



### **Mandatory Training Requirements under Chapter 1.3 of the International Maritime Dangerous Goods (IMDG) Code (2008 edition)**

### **Advice for Training Providers**

#### **1.0 INTRODUCTION**

This document provides advice to training providers with respect to the implementation of training programmes adopted to comply with Chapter 1.3 of the 2008 edition of the IMDG Code and AMSA acceptance of course where this is relevant.

The paper is to be read in conjunction with the General Information document also provided on the AMSA web site.

#### **2.0 TRAINING CURRICULUM AND RECOGNITION OF ALTERNATIVES**

The subject matter required by each level of training is detailed in section 1.3.1.2.1, for general awareness training, and in section 1.3.1.5 for function-specific training. It should be noted sections 1.3.1 to 1.3.1.3 are mandatory while sections 1.3.1.4 to 1.3.1.7 are only recommendatory.

##### **2.1 General Awareness Training**

As section 1.3.1.2.1 of the IMDG Code is mandatory, General Awareness training that covers the subject matter described in this section must be provided to all shore-based personnel identified in section 2.1 of the "General Training" paper (as reproduced from section 1.3.1.2 of the IMDG Code). As such General Awareness training must provide familiarity with the general provisions of dangerous goods transport provisions and cover:

- A description of the classes of dangerous goods;
- An overview of labelling, marking and placarding requirements;
- An overview of packing, stowage, segregation and compatibility provisions.
- A description of the purpose and content of dangerous goods transport documents (such as the Multimodal Dangerous Goods Form and the Container/Vehicle Packing Certificate); and
- A description of available emergency response documents.

While it appears to be a comprehensive list it is important to remember that this training is an overview and detailed information is only necessary when required by the individuals' specific role(s).

##### **2.2 Acceptance of Alternatives for General Awareness Training**

It is noted that the general awareness training requirements of chapter 1.3 of the IMDG Code are the same as those required by regulation 1.3 of the Model Regulations adopted in conjunction with the 7th Edition of the Australian Dangerous Goods Code (ADG7). As such, it is quite possible that training provided in accordance with this regulation (or relevant state legislation adopting regulation 1.3) may be satisfactory for the purposes of the General Awareness Training required by section 1.3.1.2.1 of the IMDG Code.

Similarly, OH&S workplace training provided under company procedures and/or as required by state legislation may also be satisfactory for the purposes of the General Awareness Training required by section 1.3.1.2.1 of the IMDG Code provided the subject matter is covered.

In these circumstances AMSA does not envisage requiring duplication of training in order to comply with the IMDG Code with respect to General Awareness training on the condition that:

- Employers check to ensure all the elements described in section 1.3.1.2.1 of the IMDG Code are covered; and
- This is reflected in training records held by both the employer and employee.

##### **2.3 Function-Specific Training**

As sections 1.3.1.5 to 1.3.1.7 of the IMDG Code are recommendatory, the subject matter detailed in section 1.3.1.5 is not mandatory and allows the employer to tailor training packages for their individual needs.

AMSA considers that the recommended training requirements<sup>1</sup> form the basis of identifying the training needs for specific roles. However, variations to the recommended requirements will be accepted by AMSA where an employer has:

- Specifically undertaken a process of identifying training needs in regards to the specific role (and or specific goods); and
- Has developed a training package harmonised with this analysis.

This could be accepted but may be subject to additional verification processes. However, where the roles in question are required to have Function-specific training “accepted” by AMSA, the training provided will subject to specific acceptance in any case.

The recommended subject matter for Function-specific training is provided in the table attached to section 1.3.1.5 of the IMDG Code which is reproduced below. The references referred to in this table and other recommended texts are included in annex 1 of this paper.

Function	Specific Training Requirements	Numbers in this column refer to the list of Related Codes and Publications in 1.3.1.7 <sup>2</sup>
1 Classify dangerous goods and identify Proper Shipping Name	Classification requirements, in particular: <ul style="list-style-type: none"> <li>– the structure of the description of substances</li> <li>– the classes of dangerous goods and the principles of their classification</li> <li>– the nature of the dangerous substances and articles transported (their physical, chemical and toxicological properties)</li> <li>– the procedure for classifying solutions and mixtures</li> <li>– the procedure for classifying solutions and mixtures</li> <li>– identification by Proper Shipping Name</li> <li>– use of Dangerous Goods List</li> </ul>	.1, .4, .5 and .12
2 Pack dangerous goods	Classes Packaging requirements: <ul style="list-style-type: none"> <li>– type of packages (IBC, large packaging, tank container and bulk container)</li> <li>– UN marking for approved packagings</li> <li>– segregation requirements</li> <li>– limited quantities and excepted quantities</li> </ul> Marking and labelling First aid measures Emergency response procedures Safe handling procedures	.1 and .4
3 Mark, label or placard dangerous goods	Classes Marking, labelling and placarding requirements <ul style="list-style-type: none"> <li>– primary and subsidiary risk labels</li> <li>– marine pollutants</li> <li>– limited quantities and excepted quantities</li> </ul>	.1

<sup>1</sup>Tables provided under section 1.3.1.5 and 1.3.1.6 of the IMDG Code.

<sup>2</sup>As reproduced in the Annex to this paper

Function	Specific Training Requirements	Numbers in this column refer to the list of Related Codes and Publications in 1.3.1.7 <sup>3</sup>
4 load/unload cargo transport units <sup>4</sup>	Documentation Classes Marking, labelling and placarding Stowage requirements, where applicable Segregation requirements Cargo securing requirements (as contained in the IMO/ILO/UN ECE guidelines) Emergency response procedures First aid measures CSC requirements Safe handling procedures	
5 Prepare transport documents for dangerous goods	Documentation requirements <ul style="list-style-type: none"> <li>– transport document</li> <li>– container/vehicle packing certificate</li> <li>– competent authorities approval</li> <li>– waste transport document</li> <li>– special documentation where appropriate.</li> </ul>	.1
6 Offer dangerous goods for transport	Thorough knowledge of the IMDG Code Local requirements at loading and discharge ports <ul style="list-style-type: none"> <li>– port by laws</li> <li>– national transport regulations</li> </ul>	.1 to .10 and .12
7 Accept dangerous goods for transport	Thorough knowledge of the IMDG Code Local requirements at loading and discharge ports <ul style="list-style-type: none"> <li>– port by laws, in particular quantity limitations</li> <li>– national transport regulations</li> </ul>	.1 to .12
8 Handle dangerous goods in transport	Classes and their hazards Marking, labelling and placarding Emergency response procedures First aid measures Safe handling procedures such as <ul style="list-style-type: none"> <li>– use of equipment</li> <li>– appropriate tools</li> <li>– safe working loads</li> </ul> CSC requirements, local requirements at loading, transit and discharge ports Port byelaws, in particular, quantity limitation National transport regulations	.1, .2, .3, .6, .7, .8 and .10
9 Prepare dangerous goods loading/ stowage plans	Documentation Classes Stowage requirements Segregation requirements Document of compliance Relevant IMDG Code parts, local requirements at loading, transit and discharge ports Port byelaws, in particular, quantity limitations	.1, .10, .11, and .12

<sup>3</sup>As reproduced in the Annex to this paper

Function	Specific Training Requirements	Numbers in this column refer to the list of Related Codes and Publications in 1.3.1.7 <sup>4</sup>
10 Load/unload dangerous goods into/ from ships	Classes and their hazards Marking, labelling and placarding Emergency response procedures First aid measures Safe handling procedures such as – use of equipment – appropriate tools – safe working loads CSC requirements, local requirements at loading, transit and discharge ports Port byelaws, in particular, quantity limitation National transport regulations	.1, .2, .3, .7, .9, .10 and .12
11 Carry dangerous goods	Documentation Classes Marking, labelling and placarding Stowage requirements, where applicable Segregation requirements Local requirements at loading, transit and discharge ports – Port byelaws, in particular, quantity limitation – National transport regulations Cargo securing requirements (as contained in the IMO/ILO/UN ECE guidelines) Emergency response procedures First aid measures CSC requirements Safe handling procedures	.1, .2, .3, .6, .7, .10, .11 and .12
12	Enforce or survey or inspect for compliance with applicable rules and regulations	Knowledge of IMDG Code and relevant guidelines and safety procedures
13	Are otherwise involved in the transport of dangerous goods, as determined by the competent authority	As required by the competent authority commensurate with the task assigned

<sup>4</sup>As reproduced in the Annex to this paper

## 3.0 AMSA ACCREDITED TRAINING

As noted in section 2.2 of the “General Training” paper there are three distinct roles where the function-specific training will have to be specifically “accepted” by AMSA. This requirement applies to those responsible for:

1. Packing of dangerous goods, **[including those that supervise the packing of Cargo Transport Units]**;
2. Marking, labelling or placarding of dangerous goods; and
3. Preparing and signing transport documentation (shipper and container packing declarations).

These roles have been identified as being critical to ensuring that the requirements of the IMDG Code will be complied with and is similar to the assessment of critical roles identified by the Civil Aviation Safety Authority (CASA).

Given the critical nature of these roles the training employed must include a means of assessing the competency of participants and this will be examined as part of AMSA’s assessment.

### 3.1 Format and acceptance of training

This training can be provided in a range of formats including conventional class room training, structured on the job training or electronic/on line training programmes. However:

- the content of the training;
- the method of delivery training (including the competence of providers where relevant); and
- the method of assessing competency

will need to be accepted by the AMSA Manager – Ship Inspections. Where an electronic or online package is employed the proposal must include some process to mitigate the risk that the identified participant may employ a substitute or that the result may be assigned to the wrong participant.

In so far as the content of training is concerned the AMSA assessment will normally consider the recommended

training requirements of chapter 1.3<sup>6</sup> as being the basis of any programme. However, as noted in section 3.3 should an organisation:

- specifically undertake a process of identifying training needs in regards to the specific role (and or specific goods); and
- develop a training package harmonised with this analysis

then this could be considered as complying with the requirements but this will be subject to a verification audit.

### 3.2 Submission of Training Packages for assessment

Documented proposals are to be submitted to the AMSA Manager, Ship Inspections for assessment. This should include information on who will provide the training and evidence of their competence to do this. The level of detail will need to be quite high as this will avoid the need to seek additional information.

For electronic or online packages these will be accepted either on the basis of an examination of the package itself or certification from another Authority, acceptable to AMSA, that the package is acceptable for the purpose of Chapter 1.3 of the IMDG Code.

It will be a condition of acceptance that there is a mechanism to update the training packages each time the IMDG Code is amended.

### 3.3 Details of “accepted” training packages

AMSA will list on its website, accepted training packages that are commercially available to any user. Where a package has been specifically approved for a particular organisation for its own use, these details will not be provided on the website.

An approval certificate will be issued for any training course accepted and this will be valid for five years subject to endorsement as noted in Annex 2 below.

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<sup>6</sup>Tables provided under section 1.3.1.5 and 1.3.1.6 of the IMDG Code.

## **Annex 1 to Advice to Training Providers**

### **Publications and References**

#### **1.0 Relevant IMO-UN Publications**

Section 1.3.1.7 of the IMDG Code lists Related Codes and publications which may be appropriate for Function-specific training. They are referred to in the recommended training requirements provided in section 1.3.1.5 of the IMDG Code.

1. The International Maritime Dangerous Goods (IMDG) Code, as amended
2. The EmS Guide: Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS), as amended
3. Medical First Aid Guide for Use in Accidents involving Dangerous Goods (MFAG), as amended
4. United Nations Recommendations on the Transport of Dangerous Goods-Model Regulations, as amended
5. United Nations Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria, as amended
6. The IMO/ILO/UN ECE Guidelines for Packing of Cargo Transport Units (CTUs).
7. The Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas
8. The International Convention for Safe Containers (CSC), 1972, as amended
9. The Code of Safe Practice for Cargo Stowage and Securing (CSS Code), as amended
10. MSC1/Circ.1265; Recommendations on the safe use of pesticides in ships applicable to the fumigation of cargo transport units
11. International Convention for the Safety of Life at Sea (SOLAS) 1974, as amended
12. International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 73/78), as amended.

<sup>7</sup>See [www.containerhandbuch.de/](http://www.containerhandbuch.de/)

<sup>8</sup>See [www.vohma.com/publications.htm](http://www.vohma.com/publications.htm)

<sup>9</sup>See [www.currieassociates.com](http://www.currieassociates.com)

#### **2.0 Additional Training Resources**

There are a number of resources available that could be employed in the development of training packages that would comply with the requirements of chapter 1.3 of the IMDG Code. The following may be of interest (this list will be updated from time to time as more resources come to light or are produced):

**IMO Model Course 1.10** (Dangerous, Hazardous and Harmful Cargoes – 2002 edition): While this is the IMO Model course it is quite dated and not all the information it contains is now accurate. If this publication is used care must be taken to ensure the content is updated to reflect current requirements.

**IMO Model Course 3.18** (Safe packing of Cargo Transport Units – 2001 edition): This model course is relevant to those packing Cargo Transport Units (CTU) and the application of the IMO/ILO/UN ECE Guidelines for Packing of CTU.

**Container Handbook** – Cargo Loss Prevention Information: Published by German Marine Insurers (Gesamtverband der Deutschen) and is again relevant to those packing Cargo Transport Units (CTU) and the application of the IMO/ILO/UN ECE Guidelines for Packing of CTU. This publication includes specific information on dangerous goods<sup>7</sup>.

**IMDG – Amendment 34 Training Program:** Published by the International Vessel Operators Hazardous Materials Association (VOHMA) . This publication is based on the modular training system as described in chapter 1.3 of the IMDG Code and covers the USDOT training requirements for the transport of dangerous goods.

**IMDG – Amendment 34 General Awareness Training Program:** Published by the International Vessel Operators Hazardous Materials Association (VOHMA)<sup>8</sup>. This publication covers the general awareness training required by chapter 1.3 of the IMDG Code.

**Complete Guide to the IMDG Code (Amendment 34 Edition)** – Navigating the IMDG Code: Published by Currie Associates Inc Queensbury NY 12504<sup>9</sup>

**Dangerous, Hazardous and Harmful Cargoes – Handbook:** To be published by AMSA in the latter half of 2009.

## **Annex 2 to Advice to Training Providers**

### **Submission of Courses for Acceptance**

An organisation wishing to gain approval to deliver IMDG Code training that requires AMSA acceptance must make a written submission to the AMSA Manager Ship Inspections under the following headings:

#### **Contact details:**

The full name and address of the training provider requesting approval to deliver “AMSA accepted” IMDG Code training.

#### **Registered Training Organisation (if appropriate)**

Being a Registered Training Organisation (RTO) is not a prerequisite for acceptance but is beneficial in so far as providing evidence of quality assurance systems. If the training provider is an RTO, documentary evidence issued by the appropriate Australian authority should be submitted.

#### **Full title of the course**

Reference should be made to Chapter 1.3 of the IMDG Code and any other reference material used for the course and the edition of the IMDG Code to which it relates.

#### **Aim of the course**

The aim of the course (whether that be a full or refresher training course) is to be specified indicating its scope and the nature of qualifications that program will issue at the conclusion of the course. For training providers that are not RTO's a Certificate of Completion (which may include ID style evidence) is to be issued.

#### **Objectives of the course**

The Training Provider is to specify the intended outcomes of the training.

#### **Overall Course training plan**

The Training provider is to specify how the training will be delivered including details of assessment mechanisms and the training media.

#### **Course curriculum**

The course curriculum is to be based on Chapter 1.3 of the IMDG Code and is to take into account IMO Model Courses 1.10 (noting the latter is not current) and section 1.3.1.4 to section 1.3.1.7 of the IMDG code.

#### **Entry standards**

Where an entry standard is required the Training Provider is to specify this. All staff undertaking role specific training are either to have completed

- General Awareness Training (as specified in 1.3.1.2.1 of the IMDG Code), or an accepted equivalent, or
- this training is to be incorporated as part of the course. How this is addressed is to be detailed in the submission.

#### **Conduct of the training**

Explanation of the following must be specified:

#### **Qualifications of teaching staff**

Training and assessment must be undertaken by persons who at a minimum have completed Level IV Certificate for Assessment & Workplace Training (or have evidence of equivalent skills) and can provide evidence of knowledge of the content and application of the IMDG Code. .

#### **Course intake limitations**

The Training Provider is to determine the number of students that can be effectively trained in a single session on the basis of the training system employed and the training aids and material at hand. Generally speaking where a hard copy of the IMDG Code is employed a minimum of one copy between three attendees will be accepted.

#### **Course notes and reference documents**

Course notes and reference documents must be of a suitable quality and substance to enable the student to complete the course. Copies of the complete (excluding IMO and UN publications) course are to be submitted with the application.

#### **References**

A reading list appropriate to the course material is to be made available to the students and references that are to be used in the course are to be detailed in the submission.

#### **Facilities and Equipment**

Where facilities or equipment will be required to deliver the training the Training Provider is to provide details in the submission.

## Class attendance

Attendees are required to receive training covering 100% of the relevant material. The submission is to include details of:

- How attendance will be recorded,
- How the identity of attendees will be reconciled; and
- How remedial training may be provided to attendees who may be absent from part of the course for a valid reason (if applicable)

## Assessment procedures

The Training Provider is to specify and justify the performance criteria for successful completion of the training.

- All attendees will be required to present sufficient evidence of competence and meet all the performance criteria within the range of the subject matter.
- The Training Provider must devise appropriate instruments of assessment for consideration as part of the approval process and submit a copy of the assessment plan together with the marking scheme.
- Any supplementary methods of assessment are to be specified.
- If there is to be a final assessment, the criteria to be applied in the case of a candidate not passing<sup>10</sup>.

## Quality standards

The Training provider is to detail the internal processes to be used to ensure the training program:

- i. Is corrected for any errors, omissions or identified weaknesses
- ii. Remains in compliance with the requirements of chapter 1.3 of the IMDG Code (as amended);
- iii. Continues to achieves the training objectives
- iv. Seeks and employs user or assessor feed back; and
- v. Updates for amendments to the IMDG Code.

**Note:** *Quality procedures and/or processes to be employed by the Training Provider are to be documented and may be audited by AMSA.*

## Course completion documentation

The form and content of the course completion document is to be included in the submission for acceptance. A copy of this document is to be provided by the Training Provider to both the attendee and their employer,

## Course validity

AMSA will approve courses for the period for a period of five years, however, a verification audit<sup>11</sup> will be carried out during the transition year between where both the current and forthcoming editions are in effect. The purpose of this audit is to verify the effectiveness of the mechanism incorporated by the Training Provider to reflect IMDG Code amendments into their training material.

## Fees

It is expected that approval of courses will be carried out on a cost recovery basis. Further detail will be provided upon application.

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<sup>10</sup>It is expected that a candidate who fails the final assessment may re-sit it once. Failure to attain the required standard will require the candidate to repeat the course

<sup>11</sup>This can either be in the form of a desk top audit, documents review, visit or any other mechanism appropriate to the nature of the course structure and method of delivery.