



สำนักงานการบินพลเรือนแห่งประเทศไทย
The Civil Aviation Authority of Thailand

Guidance Material for Competency-based approach to dangerous goods training and assessment

CAAT-GM-OPS-DGCBT

Revision: 01

Date: 26 December 2023



Director General of the Civil Aviation Authority of Thailand

Intentionally Left Blank

Table of Contents

Table of Contents	3
Abbreviations	4
0 Introduction.....	5
0.1 Background.....	5
0.2 Purpose	5
0.3 Applicability	5
0.4 Reference (Refer regulation)	5
0.5 Instruction.....	5
1 Competency-based approach to dangerous goods training and assessment	6
1.1 General.....	6
1.2 CBTA Framework	6
1.3 Dangerous Goods Training Programmes	6
2 Development and Implementation of competency – based training and assessment programmes	8
2.1 Phase 1 – Analyse Training Needs	8
2.2 Phase 2 – Design Competency - Based Training and Assessment	10
2.3 Phase 3 – Develop the training and assessment materials	12
2.4 Phase 4 – Implement the training and assessment plans.....	14
2.5 Phase 5 – Evaluate the training programme.....	15
3 Dangerous Goods Instructor Qualifications	16
4 Appendix A - Adapted DG task list by well-defined roles.....	17
5 Appendix B - Adapted DG Knowledge table.....	23
6 Appendix C - Example of an adapted competency model	26
7 Appendix D – Sample Form Summary.....	28
7.1 Template Summary of design output for (a) Personnel responsible for preparation of dangerous goods consignments.....	28
7.2 Template-Summary of design output for (b & e) Personnel responsible for processing or accepting goods presented as general cargo	30
7.3 Template-Summary of design output for (c & f) Personnel responsible for processing or accepting dangerous goods consignments.....	31
7.4 Template-Summary of design output for (d) Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices.....	33
7.5 Template-Summary of design output for (g) Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments	34
7.6 Template-Summary of design output for (h) Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport.....	36
7.7 Template-Summary of design output for (i) Personnel responsible for the planning of aircraft loading.....	37
7.8 Template-Summary of design output for (j) Flight crew.....	38
7.9 Template-Summary of design output for (k) Flight operations officers and flight dispatchers	39
7.10 Template-Summary of design output for (l) Cabin crew	40
7.11 Template Summary of design output for (m) Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail.....	41
8 Appendix E - Sample certificate template	42
9 Appendix F – Training Need Analysis Form for Shipper and Freight Forwarder	43
10 Appendix G – Training Need Analysis Form for Operator and Ground Handling Agent	45
11 Appendix H - Sample - Training need analysis Form	47
12 Appendix I - Example - Training Needs Analysis Assessment.....	52
13 Appendix J - Sample - Training Plan	55
14 Appendix K – Sample – Lesson plan	57

Abbreviations

Abbreviations	Meaning
A	
AOC	Air Operator Certificate
AOCR	Air Operator Certificate Requirements
C	
CAAT	The Civil Aviation Authority of Thailand
CBTA	Competency-Base Training and Assessment
D	
DG	Dangerous Goods
DGR	IATA Dangerous Goods Regulations
G	
GHA	Ground Handling Agent
GM	Guidance Material
I	
ICAO	International Civil Aviation Organisation
IATA	International Air Transport Association
T	
TI	Technical Instructions for the Safe Transport of Dangerous Goods by Air

0 Introduction

0.1 Background

Dangerous goods are known to have been involved in, and the cause of, incidents and accidents associated with air transportation. The dangerous goods training programme constitutes the foundation for safely transporting dangerous goods by air. The Competency-based approach to dangerous goods training and assessment (CBTA) Guidance Material (GM) is issued by the Civil Aviation Authority of Thailand (CAAT) and contain information about standard, practices and procedures required to be complied.

0.2 Purpose

This GM provides guidance to organisation applying for CAAT approval for dangerous goods training programme in developing and implementing competency-based approach to dangerous goods training and assessment (CBTA) for personnel involved in the transport of cargo, mail, passengers and baggage by air.

0.3 Applicability

This GM is applicable for all organisation and entities are required to have an approved dangerous goods training programs, including curriculums for each function identified as applicable to the personnel that they assign to work in the dangerous goods transportation process.

0.4 Reference (Refer regulation)

- (a) Annex 18, Safe Transportation of Dangerous Goods by Air
- (b) International Civil Aviation Organization Doc 9284 Technical Instructions for the Safe Transport of Dangerous Goods by Air
- (c) International Civil Aviation Organization Doc 10147 Guidance on a Competency-based Approach to Dangerous Goods Training and Assessment
- (d) IATA Dangerous Goods Regulations

0.5 Instruction

Under the CBTA framework, the organisation is ultimately accountable for the DG training programme for their personnel. As a result, contrary to the categorization approach to DG training Programme, organisations have additional responsibilities to conduct training needs analysis and maintain training and assessment records for their personnel.

The CAAT has provided an example template (Appendix A-G) to assist organisation in formulating their training needs analysis with reference to ICAO's generic list of tasks for personnel involved in the transport of cargo, passengers and baggage by air in Thailand. Third party training providers and/or other entities in the dangerous goods transport chain can make reference to this template in order to enhance compatibility when considering how their compatible information is made available to the public.

The ensuing paragraphs contain information to assist applicants in adopting a competency-based approach to DG training and assessment (CBTA) in their DG training programmes intended for consideration and approval by the CAAT.

The information given below is for guidance only and the application of relevant section in the training programmes depend on personnel's functions for which they are responsible. These responsibilities are determined by the specific function personnel perform and not by their job titles or description.

Personnel who have received training but who are assigned to new functions must be assessed to determine their competence in respect of their new function. If competency is not demonstrated, appropriate additional training must be provided.

1 Competency-based approach to dangerous goods training and assessment

1.1 General

According to the 2021-2022 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI) published by the International Civil Aviation Organization (ICAO), dangerous goods (DG) training requirements for **personnel** of shippers, freight forwarders, aircraft operators, etc. have been revised from the current categorization approach to a competency-based approach, which will become mandatory from 1 January 2023.

As of July 1, 2023, the organisation are required by CAAT to fully implement Competency-Based Training and Assessment for Dangerous Goods Training. During the transition period (1 January 2023 – 30 June 2023), the organisation may use the Dangerous Goods Training Programme in Category(ies) until end of June 2023.

1.2 CBTA Framework

The dangerous goods training framework for Thailand and the corresponding application forms for Approval of Dangerous Goods Training Programmes are designed to align to the aforementioned requirements. Organizers need to ensure that DG training provided to personnel on or after 1 January 2023 meets the new requirements. Applicants for DG training programme approval will be required to demonstrate with documented evidence that their programme have been designed and will be conducted based on the principles of competency-based approach to training and assessment. Training certificates that are issued before 1 January 2023 and have a validity period beyond 1 January 2023 will continue to be valid until they expire.

The ensuing paragraphs contain information to assist applicants in adopting a competency-based approach to DG training and assessment (CBTA) in their DG training programme intended for consideration and approval by the CAAT. This guidance information is adapted from the ICAO Document – Guidance on a Competency-based Approach to Dangerous Goods Training and Assessment (ICAO Doc 10147) and can be read in conjunction with the Proposed Framework for Implementation of Competency-based Approach to Dangerous Goods Training and Assessment in Thailand

This guidance will go into the details of the preparation, design and development of CBTA and will involve technical details relevant to the training provisions set out in the ICAO TI. It is therefore intended to be read by qualified DG training instructors who will establish and maintain a DG training programme by themselves or on behalf of their organizers.

1.3 Dangerous Goods Training Programmes

A training programme includes elements such as methodology initial and recurrent training and assessment, instructor qualifications and competencies, training and assessment records and evaluation of its effectiveness.

Organisations need to determine the purpose and objective of the competency-based training programme based on the functions for which their personnel are responsible. Organisations should ensure that training is designed and developed to establish clear links among the competencies to be achieved, the learning objectives, assessment methods, and course materials.

The establishment of a DG training programme can be divided into five workflows, or phases, namely:

- (i) Analyse training need;
- (ii) Design local competency-based training;
- (iii) Develop the training and assessment materials;
- (iv) Implement – conduct the course; and
- (v) Evaluate the course.

A competency is a dimension of human performance that is used to reliably predict successful performance on the job. It is manifested and observed through behaviors that mobilize/make use of the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

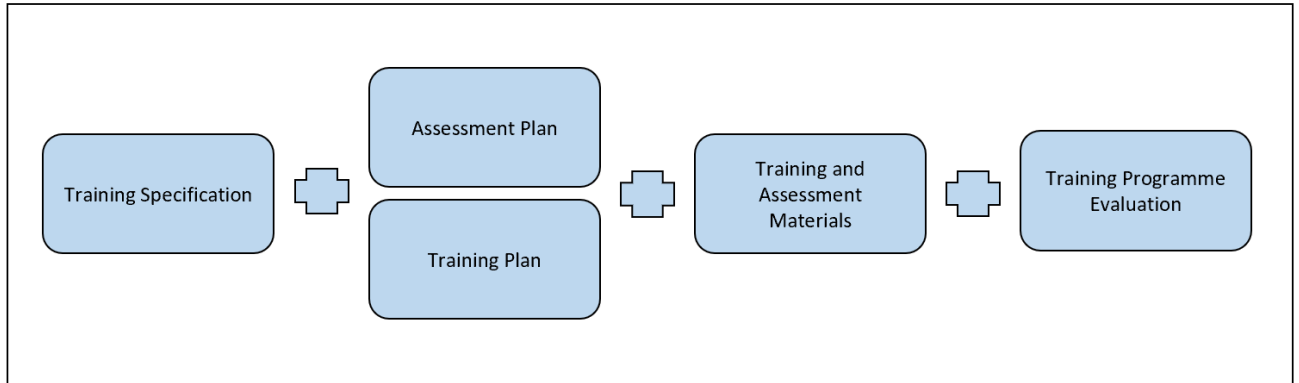


Figure 1: Competency-based training components

2 Development and Implementation of competency – based training and assessment programmes

Developing a competency-based dangerous goods training programme take on a phase approach following the ADDIE (analyse, design, develop, implement and evaluate) instructional design model as illustrated in Figure 2

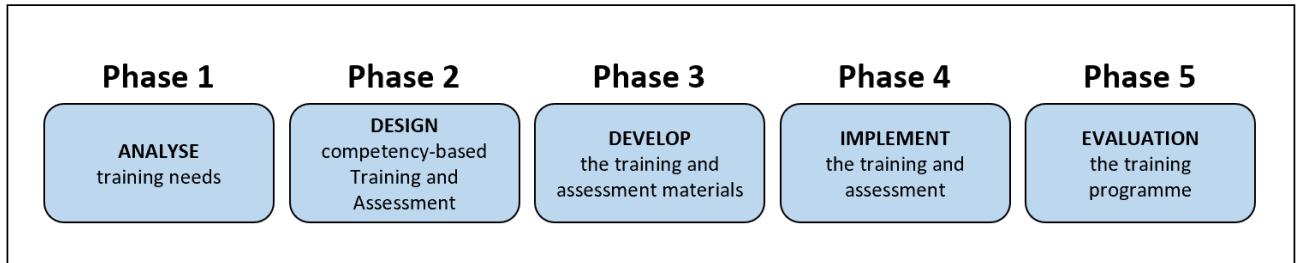


Figure 2: Competency-based training and assessment workflows

2.1 Phase 1 – Analyse Training Needs

The first phase in the development and implementation of a competency-based training programme specific to an organisation's environment and requirements is to conduct a training needs analysis. This is generally applicable to the organizer of a DG training programme, be it the organizers or as a third-party training provider.

An organizer conducts a training needs analysis to determine the results that the training needs to achieve and what resources exist to achieve these results. This critical step will ensure that the training fits the organisation's purpose and is effective.

A training specification is developed during this phase of development that details the requirements that need to be fulfilled when designing the training. This should include the purpose of the training along with its requirements, including operational, technical, regulatory and organizational requirements. This phase also involves the development of the task list.

The CAAT has adapted the well-defined job functions in the aviation industry with reference to ICAO Doc 10147 who typically perform the seven categories of tasks in paragraph 2.1.5, and thus have a role to play in the transport of cargo, passengers and baggage by air:

Staff of shippers and freight forwarders

- a) *Personnel responsible for preparation of DG consignments;*
- b) *Personnel responsible for processing or accepting goods presented as general cargo;*
- c) *Personnel responsible for processing or accepting DG consignments;*
- d) *Personnel responsible for handling cargo in a warehouse, and loading and unloading unit load devices;*

Staff of aircraft operators and handling agents

- e) *Personnel responsible for processing or accepting goods presented as general cargo;*
- f) *Personnel responsible for processing or accepting DG consignments;*
- g) *Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments;*
- h) *Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport;*
- i) *Personnel responsible for the planning of aircraft loading;*
- j) *Flight crew;*
- k) *Flight operations officers and flight dispatchers;*

- l) Cabin crew; and
- m) Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail.
- n) Person responsible for the oversight of dangerous goods operations including instructor who perform training any class

A list of tasks typically performed by personnel in the air cargo supply chain as well as aircraft operators has been compiled by ICAO. The tasks are divided into seven broad categories, which are further broken down into smaller sub tasks:

- 1) Classifying DG;
- 2) Preparing DG shipment;
- 3) Processing/accepting cargo;
- 4) Managing cargo pre-loading;
- 5) Accepting passenger and crew baggage;
- 6) Transporting cargo/baggage; and
- 7) Collecting safety data.

In this phase, a review should be conducted on the roles and responsibilities of the intended personnel, upon which the tasks involving the transport of cargo, passengers and baggage by air are identified.

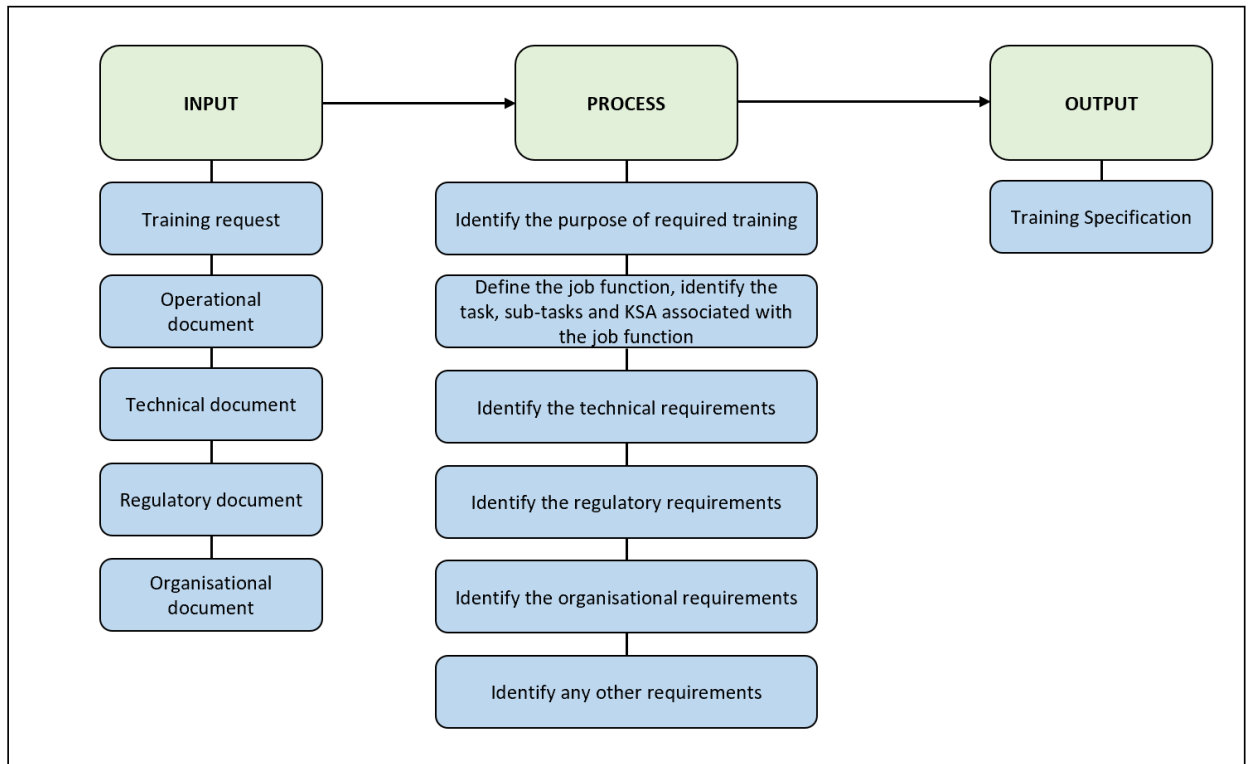


Figure 3: Analyse training need — Workflow 1

Required action:

- Assess the training needs analysis of the personnel
- Assess the Training Needs Analysis Form for Shipper and Freight Forwarder [\(see appendix F\)](#)
- Assess the Training Needs Analysis Form for Operator and Ground Handling Agent for air operators and related agencies [\(see appendix G\)](#)

2.2 Phase 2 – Design Competency - Based Training and Assessment

The second phase in the development and implementation of competency-based training and assessment programme is its design. This is done taking into account the training needs analysis from Phase 1.

The intended outcome from this phase will produce the components of a competency- based training and assessment, which include:

- a) Designing an adapted competency model that addresses the list of tasks identified in Phase 1;
- b) Designing an assessment plan that will be used to assess the competence of personnel; and
- c) Designing a training plan that will enable the development and delivery of the training course.

A competency model for a job function may vary depending on the needs and operating environment of an organisation, and should include the following elements:

- a) The list of competencies/capabilities required for the job function
 - i. The list of competencies/capabilities may be developed using the task list that was identified from Phase 1. For example, a competency may be defined as demonstrating the ability to perform one of the tasks under the seven broad categories of tasks identified (2.1.5).
- b) Performance criteria for assessing each competency/capability
 - i. Each competency/capability is associated with a list of observable behaviors, and each observable behavior is measured against a competency standard, which may be similar to Key Performance Indicators.
 - ii. Successfully meeting the defined standards for the list of observable behaviors will contribute to achieving a competency/capability.
 - iii. An example of an observable behavior may require personnel to successfully perform a smaller sub-task within a group of tasks.

With reference to ICAO Doc 10147 and Dangerous Goods Regulations (DGR) published by the International Air Transport Association (IATA), the CAAT has adapted a table (Table 1 of Appendix A) that maps the tasks typically performed by the well-defined job functions, and derived a second table (Table 2 of Appendix B) that identifies the DG knowledge topics that contribute to achieving competency to the list of tasks performed by each job function. An example of an adapted competency model is demonstrated in Table 3 of Appendix C for reference.

Personnel's assessment may be completed using a variety of tools including observation of job performance, tests, or other practical exercises. Assessment tools must be valid and reliable in terms of being an appropriate measure of the competency/capability being assessed and of obtaining consistent results when administered by different assessors.

Assessors are expected to conduct dangerous goods competency assessments in accordance with the assessment plan and to utilize the assessment tools as specified in the plan to document evidence and outcomes of assessments. To fulfill its role, assessors have to be familiar with the competency of each task in the job function of the training programme, observe the performance of personnel and subsequently determine if personnel have achieved the required competencies base on their performance during the assessments. Assessors may also provide feedback to help improve the effectiveness of the training.

Details of an assessment plan may include:

- a) The final competency standard associated with the final milestone;
- b) The interim competency standard associated with each milestone (if required)
- c) The assessments list (formative and summative assessments, examinations, oral assessments, etc.) required for each of the milestone(s) that have been defined;

- d) When assessment should take place;
- e) The tools to be used to collect evidence during practical assessment (where applicable);
- f) The pass marks for projects, examinations, or oral assessments; and
- g) The number of observations required to assess performance for the competency standards.

The training plan will be used by the training designers to create the training and assessment materials. The list of tasks from Phase 1 should be referred when preparing the training plan. The training plan is to detail:

- a) The composition and structure of the course;
- b) Modules, training events and their delivery format and sequence;
- c) Syllabus;
- d) Milestones (if required); and
- e) Course schedule

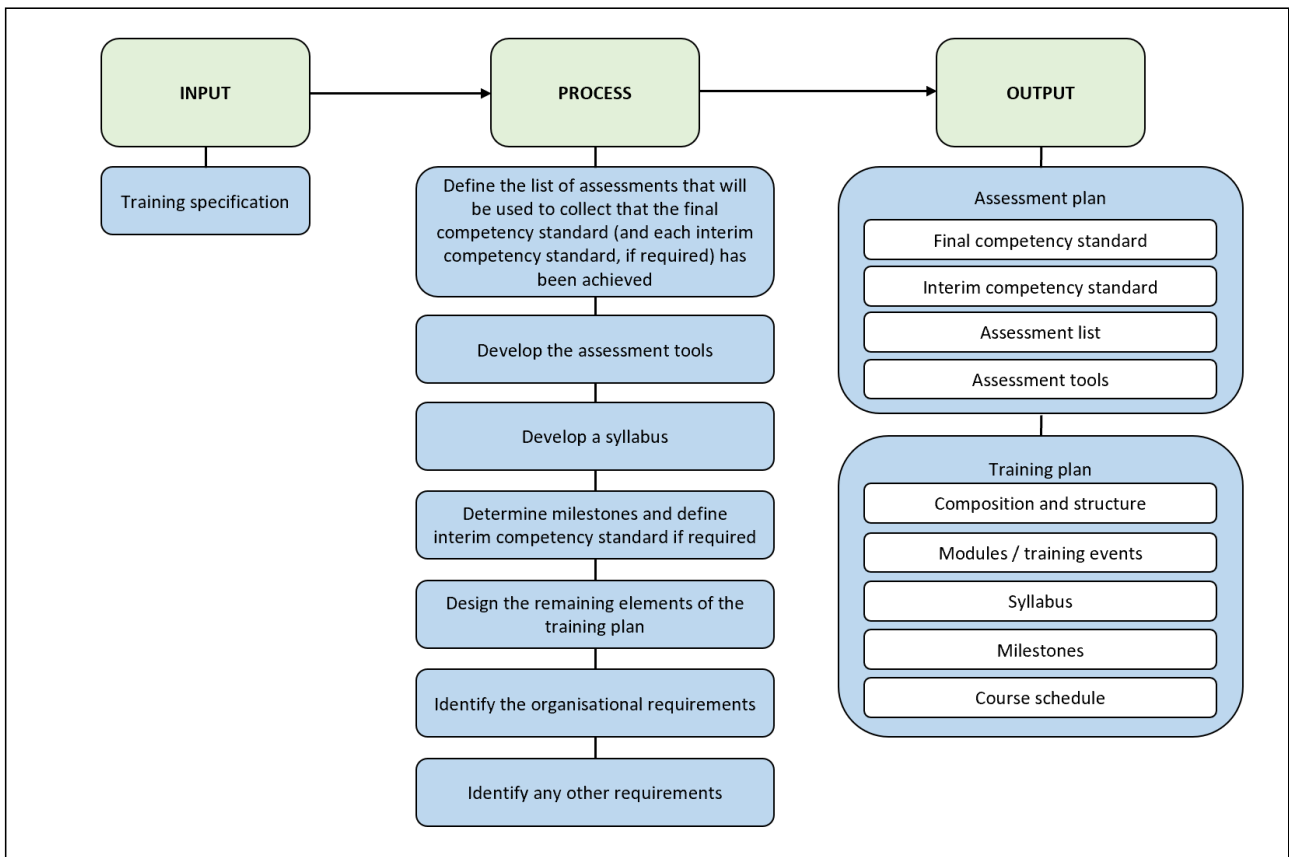


Figure 4: Design the assessment and training plans — Workflow 2

Required action:

- Assess the list of tasks, and for each task make reference to the corresponding parts of training and assessment materials ([see Table 1 of Appendix A](#))
- Assess the DG Knowledge table ([see Table 2 of Appendix B](#))
- Assess an example of an adapted competency model ([see Appendix C](#)), this item can be combined into Template summary of design output for personnel responsible for specific functions ([see Appendix D](#))
- Assess training course outline (e.g., delivery format, tool to be used, assessment methods and duration)

2.3 Phase 3 – Develop the training and assessment materials

The third phase in the development and implementation of a competency-based training and assessment programme is the development of the training and assessment materials. Development is based on the adapted competency model and the training and assessment plans. Training and assessment materials include but are not limited to training notes, exercise briefings, practical exercises, case studies, presentations, video clips, self-test quizzes, examinations, assessments and assessment tools.

Training and assessment material should not be limited to only the core dangerous goods course but should also include material applicable to training events such as on-the-job training and assessments at the workplace.

It is important that CBTA incorporates a mechanism to enable feedback so that the organizers of the training can ensure their programmes remain effective and relevant to the competencies intended to be achieved. At a minimum, a source of feedback should come from the personnel at the end of the course, and should include questions seeking feedback on the suitability of the course to the training needs of their job functions.

In accordance with ICAO TI, the record of training and assessment must include:

- a) The name of the trainee;
- b) The month of completion of the training and assessment;
- c) A description, a copy or reference to training and assessment materials used to meet the training and assessment requirements;
- d) The name and address of the organization providing the training and assessment; and
- e) Evidence which shows that the personnel have been assessed as competent.

As the requirement for CBTA becomes mandatory from 1 January 2023, the categorization approach will no longer be used. Henceforth, the ICAO category of personnel numbering system will become obsolete.

In this connection, when a sample certificate is submitted by the applicant, it is recommended that the description of the DG training programme for the applicable type of personnel and respective competency elements are clearly stated on the certificate and in a way that is easy to reference. This is especially significant for practical implications when a DG training programme has been designed to meet the needs of more than one type of personnel.

NOTE:

Prior to the approved implementation phase (phase 4), instructors are required to demonstrate effective teaching to ensure that the training is designed and developed to establish clear links among the competencies to be achieved, the learning objectives, assessment methods, and course materials.

At this phase, CAAT Dangerous Goods Inspector shall evaluate the classroom performance together with organizers (operators) by utilizing the Training need analysis and assessment. This process is to ensure that competencies and their associated descriptions and observable behaviors and forms the basis from which an adapted competency model is derived and achieved.

All assessors should reach the same conclusion when performing an assessment. Henceforth, all assessors should be trained and monitored to achieve and maintain an acceptable level of inter-rater reliability.

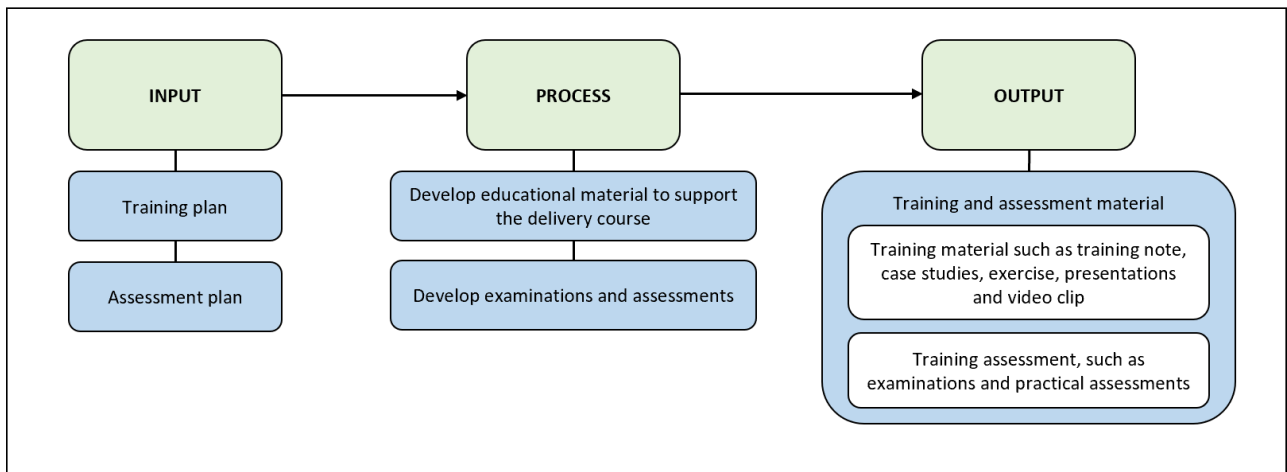


Figure 5: Develop the training and assessment materials - Workflow 3

Required action:

- Submit the Training Needs Analysis Form for Shipper and Freight Forwarder ([see appendix F](#))
- Submit the Training Needs Analysis Form for Operator and Ground Handling Agent for air operators and related agencies ([see appendix G](#))
- Submit the list of tasks, and for each task make reference to the corresponding parts of training and assessment materials ([see Table 1 of Appendix A](#))
- Submit the DG Knowledge table ([see Table 2 of Appendix B](#))
- Submit an example of an adapted competency model ([see Appendix C](#)), this item can be combined into Template summary of design output for personnel responsible for specific functions ([see Appendix D](#))
- Submit training course outline (e.g., delivery format, tool to be used, assessment methods and duration)
- Submit training materials
- Submit assessment materials with answers where applicable
- Submit qualifications and experiences of the instructors (see 3.1.1- 3.1.3)
- Submit Course evaluation or feedback form
- Submit a sample certificate ([see Appendix E](#)), if any
- [Submit CAAT-OPS-CLDGI-302, OPS Approval of Dangerous Goods Training Program Checklist](#)
- [Submit CAAT-OPS-CLDGI-303, OPS Approval of Dangerous Goods Training Program; Postal](#)
- [Submit CAAT-OPS-DG-401, Application for Approval of Dangerous Goods Training Programs](#)

2.4 Phase 4 — Implement the training and assessment plans

The fourth phase in the development and implementation of a competency-based training and assessment programme is conducting the course in accordance with the training and assessment plans. This involves delivering the training; monitoring the progress of the personnel; providing timely and continuous feedback on their performance; diagnosing deficiencies in the training and addressing them in a timely manner; and carrying out assessments according to the assessment plan. The goal of this phase is competent personnel.

The approval of the competency-based training approach is subject to inspection by the CAAT inspectors to verify:

- The fully documentation of the 3 Phases submitted and approved;
- The implementation during the Phase 4 of the documentation system approved by the CAAT, (class observation required)
- The compliance and the implementation of tools elaborated, submitted and approved during Phases 1, 2 and 3;
- The assessment of the qualification and skills of the instructor when conducting the training using the CBTA approach, (class observation required).

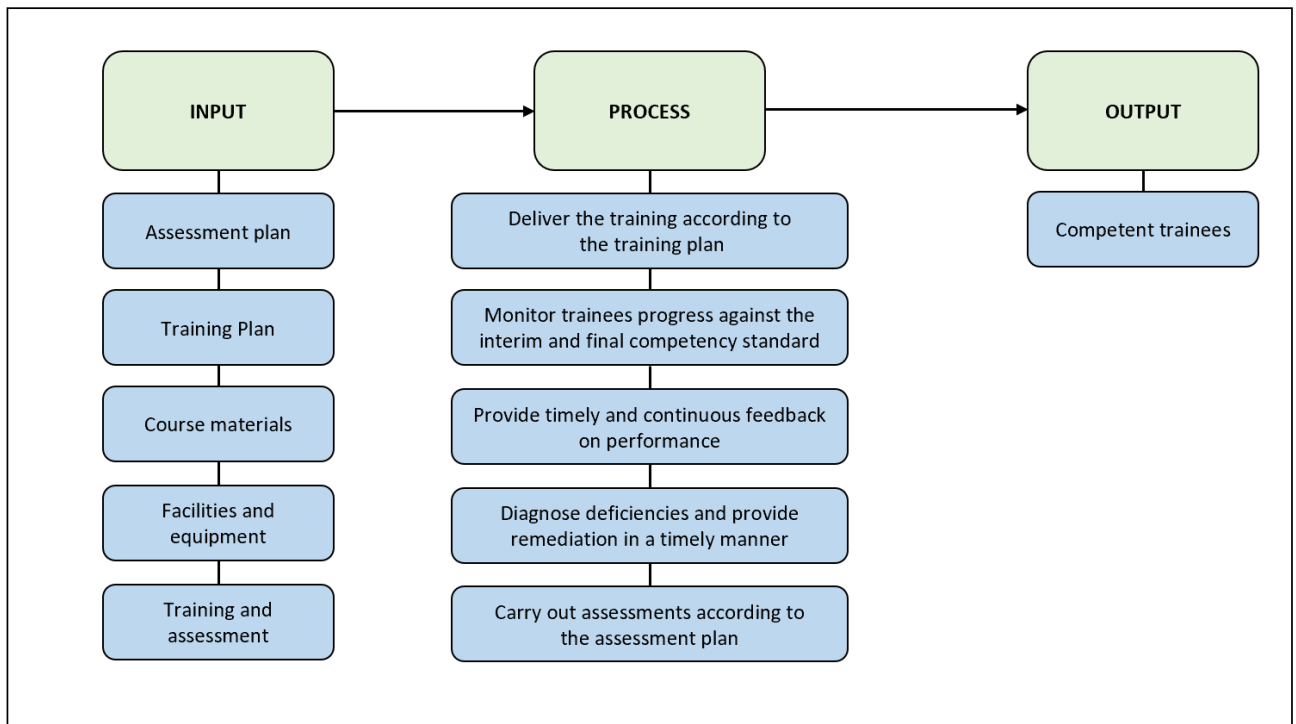


Figure 6: Conduct the course in accordance with the training and assessment plans - Workflow 4

2.5 Phase 5 – Evaluate the training programme

The competency-based training programme should be reviewed by the organisation on a periodic basis to ensure its effectiveness. After training is completed, feedback on job performance of personnel at the workplace should be gathered from personnel, instructors, assessors and organisations (in the case of training programmes developed by training service providers). Such feedback may be in the form of course results, audit reports, inspection reports, documented observations of personnel's job performance at the workplace, written evaluation by personnel, instructors or assessors and occurrence reports involving personnel that were trained and assessed to be competent under the training programme. Such reports should be evaluated with a view to amend or revise various components of the training programme (e.g. assessment plan, training plan, training and assessment materials) to better support the learning progression and competency of personnel in performing the intended job function.

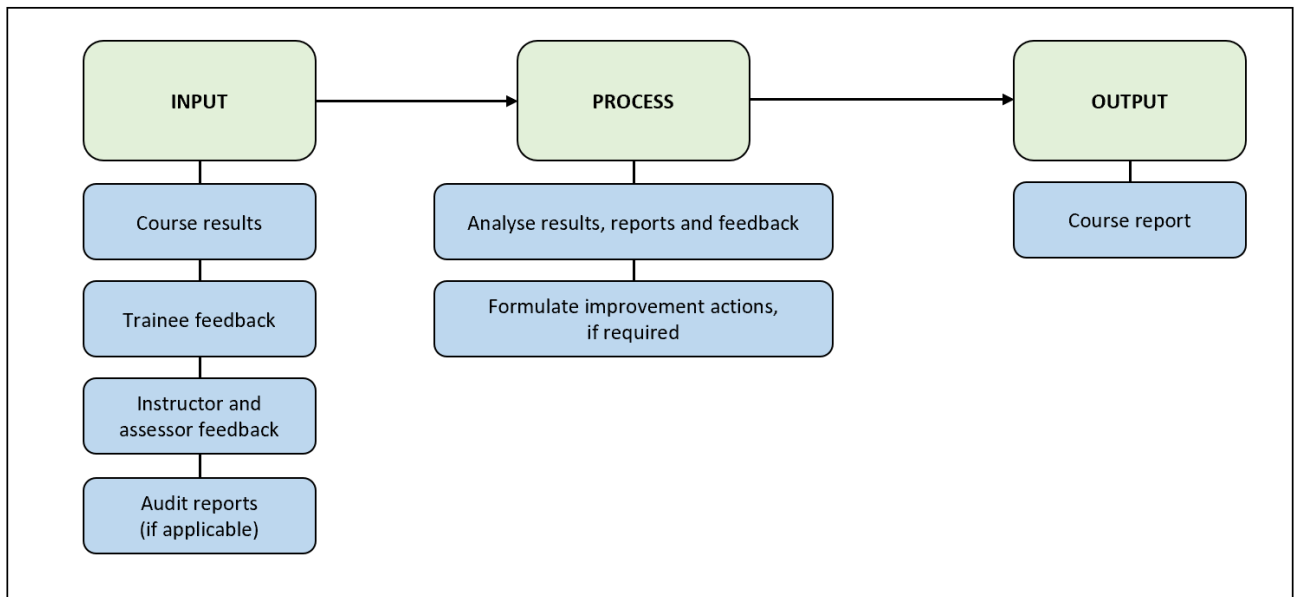


Figure 7: Evaluate the course including the training and assessment plans — Workflow 5

Required action:

- Submit evidence of an evaluation of the training programs completed (for applicants seeking a renewal of CAAT's approval of its competency-based training programs only).

3 Dangerous Goods Instructor Qualifications

- 3.1.1 According to ICAO TI, instructors of initial and recurrent DG training must demonstrate or be assessed as competent in instruction and the function(s) that they will instruct prior to delivering such training.
- 3.1.2 Instructors delivering initial and recurrent DG training must deliver such courses at least every 24 months, or in the absence of this, attend recurrent training.
- 3.1.3 With reference to international practices and the requirements of other competent authorities, it is considered necessary that instructors for DG training programs, particularly those related to “DG Regulations (DGR)” (i.e. personnel who prepares, processes or accepts DG consignments for transport by air), or “DG Awareness (DGA)” (i.e. any other personnel involved in the transport of general cargo, passengers and baggage by air) courses, must have successfully completed a DG training programs designed for personnel who prepares, processes or accepts DG consignments for transport by air. It is also best practice if an instructor successfully completes any course for an instructor or on instructional techniques before delivering those courses.

Required action:

- List of DG training instructors
- For each instructor:
 - i) Either:
 - Qualification that demonstrates competence in the functions they will instruct
 - Course delivery record of CAAT approved DG training programs in the past 24 months and
 - ii) Qualification on instructional techniques (if any)

4 Appendix A - Adapted DG task list by well-defined roles

Table 1: Adapted DG task list by well-defined roles denote dangerous goods tasks relevant to the respective well-defined job functions / roles

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder			Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n
0. Understanding the basics of dangerous goods														
0.1 Recognize dangerous goods applicability														
0.1.1 Understand the definition	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.1.2 Recognize the legal framework (global, Thailand)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.1.3 Identify the application and scope	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.1.4 Differentiate hazard and risk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.2 Understand the general limitations														
0.2.1 Develop a sense of forbidden dangerous goods	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.2.2 Recognize potential hidden dangerous goods	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.2.3 Familiarize with passenger provision	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.3 Identifying role and responsibilities														
0.3.1 Clarify the individual and collective role of the supply chain stakeholders	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.3.2 Understand the passenger's responsibilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.3.3 Recognize the impact of State & operator variations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.4 Understanding the importance of classification & packaging														
0.4.1 Identify the general information about classes, divisions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.4.2 Understand the general principles of Packing Groups	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.4.3 Consider multiple hazards	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.5 Understanding hazard communication														
0.5.1 Recognize the basic marking requirement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.5.2 Recognize the basic labelling requirement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.5.3 Identify the required documentation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder				Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n	
0.6 Familiarizing with basic emergency response															
0.6.1 Create awareness about general emergency procedure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
0.6.2 Understand the organizer’s emergency response requirement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1. Classifying DG															
1.1 Evaluate substance or article against classification criteria															
1.1.1 Determine if it is dangerous goods	✓													✓	
1.1.2Determine if it is forbidden under any circumstances	✓													✓	
1.2 Determine DG description															
1.2.1 Determine class or division	✓													✓	
1.2.2 Determine packing group	✓													✓	
1.2.3 Determine proper shipping name and UN number	✓													✓	
1.2.4 Determine if it is forbidden unless approval or exemption is granted	✓													✓	
1.3 Review special provisions															
1.3.1 Assess if special provision(s) is applicable	✓													✓	
1.3.2 Apply special provision(s)	✓													✓	
2. Preparing DG shipment															
2.1 Assess packing options including quantity limitations															
2.1.1 Consider limitations (de minimis quantities, excepted quantities, limited quantities, passenger aircraft, cargo aircraft only, special provisions, dangerous goods in the mail)	✓													✓	
2.1.2 Consider State and operator variations	✓													✓	
2.1.3 Determine if all-packed-in-one can be used	✓													✓	
2.1.4 Select how dangerous goods will be shipped based on limitations and variations	✓													✓	
2.2 Apply packing requirements															

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder				Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n	
2.2.1 Consider constraints of packing instructions	✓													✓	
2.2.2 Identify and follow the instructions provided by the packaging manufacturer when UN specification packaging is used	✓													✓	
2.2.3 Select appropriate packaging materials (absorbent, cushioning, etc.)	✓													✓	
2.2.4 Assemble package	✓													✓	
2.3 Apply marks and labels															
2.3.1 Determine applicable marks	✓													✓	
2.3.2 Apply marks	✓													✓	
2.3.3 Determine applicable labels	✓													✓	
2.3.4 Apply labels	✓													✓	
2.4 Assess use of overpack															
2.4.1 Determine if overpack can be used	✓													✓	
2.4.2 Apply marks if necessary	✓													✓	
2.4.3 Apply labels if necessary	✓													✓	
2.5 Prepare documentation															
2.5.1 Complete the dangerous goods transport document (DGD)	✓													✓	
2.5.2 Complete other transport documents (e.g. air waybill)	✓													✓	
2.5.3 Include other required documentation (approvals/exemptions, etc.)	✓													✓	
2.5.4 Retain copies of documents as required	✓													✓	
3. Processing/accepting cargo															
3.1 Review documentation															
3.1.1 Verify dangerous goods transport document (DGD)			✓			✓								✓	
3.1.2 Verify other transport documents (e.g. air waybill)			✓			✓								✓	
3.1.3 Verify other documents (exemptions, approvals, etc.)			✓			✓								✓	

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder			Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n
3.1.4 Verify State/operator variations			✓			✓								✓
3.2 Review packaging, marks & labels														
3.2.1 Verify marks			✓			✓								✓
3.2.2 Verify labels			✓			✓								✓
3.2.3 Verify packaging type			✓			✓								✓
3.2.4 Verify package conditions			✓			✓								✓
3.2.5 Verify State/operator variations			✓			✓								✓
3.3 Complete acceptance procedures														
3.3.1 Complete acceptance checklist			✓			✓								✓
3.3.2 Provide shipment information for load planning			✓			✓								✓
3.3.3 Retain documents as required load planning			✓			✓								✓
3.4 Process/accept cargo other than DG														
3.4.1 Check documentation for indications of undeclared dangerous goods		✓			✓								✓	✓
3.4.2 Check packages for indications of undeclared dangerous goods		✓			✓								✓	✓
4. Managing cargo pre-loading														
4.1 Plan loading														
4.1.1 Determine stowage requirements						✓		✓						✓
4.1.2 Determine segregation, separation, aircraft/compartment limitations						✓		✓						✓
4.2 Prepare load for aircraft														
4.2.1 Check packages for indications of undeclared dangerous goods			✓			✓								✓
4.2.2 Check for damage and/or leakage			✓			✓								✓
4.2.3 Apply stowage requirements (e.g. segregation, separation, orientation)			✓			✓								✓
4.2.4 Apply ULD tags when applicable			✓			✓								✓

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder			Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n
4.3 Issue NOTOC														
4.3.1 Enter required information									✓					✓
4.3.2 Verify conformance with load plan									✓					✓
4.3.3 Transmit to loading personnel									✓					✓
5. Accepting passenger and crew baggage														
5.1 Process baggage														
5.1.1 Identify forbidden dangerous goods								✓					✓	✓
5.1.2 Apply approval requirements								✓					✓	✓
5.2 Accept baggage														
5.2.1 Apply operator requirements								✓				✓		✓
5.2.2 Verify passenger baggage requirements								✓				✓		✓
5.2.3 Advise pilot-in-command								✓				✓		✓
6. Transporting cargo/baggage														
6.1 Load aircraft														
6.1.1 Transport cargo/baggage to aircraft							✓							✓
6.1.2 Check packages for indications of undeclared dangerous goods							✓							✓
6.1.3 Check for damage and/or leakage							✓							✓
6.1.4 Apply stowage requirements (e.g. segregation, separation, orientation, securing and protecting from damage)							✓							✓
6.1.5 Verify that NOTOC reflects against aircraft load							✓							✓
6.2 Manage DG pre- and during flight														
6.2.1 Detect presence of dangerous goods not permitted in baggage										✓	✓	✓		✓
6.2.2 Interpret NOTOC										✓	✓			✓
6.2.3 Apply procedures in the event of an emergency										✓	✓	✓		✓
6.2.4 Inform flight operations officer/flight dispatcher/air traffic control in the event of an emergency										✓	✓			✓

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder				Aircraft operator and ground handling agent								Security agent	Oversight staffs
Well-defined job functions for the transport of DG by air Tasks with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n	
6.2.5 Inform emergency services of the dangerous goods on board in the event of an emergency										✓	✓			✓	
6.3 Unload aircraft															
6.3.1 Apply specific unloading considerations							✓							✓	
6.3.2 Check packages for indications of undeclared dangerous goods							✓							✓	
6.3.3 Check for damage and/or leakage							✓							✓	
6.3.4 Transport cargo/baggage to facility/terminal							✓							✓	
7. Collecting safety data															
7.1 Report DG accidents		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.2 Report DG incidents		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.3 Report undeclared/mis-declared DG		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7.4 Report DG occurrences		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	

Remark

Shippers and freight forwarders

- Personnel responsible for preparation of DG consignments
- Personnel responsible for processing or accepting goods presented as general cargo
- Personnel responsible for processing or accepting DG consignments
- Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices

Aircraft operators and ground handling agents

- Personnel responsible for processing or accepting goods presented as general cargo
- Personnel responsible for processing or accepting DG consignments
- Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments
- Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport
- Personnel responsible for the planning of aircraft loading
- Flight crew
- Flight operations officers and flight dispatchers
- Cabin crew
- Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail
- Person responsible for the oversight of dangerous goods operations including instructor who perform training any class

5 Appendix B - Adapted DG Knowledge table

Table 2: Cells were marked denote DG knowledge topics relevant to the respective well-defined job functions / roles

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder			Aircraft operator and ground handling agent									Security agent	Oversight staffs
DG Well-defined job functions for the transport of DG by air Knowledge with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n	
Scope and applicability (including overview of DG regulatory requirements in Thailand)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Limitation of dangerous goods on aircraft	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Definitions, Roles and Responsibilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Training requirements	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dangerous goods security													✓	✓	
General provisions concerning radioactive material	✓		✓			✓			✓	✓				✓	
Reporting of dangerous goods accidents, incidents and other occurrences		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Emergency response procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Classification General	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Classification Class 1	✓													✓	
Classification Class 2	✓													✓	
Classification Class 3	✓													✓	
Classification Class 4	✓													✓	
Classification Class 5	✓													✓	
Classification Class 6	✓													✓	
Classification Class 7	✓													✓	
Classification Class 8	✓													✓	
Classification Class 9	✓													✓	
Dangerous goods list General	✓		✓			✓			✓	✓				✓	
Dangerous goods list Arrangement	✓		✓			✓			✓	✓				✓	
Special provisions	✓		✓			✓								✓	
Dangerous goods in limited quantities	✓		✓			✓								✓	
Dangerous goods packed in excepted quantities	✓		✓			✓								✓	
Packing Instructions General	✓		✓			✓								✓	
Packing Instructions Class 1	✓		✓			✓								✓	
Packing Instructions Class 2	✓		✓			✓								✓	
Packing Instructions Class 3	✓		✓			✓								✓	
Packing Instructions Class 4	✓		✓			✓								✓	
Packing Instructions Class 5	✓		✓			✓								✓	
Packing Instructions Class 6	✓		✓			✓								✓	
Packing Instructions Class 7	✓		✓			✓								✓	
Packing Instructions Class 8	✓		✓			✓								✓	
Packing Instructions Class 9	✓		✓			✓								✓	

Table 1: Adapted DG task list by well-defined roles	Shipper	Freight forwarder			Aircraft operator and ground handling agent								Security agent	Oversight staffs
DG Well-defined job functions for the transport of DG by air Knowledge with reference to ICAO TI / IATA DGR	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Packing Instructions Lithium batteries PI965-970 (General)	✓		✓			✓								✓
Preparing dangerous goods shipment general	✓													✓
Package markings	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Labelling	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Documentation	✓	✓	✓		✓	✓			✓				✓	✓
Packaging applicability, nomenclature and codes	✓		✓			✓								✓
Marking of packagings other than inner packagings	✓		✓			✓								✓
Requirements for packagings	✓		✓			✓								✓
Packaging performance tests	✓													✓
Requirements for the construction and testing of cylinders and closed cryogenic receptacles, aerosol dispensers and small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas	✓													✓
Packagings for infectious substances of Category A	✓		✓			✓								✓
Requirements for the construction, testing and approval of packages for radioactive material and for the approval of such material	✓		✓			✓								✓
Acceptance procedures			✓			✓								✓
Storage and loading				✓			✓		✓	✓				✓
Inspection and decontamination				✓			✓			✓				✓
Provision of information									✓	✓	✓			✓
Provisions concerning passengers and crew	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Provisions to aid recognition of undeclared dangerous goods	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Remark

Shippers and freight forwarders

- Personnel responsible for preparation of DG consignments
- Personnel responsible for processing or accepting goods presented as general cargo
- Personnel responsible for processing or accepting DG consignments
- Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices

Aircraft operators and ground handling agents

- Personnel responsible for processing or accepting goods presented as general cargo
- Personnel responsible for processing or accepting DG consignments
- Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments

- h. Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport
- i. Personnel responsible for the planning of aircraft loading
- j. Flight crew
- k. Flight operations officers and flight dispatchers
- l. Cabin crew
- m. Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail
- n. Person responsible for the oversight of dangerous goods operations including instructor who perform training any class

6 Appendix C - Example of an adapted competency model

Example of competency model adapted for Personnel responsible for preparation of dangerous goods consignments

Competency	Description	Performance		
		Observable behavior (OB)	Competency	
			Final competency standard	Conditions
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability	The level of performance to be achieved as defined by the training programme organizer, e.g. the pass mark for a specific part of assessment set at 80%	e.g. The training modules / topics that a trainee has to attend
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Evaluate substance or article against classification criteria	Demonstrate ability to correctly determine the classification of a particular substance or article	OB1: Correctly determine if it is dangerous goods		
		OB2: Correctly determine if it is forbidden under any circumstances		
C2: Determine DG description	Demonstrate ability to correctly determine the technical details of dangerous goods shipments	OB1: Correctly determine class or division		
		OB2: Correctly determine packing group		
		OB3: Correctly determine proper shipping name and UN number		
		OB4: Correctly determine if it is forbidden unless approval or exemption is granted		
C3: Review special provisions	Demonstrate ability to correctly determine the nature and applicability of special provisions	OB1: Correctly assess if special provision(s) is applicable		
		OB2: Correctly apply special provision(s)		
C4: Assess packing options including quantity limitations	Demonstrate ability to correctly evaluate the packing options of dangerous goods shipments	OB1: Correctly consider limitations (de minimis quantities, excepted quantities, limited quantities, passenger aircraft, cargo aircraft only, special provisions, dangerous goods in the mail)		
		OB2: Correctly include state and operator variations into consideration		

Competency	Description	Performance		
		Observable behavior (OB)	Competency	
			Final competency standard	Conditions
		OB3: Correctly determine if all-packed-in-one can be used		
		OB4: Correctly select how dangerous goods will be shipped based on limitations and variations		
C5: Apply packing requirements	Demonstrate ability to correctly comply with the packing requirements on dangerous goods shipments	OB1: Correctly include constraints of packing instructions into consideration		
		OB2: Correctly identify and follow the instructions provided by the packaging manufacturer when UN specification packaging is used		
		OB3: Correctly select appropriate packaging materials (absorbent, cushioning, etc.)		
		OB4: Correctly assemble package		
C6: Apply marks and labels	Demonstrate ability to correctly apply marks and labels on dangerous goods shipments	OB1: Correctly determine and apply applicable marks		
		OB2: Correctly determine and apply applicable labels		
C7: Assess use of overpack	Demonstrate ability to correctly evaluate the use of overpack on dangerous goods shipments	OB1: Correctly determine if overpack can be used		
		OB2: Correctly apply marks if necessary		
		OB3: Correctly apply labels if necessary		
C8: Prepare documentation	Demonstrate ability to correctly prepare documentations for dangerous goods shipments	OB1: Correctly complete the dangerous goods transport document (DGD)		
		OB2: Correctly complete other transport documents (e.g. air waybill)		
		OB3: Correctly include other required documentation (approvals/exemptions, etc.)		
		OB4: Understand and follow procedures for document retention		

7 Appendix D – Sample Form Summary

7.1 Template Summary of design output for (a) Personnel responsible for preparation of dangerous goods consignments

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Evaluate substance or article against classification criteria	Demonstrate ability to correctly determine the classification of a particular substance or article	OB1: Correctly determine if it is dangerous goods		
		OB2: Correctly determine if it is forbidden under any circumstances		
C2: Determine DG description	Demonstrate ability to correctly determine the technical details of dangerous goods shipments	OB1: Correctly determine class or division		
		OB2: Correctly determine packing group		
		OB3: Correctly determine proper shipping name and UN number		
		OB4: Correctly determine if it is forbidden unless approval or exemption is granted		
C3: Review special provisions	Demonstrate ability to correctly determine the nature and applicability of special provisions	OB1: Correctly assess if special provision is applicable		
		OB2: Correctly apply special provision(s)		
C4: Assess packing options including quantity limitations	Demonstrate ability to correctly evaluate the packing options of dangerous goods shipments	OB1: Correctly consider limitations (de minimis quantities, excepted)		
		OB2: Correctly include state and operator variations into consideration		
		OB3: Correctly determine if all-packed-in-one can be used		

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
		OB4: Correctly select how dangerous goods will be shipped based on limitations and variations		
C5: Apply packing requirements	Demonstrate ability to correctly comply with the packing requirements on dangerous goods shipments	OB1: Correctly include constraints of packing instructions into consideration		
		OB2: Correctly identify and follow the instructions provided by the packaging manufacturer when UN specification packaging is used		
		OB3: Correctly select appropriate packaging materials (absorbent, cushioning, etc.)		
		OB4: Correctly assemble package		
C6: Apply marks and labels	Demonstrate ability to correctly apply marks and labels on dangerous goods shipments	OB1: Correctly determine and apply applicable marks		
		OB2: Correctly determine and apply applicable labels		
C7: Assess use of overpack	Demonstrate ability to correctly evaluate the use of overpack on dangerous goods shipments	OB1: Correctly determine if overpack can be used		
		OB2: Correctly apply marks if necessary		
		OB3: Correctly apply labels if necessary		
C8: Prepare documentation	Demonstrate ability to correctly prepare documentations for dangerous goods shipments	OB1: Correctly complete the dangerous goods transport document (DGD)		
		OB2: Correctly complete other transport documents (e.g. air waybill)		
		OB3: Correctly include other required documentation (approval/exemption,		
		OB4: Understand and follow procedures for document retention		

7.2 Template-Summary of design output for (b & e) Personnel responsible for processing or accepting goods presented as general cargo

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Process/accept cargo other than DG	Demonstrate ability to correctly complete the processing and acceptance of general cargo shipments	OB1: Correctly check documentation for indications of undeclared dangerous goods		
		OB2: Correctly identify indications of undeclared dangerous goods from shipment package		
C2: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents / incidents / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur and when undeclared/ mis-declared dangerous goods are discovered		

7.3 Template-Summary of design output for (c & f) Personnel responsible for processing or accepting dangerous goods consignments

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Review documentation	Demonstrate ability to correctly verify documents for dangerous goods shipments	OB1: Correctly verify dangerous goods transport document (DGD)		
		OB2: Correctly verify other transport documents (e.g. air waybill)		
		OB3: Understand how to verify other documents such as exemption, approval, etc.		
		OB4: Correctly verify the applicable state/operator variations		
C2: Review packaging, marks & labels	Demonstrate ability to correctly verify packaging, marks and labels for dangerous goods shipments	OB1: Correctly identify and verify marks on shipment package		
		OB2: Correctly identify and verify labels on shipment package		
		OB3: Correctly verify the required type of packaging		
		OB4: Understand the process of verifying package conditions		
		OB5: Correctly verify the applicable state/operator variations		
C3: Complete acceptance procedure	Demonstrate ability to correctly apply procedures to complete dangerous goods acceptance	OB1: Correctly apply and complete dangerous goods acceptance checklist		
		OB2: Correctly prepare and provide shipment information for load planning		
		OB3: Understand and follow procedures for document retention		

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C4: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incidents / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur and when undeclared/ mis-declared dangerous goods are discovered		

7.4 Template-Summary of design output for (d) Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Plan loading	Demonstrate ability in planning the loading of cargo shipments in accordance with the requirements	OB1: Correctly determine stowage requirements		
		OB2: Correctly determine segregation, separation, aircraft/compartment limitations		
C2: Prepare load for aircraft	Demonstrate ability to correctly prepare cargo shipments to be loaded on an aircraft	OB1: Correctly check packages for indications of undeclared dangerous goods		
		OB2: Understand the requirement to check for damage and/or leakage		
		OB3: Correctly apply stowage requirements (e.g. segregation, separation, orientation)		
		OB4: Correctly apply ULD tags when applicable		
C3: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incidents / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur and when undeclared/ mis-declared dangerous goods are discovered		

7.5 Template-Summary of design output for (g) Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Plan loading	Demonstrate ability in planning the loading of cargo shipments in accordance with the requirements	OB1: Correctly determine stowage requirements		
		OB2: Correctly determine segregation, separation, aircraft/compartment limitations		
C2: Prepare load for aircraft	Demonstrate ability to correctly prepare cargo shipments to be loaded on an aircraft	OB1: Correctly check packages for indications of undeclared dangerous goods		
		OB2: Understand the requirements to check for damage and/or leakage		
		OB3: Correctly apply stowage requirements (e.g. segregation, separation, orientation)		
		OB4: Correctly apply ULD tags when applicable		
C3: Load aircraft	Demonstrate ability to correctly load cargo shipments on an aircraft	OB1: Understand how cargo/baggage should be transported to aircraft		
		OB2: Correctly check packages for indications of undeclared dangerous		
		OB3: Correctly check for damage and/or leakage before loading into aircraft		
		OB4: Correctly apply and verify stowage requirements (e.g. segregation, separation, orientation, securing and protecting from damage)		
		OB5: Correctly verify that NOTOC reflects against DG loaded		

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C4 Unload aircraft	Demonstrate ability to correctly unload cargo shipments from an aircraft	OB1: Correctly apply specific unloading considerations		
		OB2: Correctly check packages for indications of undeclared dangerous		
		OB3: Correctly check for damage and/or leakage upon unloading from aircraft		
		OB4: Understand how cargo/baggage is transported from aircraft to facility/terminal		
C5: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents / incidents/ occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur, undeclared/ mis-declared dangerous goods are discovered and other dangerous goods occurrences are identified		

7.6 Template-Summary of design output for (h) Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Process baggage	Demonstrate ability in the identification of forbidden dangerous goods and the application of approval requirements in baggage processing	OB1: Correctly identify forbidden dangerous goods		
		OB2: Correctly apply approval requirements		
C2: Accept baggage	Demonstrate ability to correctly accept baggage	OB1: Correctly apply operator requirements		
		OB2: Correctly verify passenger baggage requirements		
		OB3: Understand the information to be communicated to pilot-in-command		
C3: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incidents/ occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur, undeclared/ mis-declared dangerous goods are discovered and other		

7.7 Template-Summary of design output for (i) Personnel responsible for the planning of aircraft loading

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Plan loading	Demonstrate ability in planning the loading of cargo shipments in accordance with the requirements	OB1: Correctly determine stowage requirements		
		OB2: Correctly determine segregation, separation, aircraft/compartment limitations		
C2: Issue NOTOC	Demonstrate ability to correctly complete the filing of NOTOC and transmit it to loading personnel	OB1: Correctly enter required information		
		OB2: Correctly verify conformance with load plan		
		OB3: Correctly transmit to loading personnel		
C3: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incident / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur, undeclared/ mis-declared dangerous goods are discovered and other dangerous goods occurrences are identified		

7.8 Template-Summary of design output for (j) Flight crew

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Manage DG pre- and during flight	Demonstrate ability to correctly manage dangerous goods before and during flight, and apply appropriate procedures in emergency situations	OB1: Correctly detect presence of dangerous goods, which are not permitted in baggage		
		OB2: Correctly interpret NOTOC		
		OB3: Correctly apply procedures in the event of an emergency		
		OB4: Understand the information to be communicated to flight operations officer / flight dispatcher / air traffic control in the event of an emergency		
		OB5: Understand the information to be communicated to emergency services of the dangerous goods on board in the event of an emergency		
C2: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents / incidents / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur, undeclared/ mis-declared dangerous goods are discovered and other dangerous goods occurrences are identified		

7.9 Template-Summary of design output for (k) Flight operations officers and flight dispatchers

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Manage DG pre- and during flight	Demonstrate ability to correctly manage dangerous goods before and during flight, and apply appropriate procedures in emergency situations	OB1: Correctly detect presence of dangerous goods, which are not permitted in baggage		
		OB2: Correctly interpret NOTOC		
		OB3: Correctly apply procedures in the event of an emergency		
		OB4: Understand the information to be communicated to flight operations officer / flight dispatcher / air traffic control in the event of an emergency		
		OB5: Understand the information to be communicated to emergency services of the dangerous goods on board in the event of an emergency		

7.10 Template-Summary of design output for (I) Cabin crew

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Accept baggage	Demonstrate ability to correctly accept baggage	OB1: Correctly apply operator requirements		
		OB2: Correctly verify passenger baggage requirements		
C2: Manage DG pre- and during flight	Demonstrate ability to correctly manage dangerous goods before and during flight, and apply appropriate procedures during emergency situations	OB1: Correctly detect presence of dangerous goods, which are not permitted in baggage		
		OB2: Correctly apply procedures in the event of an emergency		
C3: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incidents / occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur, undeclared/ mis-declared dangerous goods are discovered and other dangerous goods occurrences are identified		

7.11 Template Summary of design output for (m) Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail

Competency	Description	Summary of design output (for submission to CAAT)		
		Observable behavior (OB)	Relevant parts of submitted materials	
			Assessment	Training
C0: Understanding the basics of dangerous goods	Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures	OB1: Recognize dangerous goods applicability		
		OB2: Understand the general limitations		
		OB3: Identifying role and responsibilities		
		OB4: Understanding the importance of classification & packaging		
		OB5: Understanding hazard communication		
		OB6: Familiarizing with basic emergency response		
C1: Process / accept cargo other than dangerous goods	Demonstrate ability to identify hidden dangerous goods when screening cargo shipments	OB1: Correctly check documentation for indications of undeclared dangerous goods		
		OB2: Correctly identify indications of undeclared dangerous goods from shipment package		
C2: Process baggage	Demonstrate ability to identify forbidden dangerous goods when screening baggage	OB1: Correctly identify forbidden dangerous goods		
		OB2: Correctly apply approval requirements		
C3: Collect safety data	Demonstrate ability and correct attitude when dangerous goods accidents/ incidents/ occurrences are identified	OB1: Understand the differences between dangerous goods accidents/ incidents/ occurrences		
		OB2: Understand the correct emergency responses in case of dangerous goods accidents / incidents		
		OB3: Apply the correct reporting procedures when dangerous goods accidents / incidents occur and when undeclared/ mis-declared dangerous goods are discovered		

8 Appendix E - Sample certificate template

<p>LOGO Company</p> <p>This is to certify that Name Surname has successfully completed</p> <p>Dangerous Goods Regulations Course for Personnel of Operator and Ground Handling Agent Responsible for Processing and Accepting Dangerous Goods Consignment and is competent in elements list below</p> <p>Date of training 1 January 2023 (Expiring on 31 January 2025)</p> <p>List of Competency Element</p> <ol style="list-style-type: none"> 1. Review Dangerous Goods Document 2. Review Packaging, Marks and Labels for Dangerous Goods Consignment 3. Complete Dangerous Goods Acceptance Procedure 4. Safety Data Reporting (Dangerous Goods Occurrence) <p>CAAT Approval: OPS-DG-TIXX-22F Certificate no: XXX-00001</p> <p>Address</p> <p>Signed (Accountable Manager)</p>	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Figure 8: Sample certificate template

9 Appendix F – Training Need Analysis Form for Shipper and Freight Forwarder

LOGO COMPANY

Dangerous Goods (DG) Training Needs Analysis Form for Staff Members of Shippers & Freight Forwarders

Company Name: _____

Training Needs Analysis Record (Please fill in this part)					
Notes:					
1. Each employee may be responsible for a mixture of tasks or be responsible for more than one role (if applicable) shown in Table 1 on the next page.					
2. Employers may substitute a training needs analysis record for each employee with an internal training policy manual (as appropriate), describing the training needs for certain job functions.					
	Name of Employee	Role of Employee (see Table 1)		Name of Employee	Role of Employee (see Table 1)
1.	Mr. Somchai S.	c	11.		
2.	Ms. Beat R.	b, d	12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Roles (see Table 1 for the Task List)

- a — Personnel responsible for preparation of DG consignments
- b — Personnel responsible for processing or accepting goods presented as general cargo
- c — Personnel responsible for processing or accepting DG consignments
- d — Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices

Responsible Person:

(Name)

(Position)

(Phone)

(Email)

(Signature)

Figure 9: Training Need Analysis Form for Shipper and Freight Forwarder (Front)

This table aims to assist employers in conducting Training Needs Analysis for employees. It is for reference only, not required to be filled.

Table 1 Training Needs Analysis Template (well-defined roles with reference to the International Civil Aviation Organization)

Select the most appropriate role(s) for each employee based on the task list below :

Tasks	Roles*			
	a	b	c	d
0. Understanding the basics of dangerous goods	Y	Y	Y	Y
1. Classifying dangerous goods				
1.1 Evaluate substance or article against classification criteria (check if it is DG, and whether forbidden under any circumstances)	Y	-	-	-
1.2 Determine DG description (determine class or division, packing group, UN number, etc.)	Y	-	-	-
1.3 Review special provisions	Y	-	-	-
2. Preparing dangerous goods shipments				
2.1 Assess packing options including quantity limitations (consider limitations, state and operator variations, etc.)	Y	-	-	-
2.2 Apply packing requirements (consider constraints of packing instructions, select appropriate packaging materials, etc.)	Y	-	-	-
2.3 Determine and apply marks and labels	Y	-	-	-
2.4 Assess use of overpacks	Y	-	-	-
2.5 Prepare documentation	Y	-	-	-
3. Processing/accepting cargo				
3.1 Review documentation (i.e. Shipper's Declaration for DG)	-	-	Y	-
3.2 Review packaging, marks & labels	-	-	Y	-
3.3 Conduct and complete DG acceptance procedures	-	-	Y	-
3.4 Process/accept cargo other than DG (check documentation and packages for indications of undeclared DG)	-	Y	-	-
4. Managing cargo pre-loading				
4.1 Plan loading DG cargo (determine segregation, separation, etc. requirements)	-	-	-	Y
4.2 Prepare DG cargo load for aircraft (check packages for indications of undeclared DG, check for damage/leakage, apply ULD tags when applicable, etc.)	-	-	-	Y
7. Collecting safety data (report DG accidents, incidents, undeclared/mis-declared DG & other occurrences)	-	Y	Y	Y

Roles

a — Personnel responsible for preparation of DG consignments

b — Personnel responsible for processing or accepting goods presented as general cargo

c — Personnel responsible for processing or accepting DG consignments

d — Personnel responsible for handling cargo in a warehouse and loading and unloading unit load devices

Figure 10: Training Need Analysis Form for Shipper and Freight Forwarder (Back)

10 Appendix G – Training Need Analysis Form for Operator and Ground Handling Agent

LOGO COMPANY

**Dangerous Goods (DG) Training Needs Analysis Form for Staff
 Members of Aircraft Operators & Ground Handling Agents**

Company Name: _____

Training Needs Analysis Record (Please fill in this part)					
Notes: 1. Each employee may be responsible for a mixture of tasks or be responsible for more than one role (if applicable) shown in Table 1 on the next page. 2. Employers may substitute a training needs analysis record for each employee with an internal training policy manual (as appropriate), describing the training needs for certain job functions.					
	Name of Employee	Role of Employee (see Table 1)		Name of Employee	Role of Employee (see Table 1)
1.	Mr. Somchai S.	f	10.		
2.	Ms. Besties R.	e, g	11.		
3.			12.		
4.			13.		
5.			14.		
6.			15.		
7.			16.		
8.			17.		
9.			18.		

Roles (see Table 1 for the Task List)

- e — Personnel responsible for processing or accepting goods presented as general cargo
- f — Personnel responsible for processing or accepting DG consignments
- g — Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments
- h — Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport
- i — Personnel responsible for the planning of aircraft loading
- j — Flight crew
- k — Flight operations officers and flight dispatchers
- l — Cabin crew
- m — Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail

Responsible Person:

(Name)	(Position)
(Phone)	(Email)
(Signature)	

Figure 11: Training Need Analysis Form for Operator and Ground Handling Agent (Front)

This table aims to assist employers in conducting Training Needs Analysis for employees. It is for reference only, not required to be filled.

Table 1 Training Needs Analysis Template (well-defined roles with reference to the International Civil Aviation Organization)

Select the most appropriate role(s) for each employee based on the task list below :

Tasks	Roles*									
	e	f	g	h	i	j	k	l	m	
0. Understanding the basics of dangerous goods	Y	Y	Y	Y	Y	Y	Y	Y	Y	
3. Processing/accepting cargo										
3.1 Review documentation (i.e. Shipper's Declaration for DG)	-	Y	-	-	-	-	-	-	-	
3.2 Review packaging, marks & labels	-	Y	-	-	-	-	-	-	-	
3.3 Conduct and complete DG acceptance procedures	-	Y	-	-	-	-	-	-	-	
3.4 Process/accept cargo other than DG (check documentation and packages for indications of undeclared DG)	Y	-	-	-	-	-	-	-	Y	
4. Managing cargo pre-loading										
4.1 Plan loading DG cargo (determine segregation, separation, etc. requirements)	-	-	Y	-	Y	-	-	-	-	
4.2 Prepare DG cargo load for aircraft (check packages for indications of undeclared DG, check for damage/leakage, apply ULD tags when applicable, etc.)	-	-	Y	-	-	-	-	-	-	
4.3 Issue NOTOC	-	-	-	-	Y	-	-	-	-	
5. Accepting passenger and crew baggage										
5.1 Process passenger or crew baggage (identify forbidden DG, etc.)	-	-	-	Y	-	-	-	-	Y	
5.2 Accept passenger or crew baggage (verify passenger baggage requirements, notify pilot-in-command, etc.)	-	-	-	Y	-	-	-	Y	-	
6. Transporting cargo/baggage										
6.1 Load aircraft (check for damage and/or leakage, apply segregation and separation requirements, etc.)	-	-	Y	-	-	-	-	-	-	
6.2 Manage DG pre- and during flight (apply procedures in the event of an emergency)	-	-	-	-	-	Y	Y	Y	-	
6.3 Unload aircraft (check for damage and/or leakage, etc.)	-	-	Y	-	-	-	-	-	-	
7. Collecting safety data (report DG accidents, incidents, undeclared/mis-declared DG & other occurrences)	Y	Y	Y	Y	Y	Y	-	Y	Y	

*** Roles**
 e — Personnel responsible for processing or accepting goods presented as general cargo
 f — Personnel responsible for processing or accepting DG consignments
 g — Personnel responsible for handling cargo in a warehouse, loading and unloading unit load devices and loading and unloading aircraft cargo compartments
 h — Personnel responsible for accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport
 i — Personnel responsible for the planning of aircraft loading
 j — Flight crew
 k — Flight operations officers and flight dispatchers
 l — Cabin crew
 m — Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail

Figure 11: Training Need Analysis Form for Operator and Ground Handling Agent (Back)

11 Appendix H - Sample - Training need analysis Form

- ⇒ used for designing the training and assessment programs (outcome). However, the tasks and sub-tasks, and the level of proficiency shown here are only recommendations. Additional training and assessment may be required for personnel assigned with additional responsibilities, and less training and assessment may be needed for personnel assigned with fewer responsibilities than those presented in these lists. Furthermore, some employers may divide the job functions differently, and as a result, they will have a different training specification.

(Operator's job functions) for the transport of DG by air Tasks with reference to ICAO TI /IATA DGR)	Describe operator's job functions role and their responsibilities. (From Operator's manual = Job responsibilities, SOP, Internal procedure to response their job functions)
Remarks Instruction: Operator's job functions reference	Based on the job function described in paragraph 1 and the desired training outcome described in paragraph of this document, the tasks and sub-tasks are identified in the table below. The competency factors are mapped against each of the performance criteria of the sub-tasks. This will provide a good specification to develop the assessment and training plans. In addition, levels of proficiency are defined for each of the performance criteria of the sub-tasks to provide guidance for the course designer and developer to develop suitable contents and assessment methods to verify the competency of the learners. (From Operator's manual = Job responsibility, SOP, Internal procedure to response their job functions)

	Competency Factors			Level of Proficiency
	Knowledge	Skills	Attitude	
Task 0. Understanding the basics of dangerous goods				
Sub Task 0.1 Recognize dangerous goods applicability				
0.1.1 Understand the definition				
0.1.2 Recognize the legal framework (global, Thailand)				
0.1.3 Identify the application and scope				
0.1.4 Differentiate hazard and risk				
Sub Task 0.2 Understand the general limitations				
0.2.1 Develop a sense of forbidden dangerous goods				
0.2.2 Recognize potential hidden dangerous goods				
0.2.3 Familiarize with passenger provision				
Sub Task 0.3 Identifying role and responsibilities				
0.3.1 Clarify the individual and collective role of the supply chain stakeholders				
0.3.2 Understand the passenger's responsibilities				
0.3.3 Recognize the impact of State & operator variations				
Sub Task 0.4 Understanding the importance of classification & packaging				
0.4.1 Identify the general information about classes, divisions				
0.4.2 Understand the general principles of Packing Groups				
0.4.3 Consider multiple hazards				
Sub Task 0.5 Understanding hazard communication				

	Competency Factors			Level of Proficiency
	Knowledge	Skills	Attitude	
0.5.1 Recognize the basic marking requirement				
0.5.2 Recognize the basic labelling requirement				
0.5.3 Identify the required documentation				
Sub Task 0.6 Familiarizing with basic emergency response				
0.6.1 Create awareness about general emergency procedure				
0.6.2 Understand the organizer's emergency response requirement				
Task 1. Classifying DG				
Sub Task 1.1 Evaluate substance or article against classification criteria				
1.1.1 Determine if it is dangerous goods				
1.1.2 Determine if it is forbidden under any circumstances				
Sub Task 1.2 Determine DG description				
1.2.1 Determine class or division				
1.2.2 Determine packing group				
1.2.3 Determine proper shipping name and UN number				
1.2.4 Determine if it is forbidden unless approval or exemption is granted				
Sub Task 1.3 Review special provisions				
1.3.1 Assess if special provision(s) is applicable				
1.3.2 Apply special provision(s)				
Task 2. Preparing DG shipment				
Sub Task 2.1 Assess packing options including quantity				
2.1.1 Consider limitations (de minimis quantities, excepted quantities, limited quantities, passenger aircraft, cargo aircraft only, special provisions, dangerous goods in the mail)				
2.1.2 Consider State and operator variations				
2.1.3 Determine if all-packed-in-one can be used				
2.1.4 Select how dangerous goods will be shipped based on limitations and variations				
Sub Task 2.2 Apply packing requirements				
2.2.1 Consider constraints of packing instructions				
2.2.2 Identify and follow the instructions provided by the packaging manufacturer when UN specification packaging is used				
2.2.3 Select appropriate packaging materials (absorbent, cushioning, etc.)				
2.2.4 Assemble package				
Sub Task 2.3 Apply marks and labels				
2.3.1 Determine applicable marks				

	Competency Factors			Level of Proficiency
	Knowledge	Skills	Attitude	
2.3.2 Apply marks				
2.3.3 Determine applicable labels				
2.3.4 Apply labels				
Sub Task 2.4 Assess use of overpack				
2.4.1 Determine if overpack can be used				
2.4.2 Apply marks if necessary				
2.4.3 Apply labels if necessary				
Sub Task 2.5 Prepare documentation				
2.5.1 Complete the dangerous goods transport document (DGD)				
2.5.2 Complete other transport documents (e.g. air waybill)				
2.5.3 Include other required documentation (approvals/exemptions, etc.)				
2.5.4 Retain copies of documents as required				
Task 3. Processing/accepting cargo				
Sub Task 3.1 Review documentation				
3.1.1 Verify dangerous goods transport document (DGD)				
3.1.2 Verify other transport documents (e.g. air waybill)				
3.1.3 Verify other documents (exemptions, approvals, etc.)				
3.1.4 Verify State/operator variations				
Sub Task 3.2 Review packaging, marks & labels				
3.2.1 Verify marks				
3.2.2 Verify labels				
3.2.3 Verify packaging type				
3.2.4 Verify package conditions				
3.2.5 Verify State/operator variations				
Sub Task 3.3 Complete acceptance procedures				
3.3.1 Complete acceptance checklist				
3.3.2 Provide shipment information for load planning				
3.3.3 Retain documents as required load planning				
Sub Task 3.4 Process/accept cargo other than DG				
3.4.1 Check documentation for indications of hidden/undeclared dangerous goods				
3.4.2 Check packages for indications of hidden/undeclared dangerous goods				
Task 4. Managing cargo pre-loading				
Sub Task 4.1 Plan loading				

	Competency Factors			Level of Proficiency
	Knowledge	Skills	Attitude	
4.1.1 Determine stowage requirements				
4.1.2 Determine segregation, separation, aircraft/compartment limitations				
Sub Task 4.2 Prepare load for aircraft				
4.2.1 Check packages for indications of hidden/undeclared dangerous goods				
4.2.2 Check for damage and/or leakage				
4.2.3 Apply stowage requirements (e.g. segregation, separation, orientation, securing and protecting from damage)				
4.2.4 Apply ULD tags when applicable				
4.2.5 Transport cargo to aircraft				
Sub Task 4.3 Issue NOTOC				
4.3.1 Enter required information				
4.3.2 Verify conformance with load plan				
4.3.3 Transmit to loading personnel				
Task 5. Accepting passenger and crew baggage				
Sub Task 5.1 Process baggage				
5.1.1 Identify forbidden dangerous goods				
5.1.2 Apply approval requirements				
Sub Task 5.2 Accept baggage				
5.2.1 Apply operator requirements				
5.2.2 Verify passenger baggage requirements				
5.2.3 Advise pilot-in-command				
Task 6. Transporting cargo/baggage				
Sub Task 6.1 Load aircraft				
6.1.1 Transport cargo/baggage to aircraft				
6.1.2 Check packages for indications of undeclared dangerous goods				
6.1.3 Check for damage and/or leakage				
6.1.4 Apply stowage requirements (e.g. segregation, separation, orientation, securing and protecting from damage)				
6.1.5 Verify that NOTOC reflects against aircraft load				
6.1.6 Provide NOTOC information to pilot-in-command and flight operations officer/flight dispatcher				
Sub Task 6.2 Manage DG pre- and during flight				
6.2.1 Detect presence of dangerous goods not permitted in baggage				
6.2.2 Interpret NOTOC				

	Competency Factors			Level of Proficiency
	Knowledge	Skills	Attitude	
6.2.3 Apply procedures in the event of an emergency				
6.2.4 Inform flight operations officer/flight dispatcher/air traffic control in the event of an emergency				
6.2.5 Inform emergency services of the dangerous goods on board in the event of an emergency				
Sub Task 6.3 Unload aircraft				
6.3.1 Apply specific unloading considerations				
6.3.2 Check packages for indications of undeclared dangerous goods				
6.3.3 Check for damage and/or leakage				
6.3.4 Transport cargo/baggage to facility/terminal				
Task 7. Collecting safety data				
Sub Task 7.1 Report DG accidents				
Sub Task 7.2 Report DG incidents				
Sub Task 7.3 Report undeclared/mis-declared DG				
Sub Task 7.4 Report DG occurrences				

Remarks instruction

Levels of Proficiency

Introductory (*): covers general knowledge or understanding of basic concepts and techniques.

Basic (**): delivers competency that is sufficient for an individual to carry out simple work activities, most of it routine and predictable. Guidance or assistance from an expert may be required from time to time.

Intermediate (***): comprises of complex or critical activities, in a non-routine context, which enables a person to work autonomously and solve problems without special assistance.

Advanced (****): covers complex technical and professional activities in a wide variety of contexts, which allows the personnel to provide advice. Dangerous goods training course instructors should have acquired, this level of proficiency on the tasks or functions that they will instruct prior to delivering such course(s).

12 Appendix I - Example - Training Needs Analysis Assessment

According to the Table below;

Example for completing the Training Needs Analysis Assessment form.

Job Function	Task	Sub Task	Knowledge	Skills	Attitude	Level of Proficiency
(Please specific job function)	TASK 0 Understanding the basic of dangerous goods	Understand the definition	Describe the definition of Dangerous Goods	recognize the definition of Dangerous Goods	Driven to ensure safety and compliance with applicable regulations Committed to be well verse on Dangerous Goods Regulations by engaging in group discussions and asking relevant and effective questions Positive Mindset	*
		Recognize Legal Framework	Describe the basis of the regulations Describe the regulations on transporting Dangerous Goods Describe the regulations on Dangerous Goods reporting	recognize and explain the Dangerous Goods Regulations of IATA and local authority.		*
		Identify the application and scope	Describe the difference between Approvals, Exemptions, and Exceptions	recognize the requirements between Approvals, Exemptions, and Exceptions		*
		Differentiate hazard and risk	State the definition of Hazard and risk	recognize to distinguish between hazard and risk on dangerous goods		*
		Develop a sense of hidden dangerous goods	State the definition of hidden dangerous goods	recognize to potential hidden dangerous goods on a general description		*
		Recognize potential hidden dangerous goods	List the types of dangerous articles and substances that may be present in items with a general description	recognize dangerous articles and substances in items with a general description		*
		Familiarize with passenger provisions	Understand the requirement of the items that permitted to be carried by passengers and crew what is prohibited	recognize use IATA Table 2.3A Provision for dangerous goods carried by passengers and crews to identify which items are prohibited and which items are allowed in baggage		*

Job Function	Task	Sub Task	Knowledge	Skills	Attitude	Level of Proficiency
		Clarify the individual and collective role of the supply chain stakeholders	Describe the responsibilities of the Shipper and Operator and Handling Provider	recognize to distinguish the responsibilities of Shippers, Operators and Handling Provider Agents working on behalf of the operator.		*
		Understand the passenger responsibilities	Describe the responsibilities of the Passenger	recognize to distinguish the responsibilities of the Passenger		*
		Recognize the impact of State and Operator Variations	Locate the State and Operator Variations	recognize operator variations of the operator and able locate and apply the correct variations		*
		Identify the general information about classes and divisions	Identify and describe the different classes and divisions	recognize dangerous goods into their class or division based on their properties and characteristics		*
		Recognize basic marking requirements	State the basic requirement of marking	recognize and identify marking correctly		*
		Recognize basic labelling requirements	State the basic requirement of labelling	recognize and identify hazards and handling labels correctly		*
		Identify the required documentation	State the basic requirement of documentation	recognize to identify the dangerous goods transportation documentation correctly		*
		Create awareness about general emergency procedures	Locate the emergency procedures	recognize to describe the emergency procedures in accordance with the operator's Emergency Response Plan.		*
		Understand the employer's emergency response requirements	Locate the emergency procedure of the employer	recognize to describe the employer's activities		*

Job Function	Task	Sub Task	Knowledge	Skills	Attitude	Level of Proficiency
	Task 6 Transporting Baggage and cargo	6.2.2 Interpret NOTOC	Describe the general requirement for the Provision of Information to the Pilot-in-Command	interpret the dangerous goods information that appears in NOTOC correctly.	Driven to ensure safety and compliance with applicable	***
		6.2.3 Apply the procedures in the event of an emergency	To know the procedure in the event of an emergency in Case of an Aircraft Accident or Incident in accordance with ERP.	able to explain the procedure event of an emergency in Case of an Aircraft Accident or Incident Able to provide dangerous goods information to emergency services/air traffic control, and airport authorities in accordance with Incident Reporting, Escalation, assessment, and notification procedures in ERP.	regulations Committed to be well verse on Dangerous Goods Regulations by engaging in group discussions and asking relevant and effective questions Positive Mindset	***
		6.2.4 Inform the flight operations officer/flight dispatcher/air traffic control in the event of an emergency	To know the requirement and procedure for; Information by the Pilot-in- Command in Case of In- Flight Emergency Information by Operator in Case of an Aircraft Accident or Incident			***
		6.2.5 Inform emergency services of the dangerous goods on the NOTOC in the event of an emergency				***

13 Appendix J - Sample - Training Plan

TRAINING PLAN	
Course Title	Dangerous Goods Regulations for Flight Dispatchers
Course Objective	By the end of training the personnel responsible for Flight Dispatchers is able to explain and decode the dangerous goods information that appears in NOTOC as well as they will know the procedure to provide dangerous goods information to emergency services/air traffic control, and airport authorities in accordance with Incident Reporting, Escalation, assessment, and notification procedures in ERP.
Who should attend	Personnel Responsible for Flight Dispatchers
Training Duration	Self-Study 5 Days before class commencement Classroom 3 Hours 30 min
Training Material	<ul style="list-style-type: none"> • Presentation Slide; • Video; • ICAO TI 2023-2024 Edition with Addendum; • IATA DGR 64th Edition with addendum); • Handout; • Incident Reporting, Escalation, assessment, and notification Flowchart; • Dangerous Goods Manual
Assessment Material	<ul style="list-style-type: none"> • Exercises book • Final Examination paper

Training Schedule	
Time	Topics
0900hrs-1030hrs	<p>Recap</p> <ul style="list-style-type: none"> • Introduction • Scope and applicability; • General Limitations; • Roles and Responsibilities; • General information about classes, Divisions • Marking and Labelling • Documentation • Basic emergency Response
1030hrs - 1045hrs	Break
1045hrs -1200hrs	<ul style="list-style-type: none"> • Provision information to Captain (NOTOC) • Information by the Pilot-in-Command in Case of In- Flight Emergency • Information by Operator in Case of an Aircraft Accident or Incident
1200hrs - 1300hrs	Lunch Break
1300hrs - 1330hrs	Review Exercises book
1330hrs - 1400hrs	Final Assessment

14 Appendix K – Sample – Lesson plan

LESSON PLAN	
Dangerous Goods Regulations for Flight Dispatchers	
COURSE OBJECTIVES	<p>By the end of this Course the participants will be able to:</p> <ul style="list-style-type: none"> ➤ Identify dangerous goods correctly; ➤ Identify hidden dangerous goods; ➤ Recognize the hazard and handling labels correctly and their purpose; ➤ Understand the provision for dangerous goods carried by passengers and crews; ➤ Understand the 9 classes and divisions of dangerous goods correctly ➤ Identify and interpret NOTOC correctly ➤ Understand the procedure in the event of an emergency in Case of an Aircraft Accident or Incident in accordance with ERP ➤ The flight dispatcher is able to provide dangerous goods information to emergency services/air traffic control, and airport authorities within required timeframe in accordance with Incident Reporting, Escalation, assessment, and notification procedures in ERP.

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
Introductions				
<ul style="list-style-type: none"> Introduction 	<ul style="list-style-type: none"> Announce the name of the course Instructor name and experiences Course Objective Announce the duration of the course, and the location of facilities (restrooms, breaks, emergency procedures, etc.) Describe how the class will be conducted. 	N/A	<ul style="list-style-type: none"> PPT 1-5 Announce by Instructor 	10 MIN
Scope and Applicability				
<ul style="list-style-type: none"> Reference to specific dangerous goods accidents Reference to law and source documents General Philosophy Definition of Dangerous Good Basic of Regulation Approvals and Exemptions Dangerous Goods Training Requirement Applicability, General and Scope Differentiate between Hazard and Risk Review Exercise 	<ul style="list-style-type: none"> Show video on UPS, FLIGHT 1307 to specific dangerous goods accidents, supplemented by reference to dangerous goods incidents, can aid such understanding Present the Technical Instructions and any other reference material used (e.g. the IATA Dangerous Goods Regulations, Dangerous Goods Manual, Incident Reporting, Escalation, assessment, and notification Flowchart) including the local regulation and requirement. Explain the General Philosophy in the transportation of dangerous goods. Explain Definition of dangerous goods and Ask participants to give examples of dangerous good Show how ICAO provisions are derived from UN subCoE on the transport of DG and IAEA Explain the requirements of approvals and Exemptions on dangerous goods from the States concerned in order to be carried. General Training Requirement for flight dispatchers Explain Recurrent Training and Assessment Requirement and Training Record Requirement CBTA is to flight dispatchers' personnel Explain the general requirement for Applicability, General and Scope Point out the different between risk and hazard and consequent Review Exercise "Scope and Applicability Chapter" 	<ul style="list-style-type: none"> Videos GENERAL PHILOSOPHY DGR 1.0 DGR Appendix A DGR 1.1 DGR 1.2.5 DGR 1.2.6 DGR 1.5 DGR 1.2.1, 1.2.3, 1.2.4 N/A N/A 	<ul style="list-style-type: none"> PPT 7 ICAO TI Edition 2023-2024 IATA DGR edition 64th Addendum (DGR and TI) PPT 8 PPT 9 PPT 10 PPT 10-13 PPT 14 PPT 15-16 PPT 19-21 PPT 17-18 Exercise Book 	15 MIN

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
General Limitations				
<ul style="list-style-type: none"> Dangerous Goods Forbidden in Aircraft Under Any Circumstances Dangerous Goods Forbidden Unless Exempted Dangerous Goods in the operator's properties 	<ul style="list-style-type: none"> Explain what is dangerous goods forbidden to transport in aircraft under any circumstances and how to identify Explain what is Dangerous Goods Forbidden Unless Exempted Explain what is Airworthiness and operating items, and explains the requirements and that there is the danger such items may be sent undeclared. Also, portable electronic devices containing lithium metal or lithium ion cells or batteries are allowed to be carried for EFB and use or sale on the aircraft (POS). 	<ul style="list-style-type: none"> - DGR 2.1.1 - DGR 2.1.2 - DGR 2.5 	<ul style="list-style-type: none"> - PPT 23-24 - PPT 25 - PPT 26 	15 MIN
<ul style="list-style-type: none"> Hidden Dangerous Goods 	<ul style="list-style-type: none"> Recognize the potential hidden dangerous goods. Ask question to participant to identify the dangerous goods. Provide examples of visual indications such as product-related images and text on packages 	<ul style="list-style-type: none"> - DGR 2.2 	<ul style="list-style-type: none"> - PPT 27-28 	
<ul style="list-style-type: none"> Awareness of consumer warning labels 	<ul style="list-style-type: none"> Some everyday household items bear consumer warning labels which may or may not indicate they are classified as dangerous goods in air transport. Depictions of GHS and any other relevant labelling together with an indication of the likely associated transport classification. 	<ul style="list-style-type: none"> -DGR APP B.4 	<ul style="list-style-type: none"> - PPT 29 	
<ul style="list-style-type: none"> Dangerous Goods Carried by Passenger and crews 	<ul style="list-style-type: none"> The Dangerous Goods Regulations forbid the carriage of dangerous goods by passengers and crew with specific exceptions. For those that are permitted, conditions may apply and some may only be carried with the approval of the operator. Provides the information necessary to enable staff to recognize such dangerous goods and to know which conditions or operator's policies apply to their carriage 	<ul style="list-style-type: none"> -DGR Table 2.3A 	<ul style="list-style-type: none"> - PPT 30-31 	
<ul style="list-style-type: none"> Review Exercise 	<ul style="list-style-type: none"> Review Exercise "General Limitations Chapter" 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> - Exercise Book 	

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
Identifying Roles and Responsibility				
<ul style="list-style-type: none"> Operator's Responsibilities Shipper's Responsibilities Passenger's Responsibilities State and operator variations 	<ul style="list-style-type: none"> Explain what is the responsibility for operator's and ground handling agent Explain what is the responsibility for shipper Explain what is the responsibility for passenger Ask question to participants to identify responsibilities between operator and shipper correctly States and operators can place additional restrictions on the carriage of dangerous goods by air. These are known as State and operator variations. explains these provisions and highlights any variations relevant to the operator. 	<ul style="list-style-type: none"> - DGR 1.4 - DGR 1.3 - DGR 1.4.3.1 - DGR 2.8 	<ul style="list-style-type: none"> - PPT 33-34 - PPT 35 - PPT 36 - PPT 37 	10 MIN
Review Exercise	Review Exercise "Identifying and Responsibility"	N/A	- Exercise Book	
General information about classes, Divisions				
<ul style="list-style-type: none"> Classes of Dangerous Goods 	<ul style="list-style-type: none"> The nine classes and divisions of dangerous goods are outlined. It will explain that generic classes and divisions and give the question to participants that the products such as paint may or may not be classified as dangerous goods depending upon the characteristics of the specific product. 	<ul style="list-style-type: none"> - DGR 3.0.2 	<ul style="list-style-type: none"> -PPT 39-49 	15 MIN
Review Exercise	Review Exercise "General information about Classes and Divisions"	N/A	- Exercise Book	
Marking and Labelling				
<ul style="list-style-type: none"> Markings on packages Labels on packages 	<ul style="list-style-type: none"> There are prescribed markings for packages to identify their contents and for other purposes, such as the UN number, proper shipping name, UN specification markings and Limited Quantity markings etc. Labels are required on packages of dangerous goods both to identify the hazard of the contents (e.g. in the event of leakage from or damage to packages) and to aid handling. Asking to participants to identify the hazard label classes/divisions and recognize the handling labels 	<ul style="list-style-type: none"> - DGR - DGR 7.3 - DGR 7.4 	<ul style="list-style-type: none"> - PPT 51-55 - PPT 56-60 	10 MIN
Review Exercise	Review Exercise "Marking and Labelling"	N/A	- Exercise Book	

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
Documentation				
<ul style="list-style-type: none"> Dangerous Goods transport document and other relevant documents <p>Review Exercise</p>	<ul style="list-style-type: none"> Dangerous goods bearing a hazard label (other than consignments solely of dry ice and some lithium battery consignments) are required to be accompanied by a dangerous goods transport document, commonly known as the 'Shipper's Declaration'. Review Exercise "Documentation" 	<p>- DGR 8.1.9</p> <p>N/A</p>	<p>- PPT 62-63</p> <p>- Exercise Book</p>	5 MIN
Emergency Response				
<ul style="list-style-type: none"> Actions to be taken in the event of incidents/accidents <p>Review Exercise</p>	<ul style="list-style-type: none"> There is the possibility of a passenger having forbidden dangerous goods, or even goods they are permitted to have, which cause an incident on the ground or in flight. There is also the possibility that an incident may arise in cargo and be caused by or involve dangerous goods. Provide the general procedures for dealing with these eventualities Asking participants to explain local procedures for emergencies on the ground. Review Exercise "Emergency Response" 	<p>- DGR 9.5.1.2</p> <p>N/A</p>	<p>- DGM XX</p> <p>- ERP XX</p> <p>- SOP XX</p> <p>Exercise Book</p>	10 MIN
Provision information to Captain (NOTOC)				

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
<ul style="list-style-type: none"> Requirement for a NOTOC 	<ul style="list-style-type: none"> - Dangerous goods (with some exceptions) carried as cargo or stores, must be notified to the pilot-in-command in written (or electronic) form primarily for use in the event of an emergency. Personnel with responsibilities for operational control of the aircraft (e.g. the flight operations officer, flight dispatcher, or designated ground personnel responsible for flight operations) must also be provided with the same information that is required to be provided to the pilot-in-command 	- DGR 9.5.1	- PPT 68-71	30 MIN
<ul style="list-style-type: none"> Understanding and interpreting the NOTOC 	<ul style="list-style-type: none"> - Achieve through the use of a document commonly referred to as a Notification to Commander (NOTOC). - The main details on a NOTOC are the proper shipping name, the UN number (the technical name (s) shown on the dangerous goods transport document is not required), the class or division, the subsidiary risk, the packing group, the number of packages and the exact loading location and the net or gross mass of each package. For radioactive material, the Transport Index must also be stated. A phone number of a location from where full details of the NOTOC information can be obtained may be stated on the NOTOC if the operator intends the pilot-in-command to provide this number to ATC in the event of an in-flight emergency - depicts the NOTOC used by the operator and explains its contents. 	<ul style="list-style-type: none"> - DGR 9.5.1.1.3 - DGR 9.5.1.1.3.3 	-PPT 72	
<ul style="list-style-type: none"> Accessibility of NOTOC 	<ul style="list-style-type: none"> - A legible copy must be retained on the ground and must be readily accessible to the flight dispatcher until after the arrival of the flight. - Explain the requirement to the participants - Review Exercise "Provision information to Captain (NOTOC)" 	<ul style="list-style-type: none"> -DGR 9.5.1.1.9 <p>N/A</p>	<ul style="list-style-type: none"> -PPT 73 <p>EXERCISE BOOK</p>	
Review Exercise				

TOPIC/CONTENT	ACTIVITY / EMPHASIS	DGR REFERENCE	TEACHING AIDS	DURATION
Information by the Pilot-in-Command in Case of In-Flight Emergency				
<ul style="list-style-type: none"> Information to be provided by the pilot-in-command in case of in-flight emergency <p>Review Exercise</p>	<ul style="list-style-type: none"> In the event of an in-flight emergency which may or may not be caused by dangerous goods, as soon as the situation permits, specific information about the dangerous goods carried as cargo must be provided to ATC for the information of aerodrome authorities Explain the policy and procedures for emergency response actions, including the policy on transmission of information to ATC Review Exercise "Information by the Pilot-in- Command in Case of In-Flight Emergency" 	- DGR 9.5.1.3	-PPT 74-75 EXERCISE BOOK	15 MIN
Information by Operator in Case of an Aircraft Accident or Incident				
<ul style="list-style-type: none"> Information by Operator in Case of an Aircraft Accident or Incident Incident Reporting, Escalation, assessment, and notification procedures involving dangerous goods in ERP. <p>Review Exercise</p>	<ul style="list-style-type: none"> This is the responsibility of flight dispatcher which is assigned by company to provide information without delay, to emergency service responding to accident or serious incidents about dangerous goods on board the aircraft Explain the procedures for Incident Reporting, Escalation, assessment, and notification involving dangerous goods in ERP. <p>Review Exercise "Information by Operator in Case of an Aircraft Accident or Incident"</p>	- DGR 9.6.3	-PPT 76-79 EXERCISE BOOK	30 MIN
FINAL ASSESSMENT AT THE END OF COURSE			60 MINUTES	
<p>The participants will be given a written exam as follows:</p> <ul style="list-style-type: none"> - During training formative assessment - 40% - End of training summative written assessment - 60% 				

Intentionally Left Blank