



ICAO

TRAINAIR *PLUS*™



TRAINAIR *PLUS*

Operations Manual (TPOM)



2013

Second Edition

International Civil Aviation Organization



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TRAINAIR *PLUS*

Operations Manual (TPOM)

TABLE OF CONTENTS

Chapter 1: INTRODUCTION AND DEFINITIONS	5
1.1 PURPOSE OF THE MANUAL	6
1.2 RELATED MANUALS	6
1.3 DEFINITIONS AND TERMINOLOGY	7
1.4 ACRONYMS	8
Chapter 2: TRAINAIR <i>PLUS</i> PROGRAMME BACKGROUND	9
2.1 TRAINAIR <i>PLUS</i> PROGRAMME OBJECTIVES	10
2.2 FROM TRAINAIR TO TRAINAIR <i>PLUS</i>	10
2.3 PROGRAMME PRINCIPLES	12
2.4 THE ICAO AVIATION TRAINING DIRECTORY	13
2.5 SUPPORTING NEXT GENERATION AVIATION PROFESSIONALS(NGAP)	14
Chapter 3: TRAINAIR <i>PLUS</i> PROGRAMME MEMBERSHIP	15
3.1 BENEFITS OF MEMBERSHIP	16
3.2 MEMBERSHIP CRITERIA	16
3.3 REQUIREMENTS OF MEMBERSHIP	17
3.4 TRAINAIR <i>PLUS</i> CERTIFICATES AND LOGOS	20
3.4.1 TRAINAIR <i>PLUS</i> LOGO USAGE GUIDELINES	21
3.5 LANGUAGE OF COMMUNICATION	23
3.6 PROGRAMME FEES	23
Chapter 4: THE MEMBERSHIP PROCESS	25
4.1 GENERAL	26
4.2 MEMBERSHIP PROCESS FLOWCHART	27
4.3 ASSESSMENT PROCESS	27
4.3.1 APPLICATION	27
4.3.2 PRE-ASSESSMENT	28
4.3.3 ON-SITE ASSESSMENT	28
4.3.4 POST-ASSESSMENT	29
4.4 ASSESSMENT GUIDELINES	30
4.4.1 ASSESSMENT CRITERIA AND PROTOCOLS	30
4.4.2 ASSESSMENT SCHEDULE	32
4.5 FOLLOW-UP ASSESSMENTS AND RENEWAL	32
4.6 SUSPENSION AND REVOCATION	33

Chapter 5: STANDARDIZED TRAINING PACKAGES (STPs)	35
5.1 STP DEVELOPMENT BY A TRAINING CENTRE	36
5.2 TRAINING DEVELOPMENT GUIDE (TDG)	36
5.3 WORKFLOW CHART	37
5.4 VALIDATION AND APPROVAL OF STP BY ICAO	38
5.5 IMPLEMENTATION	39
5.6 ADAPTATION AND TRANSLATION	39
5.7 STP ASSEMBLY INSTRUCTIONS	40
5.8 PROCESS FOR ISSUING A TRAINAIR PLUS ICAO QUALIFIED COURSE DEVELOPER (TP-IQCD) CERTIFICATE	48
Chapter 6: STANDARDIZED TRAINING PACKAGE (STP) SHARING PROGRAMME	49
6.1 MANAGEMENT OF THE STP LIBRARY	50
6.1.1 WEB-BASED STP LIBRARY	50
6.1.2 EXCHANGE OF STPs	51
Chapter 7: PROGRAMME ADMINISTRATION AND OVERSIGHT	53
7.1 TRAINAIR <i>PLUS</i> PROGRAMME MANAGEMENT	54
7.1.1 AVIATION SAFETY TRAINING (AST) SECTION, AIR NAVIGATION BUREAU	54
7.1.2 TRAINAIR <i>PLUS</i> STEERING COMMITTEE	54
7.1.3 TRAINAIR <i>PLUS</i> ELECTRONIC MANAGEMENT SYSTEM (TPeMS)	55
Chapter 8: PROGRAMME TRAINING COURSES	57
8.1 TRAINAIR <i>PLUS</i> TRAINING COURSES	58
8.1.1 TRAINAIR <i>PLUS</i> Training Developers Course	58
8.1.2 TRAINAIR <i>PLUS</i> Training Instructors Course	59
8.1.3 TRAINAIR <i>PLUS</i> Training Managers Course	59
Chapter 9: TRAINAIR <i>PLUS</i> INTERNATIONAL MEETINGS	61
9.1 TRAINAIR <i>PLUS</i> GLOBAL SYMPOSIUM	62
9.2 TRAINAIR <i>PLUS</i> REGIONAL CONFERENCES	64
Chapter 10: TRAINAIR <i>PLUS</i> QUALITY ASSURANCE	67
10.1 QUALITY MANAGEMENT SYSTEM	68
10.2 ISO 9001-2008 REQUIREMENTS	69

CHAPTER 1

INTRODUCTION AND DEFINITIONS

- 1.1 PURPOSE OF THE MANUAL**
- 1.2 RELATED MANUALS**
- 1.3 DEFINITIONS AND TERMINOLOGY**
- 1.4 ACRONYMS**

1.1 PURPOSE OF THE MANUAL

1.1.1 Competent personnel are essential to establish, manage and operate safe air transportation systems. Training of aviation professionals plays a critical role in achieving safety objectives and ICAO is committed to supporting Member States in implementing high quality standards in civil aviation training. As outlined in the ICAO Civil Aviation Training Policy, the TRAINAIR *PLUS* Programme is a key element in ICAO's strategy to achieve this goal. The TRAINAIR *PLUS* Programme provides its Members with support for new and existing aviation training centres through the provision of technical expertise, and quality oversight. The result is a cooperative network of ICAO TRAINAIR *PLUS* Centres that develop and share high-quality standardized aviation training materials for the benefit of all Members.

1.1.2 The TRAINAIR *PLUS* Operations Manual (TPOM) is published primarily to provide Contracting States, civil aviation training organizations and ICAO personnel with guidance and information on the operation of the TRAINAIR *PLUS* Programme. This manual sets forth the objectives and principles of the Programme and details the rules and requirements related to Programme membership, the assessment process, and the development, validation and sharing of Standardized Training Packages (STPs) and other training material. It also addresses the administration and oversight of the Programme, including competency requirements for various training professional levels, information processes and quality assurance activities.

1.1.3 The rules and operations of the TRAINAIR *PLUS* Programme, as set forth in this Manual, supersede any rules and principles that may have been applicable to the former TRAINAIR Programme.

1.2 RELATED MANUALS

1.2.1 The *TRAINAIR PLUS Training Development Guide* (Doc 9941) provides a methodology for competency-based training. It is a guide to the development of training material in a consistent and systematic manner and also sets forth training development standards, making it practical for course material to be shared between participating TRAINAIR *PLUS* Members.

1.2.2 *Manual on the Approval of Flight Crew Training Organizations* (Doc 9841) provides information and guidance to licensing authorities and training organizations on the implementation of Annex 1 and other Annex Standards related to the approval of training organizations. It describes the process through which approval is granted to a training organization, the contents of an application proposal to become an approved training organization, and the quality assurance system needed to maintain approval.

1.2.3 Procedures for Air Navigation Services (PANS) — Training (Doc 9868) contains material that provides for the uniform implementation of the training required for pilot licenses and ratings found in Annex 1. This document is complementary to the Standards and Recommended Practices (SARPs) contained in Annex 1 — *Personnel Licensing* and specifies, in greater detail than in the SARPs, the actual procedures to be applied by training organizations in providing training for aeronautical personnel.

1.3 DEFINITIONS AND TERMINOLOGY

When the following terms are used in this manual or other related TRAINAIR *PLUS* documentation, they have the following meanings:

Assessor: A training specialist who is approved by the Chief of the Aviation Safety Training Section (AST) as having the required competencies to conduct ICAO TRAINAIR *PLUS* assessment missions of Members and membership applicants.

Course Developer: A training specialist who has completed a TRAINAIR *PLUS* Training Developers Course (TDC) and has the proven competencies to carry out TRAINAIR *PLUS* procedures for preparing a training package. Further details are set forth in the TRAINAIR *PLUS* Training Development Guide (Doc 9941).

International Consultant: Also referred to as an Expert, an International Consultant provides specialized expertise in the development of a Standardized Training Package (STP) to the Course Development Unit (CDU) of a Civil Aviation Training Centre (CATC).

Standardized Training Package (STP): A training package produced in accordance with the ICAO Training Development Guide (Doc 9941).

TPP Evaluator: A training specialist who is approved by the Chief AST as having the required competencies to conduct an ICAO TRAINAIR *PLUS* 3-stage evaluation of an STP from development to approval.

TPP Instructor: A training specialist who has completed formal training in instructional techniques and who has the responsibility to deliver a given course to trainees in accordance with the standards defined for that course.

1.4 ACRONYMS

ADDIE	Analysis, Design, Development, Implementation, Evaluation
AST	Aviation Safety Training Section of ICAO
ANB	Air Navigation Bureau of ICAO
ATD	Aviation Training Directory
CAA	Civil Aviation Authority
CAP	Corrective Action Plan
CATC	Civil Aviation Training Centre
CDU	Course Development Unit
ICAO	International Civil Aviation Organization
ISD	Instructional Systems Design
LDCs	Least Developed Countries
STP	Standardized Training Package
STPL	Standardized Training Package Library
TDC	Training Developers Course
TDG	Training Development Guide
TIC	Training Instructors Course
TMC	Training Managers Course
TPeMS	TRAINAIR <i>PLUS</i> electronic Management System
TPOM	TRAINAIR <i>PLUS</i> Operations Manual
TPP	TRAINAIR <i>PLUS</i> Programme
TPSC	TRAINAIR <i>PLUS</i> Steering Committee

CHAPTER 2

TRAINAIR *PLUS* PROGRAMME BACKGROUND

- 2.1 TRAINAIR *PLUS* PROGRAMME OBJECTIVES**
- 2.2 FROM TRAINAIR TO TRAINAIR *PLUS***
- 2.3 PROGRAMME PRINCIPLES**
- 2.4 THE ICAO AVIATION TRAINING DIRECTORY**
- 2.5 SUPPORTING NEXT GENERATION AVIATION PROFESSIONALS (NGAP)**

2.1 TRAINAIR *PLUS* PROGRAMME OBJECTIVES

2.1.1 ICAO has an important role to play in ensuring that the civil aviation community and especially States have access to the pool of qualified professionals they need to support the safe, secure and sustainable development of air transport. ICAO defines training standards and encourages States to harmonize their training programmes to enhance their aviation personnel's capabilities to the highest possible level.

2.1.2 The TRAINAIR *PLUS* Programme goal is to improve the safety and efficiency of air transport through the establishment, maintenance and monitoring of high standards of training and competency of aviation personnel on a world-wide basis and in a cost-effective manner. The specific objectives of the TRAINAIR *PLUS* Programme are to:

- promote the implementation of an affordable competency-based approach for aviation training;
- streamline, and facilitate the implementation and the development of the TRAINAIR *PLUS* methodology used in Standardized Training Packages (STPs);
- coordinate and supply technical support for Training Developers Courses (TDCs);
- provide quality control throughout the STP development process; and
- operate an international STP sharing system and cooperative training network.

2.1.3 The TRAINAIR *PLUS* Programme is based on three (3) interrelated tools: a) development of standardized training material, b) establishment of an international pool mechanism of training courses, and c) the creation of an international sharing network between public as well as private Civil Aviation Training Centres (CATCs).

2.1.4 The TRAINAIR *PLUS* Programme addresses all fields of civil aviation activities, from basic equipment and systems training supporting new implementation projects, up to graduate level courses for a variety of civil aviation professionals. Contracting States, international and regional organizations, airlines, airports, air navigation service providers, manufacturers, training and education providers and development organizations are encouraged to actively support and participate in the new ICAO TRAINAIR *PLUS* Programme.

2.2. FROM TRAINAIR TO TRAINAIR *PLUS*

2.2.1 The original ICAO TRAINAIR Programme was launched as part of a broader UN initiative that provided much needed competency-based training knowledge, tools and materials to government training providers across multiple sectors for over two decades. In 2010, ICAO initiated an in-depth review of this

programme and decided upon an upgraded programme to be called TRAINAIR *PLUS*. The new TRAINAIR *PLUS* Programme includes a significantly revised course development methodology, a new approach to the sharing network, and a self-sustaining budgetary mechanism. In October 2010, the Secretary General issued Electronic Bulletin 2010/45 encouraging ICAO Member States to consider this new approach to support the implementation of high quality training.

2.2.2 TRAINAIR *PLUS* enhances TRAINAIR methodological standards, course development and related procedures. The following table highlights the new features of the TRAINAIR *PLUS* Programme:

FEATURES	TRAINAIR	TRAINAIR PLUS
CATC Assessments	Simple checklist	A comprehensive and structured assessment using: <ul style="list-style-type: none"> • TRAINAIR <i>PLUS</i> Assessment Guidelines (TPAG); • Protocol Questionnaire (PQ) based on ICAO Docs 9841 and 9868; and • quality control system for the assessment reporting processes.
Development of STPs	<ul style="list-style-type: none"> • Training Development Guideline (TDG/1990) • Nine-phase/report 	<ul style="list-style-type: none"> • Training Development Guide (TDG) ICAO Doc. 9941 • Three-stage/report
Phase approvals	Through TRAINAIR Central Unit (TCU) managed by ICAO	Through certified TPP Evaluators accredited by ICAO
STP validation and technical support	Through TCU	Through certified TPP Evaluators
Membership status*	STP validated	Associate Member: successful assessment and Corrective Action Plan (CAP) implemented** Full Member: Associate Membership and one STP validated
Membership costs	Free of charge	Annual fee to support the comprehensive development of the Programme
Membership access	Government CATC	All aviation training centres including private sector and aviation related organizations
Membership duration	Permanent	Renewal every three years (following assessment) and active participation

* The differences between Associate status and Full Membership are discussed in Chapter 3.

** The assessment process is discussed in Chapter 4. Also see the TRAINAIR *PLUS* Assessment Guidelines (TPAG).

Table 2.2.2 TRAINAIR *PLUS* Programme (*continues on next page*)

FEATURES	TRAINAIR	TRAINAIR PLUS
Methodology	SI nstructional System Design (ISD/1990)	ICAO updated TDG (Doc 9941) competency-based training approach***
Processes and Procedures	Centralized through TCU	<ul style="list-style-type: none"> • Shared by Centres based on TPOM • Certified Evaluators • Interactive through TPMS
Core activities	Focus on STP development	Focus on Training Quality System
Technological development	Computer-based training	Multimedia, e-learning, simulators
Corporate membership	None	Industry partnerships
STP sharing pool	Free of charge	A cost-recovery mechanism to support STP development by Members

*** The competency-based training approach is set forth in the TRAINAIR *PLUS* Training Development Guide (Doc 9941).

Table 2.2.2 TRAINAIR *PLUS* Programme

2.3 PROGRAMME PRINCIPLES

2.3.1 The TRAINAIR *PLUS* Programme and related activities are governed by the following principles: cooperation, timeliness, quality, value recognition, professionalism, accountability, transparency, fairness, consistency, and cost recovery.

2.3.1.1 Cooperation: The TRAINAIR *PLUS* Programme is a cooperative system that seeks to benefit as many CATCs as possible through the sharing and transfer of knowledge and technical expertise throughout the aviation community on a world-wide basis.

2.3.1.2 Timeliness: The TRAINAIR *PLUS* Programme delivers timely, relevant information and training to its Members at all times.

2.3.1.3 Quality: Internal quality control and quality assurance processes are established and implemented by AST to the systematic and objective delivery of all products of the TRAINAIR *PLUS* Programme and enhance customer satisfaction.

2.3.1.4 Value recognition: While new cost recovery mechanisms have been introduced, the Programme offers value to Members by providing courses that are material dependent and fully validated by skilled, competent evaluators. STP fees contribute to value recognition.

2.3.1.5 Professionalism: TRAINAIR *PLUS* activities including delivering training courses, developing STPs and performing assessments are conducted by appropriately qualified experts.

2.3.1.6 Accountability: TRAINAIR *PLUS* Members are accountable for the quality of the course material they offer to other Members under the supervision of AST. While the new STP development system is structured to be more autonomous, Members must ensure that their STPs are current in order to remain Members in good standing.

2.3.1.7 Transparency: All methodological aspects of the programme including the assessment process are available to interested training centres and parties; however, individual assessment results are kept confidential between ICAO, the assessed training centre and the concerned Civil Aviation Authority of the State.

2.3.1.8 Fairness: The TRAINAIR *PLUS* Programme promotes fairness in all aspects of its activities from evaluation of facilities during the Associate Membership assessment process to the sharing of STPs available through the STP Library.

2.3.1.9 Consistency: TRAINAIR *PLUS* assessments are conducted in a consistent and objective manner through the training and approval of assessors, the provision of guidance material contained in this manual, and the application of internal quality control processes. While individual Members are responsible for updating their STPs, the Programme reserves the right to eliminate STPs that are not current. Although the owner retains the rights to the course material, the course will no longer be considered an STP.

2.3.1.10 Cost recovery: The TRAINAIR *PLUS* Programme is operated on a cost-recovery basis with all technical support costs covered by Members.

2.4 THE ICAO AVIATION TRAINING DIRECTORY

2.4.1 The ICAO Aviation Training Directory (ATD) is an essential component of the TRAINAIR *PLUS* Programme. The Directory has undergone a significant overhaul in order to promote a larger and better-connected international aviation training community. The ATD provides aviation training centres with enhanced visibility enabling them to reach aviation training stakeholders from all ICAO Member States.

2.5 SUPPORTING NEXT GENERATION AVIATION PROFESSIONALS (NGAP)

2.5.1 ICAO has launched significant initiatives to support the Next Generation of Aviation Professionals (NGAP) in order to ensure that a sufficient number of qualified and competent aviation professionals are available to operate, manage and maintain the international air transport system in the future. The TRAINAIR *PLUS* Programme strongly supports NGAP strategies by:

- increasing the availability of highly qualified and required human resources;
- facilitating access to quality aviation training;
- providing reliable human resource data to support training needs and capacities;
- enabling and supporting the use of a competency-based approach in developing training; and
- promoting best practice methods and standards to demonstrate compliance with regulatory requirements, Standards and Recommended Practices (SARPs) and national regulations.



CHAPTER 3

TRAINAIR *PLUS* PROGRAMME MEMBERSHIP

- 3.1 BENEFITS OF MEMBERSHIP**
- 3.2 MEMBERSHIP CRITERIA**
- 3.3 REQUIREMENTS OF MEMBERSHIP**
- 3.4 TRAINAIR PLUS CERTIFICATES AND LOGOS**
- 3.5 LANGUAGE OF COMMUNICATION**
- 3.6 PROGRAMME FEES**

3.1 BENEFITS OF MEMBERSHIP

3.1.1 Members of the TRAINAIR *PLUS* Programme enjoy the benefits of being part of an established international cooperative network of civil aviation training organizations and centres. Through the international sharing network, Members have access to all Standardized Training Packages (STPs) prepared by other Members and can import and adapt STPs to meet their local conditions.

3.1.2 Through the TRAINAIR *PLUS* Programme, Members can progressively upgrade their curriculum by applying the TRAINAIR *PLUS* course development methodology and accessing a pool of validated STPs.

3.1.3 The TRAINAIR *PLUS* Programme provides a forum that supports cooperation among Contracting States and a programme for Members to exchange training best practices. Members are invited to participate in all TRAINAIR *PLUS* events as well as other relevant ICAO activities.

3.1.4 Full and Associate Members may use the TRAINAIR *PLUS* and ICAO logos on their publications and letterheads. However, TRAINAIR *PLUS* and ICAO logos should not be used on course certificates for courses that are not STPs. A certificate will be issued electronically by ICAO to the CATC for each course participant for all TRAINAIR *PLUS* courses and courses using STPs. A reference code will allow the tracking and reporting of all training activities.

3.2 MEMBERSHIP CRITERIA

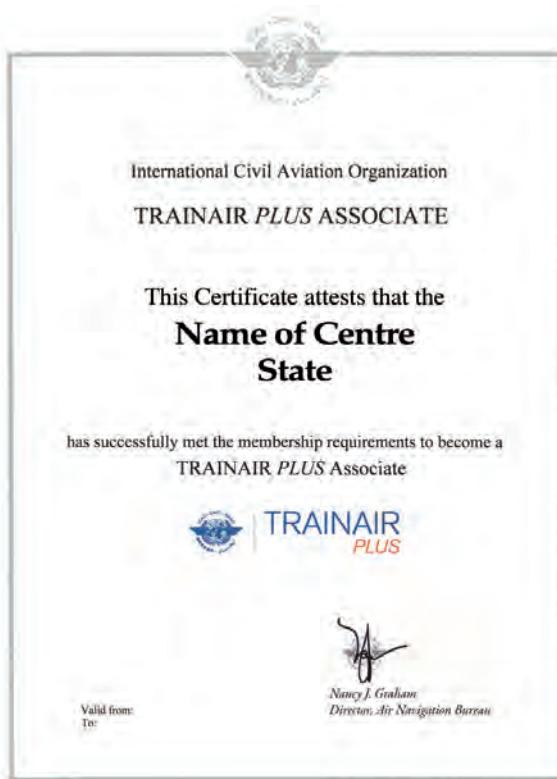
3.2.1 The TRAINAIR *PLUS* Programme is open to all CATCs throughout the world, provided they have the capability to prepare course materials according to the TRAINAIR *PLUS* methodology based on Doc. 9941. The cooperative system provides three categories of membership:

- **Associate Members:** organizations that use but do not develop STPs;
- **Full Members:** training organizations that both develop and use STPs; and
- **Corporate Members:** industry organizations that wish to participate in the various TRAINAIR *PLUS* activities.

3.3 REQUIREMENTS OF MEMBERSHIP

3.3.1 In order to qualify as an **Associate Member**, a training organization shall:

- undergo a successful TRAINAIR *PLUS* assessment and implement fully the Corrective Action Plan (CAP) to the satisfaction of ICAO;
- designate a focal point for all TRAINAIR *PLUS* activities;
- pay the TRAINAIR *PLUS* Associate Member fees;
- agree in writing to abide by the rules of the Programme as described in this manual;
- use at least one STP per year;
- agree to follow-up assessments every three years; and
- participate, on a regular basis, in TPP regional and global activities.



3.3.2 In order to qualify as a **Full Member**, a CATC shall:

- establish and maintain a Course Development Unit (CDU) with active course developers who have successfully completed the Training Developers Course (TDC);
- pay the TRAINAIR *PLUS* Full Member fee;
- develop a first STP;
- produce at least one validated STP every three years;
- consistently update the STPs it has originated; and
- participate, on a regular basis, in TPP regional and global activities (e.g. ICAO TRAINAIR *PLUS* Global Symposium, Regional Conferences, Steering Committee Meetings, etc.).



3.3.3 In order to qualify as a **Corporate Member**, a company shall:

- agree in writing to abide by the rules of the Programme as described in this manual;
- contribute to the programme by making available on a bilateral basis relevant resources such as non-STP courses;
- designate a focal point for all TRAINAIR *PLUS* activities;
- pay the TRAINAIR *PLUS* Corporate Member fees; and
- participate, on a regular basis, in TPP regional and global activities.

3.3.4 A training organization is considered a **Full** or **Associate Member** only once the assessment process is completed, payment is made, and the conditions for the membership level sought are met. An organization seeking TRAINAIR *PLUS* membership cannot extend its membership to any activity made in association with any other non - TRAINAIR *PLUS* organizations.



3.3.5 The following table summarizes the membership requirements and benefits for Members, taking into account that a number of Members of the TRAINAIR *PLUS* Programme have also been members of the former ICAO TRAINAIR Programme (until December 2012):

MEMBER TYPE	IDENTIFICATION	REQUIREMENTS	BENEFITS
TRAINAIR <i>PLUS</i> Associate Member	TRAINAIR <i>PLUS</i> Associate Member	<ul style="list-style-type: none"> •Successful assessment •Annual fee •Re-assessment every 3 years •Use an STP at least once a year 	<ul style="list-style-type: none"> •No need to complete an STP •Access to new TRAINAIR <i>PLUS</i> documents •Technical assistance for course development and improvement of conventional course •Access to private internet portal •Access to the new TRAINAIR <i>PLUS</i> Training Developers Course (TDC) •Access to STP Sharing Pool <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> •Observer-only in TRAINAIR <i>PLUS</i> conferences •Fees are higher for Associate Members
TRAINAIR <i>PLUS</i> Full Member	TRAINAIR <i>PLUS</i> Full Member	<ul style="list-style-type: none"> •Associate Member •Develop STP with new TDG •Annual fee •Re-assessment every 3 years 	<ul style="list-style-type: none"> •Access to new TDG •Prepare courses using new TDG •Access to STP Sharing Pool •Access to private internet portal •Voting rights in TRAINAIR <i>PLUS</i> conferences •Potential revenue generated by STP sharing •Access to new TRAINAIR <i>PLUS</i> Training Developers Course (TDC)

Table 3.3.5 Membership Requirements and Benefits

3.4 TRAINAIR *PLUS* CERTIFICATES AND LOGOS

3.4.1 TRAINAIR *PLUS* issues certificates to all participants in courses held by Members using Standardized Training Packages (STPs) available through the STP Library. Each certificate displays the ICAO TRAINAIR *PLUS* logo, the name of the participant, the name of the CATC and a unique identifier for each certificate. The certificates are sent electronically to the CATC and must be signed by the Director of the Centre. The TRAINAIR *PLUS* logo can be used only on certificates attesting to the completion of a TRAINAIR *PLUS* Standardized Training Package (STP) course. The use of the TRAINAIR *PLUS* logo on a certificate is reserved solely for courses conducted using STPs developed by TRAINAIR *PLUS* Members. The logo cannot be used on a certificate that is not a TRAINAIR *PLUS* STP.

3.4.2 TRAINAIR PLUS LOGO USAGE GUIDELINES

3.4.2.1 These guidelines will assist TRAINAIR PLUS Associate Members and Full Members on the use of TRAINAIR PLUS terminology and usage of the TRAINAIR PLUS logo. It is fundamental that Members respect and apply these guidelines as this will cement the Programme's image consistency and further strengthen the Programme's branding and international recognition.

3.4.2.2 Purpose: A well respected TRAINAIR PLUS brand image will enable Members as well as the rest of the TRAINAIR PLUS community to achieve the following:

- ensure immediate recognition of the training centre as a prominent participant member of an ICAO network;
- deliver the training centre's messages clearly and consistently; and
- confirm the Programme's credibility.



**TRAINAIR
PLUS**

3.4.2.3 Identification: When referring to its relationship within the TRAINAIR PLUS Programme (TPP), the training centre should identify its status within the Programme, either as a TRAINAIR PLUS Associate or Full Member. The centre is encouraged to use this identification in all of its promotional and marketing documents as follows:

- Website
- Brochures
- Flyers
- Business Cards
- E-mails
- Electronic Signatures
- Certificates (for TRAINAIR PLUS courses only)
- Packaging
- Door Plaques
- Other marketing/promotion documents

3.4.2.4 The Programme provides the centre with a programme membership but does not provide:

- an endorsement;
- an accreditation; or
- an approval as an ICAO Training Centre.

A centre must not make use of the terminology mentioned in Paragraph 3.4.2.4 in promotional documents in order to avoid jeopardizing the core values and objectives of the Programme and undermining the authority of the State the centre represents.

3.4.2.5 Trademark: The TRAINAIR *PLUS* name using the ICAO logo is a trademark of the ICAO TRAINAIR *PLUS* Programme which is responsible for defending against any damaging or confusing uses. While TRAINAIR *PLUS* Programme Members are encouraged to use the TRAINAIR *PLUS* logo in the various contexts listed in Paragraph 3.4.2.3 in order to fully promote the TRAINAIR *PLUS* Programme and its community and activities, correct usage is paramount because the logo is an important element of the Programme's visual identity.

3.4.2.6 Correct use of the logo: The TRAINAIR *PLUS* logo should be displayed prominently and clearly to maximize its impact. Allow it to breathe by preserving a minimum clear space zone around each of the four sides. Use the clear space zone between the logo and the other graphic elements such as type, images, other logos and the edge of the pages, to ensure the logo retains a strong presence wherever it appears. Where possible, allow as much space as possible around the logo.

3.4.2.7 The logo must always be displayed at a size large enough to read both the logo type and the registered trademark. This will vary based on the resolution of the media it is being used in, but as a general rule the logo circle should be no smaller than 1 cm (3/8") or 36 pixels in height. The TPP logo may be positioned on a pale colour or photographic background. The file for the TPP logo is available for download in the "Members Only" section of the web site.

3.4.2.8 Incorrect use of the logo: Derivative versions of the TRAINAIR *PLUS* logo are not allowed, as they dilute the Programme's brand identity. As well, **users shall never:**

- stray from the colour palette;
- switch the colours;
- use the design on similarly coloured backgrounds;
- rearrange elements of the design; or
- stretch or distort the logo.

3.4.3 Corporate Members may only use the TRAINAIR *PLUS* logo followed by the term “Corporate Member” for training activities exclusively.

3.4.4 A CATC may not use the logo or its likeness for any other commercial purpose without permission from the ICAO Aviation Safety Training (AST) Section.

3.5 LANGUAGE OF COMMUNICATION

3.5.1 Communications between ICAO and TRAINAIR *PLUS* candidates or Members should preferably be in the English language or in one of the other ICAO official languages (Arabic, Chinese, French, Russian or Spanish). It should be noted that the use of a language other than English may necessitate some delays due to translation. This requirement applies to any official document requested by ICAO during the assessment process. It is the responsibility of the training centre to translate any required documents which are not available in one of the ICAO official languages.

3.6 PROGRAMME FEES

3.6.1 Fees associated with the Programme include the following:

- Assessment fees
- Annual membership fees
- Fees for the use of STPs

In addition to the payment of an annual membership fee, Members shall be responsible for paying the costs associated with their assessment. The assessment fee is comprised of two components: a non-refundable fixed fee to cover administrative costs associated with the assessment; and a variable fee covering transportation, daily subsistence allowance and transfer expenses for the ICAO assessor. ICAO will invoice the TRAINAIR *PLUS* candidate member for these expenses which will be determined in accordance with applicable ICAO Staff Rules and United Nations daily subsistence allowance rates. In the event that more than one assessment is required, additional charges may be levied and will be determined on a case-by-case basis. All efforts will be made to minimize the costs to the candidate member. An assessment update is conducted once every three years.

3.6.2 ICAO is committed to ensuring that the TRAINAIR *PLUS* Programme is managed and implemented in a cost-effective manner. All Members will be charged an annual membership fee by ICAO in accordance with the applicable category of membership. Membership fees are approved by the Secretary General and will be communicated to all ICAO Members in addition to being published on the ICAO TRAINAIR *PLUS* website.

3.6.3 In determining their overall budgets, TRAINAIR *PLUS* Members may wish to consider making provision for the following additional expenses:

- provision of a TRAINAIR *PLUS* Evaluator for STP validation for CATCs who wish to become Full Members;
- training of Course Developers in a Training Developers Course (TDC); and
- assistance by ICAO or a Subject Matter Expert to help develop an STP.

3.6.4

MEMBERSHIP COST In Dollars US		1st Year	2nd Year	3rd Year	4th Year
		Fee	Fee	Fee	Fee
Assessment Fee ¹	Government owned/operated training centre	10 000	0	0	7 500
	Private training centre	12 500			10 000
Assessment Costs	Air ticket ²	Tbd	0	0	Tbd
	Daily Subsistence Allowance (DSA) for 6 days ³	Tbd	0	0	Tbd
Annual Membership Fee ⁴	Government owned/operated training centre	15 000	10 000	10 000	10 000
	Private training centre	18 750	12 500	12 500	12 500
	Corporate Member	20 000	20 000	20 000	20 000

Tbd: To be determined

1. To be paid before the on-site assessment. The Programme entails a reassessment every three years to ensure that the training centre continues to fulfill the requirements of the Programme.
2. Travel for the assessor is governed by the conditions and provisions of ICAO's travel rules, policies and procedures. Air travel will be by business class if the journey is nine hours or longer, and by economy class if the journey is less than nine hours.
3. This is an allowance which is intended to account for lodging, meals, gratuities and other expenses of United Nations travellers and is promulgated by the International Civil Service Commission (ISCS) of the United Nations.
4. The indicated annual membership fee is based on the presumption that the training centre will start its membership as an Associate Member and become a TRAINAIR *PLUS* Full Member in the second year. Subsequently, the annual membership fee will decrease from \$15,000 US to \$10,000 US (for government owned training centres) and from \$18,750 to \$12,500 US (for private training centres) in the second year. Should the training centre remain an Associate Member, the annual membership fee will remain \$15,000 US (for government owned training centre) and \$18,750 US (for private training centres).

In addition to the above indicated fees, the training organization should plan for additional expenses such as sending its instructors to a Training Developers Course (TDC) to learn the methodology to develop Standardized Training Packages (STPs). If the training centre intends to develop an STP, it is strongly recommended working with a TRAINAIR *PLUS* expert for the production of its first STP, which entails further expenses.

CHAPTER 4

THE MEMBERSHIP PROCESS

4.1 GENERAL

4.2 MEMBERSHIP PROCESS FLOWCHART

4.3 ASSESSMENT PROCESS

4.4 ASSESSMENT GUIDELINES

4.5 FOLLOW-UP ASSESSMENTS AND RENEWAL

4.6 SUSPENSION AND REVOCATION

4.1 GENERAL

4.1.1 The ICAO Civil Aviation Training Policy and the TRAINAIR *PLUS* Programme require a formal assessment of training organizations that use the ICAO logo in their training certificates and/or are seeking TRAINAIR *PLUS* membership. TRAINAIR *PLUS* membership is only granted after a successful on-site assessment conducted by ICAO confirms that the candidate training centre has satisfied the requirements for competency-based training, and manages training in such a way as to effectively support the training and learning development of aviation professionals. Only following a successful ICAO assessment can an organization become a TRAINAIR *PLUS* Full or Associate Member.

4.1.2 AST has a roster of qualified assessors and assessments may be conducted in English, French or Spanish, as requested by the training centre. Other languages may be used depending on the availability of assessors. During the on-site assessment, it is essential that the candidate Member either identifies a focal point able to communicate effectively in the language used for the assessment or provide interpretation services.

4.1.3 The TRAINAIR *PLUS* assessment is linked to a specific location. If an organization seeking TRAINAIR *PLUS* membership operates in more than one location, the assessment site will be selected by ICAO and the certificate is only valid for that location.

4.1.4 The ICAO assessment is valid for a period of three (3) years. Follow-up assessments will be conducted by ICAO at least every three years, or more frequently if deemed necessary in order to ensure that a training organization complies with the terms of the TRAINAIR *PLUS* Membership. Full payment of applicable fees and charges for each assessment phase shall be made to ICAO.

4.1.5 If ICAO becomes aware that a TRAINAIR *PLUS* Member no longer complies with the programme requirements (including technical aspects or failure to submit fees in a timely manner), ICAO may temporarily suspend the training centre's membership. ICAO will advise the training centre in writing of any non-compliance with the programme requirements and may require that an action plan be submitted. If no action is taken within the prescribed time, ICAO may revoke the training centre's membership and publish the information to those concerned including all Members.

4.2 MEMBERSHIP PROCESS FLOWCHART

4.2.1 The membership process consists of five (5) phases: a) application, b) pre-assessment, c) on-site assessment, d) post-assessment and e) delivery of certificates. The following table sets forth the workflow processes associated with each phase:

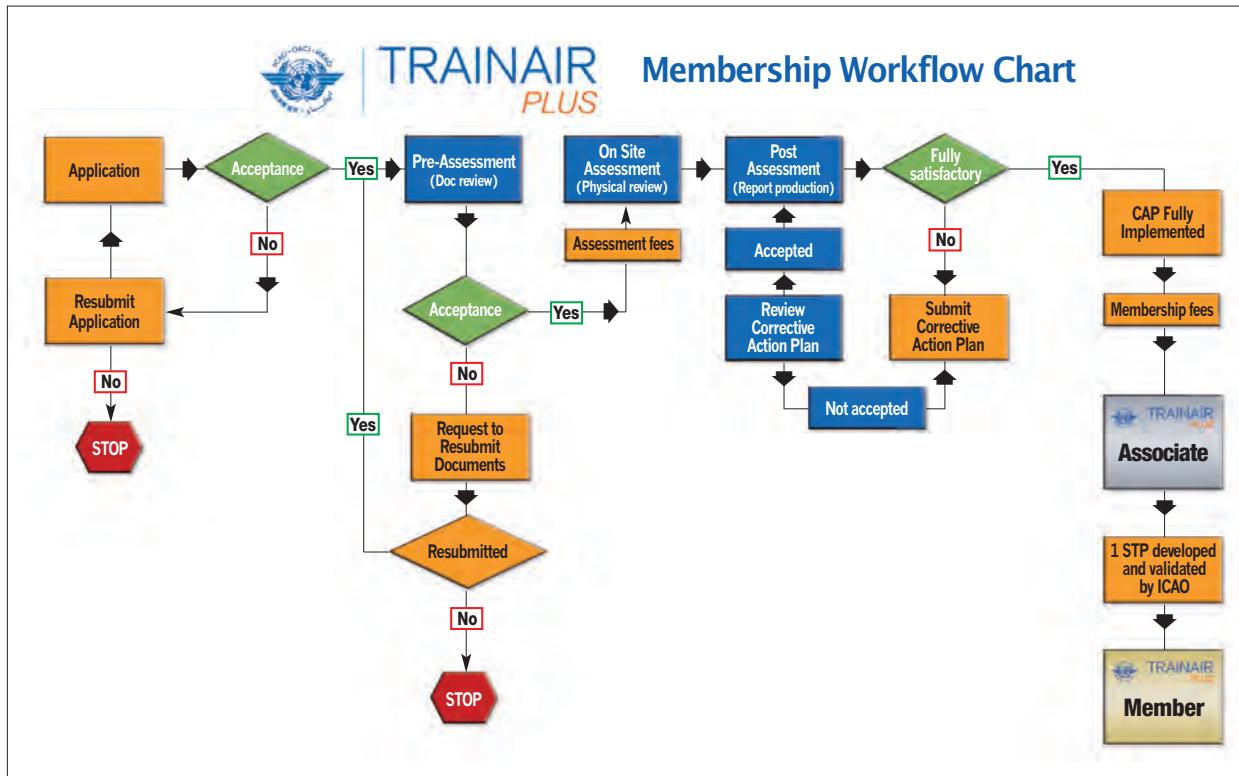


Table 4.2 MEMBERSHIP PROCESS FLOWCHART

4.3 ASSESSMENT PROCESS

4.3.1 APPLICATION

4.3.1.1 Civil Aviation Training Centres (CATCs) seeking membership in the TRAINAIR *PLUS* Programme should begin the process by submitting an official application (available electronically on the TRAINAIR *PLUS* public website). Training centres are requested to indicate on the application form whether they are seeking to become Associate or Full TRAINAIR *PLUS* Members. The request must be signed by the most senior officer of the organization or by his/her authorized representative and include the following:

- a letter from the CATC, copied to their Civil Aviation Authority (CAA), expressing their interest in obtaining ICAO TRAINAIR *PLUS* membership;

- a description of the CATC that is to be assessed, including a summary of how the training (or STP) is linked to improving job performance and is in support of the training objectives of the organization; and
- a non-refundable assessment fee. The amount of the fee is periodically reviewed and is available on the TRAINAIR *PLUS* website or by contacting the AST Section directly.

4.3.2 PRE-ASSESSMENT

4.3.2.1 Upon receipt of the application and the assessment fee, the AST Section will review all information and documentation provided and decide if the organization can be considered a candidate for TRAINAIR *PLUS* membership. If requirements appear to be met, the AST Section will communicate with the candidate training centre and coordinate a proposed schedule and timing for the on-site assessment. An estimate of the cost of the mission (travel expenses and daily subsistence allowance in accordance with UN Staff rules) for the ICAO official(s) conducting the on-site assessment will also be provided at this stage.

4.3.3 ON-SITE ASSESSMENT

4.3.3.1 A four (4) day on-site assessment mission to the training centre will be conducted by an assessor who has been approved by the Chief of AST Section to conduct assessments. The assessment mission will take place at a time mutually agreed upon by the CATC and ICAO.

4.3.3.2 The objective of the assessment addresses the components of the applicant training organization as well as its training and procedures manual, quality system and its capability to use Standardized Training Packages (STPs) developed by other Members. In particular, the following areas will be reviewed:

- the organizational structure of the training centre including job descriptions, organizational diagram, identification of accountable managers, and clear reporting line for the planning and management of the training;
- availability of appropriately equipped training facilities;
- the nature of existing course materials, training aids and training devices;
- standards for selection and development of instructional staff;
- availability of the requisite human resources (instructional, secretarial and support staff) necessary to establish a Course Development Unit;
- availability and nature of physical facilities necessary for a Course Development Unit within the training centre;
- availability of office equipment, including computers to support course development and implementation of TRAINAIR *PLUS* courses; and
- the quality assurance system.

4.3.4 POST-ASSESSMENT

4.3.4.1 The post-assessment phase encompasses all activities following the on-site assessment, including the preparation of the assessment report, the validation of the Corrective Action Plan (CAP) submitted by the CATC, if required, and the final decision regarding TRAINAIR *PLUS* membership.

4.3.4.2 Following the on-site visit, ICAO will issue a draft report to the CATC detailing the findings of the assessment including all observations and recommendations. The definitions of these terms are as follows:

- **Observation:** (before non-conformance verification). The process or service does not meet the requirements of the protocol specifications but is not critical to safety-related matters. An observation does not require a Corrective Action Plan. The CATC has a period of three years to resolve this matter. If after a reassessment the Assessor issues the same observation, this will generate a recommendation.
- **Recommendation:** (following a non-conformance verification). The process or service does not meet the requirements of the protocol specifications and is critical to safety-related matters. The CATC must prepare a CAP, the CAP must be approved by ICAO and the CATC must implement the plan as a condition to receive the Associate Membership certificate.

4.3.4.3 The recommendations contained in the draft report form the basis for the Corrective Action Plan that the CATC develops and submits to ICAO. It must specify what actions are planned and when they will be implemented. Upon execution of the CAP, the CATC must submit clear evidence of full implementation to ICAO in the form of an implementation report.

4.3.4.4 The final assessment report will indicate one of the following conclusions:

- The TRAINAIR *PLUS* candidate meets all requirements of the Programme. In this case, and upon receipt of the annual membership fees, ICAO will notify the candidate that it has successfully achieved the applicable category of TRAINAIR *PLUS* membership. The training centre will receive Associate status until its first TRAINAIR *PLUS* STP is developed and approved, following which it will be accorded Full Membership.
- The TRAINAIR *PLUS* candidate does not meet the minimum requirements of the Programme. ICAO will inform the candidate of the corrective actions that should be implemented in order to achieve TRAINAIR *PLUS* Associate Membership. The candidate should provide evidence that the Corrective Action Plan has been fully implemented within a time period agreed upon with ICAO. Depending on the deficiencies identified, another on-site visit

by an ICAO officer may be required, in which case associated travel and living expenses will once again be invoiced to the training centre. ICAO will then assess whether the corrective actions implemented ensure that the TRAINAIR *PLUS* Programme requirements are met. If so, and upon receipt of the annual membership fees, ICAO will notify the candidate that it has successfully achieved the applicable category of TRAINAIR *PLUS* membership.

4.4 ASSESSMENT GUIDELINES

4.4.1 ASSESSMENT CRITERIA AND PROTOCOLS

4.4.1.1 The TRAINAIR *PLUS* Programme strives to achieve standardization and uniformity in the scope, depth and quality of the assessments conducted. In order to ensure that all training centres are assessed in a consistent and objective manner, standardized assessment criteria and protocols have been developed to guide the ICAO assessors and training centres through the assessment process.

4.4.1.2 The overall objective of the assessment is to evaluate the capability of the training centre to manage and conduct training courses and use a Standardized Training Package (STP) with an established quality system. The assessment will examine the following eight (8) critical areas necessary for an organization to establish and deliver high and consistent standards of training for aviation personnel:

1. Organizational Structure
2. Integration in the Aviation Structure
3. Facilities and Technology Supporting Training
4. Training Delivery / Training Procedures Manual
5. Review of the Training Records System
6. Instructors
7. Training Design and Development
8. Training Quality Management System
9. Management of Improvement Recommendations

4.4.1.3 The specific areas that the ICAO assessor will examine under each critical area are set forth in the protocol table below:

1 **Organizational Structure**

Confirm that the centre has the required level of government approval to operate and has established an appropriate organization, including sufficient human resources, with supervisory and functional lines of reporting clearly outlined in relevant organizational charts, and accountabilities and competency requirements specified for each position.

2 **Integration in the Aviation Sector**

Analyze the level of integration of the training programme into the operations of the aviation sector to determine whether training activities are responsive to identified needs.

3 **Facilities and Technology Supporting Training**

View the centre's facilities (e.g. buildings, classrooms, instructional facilities, furniture, computers and other equipment) and assess whether they are sufficient to support learning objectives and training provided.

4 **Training Delivery**

Evaluate the quality of training through direct observation and confirm that training is supported by appropriate lesson plans, training materials and qualified instructors.

5 **Review of the Training Records System**

Review the system used by the centre for maintaining training records (paper and electronic) to confirm that records are well-organized, up-to-date and accessible.

6 **Instructors**

Review how the centre evaluates the appropriate accreditation and performance of the instructors to ensure that instructors are appropriately trained, regularly evaluated, and remain current through ongoing training and maintenance of license requirements, as required.

7 **Training Design and Development**

Assess the ability of the training centre to support a TPP course with an appropriate training design and development methodology consistent with the ICAO Training Development Guide, Doc 9941.

8 **Training Quality Management System**

Assess the quality management system in place and ensure that there are well-documented processes, assurances and improvement activities in place.

9 **Management of Improvement Recommendations**

Assess whether recommendations arising from previous audits/assessments are appropriately managed and implemented.

4.4.2 ASSESSMENT SCHEDULE

4.4.2.1 The average time allotted by ICAO to conduct of an on-site assessment is four (4) days by one (1) ICAO assessor, although this may be modified depending on the size and complexity of the training centre. The following table depicts an average assessment schedule and the time allotted for covering the various critical elements and protocols:

TRAINAIR <i>PLUS</i> Assessment Schedule			
Date	AM		PM
Day 1	Briefing with Directorate and Authorities Presentation of ICAO Training Policy and TRAINAIR <i>PLUS</i> Programme	1. Organizational Structure 2. Integration in the Aviation Structure	3. Facilities and Technology Supporting Training
Day 2	4. Training Delivery / Training Procedures Manual	5. Review of the Training Records System	6. Instructors
Day 3	7. Training Design and Development	8. Training Quality Management System	9. Management of Improvement Recommendations
Day 4	Pending items	Debriefing	Draft Report Discussions

Table 4.4.2 Assessment Schedule

4.5 FOLLOW-UP ASSESSMENTS AND RENEWAL

4.5.1 Follow-up assessments will be conducted by ICAO at least once every three years, or more frequently if deemed necessary in order to ensure that a training centre complies with the terms of its TRAINAIR *PLUS* membership.

4.5.2 During the follow-up assessment, ICAO will use the same processes and guidelines as followed for the initial assessment of the training centre, and will provide a report outlining the findings. If the training centre remains in compliance with the established requirements, TRAINAIR *PLUS* membership will be renewed in the applicable category.

4.6 SUSPENSION AND REVOCATION

4.6.1 If ICAO becomes aware of non-compliance by the CATC with the programme requirements, including technical aspects subject to successful assessment or failure to submit payments for fees in a timely manner, ICAO will temporarily suspend the programme membership. ICAO will advise the CATC in writing of any deficiencies noted and/or non-compliance with the requirements. The training centre will be required to submit an action plan acceptable to ICAO. If no action is taken within the prescribed time, ICAO will revoke the CATC membership and publish the information for those concerned including all Members.

4.6.2 The following infractions will be cause for suspension or revocation of membership:

- Non-payment of fees;
- Failure to adhere to the rules of the Programme;
- Inappropriate use of the Programme logo (Only certificates issued by ICAO for courses conducted by ICAO or ordered through the STP library are entitled to include the TRAINAIR *PLUS* logo); or
- Inappropriate use of certificates issued by ICAO for STP courses.
These courses shall only be taught by authorized instructors.

CHAPTER 5

STANDARDIZED TRAINING PACKAGES (STPs)

- 5.1 STP DEVELOPMENT BY A TRAINING CENTRE**
- 5.2 TRAINING DEVELOPMENT GUIDE (TDG)**
- 5.3 WORKFLOW CHART**
- 5.4 VALIDATION AND APPROVAL OF STP BY ICAO**
- 5.5 IMPLEMENTATION**
- 5.6 ADAPTATION AND TRANSLATION**
- 5.7 STP ASSEMBLY INSTRUCTIONS**
- 5.8 PROCESS FOR ISSUING A TRAINAIR *PLUS* ICAO QUALIFIED COURSE DEVELOPER (TP-IQCD) CERTIFICATE**

5.1 STP DEVELOPMENT BY A TRAINING CENTRE

5.1.1 In order to become a Full TRAINAIR *PLUS* Member, training centres must first qualify for TRAINAIR *PLUS* Associate membership, and then develop Standardized Training Packages (STPs) in accordance with the TRAINAIR *PLUS* Training Development Guide (TDG) (Doc9941).

5.1.2 Training material produced according to the procedures in the TDG takes the form of a fully documented and tested comprehensive package of training material which fully reflects the technological requirements relevant to the course. In the context of the TRAINAIR *PLUS* Programme, these packages are known as Standardized Training Packages (STPs), with each STP being issued its own TRAINAIR *PLUS* serial number. Each STP contains a step-by-step guide for the Instructor, all reference material required by the trainee, a full set of tests, exercises, model answers and scoring keys, as well as all presentation material used in the course. All STPs are validated to prove their effectiveness and capacity for replication across international training platforms.

5.1.3 In order to produce STPs, Full Members must establish and maintain a Course Development Unit (CDU). This necessitates that the Centre retains an appropriate number of qualified and active course developers. TRAINAIR *PLUS* Full Members should plan and budget for the ICAO Training Developers Courses (TDCs) which are held on a regular basis throughout the year, as advertised on the TRAINAIR *PLUS* website.

5.1.4 The development of a first STP can be challenging. TRAINAIR *PLUS* Associate Members new to the programme may require the support of a TRAINAIR *PLUS* Evaluator to assist their CDU in completing the development of a first STP. ICAO strongly recommends this approach.

5.1.5 Upon request by a TRAINAIR *PLUS* Member, the AST Section may help provide subject matter technical expertise from the appropriate ICAO section to assist the CATC's CDU with an STP under development. This service will be charged to the CATC. ICAO will provide an estimate of cost for this service.

5.2 TRAINING DEVELOPMENT GUIDE (TDG)

5.2.1 The TDG provides a methodology for the development of competency-based training courses. This is a guide to the development of training material in a systematic manner and also sets forth training standards, making it practical for course material to be shared between participating TRAINAIR *PLUS* civil aviation training organizations.

5.2.2 The TDG describes in detail the methodology to develop STPs. By applying this methodology, Members ensure that all STPs meet the same requirements, which results in a harmonized standard of high quality. Only STPs that meet the TDG requirements will be approved and made available through the TRAINAIR PLUS sharing network.

5.2.3 The TRAINAIR PLUS STP preparation methodology is based on a systematic approach which consists of three principal stages: Analysis; Design and Production; and Evaluation. Members are required to provide a phase report to ICAO at each stage of the process. These reports are analyzed by an ICAO designated TRAINAIR PLUS Evaluator to ensure that the STP meets the TDG requirements. Feedback is provided to the CDU including advice on corrective actions.



5.3 WORKFLOW CHART

5.3.1 The following workflow chart shows the three principal stages of STP development. Further detail on each step is available in the TDG.

- The *Analysis stage* consists of three main steps: a preliminary study designed to identify training needs; a job analysis to determine performance and competency requirements; and a population analysis to gather information about the target population of future trainees.

- The **Design and Production** stage includes the design of the course curriculum; the design of individual modules; and production and developmental testing.
- The **Evaluation stage** consists of validating and revising the course, if necessary, to achieve end-of-module objectives.

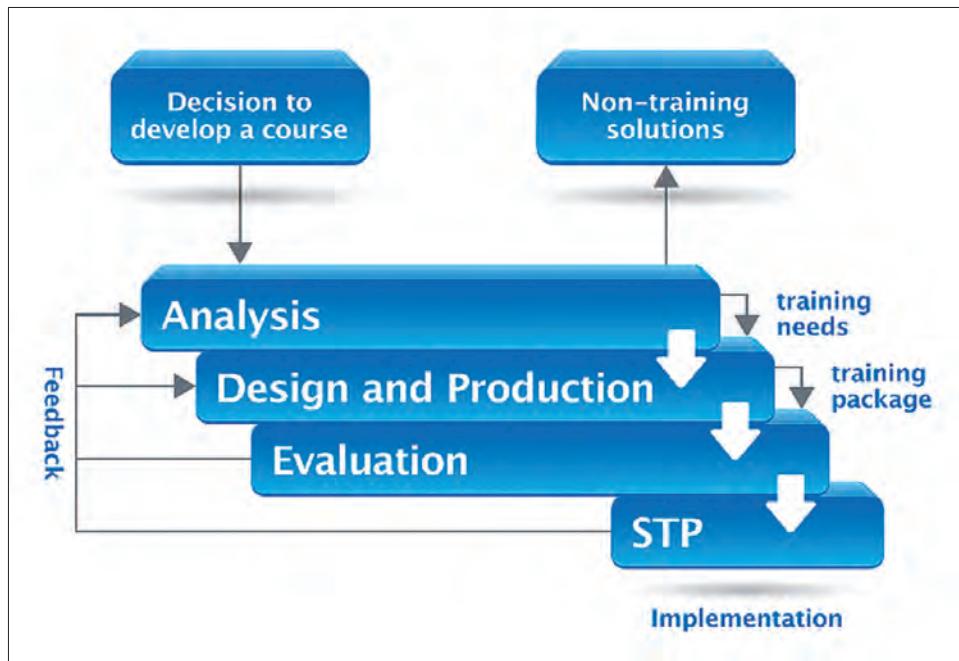


Table 5.3 Workflow Chart

5.4 VALIDATION AND APPROVAL OF STP BY ICAO

5.4.1 The CATC follows the procedures set forth in the Training Development Guide (Doc 9941) through each stage of development to ensure that the training package achieves the final course objectives. Upon completion, the feedback and validation is sent to an approved ICAO evaluator as a report for final approval. ICAO maintains a roster of evaluators for this purpose.

5.4.2 The evaluator reviews each report, validates it and either provides feedback to the CDU or recommends that the report be approved.

5.4.3 As part of ICAO's Quality Assurance Initiative, reports are randomly audited each year to ensure that quality standards are being maintained.

5.5 IMPLEMENTATION

5.5.1 TRAINAIR *PLUS* Members may develop STPs on any topic to suit their training requirements. ICAO shall be notified prior to any course development in order to list a proposed STP in the STP Register and therefore avoid duplication of effort. ICAO will assign a provisional STP number once it has approved the proposal and project plan. Once an STP number is assigned, it will be considered reserved by a Member.

5.5.2 The TRAINAIR *PLUS* Programme is a cooperative system and, if requested, originators of an STP should be willing to assist other Members who are recipients of the STP to ensure its effective implementation. However, it is understood that unless otherwise arranged between the Members, any costs involved in the implementation process shall be borne by the training centre requesting the assistance.

5.6 ADAPTATION AND TRANSLATION

5.6.1 As a general rule, all attempts should be made to implement an STP in its original format when similar trainees need to acquire similar skills in similar environments. However, there are times when an STP prepared in one CATC will need to be adapted to the local requirements in another CATC. In this context, there are two levels of adaptation of an STP:

- a minor adaptation to address local conditions that will not change the structure of the STP; and
- a major adaptation that involves a substantial modification to some of the existing material and/or the development of new or complementary material necessitating a revision of the structure of the STP.

5.6.2 In either case, a new STP number will not be assigned. The STP will continue to be recognized by its original code. Therefore, all Members shall receive notification of the changes made to the STP.

5.6.3 Major adaptations require a bilateral agreement with the STP owner. This bilateral agreement must be sent to ICAO.

5.6.4 The CATC that wishes to perform the adaptation must have TRAINAIR *PLUS* course development capability. Therefore, only Full Members can carry out major adaptations. Associate Members can carry out minor adaptations or carry out a major adaptation as part of a project to become a Full Member. In this case, the Associate Member should establish a Course Development Unit (CDU).

5.6.5 The intellectual property rights for the STP remain with the originator of the STP at all times.

5.7 STP ASSEMBLY INSTRUCTIONS

5.7.1 Preparing a Standardized Training Package (STP) to TRAINAIR *PLUS* Standards takes a considerable amount of dedicated effort on the part of the Course Development Team. As each STP is finalized it will not only be used on a permanent basis within the originator's centre and will be updated on a regular basis, but will also be made available to other interested participating centres through the TRAINAIR *PLUS* electronic Management System (TPeMS). It is therefore important that all of the relevant materials be correctly assembled and efficiently packaged to ensure that this high quality material is provided to national and international users in a form that is easy to apply and which will adequately reflect the work which has gone into the STP's preparation.

5.7.2 A complete STP, ready for international distribution, should contain **all materials**, that will assist the instructors who will be delivering the course based on the STP. Moreover, the materials should be assembled in a useful and consistent manner.

5.7.3 SCOPE

5.7.3.1 In accordance with the TRAINAIR *PLUS* Operations Manual, a printed copy and an electronic copy of each new STP prepared shall be provided to ICAO free of charge for recording and reference purposes. STPs forwarded to the TRAINAIR *PLUS* Programme shall fully comply with all requirements for printed and electronic versions contained in the Finalized STP Assembly Instructions. An electronic version of an STP will be uploaded to the TPeMS, and printed and electronic versions of an STP, assembled in compliance with Sections 2, 3 and 4 below, shall be available in the TRAINAIR *PLUS* Programme library.

5.7.3.2 STPs may be shared using electronic versions alone when the originating and receiving CATC agree to this method of exchange. Any portions of the STP, which cannot be reproduced electronically, should either be sent by the originating Centre on printed copy or readily available at the Centre receiving the STP. Electronic versions must comply fully with the requirements set forth in Sections 2 and 4 of this document (STP Contents and Electronic Version Requirements).

5.7.4 STP CONTENTS

1 - STP INFORMATION	FORMAT	PURPOSE
1.1 Cover Page (with TPP logo, training centre name and logo, full STP name and final STP code)	Pdf, jpg	This folder of material will be used to introduce Members to the STP so that they can determine if it meets their training needs.
2 - INSTRUCTOR MATERIAL	FORMAT	PURPOSE
2.1 Instructor Guide	Docx, pdf	This folder/binder should contain all material necessary for the instructor to conduct the course.
2.2 Module Plans (MP)	Docx, pdf	
2.3 PowerPoint Presentations (PP)	Pptx	
2.4 Progress Tests (PT (Q),)	Docx, pdf	
2.5 Mastery Tests (MT)	Docx, pdf	
2.6 Exercises (Ex)	Docx, pdf	
2.7 Model Answers (A.PT, A.MT, A.Ex)	Docx, pdf	
2.8 OJT Guidance Materials – Job Aids (JA)	Docx, pdf	
3 - TRAINEE MATERIAL	FORMAT	PURPOSE
3.1 Trainee Manual	Docx, pdf	This folder/binder should contain all material necessary for the trainee to participate in the course.
3.2 PowerPoint Presentation Printouts (PP)	Pptx	
3.3 Handouts (H)	Docx, pdf	
4 - INTERNAL FILES	FORMAT	PURPOSE
4.1 Index File	Docx, pdf	This folder of documents is kept on file by the TPP for evaluation purposes.
4.2 Stage 1 Report	Docx, pdf	
4.3 Stage 2 Report	Docx, pdf	
4.4 Stage 3 Report	Docx, pdf	

5.7.4.1 Instructor Material

5.7.4.1.1 It is important that the instructor be provided with **all** of the guidance required to ensure that the Course Development Team's concepts for the course are effectively conveyed.

a) **Instructor Guide**

- 1) Complete set of Module Plans (Form 6s)
- 2) Any additional instructions or directions prepared for the instructor.

When operational examples are included, adequate instructions on the use of these examples should be included in the Instructor Material and in the Trainee Material as required. These should be attached to the appropriate Module Plans.

b) **Tests and Exercises**

- 1) Progress and mastery tests.
- 2) Exercises.
- 3) Correction guides, model answers, etc., for each.

c) **On-the-Job Guidance Materials**

Where on-the-job training is required to meet the STP's terminal objective, guidelines for **both trainees and field supervisors** must be part of the STP to ensure that both fully understand what is required of them.

These should contain a clear statement of the objective(s) of the on-the-job training, along with any necessary guidance materials, checklists, workbooks, etc.

(Note that some of this material will **also** have to be provided in the trainee material.)

5.7.4.2 Trainee Material

5.7.4.2.1 The student should leave the course with a folder of handy and concise reference material, job-aids, etc., which have been extracted from the source documents. These will assist the student to apply what has been learned in the course.

5.7.4.2.2 *Even when a textbook is issued to each trainee, handouts are still useful as a supplement.* Particularly when technical manuals or manufacturers' handbooks are referred to in class, it is important that key job-aids (diagrams, checklists, etc.) from these documents be provided to the trainees, as it is unlikely they will always have access to those source documents.

5.7.4.3 PowerPoint Presentations and Audio-Visual Aids

- a) Good clear paper copies of each PowerPoint presentation, audio-visual aid or electronic file, which can be easily reproduced, on a wide range of computer printers should be included.
- b) Copies of any PowerPoint presentations or other audio or video materials should be prepared for the course. Include transcripts of any verbal messages, to assist translations.
- c) Details of any commercially procured material that is used need to be provided. This could include textbooks, PowerPoint presentations, videos, A/V presentations, etc. Details of the supplier of these items must be given to facilitate their procurement by the user.

5.7.5 PAPER COPY REQUIREMENTS

5.7.5.1 Copies and Binders

5.7.5.1.2 *Good clean copies of all materials, as specified in Section 2 above must be provided*, contained in good quality, hard cover 3 or 4 ring binders. These binders will protect the papers and simplify the separation of various elements for photocopying. All of the binders should have a cover which clearly names the STP, provides the final STP code, contains the TRAINAIR *PLUS* logo and identifies the originator of the STP (the training centre). The spines of each binder should be identified in the same way to facilitate retrieval from the library files.

5.7.5.1.3 Generally, most of the printed STP material should be assembled into the four categories set out below. Each category should be in its own folder or section.

- a) **STP INFORMATION** (available to members who wish information on the STP)
- b) **INSTRUCTOR MATERIAL** (to be made available for instructor)
- c) **TRAINEE MATERIAL** (to be made available for trainees)
- d) **INTERNAL FILES** (for TPP use)

5.7.5.1.4 Some materials may need to be in both the Instructor's Guide and the Trainee's folder or section. If so, they should be duplicated and placed in each folder or section. Having them duplicated in this way will be most helpful when preparing to conduct a course.

5.7.6 ELECTRONIC VERSION REQUIREMENTS

5.7.6.1 Contents

5.7.6.1.2 All written material and graphics as specified in Section 2 (above) should be provided to TRAINAIR *PLUS* as part of the completed package. Electronic copies will also be important to the originating centre when it becomes necessary to revise or update any of the materials in the future and must therefore be included with the master copy of the STP.

5.7.6.2 Index Files

5.7.6.2.1 An index of the various files contained, and guidance in assembling the individual files into the complete document shall be provided in a word processed file (called INDEX). The INDEX file shall contain the following information:

- a) The title of each file
- b) Location of each file (Folder)
- c) Software used for preparing files
- d) A short description of the contents of each file
- e) Any special instructions required to use a given file
- f) Any information on password or other protection on any of the files.

PLEASE NOTE: If an STP contains any copyrighted material (i.e. graphics, applications, etc.) explicit reference to the license must be included.

5.7.6.2.2 Sufficient information must be provided in the index file to allow an individual who has no previous exposure to the electronic version of the document to print out and fully reassemble any hard copy document. *Note – It is important to ensure that the index file is not password-protected and that all files and/or disks are clearly named and labelled.*

5.7.6.3 File Format Standards

5.7.6.3.1 There is a wide variation in word processing and computer graphics production packages in use by TRAINAIR PLUS Members. The TRAINAIR PLUS File Format Standards are written to provide flexibility in the software packages used within CATCs while providing file format standards that will allow STPs to be easily exchanged electronically between members.

5.7.6.3.2 Training Centres may use any word processing programmes that have the capability of converting the document files using Microsoft Office programmes. Electronic versions of STPs available in the TPMS must be available in a format that can be easily downloaded by the recipient.

5.7.6.4 Sending the Final STP via the Internet

5.7.6.4.1 Final STP's can contain over 100 computer files. A manual may be too large to transmit by email. When sending an entire STP via e-mail, there is a high risk that one or more files will be misplaced and therefore not included in the STP uploaded to the TPMS. Currently, the solution to this problem is to transmit the final STP to the TRAINAIR PLUS Programme via Dropbox or a similar large capacity file sharing site.

5.7.6.5 File Designations

5.7.6.5.1 Consistent with the TRAINAIR *PLUS* Training Development Guide (Doc 9941) Section 7.2.6 *Coding of Printed Material*, all files submitted should be coded in the same way as the printed material:

Answer	A
Exercise	Ex
Job Aid	JA
Handout	H
Mastery Test	MT
Module Plan	MP
PowerPoint Presentation	PP
Progress Test	PT

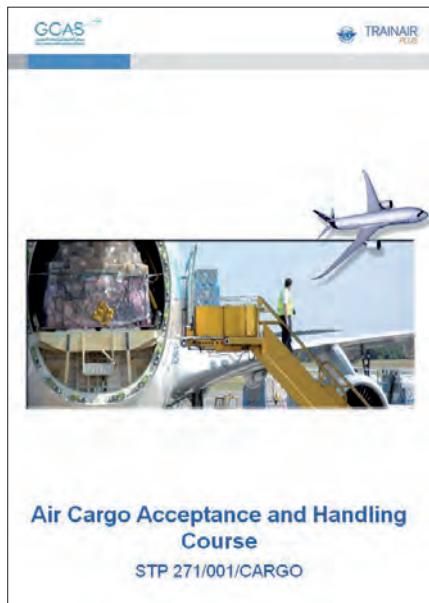
For example, the answer to Progress Test No. 2 in Module 7 would be file A.PT.7.2; Handout No. 2 in Module 8 would be: H.8.2.

5.7.6.6 STP Covers

5.7.6.6.1 The STP cover is used as an icon to identify the STP in the TPeMS catalogue. In addition to an appropriate illustration, the cover should include the following:

- full name of the STP
- final STP code
- TRAINAIR *PLUS* logo
- Name and logo of the originator of the STP

Here is an example of an STP cover that incorporates all of the required elements.



5.7.7 SHARING STPs THROUGH THE TPeMS

5.7.7.1 Storage

5.7.7.1.1 Electronic versions of STPs will be stored on the ICAO Internet server in the TRAINAIR *PLUS* electronic Management System (TPeMS).

5.7.7.1.2 A catalogue of all STPs available in the TPeMS is provided on the ICAO TRAINAIR *PLUS* Website. The electronic catalogue includes the following information:

- a) course aim;
- b) objectives;
- c) target population;
- d) prerequisites;
- e) course content (listing of modules); and
- f) listing of training equipment required to implement the course.

5.7.7.1.3 A password is provided to the focal points of all Members entitled to access the TPeMS. Members are responsible to maintain the currency of the electronic version of the STPs they have created. Amendments to STPs stored in the TPeMS must be forwarded to the TRAINAIR *PLUS* Programme.

5.7.7.2 Procedure

5.7.7.2.1 The Catalogue of STPs available through the Internet will be password protected in the TPeMS. All members will be provided with a user name and password to access this information.

5.7.7.2.2 To download a course, “clicking” on the STP number in the Catalogue will provide the user with an active link to the STP electronic ordering process. An email message is automatically sent to the TRAINAIR *PLUS* Programme and the originator of the STP.

5.7.7.3 Owner Responsibility

5.7.7.3.1 It is the responsibility of the owner of the STP to ensure that all files for this STP are stored in the TPeMS and that they are filed in a manner that allows other training centres who order the STP to easily download the STP for use in conducting a course. All owners must check their STPs to ensure that they are complete and easy to download.

5.7.8 ASSEMBLY STANDARDS (PAPER AND ELECTRONIC VERSIONS)

5.7.8.1 Labelling

7.7.8.1.1 It is important that all materials or files be clearly labelled, so that each item can be clearly identified.

- a) Each of the major elements (binders, disks, etc.) should show both the **full title** of the STP and its **complete** identification code. Refer to the TRAINAIR *PLUS* Training Development Guideline (TDG), Figure 1.2 for the code arrangement and the TRAINAIR STP Registry for details of specific STP codes.
- b) It is recommended that each major element also include the name and logo of the originator's training centre prominently displayed as well as the TRAINAIR *PLUS* logo.
- c) All individual papers, handouts, tests, etc., should show the title of the STP and the ICAO course number on the **front of the paper**.
- d) All individual items must also be coded using the TRAINAIR *PLUS* Course Materials Coding System as set out in Section 7.2.6 of the TDG.

5.7.8.2 Packaging

5.7.8.2.1 Materials are often badly treated in transit, therefore, the compiled STP and associated documents should be well packed to minimize any chance of damage. It is preferable to use a strong cardboard box, or at least, wrap in heavy-duty paper, well fastened. Compact disks should be packaged in the commercially available mailing envelopes or containers designed specifically to protect computer disks.

5.7.9 STORAGE (PAPER AND DISK COPIES)

5.7.9.1 Master Copy

5.7.9.1.1 The originator's CDU will be responsible for the storage of the Master Copy of each finalized STP, including the disk copies. The Master STP should be assembled in the manner set out in this guideline, complete with checklist to ensure that it is complete. All subsequent copies of the STP should then be made from the Master Copy, or from the master disk.

5.7.9.2 Back-Up Copy

5.7.9.2.1 The printed and disk versions of the STP which are sent to the TRAINAIR *PLUS* Programme for final approval will be kept in safe storage, and thus also serve as a back-up to the Master Copy, should this ever be lost or destroyed.

5.7.10 CONCLUSION

5.7.10.1 The Course Developers should be justifiably proud of the work they have put into preparing an STP. Make sure the packaging reflects the quality of this work and that all of their concepts developed through the course development process are conveyed to the users.

5.7.10.2 Considering the many months of dedicated effort which have gone into the production of this high quality material, it is important that the process of assembling the materials for forwarding to other locations receives the same dedication and care.

5.8 PROCESS FOR ISSUING A TRAINAIR PLUS ICAO QUALIFIED COURSE DEVELOPER (TP-IQCD) CERTIFICATE

5.8.1 REQUIREMENTS

5.8.1.1 In order to be issued a TRAINAIR PLUS ICAO Qualified Course Developer certificate, the applicant must have:

- successfully completed a TP Training Developers Course (TDC)
- been issued a TDC certificate and a valid TDC code; and
- actively participated in all three stages of development of a validated STP.

5.8.1.2 The TP-IQCD certificate is valid for a period of five (5) years. To maintain its validity, the Course Developers (CDs) must develop or revise another STP within this 5-year period or take a TDC refresher course.

5.8.1.3 All Expert Validators (EVs) will be awarded the TP-IQCD certificate.

5.8.2 PROCESS TO ISSUE A TP-IQCD CERTIFICATE

5.8.2.1 Upon validation of the STP, the EV confirms, through the TPeMS, the names of the CDs who participated in developing the STP.

5.8.2.2 The TPeMS notifies the TPP focal point that the CD has been approved by the EV.

5.8.2.3 Once approved, certificates are generated by the TPeMS for each TRAINAIR PLUS ICAO Qualified Course Developer (TP-IQCD) and sent to the CATC electronically.

5.8.2.4 The CATC awards the certificates to the TP-IQCD.

CHAPTER 6

STANDARDIZED TRAINING PACKAGE (STP) SHARING PROGRAMME

6.1 MANAGEMENT OF THE STP LIBRARY

6.1 MANAGEMENT OF THE STP LIBRARY

6.1.1 WEB-BASED STP LIBRARY

6.1.1.1 The administration of the STP Library and the STP sharing mechanism forms an integral part of the TRAINAIR *PLUS* electronic Management System (TPeMS). Because STP originators invest large amounts of resources to develop STPs, a fee is charged each time a CATC orders and conducts a course developed by another CATC.

6.1.1.2 Through its “Members Only” web portal, the (TPeMS) is a suite of web applications that manage the entire process including:

- the request to use an STP by a CATC;
- owner approval to use the STP;
- request for additional information (if any);
- invoicing;
- payment confirmation;
- course material shipment information;
- issuing certificates for participants;
- participant grades; and
- course evaluation.

6.1.1.3 Using their passwords, Members have access to all the information they require to order other Member’s STPs and administer the use of the STPs they have created. The electronic process helps to minimize the cost of management and makes the library of STPs created by Members much more accessible and sustainable.

6.1.1.4 To cover administrative expenses, ICAO charges a fixed administrative fee of \$1500 USD on each transaction for STP purchases.

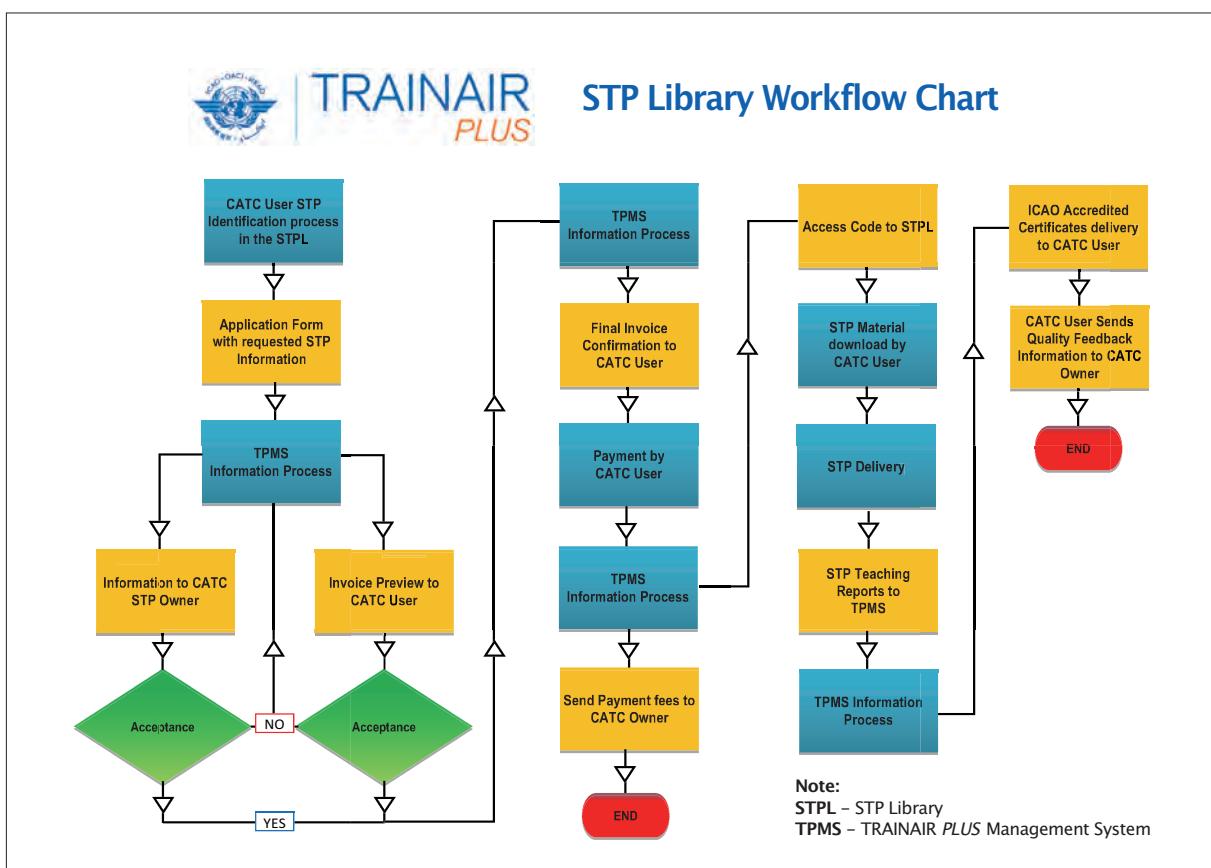


Table 6.1 TRAINAIR PLUS SPT Library Workflow Chart

6.1.2 EXCHANGE OF STPs

6.1.2.1 Standards: Only STPs that conform to the TRAINAIR PLUS TDG requirements shall be included in the STP sharing system. The updating of STPs shall remain the responsibility of the creator. However, the training centre delivering an STP course is responsible for keeping the STP up to date.

6.1.2.2 Process: Only TRAINAIR PLUS Members have access to the sharing system. Members wishing to use STPs included in the sharing pool may do so through the TPeMS.

6.1.2.3 Master Copies: STPs shall remain the property of the STP owner. The originating organization shall retain a master hard and soft copy. To facilitate sharing and revision of STPs, the electronic versions shall conform to TRAINAIR PLUS file format standards as contained in the STP assembly guidelines of the TPeMS.

6.1.2.4 Records: ICAO shall maintain records of all available STPs and keep Members updated on STPs that are planned, in progress and completed. A soft copy of each new STP must be made available to ICAO free of charge, for recording and reference purposes.

6.1.2.5 Feedback and Evaluation: A Questionnaire is included with each STP that allows the CATC to provide feedback on the quality of the course. This feedback is made available to the owner of the STP through the TPMS.

6.1.2.6 Certificates: For each course conducted using an STP, a certificate will be issued by ICAO for each participant. Each certificate is generated electronically and shows the name of the participant, the name of the STP, the name of the CATC conducting the course, a unique identifier for each participant and an indication of whether the student attended or successfully completed the course. Please see the following example of the certificate:



CHAPTER 7

PROGRAMME ADMINISTRATION AND OVERSIGHT

7.1 TRAINAIR PLUS PROGRAMME MANAGEMENT

7.1 TRAINAIR PLUS PROGRAMME MANAGEMENT

7.1.1 AVIATION SAFETY TRAINING (AST) SECTION, AIR NAVIGATION BUREAU

7.1.1.1 The Chief of the Aviation Safety Training (AST) Section of the Air Navigation Bureau is responsible for the management and execution of ICAO's safety training policy. Responsibilities for the TRAINAIR *PLUS* Programme include but are not limited to the following:

- ensure the overall successful implementation of the TRAINAIR *PLUS* Programme in line with programme principles and objectives with the aim of establishing and maintaining an ICAO world-wide cooperative network of training centres demonstrating the highest possible standards of training;
- ensure the application of internal quality control processes within AST to provide confidence in the systematic and objective delivery of all aspects of the programme;
- ensure permanent liaison between TRAINAIR *PLUS* and ICAO Senior management, and responsible for relations with States, the Civil Aviation Authorities and within ICAO;
- ensure that the programme is efficiently and effectively operated on a cost recovery basis.

7.1.1.2 TRAINAIR *PLUS* Programme Manager is responsible for the planning and implementation of overall programme activities. Responsibilities for the TRAINAIR *PLUS* Programme include but are not limited to the following:

- ensure that Training Developers Courses (TDCs) are delivered on a regular basis to provide the necessary training to civil aviation training centres on the design and development of high quality Standardized Training Packages (STPs);
- maintain the TRAINAIR *PLUS* electronic Management System (TPeMS) and the STP virtual Library including the validation of the STPs packages produced by the CATCs.
- ensure the continuous implementation and maintenance of quality management standards including the review of quality management reports;
- and act as "Faculty Manager" for ICAO TRAINAIR *PLUS* courses and validate TRAINAIR *PLUS* course materials;

7.1.2 TRAINAIR PLUS STEERING COMMITTEE

7.1.2.1 The TRAINAIR *PLUS* Steering Committee (TPSC) is responsible for providing ICAO with guidance and advice on the development and improvement of the TRAINAIR *PLUS* Programme.

The TPSC brings together Full Members who serve voluntarily. While ICAO reserves the right to make final decisions regarding Programme policy and operation, the input of the TPSC is a valued component of the programme.

The TPSC reports to the Director of the Air Navigation Bureau and coordinates its activities with the AST Section which is responsible for the secretariat.

7.1.3 TRAINAIR PLUS ELECTRONIC MANAGEMENT SYSTEM (TPEMS)

7.3.3.1 The TRAINAIR *PLUS* electronic Management System is a comprehensive system that manages all aspects of the TRAINAIR *PLUS* Programme.

These include the following five processes:

- The membership process
- Development of the first STP to achieve Full Membership
- Development of an STP by a Full Member
- The use of STPs through the STP Library
- Hosting of a TRAINAIR *PLUS* Training Developers Course (TDC)
- Upgrade former TRAINAIR STPs

Serge Elgaly

TRAINAIR PLUS

Profile | Help | Feedback | Log Out

Admin Dashboard

Pending Orders

- > Total Waiting Owner Approval: 0
- > Total Waiting for Invoice: 0
- > Total Waiting Payment Confirmation: 0

Upcoming Training Sessions

No upcoming sessions found.

Pending Certificates

No training sessions found.

Misc Actions

- > STP Cost Matrix
- > Certificate Lookup: Go

International Civil Aviation Organization (ICAO)
Air Navigation Bureau
TRAINAIR PLUS Programme

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TRAINAIR PLUS

Electronic Management System (TPeMS): Simplifying the way your training is delivered

THE TPeMS IS AN ON-LINE MANAGEMENT SYSTEM
SUPPORTING A WORLDWIDE NETWORK OF AVIATION TRAINING CENTRES
THAT ARE MEMBERS OF THE TRAINAIR PLUS PROGRAMME.

THE TPeMS PROVIDES USER-FRIENDLY AND SECURE ACCESS
TO THE FOLLOWING ON-LINE FEATURES:

- a Standardized Training Package (STP) Library;
- a virtual training management office;
- a platform to assist members in developing their STPs; and
- standardized flowcharts and application forms.

The screenshot shows the TRAINAIR PLUS Member Dashboard. At the top, there's a navigation bar with links for 'Manager DR (MMS - Library ASCA)', 'Profile', 'Help', 'Feedback', and 'Log Out'. Below the navigation is a 'Member Dashboard' header with a 'Logout' button. The main content area has several sections:

- Your STP's**: Shows two items: 'Aerodrome Inspection' (1 week duration, 2 training sessions) and 'Air Cargo Acceptance & Handling' (1 week duration, 3 training sessions).
- Pending Tasks**: A list with one item: 'Submit proposal for the following STP Orientat... Grade #4513'.
- News from Members**: A section titled 'DR Test News' with a link to 'May 14, 2012 by MMS - Library ASCA'.
- Test News**: A section titled 'May 14, 2012 by TRAINAIR PLUS' with a link to 'May 14, 2012 by TRAINAIR PLUS'.

CLICK HERE

Once on the TRAINAIR PLUS website,
click on the *Members Login* button.

CHAPTER 8

PROGRAMME TRAINING COURSES

8.1 TRAINAIR PLUS TRAINING COURSES

8.1 TRAINAIR *PLUS* TRAINING COURSES

8.1.1 TRAINAIR *PLUS* TRAINING DEVELOPERS COURSE

8.1.1.1 The TRAINAIR *PLUS* Training Developers Course is a core training activity of the TRAINAIR *PLUS* Programme. It is the main tool to consolidate the implementation of the programme among CATCs, through the creation of a team of up-to-date and well-trained professionals as course developers to work in Course Development Units (CDUs).

8.1.1.2 The course provides professionals with advanced techniques for applying an Instructional Systems Development (ISD) methodology under the TRAINAIR *PLUS* Programme. This is an instructional development workshop with focus on the practical aspects of developing training programmes.

8.1.1.3 The course will train civil aviation course developers to design and develop Standardized Training Packages (STPs) to TRAINAIR *PLUS* competency-based training standards by either upgrading existing conventional courses developed by the CATC to qualify as a TPP STP or by creating a new TPP STP. Upon successful completion of the course, trainees will be able to identify the TRAINAIR *PLUS* training development methodological standards to:

- analyse training needs and choose strategies;
- analyse jobs and target populations;
- determine training objectives;
- sequence objectives and group them into modules;
- prepare and validate tests;
- design modules;
- produce and validate training material; and
- assist in On-the-Job training planning and monitoring.

8.1.1.4 CATCs that wish to host a TDC may do so by applying in writing to the Chief of the AST Section and completing the Training Developers Course Request Form.

8.1.1.5 ICAO will assign instructors, provide course material and charge the host CATC \$500 USD per participant to cover the costs of course material and administration.

8.1.1.6 The host CATC is entitled to set the rate each eligible participant is charged to attend the course. The host CATC is responsible to cover the costs of the instructor including travel and DSA, providing the course venue and catering, in addition to recruiting participants.

8.1.1.7 Particular attention should be paid to the selection of TRAINAIR *PLUS* Developers Course participants because, once fully trained, they should be capable of preparing STPs according to international standards. These STPs will be an important contribution to the global exchange of TRAINAIR *PLUS* STPs.

8.1.1.8 TRAINAIR *PLUS* Course Developers must meet the background and qualifications set forth in the TRAINAIR *PLUS* Course Developers Selection Guide for the course development team to be truly effective.

8.1.1.9 TRAINAIR *PLUS* Course Developers will be registered in a database in the TPeMS.

8.1.2 TRAINAIR *PLUS* TRAINING INSTRUCTORS COURSE

8.1.2.1 The Training Instructors Course is currently being updated to include a new instructor competency framework and to incorporate e-learning as part of the course structure.

8.1.2.2 Particular attention should be paid to the selection of TRAINAIR *PLUS* Instructors Course participants because, once fully trained, they should be capable of delivering instruction for STPs according to international standards.

8.1.2.3 While TRAINAIR *PLUS* Instructors are not selected for their expertise in a particular discipline, they must be trained to teach course material in accordance with TRAINAIR *PLUS* standards.

8.1.2.4 TRAINAIR *PLUS* Instructors must meet the background and qualifications set forth in the TRAINAIR *PLUS* Instructors Selection Guide for the instructors team to be truly effective.

8.1.2.5 TRAINAIR *PLUS* Instructors will be registered in a database in the TPeMS.

8.1.3 TRAINAIR *PLUS* TRAINING MANAGERS COURSE

8.1.3.1 The Training Managers Course is also being restructured to upgrade the material.

CHAPTER 9

TRAINAIR *PLUS* INTERNATIONAL MEETINGS

9.1 TRAINAIR *PLUS* GLOBAL SYMPOSIUM

9.2 TRAINAIR *PLUS* REGIONAL CONFERENCES

9.1 TRAINAIR *PLUS* GLOBAL SYMPOSIUM

9.1.1 ICAO will conduct a global symposium for all TRAINAIR *PLUS* Members every second year.

9.1.2 ICAO's main objectives in organizing this event are:

- inform participants on the latest trends, techniques and tools currently available in aviation training worldwide;
- provide an international forum to exchange best practices and experiences in aviation training in general, and also more specifically on the TRAINAIR *PLUS* Programme;
- develop awareness on the programme and on generic themes related to aviation training; and
- establish effective communication links at an international level in the field of training between ICAO and the training organizations, States, regional organizations, operators, the industry and training organizations.

9.1.3 The Symposium will be held over four days and is based on the following format:

- the first and second days will present worldwide and regional initiatives in the field of training. Panels divided in specific subjects will debate on training-related issues. During the opening ceremony, new TRAINAIR *PLUS* Full and Associate Members will be presented their official certificates and plaques;
- the third day will be dedicated to the TRAINAIR *PLUS* Programme achievements and updates, with an interactive workshop presenting TRAINAIR *PLUS* to the community; and
- the fourth day will be dedicated to the visit of some national highlights such as training facilities, industrial sites, etc... thus, providing a showcase to the host organization.

9.1.4 ICAO will manage the content of the conference's programme, mainly the selection of the lecturers and moderators, and the coordination of the schedule with the host State/organization.

9.1.5 The host organization will be responsible for all other activities.

These activities include, but are not limited to the following:

- booking and setting-up of conference facilities;
- developing and maintaining a website for the conference to provide all relevant information to participants such as on-line registration and the conference's programme;
- managing the registration process for all participants;
- providing staff to assist in the administration of the conference (registration, delivery of badges, participants information, etc.);
- providing and coordinating all the logistics; ensuring availability of all audio-visual equipment (projectors, computers, speakers, communications system, etc.);
- providing interpretation in multiple languages as required;
- providing food and beverages for refreshment breaks during the symposium; Organising social events (cocktails, dinners) in association with potential sponsors (optional);
- providing a booth to ICAO at no cost to present its various documents and material; this booth should include a computer and a large screen in order to display presentations;
- promoting the event to the aviation community, nationally and internationally; liaising with local and regional media if required;
- providing participants with a list of preferred hotels and rates;
- organizing the local visits and informing ICAO of the visit programme;
- providing or covering travel and accommodation expenses for ICAO officials; and
- assisting participants in obtaining their visa to enter the country (when applicable).

The advertisement features a night-time photograph of the Singapore skyline, including the Merlion statue and the Marina Bay Sands hotel, with a large airplane flying overhead. The text on the left side reads:

First TRAINAIR **PLUS** Global Symposium
"How to Prepare Tomorrow's Aviation Workforce with Today's Training Tools"
 25 to 28 September 2012,
 Singapore
www.saa.com.sg

Hosted by:
CAAS Civil Aviation Authority of Singapore
 Organized by:
TRAINAIR **PLUS** SINGAPORE AVIATION ACADEMY

9.2 TRAINAIR *PLUS* REGIONAL CONFERENCES

9.2.1 A regional conference will be held in each alternating year under a framework of agreement with the host Member or State.

9.2.2 ICAO's main objectives in organizing this event are:

- inform participants on the latest trends, techniques and tools currently available in regional aviation training;
- provide an international forum to exchange best practices and experiences in aviation training in general, and more specifically on the TRAINAIR *PLUS* Programme;
- develop awareness of the programme and of generic themes related to aviation training; and
- establish effective communication links at a regional level in the field of training between ICAO and the training organizations, States, regional organizations, operators, the industry and training organizations.

9.2.3 The conference will be held over three days plus one day for technical activities, and is based on the following format:

- the first and second days will present worldwide and regional initiatives in the field of training. Panels on specific subjects will discuss and debate training-related issues. During the opening ceremony, new TRAINAIR *PLUS* Full and Associate Members will be presented their official certificates and plaques;
- the third day in the morning will be dedicated to the TRAINAIR *PLUS* Programme achievements and updates, with an interactive workshop presenting TRAINAIR *PLUS* to the community in full detail; and
- the third day in the afternoon will be dedicated to visits organized by the host, including training facilities, industrial sites, etc... thus, providing a showcase for the host organization.

9.2.4 ICAO will manage the content of the conference's programme, mainly the selection of the lecturers and moderators, and the coordination of the schedule with the host State/organization.

9.2.5 The host organization will be responsible for all other activities.

These activities include, but are not limited to the following:

- booking and setting-up of conference facilities;
- developing and maintaining a website for the conference to provide all relevant information to participants such as on-line registration and the conference's programme;
- managing the registration process for all participants;
- providing staff to assist in the administration of the conference (registration, delivery of badges, participants information, etc.);
- providing and coordinating all the logistics;
- ensuring availability of all audio-visual equipment (projectors, computers, speakers, communications system, etc.);
- providing interpretation in multiple languages as required;
- providing food and beverages for refreshment breaks during the symposium;
- organising social events (cocktails, dinners) in association with potential sponsors (optional);
- providing a booth to ICAO at no cost to present its various documents and material; this booth should include a computer and a large screen in order to display presentations;
- promoting the event to the aviation community, nationally and internationally; liaising with local and regional media if required;
- providing participants with a list of preferred hotels and rates;
- organizing the local visits and informing ICAO of the visit programme;
- providing or covering travel and accommodation expenses for ICAO officials; and
- assisting participants in obtaining their visas to enter the country (when applicable).



CHAPTER 10

TRAINAIR *PLUS* QUALITY ASSURANCE

10.1 QUALITY MANAGEMENT SYSTEM

10.2 ISO 9001-2008 REQUIREMENTS

10.1 QUALITY MANAGEMENT SYSTEM

10.1.1 To promote the development and delivery of high-level standard competency-based training for aviation professionals to better meet ICAO Safety and Efficiency Strategic Objectives, the scope of the TRAINAIR *PLUS* mandate is as follows:

- Promote the implementation of competency-based methodologies for the development and delivery of training courses using the Training Development Guide (TDG) (Doc 9941);
- Develop and maintain programme guidelines for the development, delivery and management of training courses addressed to course developers, instructors, managers of training centres and senior State officials;
- Establish and manage direct communication forums for training centres, States and the aviation industry through the organization of international meetings, seminars, workshops and symposia; and
- Provide advice and technical expertise on competency-based training to training centres.

10.1.2 As the ICAO TRAINAIR *PLUS* Programme evolves, and in light of the strong interest on the part of Civil Aviation Training Centres (CATCs) around the world seeking to join the TRAINAIR *PLUS* network, a quality control system is required to safely and effectively standardize all interactions within the network.

10.1.3 Therefore, ICAO intends to incorporate an ISO 9001-2008 compliant quality management system into the TRAINAIR *PLUS* Programme offered by the Aviation Safety Training Section (AST) of the ICAO Air Navigation Bureau. The ISO 9001-2008 project will commence in September 2012 with a view to certification in early 2013.

10.2 ISO 9001-2008 REQUIREMENTS

10.2.1 ISO 9001-2008 requirements stipulate that the organization shall establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of the International Standard. The organization shall:

- determine the processes needed for the quality management system and their application throughout the organization;
- determine the sequence and interaction of these processes;
- determine criteria and methods needed to ensure that both the operation and control of these processes are effective;
- ensure the availability of resources and information necessary to support the operation and monitoring of these processes;
- monitor, measure (where applicable), and analyze these processes, and;
- implement actions necessary to achieve planned results and continual improvement of these processes.

10.2.2 Documentation for the quality management system shall include:

- documented statements of a quality policy and quality objectives;
- a quality manual;
- documented procedures and records required by ISO 9001-2008;
- documents, including records, needed by the organization to ensure the effective planning, operation and control of its processes.

10.2.3 ISO 9001-2008 encourages an approach based on processes in the development, implementation and optimization of a quality management system, enhancing customer satisfaction by meeting customer requirements.

10.2.4 For organizations to function, they have to define and manage numerous inter-linked activities. Any activity or set of activities, which receives inputs and converts them to outputs, can be considered as a process. Often, the output from one process will directly form the input into the next process.

10.2.4 The application of a system of processes within an organization, together with the identification and interaction of those processes, and their management to produce the desired outcome, can be referred to as the *process approach*.

10.2.5 One advantage of the process approach is that it allows for the continuous monitoring of the inter-linkages between the individual processes within the system, their permutations and interaction. When such an approach is adopted as part of a quality management system, it highlights the importance of:

- understanding and complying with the requirements;
- the need to consider the processes in terms of added value;
- achieving results through the performance and effectiveness of the process, and;
- continual improvement of the processes on the basis of objective metrics.

10.2.5 In the model process-driven quality management system, the customers play a significant role in defining the requirements as input. To monitor customer satisfaction, it is necessary to gauge customer perceptions as to whether the organization has met their needs.

This current version of the TRAINAIR *PLUS* Operations Manual and all upcoming versions are available in the TRAINAIR *PLUS* website :
www.icao.int/trainairplus



The screenshot shows the homepage of the ICAO TRAINAIR PLUS Programme website. At the top, the ICAO logo is visible next to the text "INTERNATIONAL CIVIL AVIATION ORGANIZATION" and "A United Nations Specialized Agency". A search bar and a "FRANÇAIS" link are also at the top right. Below the header, a navigation menu includes links for Home, About us, News and Events, TRAINAIR PLUS Programme, Publications, Shop Online, and Employment.

The main content area features a banner for the "TRAINAIR PLUS Programme" with a collage of images related to aviation training. To the left of the banner is a sidebar with a detailed navigation menu:

- » Home
- » About us
- » News and Events
 - Newsletter
 - Latest News
 - Upcoming Events
- » MEMBERSHIP
 - Procedure
 - Membership requirements
 - How to apply
 - Current Members
- » ASSESSMENT
 - Training Assessment Guidelines
 - Assessment Schedule
 - Budget
- » STP Standardized Training Packages
- » Training Development Guide
- » TRAINAIR PLUS Courses
 - Training Developers Courses (TDC)
- » News from Members
- » Global Symposium 2012
- » Frequently Asked Questions (FAQ)
- » Contact us
- » Aviation Training Directory

Below the sidebar, there is a welcome message and a brief description of the programme's purpose. The page is divided into several sections with images and links:

- Training Developers Courses**: An image of a classroom setting.
- TRAINAIR PLUS Newsletter**: An image of the newsletter cover.
- Steps to become a member**: An image of a modern building.
- TRAINAIR PLUS Global Symposium 2012**: An image of a large conference hall.
- Current members**: An image of a group of people.
- Training Development Guide**: An image of the guide cover.

At the bottom, there is a note about the new course development methodology and membership framework, followed by a call to action to join the programme.



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