AMSA POLICY – TRAINING AND ASSESSMENT, QUALITY STANDARDS AND USE OF SIMULATORS

Purpose
This AMSA Policy applies to AMSA approved RTOs delivering International Maritime Organisation's Standards of Training Certification and Watchkeeping qualifications leading to a Certificate of Competency.

Standards of Training Certification and Watchkeeping (STCW)
The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended, (STCW) sets the standards of competence and certification for seafarers internationally. Australia is a signatory to the STCW Convention and as such the Australian Maritime Safety Authority (AMSA) is considered the "Administration" in Australia as it relates to STCW.

Important aspects of the STCW Convention include:
- the requirement for courses to be approved by the Administration;
- the requirement for the training and certification arrangements to be captured under a quality management framework;
- the requirement for a 5 yearly submission to the International Maritime Organization (IMO) to demonstrate continued compliance; and
- The requirement for the issue of Certificates of Competency to be "fraud proof".

The 1995 amendments to the STCW Convention required countries to provide a submission to the IMO demonstrating that their training and certification arrangements met international standards. In achieving this, countries (including Australia) were then placed on the "White List", indicating internationally that a country is compliant. For Australia this means that a seafarer holding an unlimited AMSA issued STCW Certificate of Competency will have it recognised internationally.

AMSA policy
The primary objective of this AMSA policy is to ensure compliance with the standards of STCW. This is to ensure that Australia remains on the "White List" of STCW compliant countries and that Australian unlimited Certificates of Competency and Certificate of Rating continue to be recognised worldwide as being of STCW standard.

The applicable STCW standards that apply to AMSA approved Registered Training Organisations (RTOs) are:
- Regulation I/6 Training and Assessment, STCW Code Section A-I/6 and Section B-I/6 Guidance regarding training and assessment;
- Regulation I/8 Quality Standards, STCW Code Section A-I/8 and section B-I/8 Guidance regarding quality Standards; and
- Regulation I/12 Use of Simulators, STCW Code Section A-I/12 Standards governing the use of simulators and STCW Code Section B-I/12 Guidance regarding the use of simulators.

RTOs are required to comply with one or both regulatory requirements including all STCW courses to be approved must be listed on the RTO scope of registration as follows:
- In all circumstances the STCW Code model courses take precedence in event of any interpretation of course outcomes and content.

AMSA has considered the above regulatory requirements for RTOs and recognise that these Standards are comprehensive and can give effect to the STCW standards that apply to AMSA approved Registered Training Organisations. The STCW standards should be incorporated within the RTO Standards mentioned above. The STCW Code section B-I/8 item 5,(1) permits the utilisation of education quality standards incorporating the knowledge and understanding requirements of the Convention. AMSA approved RTOs will be audited to ensure compliance to these Standards.

It is AMSA's policy to ensure that training and assessment requirements are contemporary and meet both the needs of the regulator and the industry.

Conclusion
As part of this engagement AMSA does not support unnecessary administrative barriers. To facilitate this, AMSA accepts the ASQA and TEQSA standards and recommends that the STCW standards should be incorporated within the RTO Standards. This will significantly reduce the regulatory burden with which AMSA approved RTOs need to comply.
PART 1 – Guidance regarding training and assessment

Applicable standards are Regulation l/6 Training and Assessment, STCW Code Section A-l/6 and Section B-l/6 Guidance regarding training and assessment.

Qualifications of instructors and assessors are as follows:

- Appropriately qualified and experienced for the particular types and levels of training or assessment of competence of seafarers;
- Appropriate knowledge of instructional techniques, training methods and practice and knowledge and experience in assessment methods and practice.

As a guide, TAE40110 Certificate IV in Training and Assessment or its successor.

Use of e-learning, distance learning, and blended learning

AMSA encourages RTOs to use e-learning, distance learning, and blended learning in the training of seafarers in accordance with the standards of training and assessments set out in section A-l/6 and the guidance given below:

1. E-learning, distance learning, and blended learning are approved by AMSA;
2. The type of course delivery is suitable for the selected objectives and training tasks meet the competence level for the subject covered;
3. It has clear and unambiguous instructions for the trainees to understand how the programme operates;
4. It provides learning outcomes that meet all the requirements to provide the underpinning knowledge and proficiency of the subject;
5. It is structured in a way that enables the trainee to systematically reflect on what has been learnt through both self-assessment and tutor-marked assignments;
6. It provides professional tutorial support through telephone or e-mail communications;
7. Where e-learning is provided, common information formats such as XML (Extensible Mark-up Language), which is a flexible way to share both the format and the data on the World Wide Web, intranets and elsewhere, should be used.; and
8. The e-learning system should be secured from tampering and attempts to hack into the system.

Guidance for assessing a trainee’s progress and achievements for training by e-learning, distance learning, and blended learning is given below:

1. AMSA approved assessment procedures are provided for any e-learning, distance learning and blended learning programme;
2. Clear information is given to the trainees on the way that tests and examinations are conducted and how the results are communicated;
3. There are test questions that are comprehensive and will adequately assess a trainee’s competence and are appropriate to the level being examined;
4. Procedures are in place to ensure questions are kept up to date;
5. The conditions where the examinations can take place and the procedures for invigilation to be conducted are satisfactory;
6. There are secure procedures for the examination system so that it will prevent acting dishonestly; and
7. There are secure validation procedures to record results for authenticity checks required by the STCW Convention.

Recognition of Prior Learning (RPL)

For information about RPL, see MT 03 Policy – STCW Recognition of Prior Learning.

Guidance regarding Quality Standards

Applicable standards are Regulation l/8 Quality Standards, STCW Code Section A-l/8 and section B-l/8 Guidance regarding quality standards.

The Quality Standards should apply to both management and operational levels of activity.

All training and assessment of competence should be continuously monitored through a quality standard system to cover all training courses and programmes, examinations and assessments carried out by or under the authority of an RTO and the qualification and experience of instructors and assessors, having regard to the policies, systems, controls and internal quality assurance reviews established to ensure achievement of the defined objectives.

Internal management control and monitoring measures should be applied to all levels of teaching, training, examination and assessment activity to ensure fitness for the purpose and follow up actions comply with planned arrangements and documented procedures and timely action to correct deficiency.

The quality standards should take account of whether real or simulated equipment is utilised for this purpose. In establishing and applying quality standards under the provision of regulation l/8 and section A-l/8 an RTO should ensure the standards are sufficiently flexible to take account of the varying needs of the industry, and that they facilitate and encourage the application of new technology.

In the case of RTOs, the following items are indicative of the information to be provided:

1. The mission statement of the institution;
2. Details of academic and training strategies in use;
3. An organisation chart and information on the composition of committees and advisory bodies;
4. Staff and student information;
5. A description of training facilities and equipment; and
6. An outline of the policies and procedures on:
   a. Student admission
   b. The development of new courses and review of existing courses
   c. The examination system, including appeals and re-sits
d. Staff recruitment, training, development, appraisal and promotion

e. Feedback from students and from industry, and

f. Internal audits and mitigation of identified deficiencies.

**Guidance regarding use of simulators**

Applicable standards are Regulation I/12 Use of Simulators, STCW Code Section-A-l/12 Standards governing the use of simulators and STCW Code Section B-l/12 Guidance regarding the use of simulators.

**PART 2 – General performance standards for simulators used in training**

Each RTO shall ensure that any simulator used for mandatory simulator-based training shall:

1. be suitable for the selected objectives and training tasks;

2. be capable of simulating the operating capabilities of shipboard equipment concerned, to a level of physical realism appropriate to training objectives, and include the capabilities, limitations and possible errors of such equipment;

3. have sufficient behavioural realism to allow a trainee to acquire the skills appropriate to the training objectives;

4. provide a controlled operating environment, capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to the training objectives;

5. provide an interface through which a trainee can interact with the equipment, the simulated environment and, as appropriate, the instructor; and

6. permit an instructor to control, monitor and record exercises for the effective debriefing of trainees.

**General performance standards for simulators used in assessment of competence**

Each RTO shall ensure that any simulator used for the assessment of competence required under the STCW Convention or for any demonstration of continued proficiency so required shall:

1. be capable of satisfying the specified assessment objectives;

2. be capable of simulating the operational capabilities of the shipboard equipment concerned to a level of physical realism appropriate to the assessment objectives, and include the capabilities, limitations and possible errors of such equipment;

3. have sufficient behavioural realism to allow a candidate to exhibit the skills appropriate to the assessment objectives;

4. provide an interface through which a candidate can interact with the equipment and simulated environment;

5. provide a controlled operating environment capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to assessment objectives; and

6. permit an assessor to control, monitor and record exercises for the effective assessment of the performance of candidates.

**Simulator training objectives**

Each RTO shall ensure that the aims and objectives of simulator-based training are defined within an overall training programme and that specific training objective and tasks are selected so as to relate as closely as possible to shipboard tasks and practices.

**Training procedures**

In conducting mandatory simulator-based training, instructors shall ensure that:

1. trainees are adequately briefed beforehand on the exercise objectives and tasks and are given sufficient planning time before the exercise starts;

2. trainees have adequate familiarisation time on the simulator and with its equipment before any training or assessment exercise commences;

3. guidance given and exercise stimuli are appropriate to the selected exercise objectives and tasks and to the level of trainee experience;

4. exercises are effectively monitored, supported as appropriate by audio and visual observation of trainee activity and pre- and post-exercise evaluation reports;

5. trainees are effectively debriefed to ensure that training objectives have been met and that operational skills demonstrated are of an acceptable standard;

6. the use of peer assessment during debriefing is encouraged; and

7. simulator exercises are designed and tested so as to ensure their suitability for the specified training objectives.

**Assessment procedures**

Where simulators are used to assess the ability of candidates to demonstrate levels of competency, assessors shall ensure that:

1. performance criteria are identified clearly and explicitly and are valid and available to the candidates;

2. assessment criteria are established clearly and are explicit to ensure reliability and uniformity of assessment and to optimise objective measurement and evaluation, so that subjective judgements are kept to the minimum;

3. candidates are briefed clearly on the tasks and/or skills to be assessed and on the tasks and performance criteria by which their competency will be determined;

4. assessment of performance takes into account normal operating procedures and any behavioural interaction with other candidates on the simulator or with simulator staff;

5. scoring or grading methods to assess performance are used with caution until they have been validated; and

6. the prime criterion is that a candidate demonstrates the ability to carry out a task safely and effectively to the satisfaction of the assessor.
Please Note: STCW Code section B-I/12 has specific guidance with regards to the use of simulators and should be closely followed in delivering the courses mentioned below:

- Training and assessment in radar observation and plotting;
- Training and assessment in the operational use of Automatic Radar Plotting Aids (ARPA);
- Training and assessment in the operational use of Electronic Chart Display and information System (ECDIS);
- Operational use of ECDIS where Automatic Identification System (AIS) is connected;
- Recommended performance standards for non-mandatory types of simulation:
  - Navigation and watchkeeping simulation
  - Ship handling and manoeuvring simulation
  - Cargo handling and stowage simulation
  - GMDSS communication simulation
  - Main and auxiliary machinery operation simulation.

Qualifications of instructors and assessors
An RTO shall ensure that instructors and assessors are appropriately qualified and experienced for the particular types and levels of training and corresponding assessment of competence as specified in Regulation I/6 and section A-I/6.

Instructors should be trained in IMO Model Course 6.10 ‘Train the Simulator Trainer and Assessor’ or similar in-house training.

Instructors should show evidence of training and competence in the type of simulator in use for conducting training and assessments.

PART 3 – Maritime Training Package (MTP)
As part of the synergy with the Australian general education system which enhances the quality of Australian maritime qualifications, AMSA recognises the appropriate Australian Qualifications Framework (AQF) qualifications from the Transport and Logistics Industry Skills Council (TLISC) Maritime Training Package (MTP) as satisfying the training course pre-requisite for the issue of STCW Certificates of Competency by AMSA.

Course approvals
AMSA, as required by the STCW and Marine Order 70, approves courses which lead to the attainment of an STCW Certificate of Competency. In approving such courses AMSA utilises the MTP supported by the IMO model courses. See MT05 AMSA Approval - all STCW Courses including E-learning, Distance Learning and Blended Learning, GMDSS ROC and Short Courses.

PART 4 – Audits and AMSA final assessment
In accordance with standard international practice, AMSA conducts audits of Recognised Training Organisations (RTOs) as a condition of the ongoing approval of their training courses, and conducts oral assessments of candidates for the unlimited STCW Certificates of Competency as well as the higher end near coastal certificates. See MT04 AMSA Audits - STCW Certificate of Competency and Short Courses

These audits of RTOs and AMSA final assessments of candidates are:

- integral parts of the quality assurance that Australia requires to satisfy the STCW; and
- the quality assurance tools that allow AMSA to be flexible in other areas, such as accepting e-learning, distance learning and blended learning, without any reduction of standards.

In recognition of the importance of both audits and final assessment to AMSA's twin objectives of both flexibility and quality assurance, under its quality management system AMSA will continually review both these functions for relevance.

AMSA appreciates the burden that audits might place on RTOs and therefore encourages as much cooperation as possible between AMSA, ASQA, TEQSA and State regulatory audits.

AMSA considers it is of vital importance to be actively involved, and actively engage, across a broad range of stakeholders including:

- the IMO Sub-committee on Human Elements, Training and Watchkeeping (HTW) - where AMSA can speak on behalf of Australian interests and has a voice in the development of international standards;
- participating in TLISC maritime sector meetings - where AMSA can work with industry to maintain the MTP and in particular ensure that any changes to STCW requirements are considered, and that the MTP continues to satisfy the STCW Convention;
- liaising with the Department of Education Science and Training (DEST) and the Australian Skills Quality Authority (ASQA) where AMSA can communicate with those educational authorities and ensure an alignment between maritime requirements and the national educational requirements;
- engagement with peak bodies and other industry representative groups as appropriate; and
- holding appropriate meetings and workshops to ensure nationally consistent understandings.