香港特別行政區政府
**民航處**
**Civil Aviation Department**
The Government of the Hong Kong Special Administrative Region

# Guidance on adopting Competency-based approach to dangerous goods training and assessment

1. 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 employees 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.

2. The DG training framework for Hong Kong and the corresponding application forms for Approval of DG Training Programmes are designed to align to the aforementioned requirements. Employers need to ensure that DG training provided to employees 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 programmes 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.

3. 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 CAD. 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 DG Training and Assessment in Hong Kong, which was published by the CAD in April 2021.

4. This guidance will go into the details of the preparation, design and development of CBTA (i.e. mainly workflows/phases 1-3 from ICAO Doc 10147) 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 employers.

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

6. According to ICAO Doc 10147, 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.

7. 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 behaviours that mobilize/make use of the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

**Workflow/Phase 1 – Analysing Training Needs**

8. Before a training programme is developed, the training needs of the intended trainees have to be analysed. This is generally applicable to the organizer of a DG training programme, be it the employers or as a third party training provider.

9. The CAD has adapted the well-defined roles in the aviation industry with reference to ICAO Doc 10147 who typically perform the seven categories of tasks in paragraph 10, and thus have a role to play in the transport of cargo, passengers and baggage by air:

   *Shippers and staff members of freight forwarders or sub-contractors*
   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 members 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.

10. 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.

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

Expected documents to be submitted:
- Brief description of the type of personnel to be trained, and the list of relevant tasks intended to be addressed by the DG training programme. *(**Note: For CAD assessment purpose, this item can be combined into a summary of design output of the expected documents to be submitted from Workflow/Phase 2**)*

**Workflow/Phase 2 – Designing and Planning for the training programme**

12. The second workflow/phase in the CBTA framework is the design and plan, by taking into account the training needs analysis from Workflow/Phase 1.

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

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

*Adapting a competency model*

14. A competency model for a role may vary depending on the needs and operating environment of an organization, and should include the following elements:

    a) The list of competencies/capabilities required for the role
       i) The list of competencies/capabilities may be developed using the task list that was identified from Workflow/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.

    b) Performance criteria for assessing each competency/capability
       i) Each competency/capability is associated with a list of observable behaviours, 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 behaviours will contribute to achieving a competency/capability.
       iii) An example of an observable behavior may require a candidate to successfully perform a smaller sub-task within a group of tasks.

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

*Designing an assessment plan*

16. A trainee'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.

17. Details of an assessment plan may include:
    a) The list of assessments required for each of the competencies/capabilities defined;
    b) When assessments should take place;
    c) The tools to be used to collect evidence during practical assessment (where applicable);
    d) The pass marks for projects, examinations, or oral assessments; and
    e) The number of observations required to assess performance for the competency standards.

*Designing a training plan*

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

19. The purpose of 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.

> Expected documents to be submitted:
> - A summary of design output (for CAD assessment purpose) i.e. List of tasks to be addressed, and for each task make reference to the corresponding parts of training and assessment materials *(See Appendix II for example templates)*, and
> - Training course outline (e.g. delivery format, tools to be used, assessment methods and duration).

**Workflow/Phase 3 – Developing the training and assessment materials**

20. Development of training and assessment materials is based on the resulting adapted competency model and the assessment and training plans from Workflow/Phase 2. It is important to validate development against the analysis and design workflows/phases and it must suitably address the list of tasks identified from the training needs analysis.

21. Examples of such materials may include training notes, exercise briefings, practical exercises, case studies, presentations, video clips, self-test quizzes, examinations, assessments and assessment tools.

> Expected documents to be submitted:
> - Training materials (e.g. presentations, exercises, photos of training tools (where applicable)), and
> - Assessment materials (e.g. quizzes, examinations, illustration/description of how assessment tools are used) with answers where applicable.

**Course evaluation**

22. 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 trainees 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.

> Expected document to be submitted:
> - Course evaluation form

**Training and assessment records (Certificates)**

23. 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 other information that identifies the organization providing the training and assessment (such as registered address); and
    e) Evidence which shows that the personnel have been assessed as competent.

24. 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.

25. 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.

> Expected document to be submitted:
> - Sample certificate (training and assessment records) *(**See Appendix III for example template**)*

**List of instructors and their qualifications**

26. 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.

27. 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.

28. This part should be read in conjunction with DG Advisory Circular 2/2022. (https://www.cad.gov.hk/english/DGAC/DGAC2_2022.pdf)

> Expected documents to be submitted:
> - List of DG training instructors
> - For each instructor:
>   i. Either:
>      - Qualification that demonstrate competence in the function(s) they will instruct (see DG Advisory Circular 2/2022), or
>      - Course delivery record of CAD approved DG training programmes in the past 24 months,
>
>      and
>
>   ii. Qualification on instructional techniques (i.e. ICAO/ IATA course for instructors or on instructional techniques, or equivalent)

**Provision of information to the public (applicable to third party training providers)**

29. Under the CBTA framework, the **employer** is ultimately accountable for the DG training programme for their employees. As a result, contrary to the categorization approach to DG training, employers have additional responsibilities to conduct training needs analysis and maintain training and assessment records for their employees.

30. In Hong Kong, many employers delegate to third party training providers to fulfil their responsibilities in providing DG training to their employees. In the case under the CBTA framework, when employers look for a suitable DG training programme, it is therefore important that compatible information will be made available by third party training providers so that employers are able to verify the compatibility of the programme with the results of their employees' training needs analysis. Such information can be published by the third party training providers on their websites or distributed by other media before enrolment.

31. An example of compatible information to be made available can be a summary result of training needs analysis conducted during the design phase of the DG training programme. At the minimum, this information should include a description of the type of personnel to be trained, the list of tasks to be addressed by the training (i.e. competency elements), and the duration of the DG training. It is also important that the qualification(s) and certificate(s) that trainees will obtain upon completion of the DG training are clearly communicated, especially for courses that are designed for multiple roles, and when more than one certificate may be issued.

32. The CAD has provided an example template to assist employers 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 Hong Kong. Third party training providers can make reference to this template in order to enhance compatibility when considering how their compatible information is made available to the public.

Links to CAD Training Needs Analysis form templates:

Shippers and staff of freight forwarders:
https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template(Shipper_FF).docx

Staff of aircraft operator and handling agents:
https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template(Operator_GHA).docx

**Appendix I**

| Table 1: Adapted DG task list by well-defined roles | Shipper | Freight forwarder | | | Aircraft operator and ground handling agent | | | | | | | | Security agent |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Well-defined roles for the transport of DG by air with reference to ICAO TI / IATA DGR**<br>Tasks | a | b | c | d | e | f | g | h | i | j | k | l | m |
| **0. General awareness and Safety training** | | | | | | | | | | | | | |
| 0.1 Understand the definition of DG, the scope and applicability for air transport in Hong Kong | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 0.2 Understand the roles and responsibilities of stakeholders | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 0.3 Understand the basics of DG Classification, Labels, Marks, Packaging and Documentation | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 0.4 Understand the general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 0.5 Safety training (including emergency response) | x | x | x | x | x | x | x | x | x | x | x | x | x |
| **1. Classifying DG** | | | | | | | | | | | | | |
| 1.1 Evaluate substance or article against classification criteria | | | | | | | | | | | | | |
|     1.1.1 Determine if it is dangerous goods | x | | | | | | | | | | | | |
|     1.1.2 Determine if it is forbidden under any circumstances | x | | | | | | | | | | | | |
| 1.2 Determine DG description | | | | | | | | | | | | | |
|     1.2.1 Determine class or division | x | | | | | | | | | | | | |
|     1.2.2 Determine packing group | x | | | | | | | | | | | | |
|     1.2.3 Determine proper shipping name and UN number | x | | | | | | | | | | | | |
|     1.2.4 Determine if it is forbidden unless approval or exemption is granted | x | | | | | | | | | | | | |
| 1.3 Review special provisions | | | | | | | | | | | | | |
|     1.3.1 Assess if special provision(s) is applicable | x | | | | | | | | | | | | |
|     1.3.2 Apply special provision(s) | x | | | | | | | | | | | | |
| **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) | x | | | | | | | | | | | | |
|     2.1.2 Consider State and operator variations | x | | | | | | | | | | | | |
|     2.1.3 Determine if all-packed-in-one can be used | x | | | | | | | | | | | | |
|     2.1.4 Select how dangerous goods will be shipped based on limitations and variations | x | | | | | | | | | | | | |
| 2.2 Apply packing requirements | | | | | | | | | | | | | |
|     2.2.1 Consider constraints of packing instructions | x | | | | | | | | | | | | |
|     2.2.2 Identify and follow the instructions provided by the packaging manufacturer when UN specification packaging is used | x | | | | | | | | | | | | |
|     2.2.3 Select appropriate packaging materials (absorbent, cushioning, etc.) | x | | | | | | | | | | | | |
|     2.2.4 Assemble package | x | | | | | | | | | | | | |
| 2.3 Apply marks and labels | | | | | | | | | | | | | |
|     2.3.1 Determine applicable marks | x | | | | | | | | | | | | |
|     2.3.2 Apply marks | x | | | | | | | | | | | | |
|     2.3.3 Determine applicable labels | x | | | | | | | | | | | | |
|     2.3.4 Apply labels | x | | | | | | | | | | | | |
| 2.4 Assess use of overpack | | | | | | | | | | | | | |
|     2.4.1 Determine if overpack can be used | x | | | | | | | | | | | | |
|     2.4.2 Apply marks if necessary | x | | | | | | | | | | | | |
|     2.4.3 Apply labels if necessary | x | | | | | | | | | | | | |
| 2.5 Prepare documentation | | | | | | | | | | | | | |
|     2.5.1 Complete the dangerous goods transport document (DGD) | x | | | | | | | | | | | | |
|     2.5.2 Complete other transport documents (e.g. air waybill) | x | | | | | | | | | | | | |
|     2.5.3 Include other required documentation (approvals/exemptions, etc.) | x | | | | | | | | | | | | |
|     2.5.4 Retain copies of documents as required | x | | | | | | | | | | | | |
| **3. Processing/accepting cargo** | | | | | | | | | | | | | |
| 3.1 Review documentation | | | | | | | | | | | | | |
|     3.1.1 Verify dangerous goods transport document (DGD) | | | x | | | x | | | | | | | |
|     3.1.2 Verify other transport documents (e.g. air waybill) | | | x | | | x | | | | | | | |
|     3.1.3 Verify other documents (exemptions, approvals, etc.) | | | x | | | x | | | | | | | |
|     3.1.4 Verify State/operator variations | | | x | | | x | | | | | | | |
| 3.2 Review packaging, marks & labels | | | | | | | | | | | | | |
|     3.2.1 Verify marks | | | x | | | x | | | | | | | |
|     3.2.2 Verify labels | | | x | | | x | | | | | | | |
|     3.2.3 Verify packaging type | | | x | | | x | | | | | | | |
|     3.2.4 Verify package conditions | | | x | | | x | | | | | | | |
|     3.2.5 Verify State/operator variations | | | x | | | x | | | | | | | |

| Tasks / Well-defined roles for the transport of DG by air with reference to ICAO TI / IATA DGR | Shipper | Freight forwarder | | | Aircraft operator and ground handling agent | | | | | | | | Security agent |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | g | h | i | j | k | l | m |
| **3.3 Complete acceptance procedures** | | | | | | | | | | | | | |
| 3.3.1 Complete acceptance checklist | | | x | | | x | | | | | | | |
| 3.3.2 Provide shipment information for load planning | | | x | | | x | | | | | | | |
| 3.3.3 Retain documents as required | | | x | | | x | | | | | | | |
| **3.4 Process/accept cargo other than DG** | | | | | | | | | | | | | |
| 3.4.1 Check documentation for indications of undeclared dangerous goods | | x | | | x | | | | | | | | x |
| 3.4.2 Check packages for indications of undeclared dangerous goods | | x | | | x | | | | | | | | x |
| **4. Managing cargo pre loading** | | | | | | | | | | | | | |
| **4.1 Plan loading** | | | | | | | | | | | | | |
| 4.1.1 Determine stowage requirements | | | | x | | | x | | x | | | | |
| 4.1.2 Determine segregation, separation, aircraft/compartment limitations | | | | x | | | x | | x | | | | |
| **4.2 Prepare load for aircraft** | | | | | | | | | | | | | |
| 4.2.1 Check packages for indications of undeclared dangerous goods | | | | x | | | x | | | | | | |
| 4.2.2 Check for damage and/or leakage | | | | x | | | x | | | | | | |
| 4.2.3 Apply stowage requirements (e.g. segregation, separation, orientation) | | | | x | | | x | | | | | | |
| 4.2.4 Apply ULD tags when applicable | | | | x | | | x | | | | | | |
| **4.3 Issue NOTOC** | | | | | | | | | | | | | |
| 4.3.1 Enter required information | | | | | | | | | x | | | | |
| 4.3.2 Verify conformance with load plan | | | | | | | | | x | | | | |
| 4.3.3 Transmit to loading personnel | | | | | | | | | x | | | | |
| **5. Accepting passenger and crew baggage** | | | | | | | | | | | | | |
| **5.1 Process baggage** | | | | | | | | | | | | | |
| 5.1.1 Identify forbidden dangerous goods | | | | | | | x | | | | | | x |
| 5.1.2 Apply approval requirements | | | | | | | x | | | | | | x |
| **5.2 Accept baggage** | | | | | | | | | | | | | |
| 5.2.1 Apply operator requirements | | | | | | | x | | | | | x | |
| 5.2.2 Verify passenger baggage requirements | | | | | | | x | | | | | x | |
| 5.2.3 Advise pilot-in-command | | | | | | | x | | | | | | |
| **6. Transporting cargo/baggage** | | | | | | | | | | | | | |
| **6.1 Load aircraft** | | | | | | | | | | | | | |
| 6.1.1 Transport cargo/baggage to aircraft | | | | | | | x | | | | | | |
| 6.1.2 Check packages for indications of undeclared dangerous goods | | | | | | | x | | | | | | |
| 6.1.3 Check for damage and/or leakage | | | | | | | x | | | | | | |
| 6.1.4 Apply stowage requirements (e.g. segregation, separation, orientation, securing and protecting from damage) | | | | | | | x | | | | | | |
| 6.1.5 Verify that NOTOC reflects against aircraft load | | | | | | | x | | | | | | |
| **6.2 Manage DG pre- and during flight** | | | | | | | | | | | | | |
| 6.2.1 Detect presence of dangerous goods not permitted in baggage | | | | | | | | | | x | x | x | |
| 6.2.2 Interpret NOTOC | | | | | | | | | | x | x | | |
| 6.2.3 Apply procedures in the event of an emergency | | | | | | | | | | x | x | x | |
| 6.2.4 Inform flight operations officer/flight dispatcher/air traffic control in the event of an emergency | | | | | | | | | | x | x | | |
| 6.2.5 Inform emergency services of the dangerous goods on board in the event of an emergency | | | | | | | | | | x | x | | |
| **6.3 Unload aircraft** | | | | | | | | | | | | | |
| 6.3.1 Apply specific unloading considerations | | | | | | | x | | | | | | |
| 6.3.2 Check packages for indications of undeclared dangerous goods | | | | | | | x | | | | | | |
| 6.3.3 Check for damage and/or leakage | | | | | | | x | | | | | | |
| 6.3.4 Transport cargo/baggage to facility/terminal | | | | | | | x | | | | | | |
| **7. Collecting safety data** | | | | | | | | | | | | | |
| 7.1 Report DG accidents | | x | x | x | x | x | x | x | x | x | | x | x |
| 7.2 Report DG incidents | | x | x | x | x | x | x | x | x | x | | x | x |
| 7.3 Report undeclared/misdeclared DG | | x | x | x | x | x | x | x | x | x | | x | x |
| 7.4 Report DG occurrences | | x | x | x | x | x | x | x | x | x | | x | |

## Legends for Table 1 and Table 2

**Table 1:**
Cells marked with 'X' denote DG tasks relevant to the respective well-defined roles

**Table 2:**
Cells shaded in grey colours denote DG knowledge topics relevant to the respective well-defined roles

**Table 1 and 2:**
**Well-defined roles for the transport of DG by air with reference to ICAO TI / IATA DGR**

**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

**Aircraft operators and ground 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
m - Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail

| Table 2: Adapted DG Knowledge table | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | Shipper | Freight forwarder | | | Aircraft operator and ground handling agent | | | | | | | | Security agent |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DG Knowledge** — Well-defined roles for the transport of DG by air with reference to ICAO TI / IATA DGR | a | b | c | d | e | f | g | h | i | j | k | l | m |
| Scope and applicability (including overview of DG regulatory requirements in Hong Kong) | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | |

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

| Competency | Description | Performance criteria | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Competency assessment | |
| | | | Final competency standard | Conditions |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | 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: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 | | |
| | | 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 | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 quantities, limited quantities, passenger aircraft, cargo aircraft only, special provisions, dangerous goods in the mail) | | |
| | | OB2: Correctly include state and operator variations into consideration | | |
| | | 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 | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 exemptions, approvals, 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 | | |
| **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/ misdeclared dangerous goods are discovered | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 goods | | |
| | | 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 | | |
| **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 goods | | |
| | | 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/ misdeclared dangerous goods are discovered and other dangerous goods occurrences are identified | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered and other dangerous goods occurrences are identified | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 / 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/ misdeclared dangerous goods are discovered and other dangerous goods occurrences are identified | | |

8. Template – Summary of design output for **(j) Flight crew**

| Competency | Description | Summary of design output (for submission to CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered and other dangerous goods occurrences are identified | | |

9. Template – Summary of design output for **(k) Flight operations officers and flight dispatchers**

| Competency | Description | Summary of design output (for submission to CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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 | | |

10. Template – Summary of design output for **(l) Cabin crew**

| Competency | Description | Summary of design output (for submission to CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered and other dangerous goods occurrences are identified | | |

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 CAD) | | |
|---|---|---|---|---|
| | | Observable behavior (OB) | Relevant parts of submitted materials | |
| | | | Assessment | Training |
| **C0: General awareness and safety training (including emergency response procedures)** | Demonstrate understanding to the basics of dangerous goods procedures and emergency response procedures | OB1: Correctly understand the definition of dangerous goods, the scope and applicability for air transport in Hong Kong | | |
| | | OB2: Correctly identify the roles and responsibilities of stakeholders | | |
| | | OB3: Ability to demonstrate basic understanding on dangerous goods Classification, the application of Labels, Marks, Packaging, and Documentation | | |
| | | OB4: Demonstrate understanding to general limitations (including forbidden DG, potentially undeclared DG, and provisions concerning passengers and crew) | | |
| | | OB5: Correctly identify appropriate emergency response in case of dangerous goods accident/incident | | |
| **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/ misdeclared dangerous goods are discovered | | |

# Training organization

This is to certify that

## Chan Tai Man

has successfully completed

## Dangerous Goods Regulations Course

for personnel of operators and handling agents
responsible for processing or accepting dangerous goods consignments

and is competent in the elements listed below

in the month of January 2023
(Expiring on 31 January 2025)

List of Competency elements

1.  Review dangerous goods documentation
2.  Review packaging, marks, and labels for dangerous goods consignments
3.  Complete dangerous goods acceptance procedures
4.  Safety data reporting (Dangerous goods occurrences)

(Signed)

_____

CAD Approval: DGT000/APSD/2023
Certificate Number: AAA0001

Accountable person

Address