

Civil Aviation Department
The Government of the Hong Kong Special Administrative Region

--

Competency-based Approach to Dangerous Goods Training and Assessment (CBTA)

Frequently Asked Questions (FAQ)

A) General

1. What are the changes to the dangerous goods training requirements from 1 January 2023?

Dangerous goods training requirements for personnel of shippers, freight forwarders, aircraft operators and handling agents will be changed from the current categorization approach to a competency-based approach, with a view to producing a competent workforce by providing focused training. These personnel, whether they are in-house or sub-contracted office or warehouse personnel, must be trained in the requirements commensurate with their job functions and responsibilities.

The above changes have been given legal effect in the laws of Hong Kong and shall become mandatory from 1 January 2023. As a transitional arrangement, training and assessment completed and certificates issued before 1 January 2023 with a validity period covering beyond this date will continue to be valid until they expire.

2. What is competency-based approach to dangerous goods training and assessment (CBTA)?

Under the CBTA framework, personnel must be trained in the requirements commensurate with the job functions for which they are responsible and its goal is to produce a competent workforce by providing focused training. It ensures that trainees know what tasks they are expected to perform competently. To achieve this, personnel involved in the transport of cargo, passengers and baggage by air are required to complete dangerous goods training and assessment in accordance with their assigned responsibilities.

3. What is the major difference between categorization approach and competency-based approach to dangerous goods training?

In comparison, the categorization approach focuses on the personnel's job title while the competency-based approach focuses on the personnel's job functions for which they are responsible. The advantage of concentrating on job functions and responsibilities rather than a job title ensures that training is tailored to a person's actual tasks in relation to the transport of cargo, passengers and baggage by air such that the person is competent to perform their functions. For example, some freight forwarders may need their employees

to perform some job functions that are typically performed by shippers such as labelling, marking or declaring dangerous goods. In this case, they would need to be trained to perform these functions competently regardless of their job title.

4. As an employer in the air logistics and/or aviation industry, is there anything I need to do differently under the CBTA framework?

Employers shall ensure that employees involved in the transport of cargo, passengers and baggage by air have completed appropriate dangerous goods training programme. Similar to current arrangements, they may establish and maintain their own dangerous goods training programmes approved by the CAD, which shall be reviewed and updated to cater for the CBTA framework as deemed necessary. Alternatively, employers may delegate parts of their responsibility to a third party providing CAD-approved dangerous goods training programmes to their employees.

In both situations above, employers have new responsibilities under the CBTA framework which include conducting training needs analysis and maintaining training and assessment records for their employees. [Chart-1](#) demonstrates the changes to employers' responsibilities for employees' dangerous goods training from 1 January 2023 under different scenarios. More details can be found in DGAC 1/2022 at the following website: https://www.cad.gov.hk/english/DGAC/DGAC1_2022.pdf

B) Training Needs Analysis

5. What is training needs analysis?

Training needs analysis is the initial phase of the implementation of a competency-based dangerous goods training programme, which identifies the training needs of personnel involved in the transport of cargo, passengers and baggage by air. The result from this analysis can be a list of tasks that are typically performed by the employees. Based on the results of this analysis, appropriate dangerous goods training programmes can then be developed or sought for the employees.

6. What is the expected output of training needs analysis?

Upon completion of the training needs analysis, employers should have developed the list of tasks that need to be performed by their employees, whose job functions involve the transport of cargo, passengers and baggage by air, in a specific operational setting. It will form the basis for formulating the type of training and assessment suitable for the employee. The CAD has prepared training needs analysis form templates which can be used by employers as a means of compliance for fulfilling this responsibility, as appropriate. The forms can be downloaded from the following website.

Shippers and staff members of freight forwarders or sub-contractors:

[https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template\(Shipper_FF\).docx](https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template(Shipper_FF).docx)

Staff members of aircraft operator and handling agents:

[https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template\(Operator_GH_A\).docx](https://www.cad.gov.hk/english/DGAC/Training_needs_analysis_template(Operator_GH_A).docx)

7. What are the roles of personnel involving in transport of cargo, passengers and baggage by air?

With reference to the International Civil Aviation Organization (ICAO)'s guidance document, the CAD has adapted the following list of well-defined roles in the aviation industry:

Shippers and staff members of 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 (ULD)

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
- m. Personnel responsible for the screening of passengers and crew and their baggage, cargo and mail

Employers may refer to Table 1 of the Training Needs Analysis forms to select the most appropriate role(s) for their staff.

8. Can my company outsource the training needs analysis to a CAD-approved third party dangerous goods training provider?

Yes, it is acceptable to engage a CAD-approved third party dangerous goods training provider in the process of training needs analysis. However, the employer remains

ultimately responsible for ensuring appropriate training needs analysis has been conducted for their employees, and retaining necessary records.

9. When and how often does my company need to review the result of the employees' training needs analysis (i.e. task list)?

To ensure that the dangerous goods training programmes are implemented effectively, any changes in an employee's job functions and responsibilities should be reviewed and reflected on the task list as early as practicable. Based on the changes, the employer would then be able to identify if a gap exists and if so, an initial training and assessment under the CBTA framework that commensurate with the new job functions and responsibilities have to be provided to ensure the employee could perform the tasks in the new job function competently.

10. My company employs a large group of personnel performing the same job function. Do I need to fill in the training needs analysis form for every individual?

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. At a minimum the details should include the list of tasks related to the transport of cargo, passengers and baggage by air that need to be performed by the job functions.

C) Designing and Planning for the CBTA

11. If the result of the training needs analysis indicates that an employee of my company is not required to perform a particular task listed in the CAD training needs analysis form template, is it still compulsory for that employee to complete dangerous goods training programme covering such task?

To ensure personnel are competent to perform any function for which they have a responsibility for the transport of cargo, passengers and baggage by air, they shall be provided with training prior to performing any of these functions that include:

- i) general awareness/ familiarization training – personnel must be trained to be familiar with the general knowledge in dangerous goods awareness;
- ii) function-specific training – personnel must be trained to perform competently any function for which they are responsible (i.e. the task list developed in training needs analysis); and
- iii) safety training – personnel must be trained on how to recognize the hazards presented by dangerous goods, on the safe handling of dangerous goods, and on emergency response procedures.

The CAD appreciates that differences exist in different operating environments and the tasks performed by personnel under similar job functions may not be the same across

organizations; and accepts variations in the results from training needs analysis for function-specific training. Nevertheless, the inclusion of elements of general awareness and safety training are compulsory in all dangerous goods training programmes.

Employers should be careful when conducting the training needs analysis. Even if an employee is not involved in a particular dangerous goods task, the competency of performing that particular task may still be required in order to complete other tasks. For example, understanding the hazards and characteristics of different dangerous goods will be beneficial to personnel in identifying hidden dangerous goods in general cargo or baggage.

12. Is it compulsory to include practical exercise in the training and assessment plan?

The International Civil Aviation Organization has not set out a specific training and assessment method to be used. Yet, it is encouraged to include practical exercise in the dangerous goods training and assessment as completion of such exercise requires integrated performance of competencies, allowing trainees' competencies to be evaluated comprehensively.

D) Training Certificates and Assessment Records

13. If the dangerous goods training programme is established for internal personnel only, is it still compulsory to issue training certificates?

Generally, training certificates are issued to trainees as proof of successful completion of dangerous goods training. Yet the issuance of training certificates is not compulsory when an organization provides their own dangerous goods training to their employees. They may maintain only a database of training and assessment records for their personnel. Nevertheless, such arrangements must be communicated clearly to the CAD when applying for the approval for dangerous goods training programme.

14. Will my employee's dangerous goods training certificate issued before 1 January 2023 become immediately invalid after the date?

Training certificates that are issued before 1 January 2023 under the categorization approach and have a validity period beyond 1 January 2023 will continue to be valid until they expire.

15. Is the dangerous goods training certificate still valid if an employee changes jobs?

Training certificate that was issued during an employee's previous employment would still be valid until it expires. It would remain applicable as long as the new employer is satisfied that the previous training undertaken covered the areas required by the employee's new job. This may be verified against a training needs analysis conducted by the employer.

16. My company is a freight forwarder and my employee has successfully completed a dangerous goods training programme for “personnel responsible for processing or accepting dangerous goods consignments” (role c). Can my employee also process or accept goods presented as general cargo, handle cargo in a warehouse and load and unload ULD? Likewise, can employees engage in multiple roles such as preparing, processing or accepting dangerous goods consignments at the same time?

In general, the approved dangerous goods training programmes for “personnel responsible for processing or accepting dangerous goods consignments” (role c) should cover the training elements for processing or accepting goods presented as general cargo as well as handling of cargo in a warehouse and loading and unloading ULD (roles b and d), and therefore these trained personnel may also perform the said job functions. Further reference can be made to the Training Need Analysis forms, and Tables 1 and 2 of Appendix I of Guidance on adopting Competency-based approach to dangerous goods training and assessment, as well as FAQ 25.

Personnel, especially those of freight forwarders, may be responsible for multiple roles such as preparing dangerous goods consignments for and on behalf of their shipper client, as well as processing or accepting dangerous goods consignments. In this circumstance, the personnel will be required to complete training for personnel who is responsible for both (i) preparing, and (ii) processing or accepting dangerous goods consignments (roles a and c), and employers shall ensure their personnel complete training commensurate with all relevant job functions.

It is noted that certain training courses provided by third party training providers may cover multiple roles. In this regard, employers shall ensure that their employees obtain certificate(s) covering the required multiple roles upon completion of such training course, with a view to fulfilling the CBTA requirements (See also FAQ 25).

17. My company is a freight forwarder, and the operations of my warehouse occasionally involve accepting dangerous goods consignments. Do I need to arrange a staff trained for “personnel responsible for processing or accepting dangerous goods consignments” (role c) for the task at my warehouse? How about when processing or accepting lithium ion / metal batteries in compliance with Section II of Packing Instructions (PI) 966, 977, 969 or 970?

Only personnel who has completed dangerous goods training for processing or accepting dangerous goods consignments (role c) may process or accept dangerous goods. Therefore, freight forwarders shall ensure that their warehouse operations will only engage in processing or acceptance of dangerous goods consignments in the presence of a personnel who has completed the said training.

Section II of Packing Instructions 966, 967, 969 and 970 have provided exceptions to the air transport requirements in order to facilitate the transport of lithium batteries of small size and quantity (whether on their own, contained in or packed with equipment), therefore allowing these types of dangerous goods to be processed or accepted by appropriately trained “personnel responsible for processing or accepting goods presented as general cargo” (role b).

18. I have already kept copies of dangerous goods training certificates of my employees. What is it meant by an employer having to maintain training and assessment records?

Under the CBTA framework, employers have the responsibility to maintain training and assessment records for their employees who are engaged in job functions relevant to the air transport of cargo, passengers and baggage (including those responsible for identifying forbidden or undeclared dangerous goods, etc.) for a minimum period of 36 months. If dangerous goods training certificates are issued by third party training providers, employers shall retain a copy of the relevant certificates together with this record.

The CAD has prepared a template for training and assessment record form to assist employers in fulfilling this responsibility, which can be found at the following website:

https://www.cad.gov.hk/english/DGAC/Training_assessment_record_template.docx

19. My employees are holding dangerous goods training certificates issued under the categorization approach, are they eligible to enrol in recurrent training offered under CBTA framework?

Personnel who have completed training and assessment or have been issued certificates under the categorization approach that remain valid after 1 January 2023 shall be eligible to attend recurrent training and assessment under the CBTA framework that commensurate with their previous training’s intended job functions and responsibilities.

20. My employees are holding dangerous goods training certificates under the categorization approach. If their job junctions have not been changed, which recurrent training are appropriate for them under the CBTA framework?

Under the CBTA framework, if employees’ job junctions have not been changed:

- Shippers and staff members of freight forwarders holding dangerous goods training certificates for Category 1 personnel are eligible to enrol in recurrent dangerous goods training for “role a” personnel.
- Holders of certificates for Category 3 personnel are eligible to enrol in recurrent training for “role c” personnel.
- For those holding a certificate issued for both Category 1 and 3 personnel, they are eligible to enrol in recurrent training for both “roles a and c” personnel. Please refer to

FAQ 16 and 25 for further information concerning personnel who will act in the capacity of multiple roles and the requirement to obtain corresponding qualifications.

- Dangerous goods training programmes for Category 4 and 5 personnel normally do not offer recurrent courses. Holders of such certificates may complete dangerous goods training programmes for “roles b and d” personnel respectively in order to extend their qualifications.

The above-mentioned examples are also applicable to personnel who are required to enrol in initial dangerous goods training with similar job functions under the CBTA framework.

E) CAD-approved dangerous goods training programme

21. Where can I find the list of training institutes that offer dangerous goods training programmes approved by the CAD?

The lists of the training institutes approved by the CAD and their contact details can be found at the CAD website.

List of approved dangerous goods training programmes for shippers and freight forwarders:
https://www.cad.gov.hk/application/DG_Training.pdf

List of approved dangerous goods training programmes for aircraft operators and handling agents:
https://www.cad.gov.hk/application/DG_Training_448C.pdf

22. Do my employees need to complete a dangerous goods training programme accredited by an industry organization?

It is a legal requirement that personnel involving in the transport of cargo, passengers and baggage by air shall have completed a CAD-approved dangerous goods training programme which is commensurate with their job functions. There is no legal requirement on dangerous goods training programmes to be accredited by any other organizations.

23. Will there be CBTA dangerous goods training programmes conducted in Chinese language?

CAD has been approving dangerous goods training programmes conducted in Chinese language when submitted by training organizations. Therefore, dangerous goods training programmes in Chinese language, especially those for personnel processing or accepting goods presented as general cargo, handling cargo in a warehouse, and loading and unloading ULD (roles b and d), will continue to be available under the CBTA framework.

24. How do I know which dangerous goods training programme is suitable for my employees if I look for assistance from third party training providers?

To assist employers who are looking for suitable dangerous goods training programmes for their employees, third party training providers are required to make available compatible information which allows employers to verify the compatibility of the training needs of their employees.

An example of compatible information to be made available can be a summary result of training needs analysis. At the minimum, this information should include a description of the type of personnel to be trained and the list of tasks to be addressed by the training, and the duration of the dangerous goods training. Such information can be published by the third party training providers on their websites (if any) or distributed by other media before enrolment.

25. Will dangerous goods training programmes applicable to personnel responsible for multiple roles be offered under the CBTA framework?

The arrangements of dangerous goods courses for a combination of relevant roles offered by training organizations under the CBTA framework will be similar to those offered under categorization approach (for example, courses combined for Category 1 and 3 personnel, or Category 4 and 5 personnel).

Should employees be required to receive training for multiple roles, employers shall ensure that they obtain qualifications or certificate(s) covering all the required multiple roles upon completion of the appropriate training course(s), with a view to fulfilling the CBTA requirements (See also FAQ 16).

F) Application for dangerous goods training programme approval

26. Who are qualified to be new instructors conducting dangerous goods training for shippers and staff of freight forwarders?

Instructors must be competent in instruction and the functions that they will instruct prior to delivering any dangerous goods training programmes. Effective from 1 January 2023, new instructors who wish to conduct dangerous goods training for shippers and staff of freight forwarders shall complete a course for dangerous goods instructors or on instructional techniques (or equivalent) offered by ICAO / IATA, in addition to completing a dangerous goods training programme for personnel responsible for (i) preparing, and (ii) processing or accepting dangerous goods consignments (roles a and c, or roles a and f) for transport by air which has been approved by the CAD.

27. How long does it take to process an application for approval of a dangerous goods training programme?

The application form and all the required supporting document(s) should reach the Dangerous Goods Office of the CAD at least 11 clear working days prior to the proposed start date of training course(s) for which the approval is required. For avoidance of doubt, this includes submission of any revised materials required by the CAD during the application process. To avoid possible delays to your planned training schedule, you are therefore advised to allow ample time for reviewing and revising the application materials, if deemed necessary by the CAD, with a view to satisfactorily meeting all requirements.

28. I am offering dangerous goods training to the industry as a third party training provider. Is there specific information about the course which I need to make available to trainees prior to their enrolment to my course?

In Hong Kong, many employers may seek outsourced training and assessment offered by third party training providers to fulfil their responsibilities in providing dangerous goods training to their employees. Under the CBTA framework, it is therefore important that compatible information will be made available by third party training providers so that when employers look for a suitable dangerous goods training programme for their employees, they are able to verify the compatibility of the programme with the results of their employees' training needs analysis. Such information should be published by the third party training providers on their websites (if any) or distributed by other media before enrolment.

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 dangerous goods 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, and the duration of the dangerous goods training. It is also important that the qualification(s) or certificate(s) that trainees will obtain upon completion of the dangerous goods training are clearly communicated, especially for courses that are designed for multiple roles, or when more than one certificate may be issued.

For further enquiries, please contact us at 2910 6856 or 2910 6857.

- END -

Issue date: 2 June 2022

Update date: 6 January 2023

Chart 1 – Scenarios demonstrating the changes to employers’ responsibilities for employees’ dangerous goods training from 1 January 2023

On or before 31 December 2022

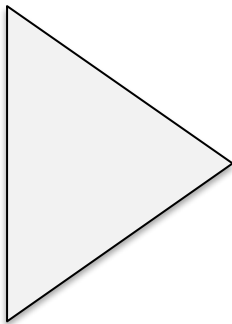
Scenario 1
Any employee who requires Initial or Recurrent dangerous goods training and assessment on or before 31 December 2022...

From 1 January 2023

Scenario 2
Employee who has previously completed Initial or Recurrent dangerous goods training and assessment under categorization approach, with expiry date beyond 1 January 2023. Upon expiry...

Scenario 3
Employee who has changed jobs such that previous dangerous goods training is no longer commensurate with the new job function(s)...

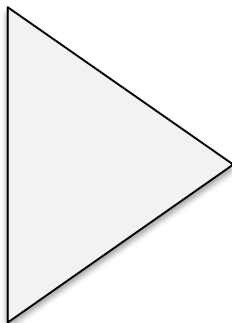
Scenario 4
Any other employee who requires Initial or Recurrent dangerous goods training and assessment on or after 1 January 2023...



Categorization approach

Employers shall provide employees with CAD-approved initial or recurrent dangerous goods training that commensurate with their responsibilities under the categorization approach.

Alternatively, employers may provide competency-based approach dangerous goods training programme (Refer to “competency-based approach” below) to their employees.



Competency-based approach

Employers shall conduct training needs analysis for employees ([See FAQ Part B](#)), basing on the result of which, provide employees with a CAD-approved competency-based dangerous goods training programme ([See FAQ Questions 19 to 21](#)) commensurate with their job functions, and maintain training and assessment records for employees ([See FAQ Part D](#)).