaluation** measures the effectiveness and efficiency of the instruction, and application of learning to job tasks. Refer to Chapter 3, Section 3 for evaluation requirements.

## Chapter 5: Validation of Training

**5-1 Validation.** A training product is said to be valid when ISS and subject matter experts verify instructional materials and associated documentation meet required standards to be complete, accurate, and ready for delivery, and the training is effective, adequate, and acceptable to the learners during the first delivery.

**a. Scope.** The Directorate must validate all technical training courses developed for use at a national level, or as designated by the Directorate, prior to implementation. Validation in this context applies to the course overall to ensure it is instructional and technically sound, as opposed to only test validation and reliability. Validation of workshops is optional but recommended.

**b. Requirements.** The Directorate will validate training by ensuring all necessary documentation has been developed and the following criteria are met:

- 1) Materials are developed in accordance with the course design guide.
- 2) Materials are developed in accordance with specified formats or other requirements.
- 3) Instruction is complete and accurate.
- 4) Instruction is effective (meaning that evaluators determine that learners are able to demonstrate through measurable skills or written tests that they can perform the outcomes).
- 5) The instruction is adequate (meaning that learners and others who evaluate the training believe it is adequate preparation to enable the learner to perform their job duties or proceed to the next stage of training).
- 6) The instruction is accepted by learners (meaning that learners do not find that the presentation of the instruction objectionable or that it interferes significantly with learning the material).
- 7) Tests are valid and reliable and have appropriate integrity.

**5-2 Conducting Validation.** Validation may be conducted one of two ways: during the Development phase of the ISD process or after the fact.

**a. Validation Conducted During Development.** A series of activities are conducted that are part of the formative evaluation of materials during the Development phase. During these activities, instructional designers and technical content personnel verify instructional materials and associated documentation are complete, accurate, and ready for delivery, and whether the course is effective, adequate, and acceptable to the learners during the first delivery. The walk-through or operational tryout may be waived by the Directorate, for example, in cases where the scope or timeline of the project is extensive. The process for conducting validation consists of the following steps:

**1) Review Analysis and Design Documents.** The purpose of this review is to ensure analysis and design documents are complete and effective.

**2) Review Instructional Materials.** The purpose of this review is to ensure materials are complete and effective, provide a technical review of the content of the materials, provide a review of the instructional soundness of the materials, ensure the materials conform to any pre-specified requirements or formats, and ensure the training conforms to the prescribed design.

**3) Conduct Walk-Through.** The purpose of the walk-through is to ensure: previous corrections and revisions from the instructional materials review have been made, instruction is sequenced logically, the consistency and quality of materials and logistics problems in delivering the training are identified and resolved.

**4) Conduct Operational Tryout.** The purpose of the operational tryout is to locate and eliminate any remaining problems in the instruction. For web-based training, an alpha test is the operational tryout.

**5) Conduct First Class.** The purpose of the First Course Conduct is to verify all revisions have been made, the course (or workshop) is effective when delivered to the target population, and it meets validation criteria. For web-based training, a beta test is the first course conduct.

**6) Write Course Report.** The purpose of this step is to document whether the course (or workshop) meets the criteria for validation as stated in applicable guidance provided by the training directorate.

**b. Validation Conducted After Development.** If the Directorate receives a request to validate training already in delivery (meaning activities like the Walk-through or First Course Conduct are not feasible) or already developed by an organization outside of the Directorate, a validation team will:

**1) Review analysis and design documents.** The purpose of this review is to ensure analysis and design documents are complete and effective.

**2) Review instructional materials.** The purpose of this review is to ensure materials are complete and effective, provide a technical review of the content of the materials, provide a review of the instructional soundness of the materials, ensure the materials conform to any pre-specified requirements or formats, and ensure the training conforms to the prescribed design.

**3) Observe the training during delivery.** The purpose of this step is to verify that the training is conducted in a manner that matches the material and meets the design.

**4) Write the course report.** The purpose of this step is to document whether the course (or workshop) meets the criteria for validation as stated in applicable guidance provided by the training directorate.

**5-3 Participation.** Participants involved in the validation process must include, at a minimum, a project manager, an Instructional Systems Specialist (ISS), and a subject matter expert (SME) designated by the Technical Training Directorate. SMEs review materials for technical accuracy. ISSs review materials for instructional soundness.

## Chapter 6: Local and Regional Training

**6-1 Local and Regional Design, Development, and Delivery.** Local and regional facilities should design, develop, and deliver outcomes-based training using a systematic approach to training design and development. The application of a systematic approach to training ensures that training and the required support materials are developed in an effective and efficient manner to match training needs in a rapidly changing environment. As training design and development resources become available at local and regional facilities, the Directorate recommends that the following requirements be instituted into training development. The exception to these recommendations are the requirements as stated in paragraphs 6-4 b and e, which are externally required for training.

**6-2 Audience.** This chapter applies to all personnel involved in local or regional technical training.

### 6-3 Outcomes-Based Training.

**a. Outcomes-Based Training** is designed based on the job tasks and associated knowledge, skills, and abilities the learner is expected to perform on the job after they complete the training (as opposed to what can be performed only in a classroom). An *outcome* is a clear, observable demonstration of learning that reflects any or all of the following:

- 1) What the learner knows.
- 2) What the learner can actually do with that knowledge.
- 3) How well the learner can demonstrate skills (proficiency).

**b. Job Tasks.** The job tasks approved and accepted by the Directorate, when available, should form the basis of training.

**c. Objectives.** Objectives specify the intended outcomes of training. Each course or workshop objective should relate to the job tasks or associated knowledge, skills, and abilities the learner is expected to perform on the job.

**6-4 Systematic Approach to Training Design and Development.** Design and development of all courses, workshops and briefings should follow a systematic approach. Using a systematic approach to training ensures that training programs and support materials are effective, efficient, and match training needs.

**a. Analysis** involves identifying the tasks, skills, and knowledge to be trained, the outcome and objectives needed to achieve it, and a clear description of the learners who will receive the training. Analysis involves determining:

- 1) The affected job tasks.
- 2) The outcomes.

**b. Section 508 Compliance.** Should a facility choose to deliver training electronically, for example, web-based training or computer based instruction (CBI), such training must be compliant with Section 508 of the Rehabilitation Act (29 U.S.C. 794d). Refer to Chapter 3, Section 2, h, of this Order for guidance on Section 508 compliance.

**c. Design** involves creating a blueprint for instruction. Using data gathered during analysis, create a design plan that includes:

- 1) Course or workshop outcomes.
- 2) Course or workshop instructional objectives.
- 3) Topics and other content needed to teach the objectives.
- 4) An outline of the objectives, topics, and associated content to be taught.
- 5) Instructional strategies and media choices for each objective or section of content.
- 6) During design, document whether and how you will assess objectives.

**d. Development** involves creating learning materials to execute the strategy described in the design plan. For courses and workshops, this involves:

- 1) Creating lesson plans or outlines with content to be covered and exercises and activities for learner interactivity.
- 2) Creating handouts or other resource materials.
- 3) Developing assessments for objectives or activities and remediation plans, if permitting remediation.

**e. Evaluation** measures the effectiveness and efficiency of the instruction, and application of learning to job tasks.

1) Per HRPM LD 5.6, training officials must administer written end of course evaluations to assess, at a minimum, participant reaction, vendor and instructor performance, and (when appropriate) learning outcomes, transfer of learning, and the effectiveness of participatory learning techniques. For additional guidance on evaluation, refer to Chapter 3, Section 3, Evaluation, in this Order.

**6-5 Course File.** The Directorate recommends that the facility creating the learning event establish and maintain a file for each learning event's documentation and materials.

## Appendix A: Glossary and Acronyms

### Glossary

ADDIE Model	<u>A</u> nalyzing the problem, <u>D</u> esigning a training solution, <u>D</u> eveloping the courseware, <u>I</u> mplementing the solution, and performing <u>E</u> valuations throughout the process.
Analysis Report	The result of the analysis phase, this report documents analysis activities conducted including specific tasks, skills, and/or knowledge requirements for a particular job(s) or topic to be trained, prerequisites, and a description of the audience for training.
Assessment	A process for obtaining information that is used for making decisions about learners, curricula and programs, and educational policy.
Audience Analysis	Determination of learner characteristics, such as current level of knowledge, skill, or experience, availability to receive training, number of learners to be trained, and appropriate class size for learning content.
Briefing	An organized body of information delivered to learners.
Course	A training event structured by measurable objectives that is designed for a particular target audience.
Course Design Guide	This document specifies the training outcomes, sequence of lessons, lesson and topic objectives, sequence of objectives, specific instructional methods and media to be used, and the assessment strategy. Course Design Guides must be used for all courses, workshops, and are optional for briefings.
Course Report	This report indicates whether the training fulfills the requirements stated in the Course Design Guide, for example, teaches to and assesses the stated objectives, follows the topic sequence, and delivers instruction using the methods and media recommended, enabling the learners to achieve the outcome.
Course Walk-Through	An abbreviated presentation of training to SMEs, instructional systems specialists, and instructors to ensure that revisions from technical and instructional reviews were made, instruction is logically sequenced, materials are of required quality and consistency, and any logistical problems have been resolved. ( <i>Precedes Operational Tryout in Validation process.</i> )
Curriculum	An organized body of training events along with the appropriate sequence, recommended delivery and assessment methods, and the level of proficiency learners attain as a result of the training events and curriculum.
Curriculum Architecture	A framework for the structure and planning of training for the technical workforce that consists of two elements: identification and maintenance of the job tasks performed by controllers and technicians as part of their daily work, and how each task should be taught and in what potential order.

<b>Term</b>	<b>Definition</b>
Evaluation	A systematic procedure for determining the effectiveness of a course, workshop, or briefing using criteria governed by a set of standards.
First Course Conduct	Delivery of training to target audience, observed by technical content lead and training development lead to determine if training meets validation criteria (for example, instructional materials and associated documentation are complete, accurate, ready for delivery), and determine whether the training is effective, adequate and acceptable to the learners during the first delivery.
Formative Evaluation	Methods undertaken during training development ( <i>forming</i> ) that determine the technical accuracy and completeness of a product and whether the design, instructional strategy, and materials are likely to result in learners being able to achieve objectives and outcomes.
High Stakes Testing	Tests or assessments with outcomes that management will include in their consideration for placement, promotion, or certification.
Instructional Systems Design	The science and psychology of sound instruction that uses the <b>ADDIE</b> model.
Job Task Analysis (JTA)	Part of the Curriculum Architecture documentation that identifies the job tasks performed by controllers and technicians as part of their daily work, how each task should be taught, and in what potential order. For each task, the JTA includes analysis of its difficulty to learn, difficulty to perform, importance, and frequency, and well as the level of proficiency required.
Objective	Statement of what the learners are expected to know or do when they have completed a lesson or entire learning event based on requirements for job performance.
Operational Tryout	Delivery of training as intended for target audience, but allowing learners the opportunity to comment on each lesson. The purpose is to resolve any remaining problems, such as time allocation for lessons, logistics associated with delivery, sequence of training within and between lessons or modules, check of previous corrections, achievement of outcomes and objectives, and validity of test items. Provides instructor orientation to materials and methods and allows other stakeholders to review. ( <i>Precedes First Course Conduct in Validation process.</i> )
Remediation	Method or process provided to allow a learner to improve written test or performance results outcomes.
Simulation	Imitation of an operation of a real-world process or system over time. Simulations present instructional scenarios and are delivered by media that create a realistic model of an actual situation or environment. Examples of simulations include tabletop re-enactments, role-playing, mock review panels, and mock software displays.
Summative Evaluation	Methods of judging the value/effectiveness of training at the end of training activities.
Test	An instrument or systematic procedure for observing and describing

<b>Term</b>	<b>Definition</b>
	one or more characteristics of a learner using measurements or descriptors such as a numerical scale or a classification scheme. Tests fall under two broad categories: written and performance.
Training Development Plan	The document that recommends a plan to achieve the desired training and provides a record of the basic planning for training. The TDP provides communication and agreement between the FAA and the vendor on how the training will be developed.
Training Event	Training that is part of a learners training record when successfully completed, and can consist of a course, workshop, or briefing.
Training Materials	These materials contain the content of the training as specified in the course design guide, for example, a programmed distance learning course, lesson plans for instructor led training, learner guides, resource materials, and assessments.
Training Proposal	The document that justifies the need for new training or training revision, lists tasks, functions (when tasks have not yet been identified), or topics to be trained, and provides a general description of the target learner population and the estimated number of learners.
Validation	The process through which instructional designers and technical content personnel verify instructional materials and associated documentation are complete, accurate, ready for delivery, and are effective, adequate, and acceptable to the learners.
Workshop	A structured training event designed for a particular target audience.

### Acronyms

<b>Term</b>	<b>Definition</b>
ADDIE	Analyze, Design, Develop, Implement, Evaluate
AJI	ATO Safety and Technical Training
ATO	Air Traffic Organization
CA	Curriculum Architecture
CBI	Computer-Based Instruction
CDG	Course Design Guide
COTS	Commercial Off-the Shelf
DOT	Department of Transportation
EIT	Electronic and Information Technology
FAA	Federal Aviation Administration
GFE	Government Furnished Equipment
GFI	Government Furnished Information
HRPM	Human Resource Policy Manual
ICT	Information and Communication Technology
IRP	Independent Review Panel
ISD	Instructional Systems Design
ISS	Instructional Systems Specialist

<b>Term</b>	<b>Definition</b>
JTA	Job Task Analysis
LOA	Letter of Authorization or Agreement
OPM	Office of Personnel Management
PM	Project Manager
SME	Subject Matter Expert
SOW	Statement of Work
TDP	Training Development Plan
WBT	Web-Based Training

**Appendix B: Section 508 Determination and Certification for EIT Purchase Requests**

*To be completed by the Requiring Official (Purchase Requestor)*

This determination and certification documents compliance with a statutory requirement applicable to any procurement of electronic and information technology (EIT) on or after June 21, 2001. This fully completed document including applicable attachments must be provided to the procurement office with the purchase request. Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 d) as amended (added) in the Workforce Investment Act of 1998 requires the Architectural and Transportation Barriers Compliance Board (Access Board) to create federal standards for electronic and information technology (EIT) products to make them more accessible by individuals with disabilities. To document either compliance with these standards or statutory exceptions, proceed through the following sections as directed. At least one certification must be signed for all EIT procured after June 21, 2001.

**SECTION 1: Is there any potential for an EIT deliverable to be procured pursuant to this requirement?**

Access Board Standards apply to Electronic and Information Technology (EIT), a term defined as:

Any equipment or interconnected system or subsystem of equipment, that is used in the creation, conversion, or duplication of data or information, or used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.

The term electronic and information technology includes, but is not limited to, telecommunications products (such as telephones), information kiosks and transaction machines, World Wide Web sites, multimedia, and office equipment such as copiers and fax machines. It includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources.

**CERTIFICATION 1 (Non-EIT deliverables):**

I certify that the requirement to be procured pursuant to this purchase request package has no potential for an EIT deliverable.

Signature	Printed Name	Date	Phone Number
-----------	--------------	------	--------------

\_\_\_\_\_ If this purchase request package may have an EIT deliverable, **PLACE AN ‘X’ BEFORE THIS SENTENCE** and proceed to Section 2.

**SECTION 2: EIT Exceptions**

Following are exceptions to Access Board requirements for EIT products:

(a) The standards DO NOT Apply to any EIT operated by agencies, the function, operation, or use of which involves:

\_\_\_\_(1) Intelligence activities.

\_\_\_\_(2) Cryptographic Activities related to national security.

\_\_\_\_(3) Command and control of military forces.

\_\_\_\_(4) Equipment as an integral part of a weapon or weapon system.

\_\_\_\_(5) Systems critical to the direct fulfillment of military or intelligence missions.

\_\_\_\_(b) Products to be acquired by a contractor incidental to a contract.

\_\_\_\_(c) Products or components of products that would require a fundamental alteration in their nature.

\_\_\_\_(d) Products located in spaces frequented only by service personnel for maintenance, repair or occasional monitoring.

\_\_\_\_(e) Products to be acquired for up to \$2,500 each (in accordance with the Federal Acquisition Regulation subpart 13.2 on micro-purchasing) prior to April 1, 2005, but the buy should comply with the accessibility standards to the maximum extent practicable. The exception is for a one-time purchase that totals \$2,500 or less, made on the open market, not under an existing contract. (Micro-purchases being made as part of a larger requirement exceeding \$2,500 are subject to Section 508.)

**CERTIFICATION 2 (Exception Exists):**

I certify that the requirement to be procured pursuant to this purchase request package meets the exception(s) indicated by the "X" (or Xs) I have placed before the applicable exception(s) above.

Signature	Printed Name	Date	Phone Number
-----------	--------------	------	--------------

If this purchase request package does not meet an exception, proceed to Section 3.

**SECTION 3: Will only fully compliant deliverables be procured in response to this solicitation?**

Refer to the “SECTION 508 TECHNICAL STANDARDS” viewable at [http://www.section508.gov/final\\_text.html](http://www.section508.gov/final_text.html) to review the standards essential for compliance. Seek assistance from your Operating Administration’s Office of the Chief Information Officer in interpreting the standards.

\_\_\_\_\_  
Signature                      Printed Name                      Date                      Phone Number

**CERTIFICATION 3 (Only fully compliant products will be procured/delivered):**

I certify that only fully compliant deliverables will be procured pursuant to the requirement identified in this purchase request package.

\_\_\_\_\_  
Signature                      Printed Name                      Date                      Phone Number

**SECTION 4: Commercial Non-Availability or Undue Burden Documentation**

**CERTIFICATION 4 (Form 4261.1 - Commercial Non-Availability or Form 4262.1 - Undue Burden Documentation):**

If you have reached this point without completing a certification, additional documentation will be required in either Attachment A or Attachment B. If you are buying a commercial item that meets the definition in Attachment A, but that commercial item is not currently available in a form that complies with Access Board standards, you must document commercial unavailability in Attachment A.

If the procurement of a requirement that is in compliance with Access Board standards would place an undue burden on the Operating Administration, you must document your rationale for undue burden in Attachment B. Check the document below that you will complete:

\_\_\_\_\_ Form 4261.1 – “EIT Commercial Non-Availability Certification”

\_\_\_\_\_ Form 4262.1 – “EIT Undue Burden Determination and Certification”