



---

**Committee of Experts on the Transport of Dangerous Goods  
and on the Globally Harmonized System of Classification  
and Labelling of Chemicals****Sub-Committee of Experts on the Transport of Dangerous Goods****Fifty-seventh session**

Geneva, 29 June-8 July 2020

Item 7 of the provisional agenda

**Global harmonization of transport of dangerous goods  
regulations with the Model Regulations.****Request for survey to better understand global dangerous  
goods training requirements****Submitted by the Medical Device Battery Transport Council (MDBTC)  
and the Dangerous Goods Trainers Association (DGTA)\*, \*\*****Introduction**

1. Employee training and training plans are two of the most critical aspects related to ensuring that dangerous goods are transported safely. MDBTC members go to great lengths to ensure their employees at facilities worldwide receive appropriate training. MDBTC members have been challenged when attempting to determine what the training requirements apply based on various regulations and national requirements and this is becoming even more challenging as national authorities impose specific training requirements. As the transport of dangerous goods has become increasingly globalized, multinational companies are struggling to understand the nuances of each individual country's training requirements. While the training requirements are clearly established in Chapter 1.3 of the UN Model Regulations, additional requirements have been established in the Modal Regulations (i.e. ICAO Technical Instructions and IMDG Code). Regional regulations such as the ADR, ADN and RID also have additional requirements such as requiring that companies designate a certified Dangerous Goods Safety Advisor (DGSA) that approves training. Individual competent authorities apply even more requirements. For instance in some European countries, parties involved in the transport of dangerous goods must be certified by the national inspectorate or in another example shippers of lithium batteries must have at least two people that are trained by an instructor that is from the country where the operations are conducted. In some countries training organizations must be certified by the national government. For transportation by air, some countries require that only approved instructors or training schools can be used. It is not entirely clear when computer based, or online training is

---

\* 2020 (A/74/6 (Sect.20) and Supplementary, Subprogramme 2)

\*\* This document was scheduled for publication after the standard publication date owing to circumstances (CORVID-19) beyond the submitter's control.

acceptable. For companies engaged in international commerce trying to comply with the multitude of additional requirements is extremely challenging.

2. Of interest to the MDBTC is the training requirements being imposed by various countries relative to the transport of lithium batteries. The ICAO Technical Instructions requires that persons who offer excepted lithium batteries (e.g. those covered by special provision SP 188 or considered “Section II” in the ICAO Technical Instructions) for transport receive “adequate instruction training”. According to the International Air Transport Association (IATA) the following is offered as a starting point for an employer on what could be considered as being adequate instruction:

- (a) The employer must identify the different configurations of lithium batteries that they ship, i.e. lithium batteries and/or lithium batteries packed with equipment and/or lithium batteries contained in equipment; lithium metal batteries and/or lithium ion batteries.
- (b) The employer must document the procedures that apply to the configurations and battery types that they ship as determined.
- (c) The procedures should be written up as a clear work instruction or other information that is available to all employees responsible for the preparation of lithium battery shipments.
- (d) All employees that are involved in the process of preparing lithium battery shipments must be taken through the procedure to ensure that they understand and can demonstrate the correct application of documented procedures for the packing, labelling, marking and documentations requirements, as applicable to their job function.
- (e) A record must be maintained that identifies each applicable employee and the date(s) that this instruction was provided.
- (f) Employees should be given periodic refresher, or at least demonstrate that they remain “adequately” instructed on how to perform the task. This should be done at least every two years or whenever the procedure is revised, or regulations are changed, whichever is sooner.
- (g) Companies that are involved in reverse logistics, i.e. arranging for returns of lithium batteries, lithium batteries packed with equipment or lithium batteries contained in equipment must develop a clear instruction for consumers on the process to be followed for returning products. This instruction must include packaging materials and lithium battery marks, as necessary. The instruction must also include the transport method and mode of transport that must be followed; this must include a clear statement on applicable prohibitions.

The MDBTC is interested in documenting how various competent authorities are addressing adequate instruction training.

3. The competency-based training (CBT) being implemented for air transport according to the ICAO Technical Instructions (see Appendix H of the IATA Dangerous Goods Regulations) is being addressed differently by competent authorities. Some have chosen not to mandate this approach because they believe the function specific requirements such as those addressed in Chapter 1.3 of the Model Regulations are enough while others are implementing the approach only for air transport. For companies engaged in international commerce it would be useful to know how competent authorities are implementing competency-based training. The MDBTC agrees as previously stated by the DGTA that a competency-based approach to training should be flexible to accommodate job-specific and site-specific competencies. For example, competency should only have to be demonstrated for those dangerous goods classes with which an employee is responsible for offering for transport.

4. In ST/SG/AC.10/C.3/2017/26 the DGTA requested that the Sub-Committee consider whether CBT is appropriate for all modes of transport and if so whether it should be implemented in a coordinated effort amongst regulatory bodies under the leadership of the

Sub-Committee. The outcome of the discussion based on the session's report ST/SG/AC.10/C.3/102 stated that:

- The Sub-Committee emphasized the value of training and recalled that Chapter 1.3 of the Model Regulations already offered a global framework for training. However, the way these general provisions were implemented in practice depended on competent authorities that had to take account of regional and modal specificities, and several delegations expressed doubts at the possibility of general harmonization in this respect.
- The Sub-Committee took note of the initiatives by ICAO and Canada to develop a new competency-based approach and expressed interest in obtaining additional information on the outcome of related surveys or preliminary results. It noted that the competency-based training approach was not intended to replace the current training principles, but rather to complement the current structures by introducing competence checking measures on the workplace and focusing on competences effectively needed.
- The Sub-Committee agreed to further discuss this issue at next sessions if additional information was provided.

However, there have been no further discussion on this matter since the DGTA paper was addressed at the 51<sup>st</sup> session of the Sub-Committee.

5. We are respectfully requesting that the Sub-Committee conduct a survey and attempt to quantify dangerous goods training requirements globally. MDBTC has drafted a survey for consideration at the 57<sup>th</sup> session and is requesting comments on the relevance and content of the survey. Once the survey questions are agreed, the MDBTC working with other interested parties is willing to conduct the survey and requests that experts and participants within the Sub-Committee complete the survey, in order to gain a better understanding of the training requirements that apply globally. This is particularly needed by multinational companies that employ dangerous goods employees worldwide. The results of the survey will be compiled and reported out at the next session of the Sub-Committee at its session in December 2020. Our goal is to publish a reference document showing any additional training requirements by country, and a link or other reference to where those training requirements are published.

## **Proposed Survey**

6. It is recognized that the dangerous goods regulations (e.g. ADR, IMDG Code, ICAO Technical Instructions) require that persons employed whose duties concern the carriage of dangerous goods to be trained appropriate to their responsibilities and duties. Employees are required to receive general awareness, safety, security and most importantly function specific training commensurate with their responsibilities and the functions (e.g. completing shipping papers, packaging, classification, etc.) and additionally based on the modes of transport requirements that apply.

The survey can be completed by going to the following website:  
<https://www.surveymonkey.com/r/DGTA>.

---