

# Criteria for the Vetting of Technology

Final



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4/4/2011

This document is intended to provide a framework for discussion on the topic of how the Association can apply a credible vetting process to be applied when members seek the endorsement technology or services being rolled into the marketplace.

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### Revisions

Serial	Date	Change	By	Authority
1	12 April 2011	Initial draft	Allan McDougall	TOR
2	16 April 2011	Integration of checks for engineering principles	Allan McDougall	TOR
3	22 April 2011	Integration of safety elements required to be asked by those completing the working tool	Allan McDougall	TOR
4	18 May 2011	Revisions and integration of comments based on review of OceanusLive and other notes	Allan McDougall	TOR

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## Intent

1. The purpose of this document is to provide an initial framework for discussion purposes.
2. This discussion will focus on the vetting process to be used by the Association when deciding whether or not (and to what extent) it will endorse technology or services being rolled into the market.

## Background

3. Within the maritime security domain, technology must meet a range of requirements that are defined in conventions, laws, regulations or best practices.
4. The vetting of technology must be considered more than an issue of regulatory compliance. It must be based upon the following:
  - 4.1. Ensuring that the concept used to design and implement the technology follows sound practices;
  - 4.2. Ensuring that the design of the technology followed sound practices;
  - 4.3. Ensuring that the technology has a reasonable chance of surviving in its intended operational environment;
  - 4.4. Ensuring that the technology does not put the operator at risk nor does it put innocent bystanders at an elevated level of risk, as much as can be reasonably foreseen;
  - 4.5. Ensuring that the technology can be maintained and does not put an undue pressure on the industry or organizations to maintain it;
  - 4.6. Ensuring that the technology or service is managed in such a way that it either evolves with the market or can be pulled from service gracefully;
  - 4.7. Ensuring that the technology or service integrates appropriate Asset Protection and Security (AP&S) measures so as to offer a reasonable assurance of its continuity under foreseeable circumstances; and
  - 4.8. Ensuring that appropriate training and development are integrated into the system to minimize the risks associated with user error, missteps in maintenance or other similar events.

## Coming into Force

5. This document will come into force upon its publication, currently set as being 01 May 2011.

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## The Vetting Process

6. The Association shall perform its assessment of the new technology in accordance with the following principles:
  - 6.1. **Competence** – only those people that are competent to assess a good or service shall be involved in the assessment process. The Executive member overseeing the assessment process must be able to demonstrate both competence experience (relevant to maritime security) in the domains being assessed;
  - 6.2. **Clarity** – the assessment shall be made and communicated in a clear way, respecting both the need of potential clients (or the public) to understand the basis of the assessment while also respecting the owner's right to the reasonable protection of its proprietary information; and
  - 6.3. **Relevance** – the assessment shall only include that information that applies to the product (or service), its design, implementation, management and retirement from service.

## Oversight of the Process

7. This effort is considered to fall under Section 11(a) (iv) of the Constitution describing *Reviews, Endorsement and Vetting*.
8. The structure of the committee used to vet technology is considered to fall under Section 10 describing *Ad Hoc Committees*. In this case, the Ad Hoc Committee would only be struck for the time required to perform the assessment and will be referred to as a *Technical Evaluation Team*. (TET)
9. In this case, the TET will report to a member of the Executive. The role of the Executive member is to ensure that the evaluation process proceeds fairly and that adequate documentation is retained.

## Constraints on those Conducting Assessments

10. All persons conducting assessments must have completed the Non-Disclosure Agreement and Code of Practice. A statement from the individual conducting the assessment may be required to further reinforce that they have agreed to these steps as published on the [www.iamsonline.org](http://www.iamsonline.org) website.
11. All persons conducting assessments must indicate that they understand that they are responsible for ensuring the appropriate safeguarding of the proprietary information of the submitter.
12. All details regarding an assessment or submission shall be retained by the Association and reasonable steps shall be taken so as to reduce the risks associated with unauthorized disclosure, modification or deletion.

## Core Tasks

13. The Executive of the Association shall maintain this process and publish it to ensure full transparency in the process.

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14. The owner of the technology or provider of the service makes the determination to submit the technology for vetting and enters into discussions with respect to the nature of the vetting and the persons conducting the vetting. At the end of the discussions, the following questions are answered and documented:
  - 14.1. The understanding of the submitter that the TET must have full access to those elements on the vetting questionnaire;
  - 14.2. The understanding of the Association that proprietary information is to be afforded appropriate controls and not released without the submitter's written consent;
  - 14.3. The understanding of the scope of the vetting and any limitations that places on the results;
  - 14.4. The understanding of safety and similar requirements; and
  - 14.5. The understanding with respect to any costs being incurred, the specific nature of those costs, and any limitations that are to be adhered to.
15. The TET is identified and the members' names are communicated to the owner of the technology or service.
16. The TET conducts the assessment using the guide provided.
  - 16.1. If costs are involved in the TET Assessment, these are coordinated in advance as discussed at an earlier level.
17. Based on the scoring achieved, the TET makes a recommendation and communicates this to the member of the Executive.
18. The Member of the Executive checks to ensure that all appropriate work has been completed.
19. The Executive member either endorses the report or sends it back for review.
20. Once accepted by the Executive, the Executive, on behalf of the TET, communicates the results back to the owner of the technology or provider of the service.
21. The Executive confirms with the submitter that the results (not the detailed scoring) are releasable into the public domain. If so, then a post is developed and included on the IAMSP website..

### Determination of Expertise and Professional

22. The determination of expertise will be based upon the criteria used to establish expertise in the courts. While there is a level of subjectivity understood in this process, the assessment must be based on clearly demonstrable grounds:
  - 22.1. Formal education from accredited institutions that deliver that training normally;
  - 22.2. Certification by professional bodies (not business interests);
  - 22.3. Experience directly in the matter being discussed; and
  - 22.4. Recognition by peers that the level of knowledge being communicated is beyond the average.
23. The determination of the concept of a professional shall be based upon the following criteria:
  - 23.1. Formal education or acceptance of a critically reviewed, peer developed body of knowledge;

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- 23.2. A demonstration that the individual is competent in that body of knowledge (certification);
- 23.3. Confirmation that the individual follows a regime of continuous learning or upkeep of that body of knowledge;
- 23.4. Verification that the individual practices or applies that body of knowledge (experience); and
- 23.5. Confirmation that the individual's actions are subject to oversight by a body with no vested interest and an acceptable code of conduct and that the individual has not breached that code of conduct.

### Standard for Selection of Reviewers

- 24. The Reviewer must be considered to be a professional as defined above and be able to demonstrate expertise. This must be agreed to by both the Submitter and the representative of the Association.
- 25. The Reviewer must be a Member in good standing.
  - 25.1. Where the Association does not have an agreed upon Member in good standing, an outside professional may be agreed upon but will be required to submit the Non-Disclosure Agreement and the Code of Practice before undertaking tasks.
- 26. The mechanics for the selection of the Reviewer is included above.

### Identifying the Checks to be Conducted

- 27. The checks conducted are defined on the working tool that is used for the purposes of assessment. This tool, while not available to the public, is available to those that are seeking endorsements of their technology at the onset of the process or upon request for companies that are considering having their product endorsed.
- 28. No requirement shall be blindly accepted. Each must be reviewed by competent persons to ensure that the specific details are appropriate.

### Accepted Standards

- 29. Accepted standards will be identified based on the nature of the good or service.
- 30. Accepted standards must meet all of the following criteria:
  - 30.1. Be developed through a consultative process involving experts and those affected by the standards;
  - 30.2. Be subject to critical review by those who can legitimately claim expertise;
  - 30.3. Be subject to oversight by a third party with no vested interest beyond the maintenance of the standard; and
  - 30.4. Be subject to periodic reviews.
- 31. The determination that a standard is pertinent sets a precedent for future use, but only in the same usage and context. A list will be maintained and published on the Association website for those

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seeking reference materials to use when developing further training. Where reference material must be purchased, it is the responsibility of the Submitter.

## Development Standards

32. The management of the production of the good or delivery of the service seeking endorsement must be subject to a Quality Assurance policy and consistent development methodology. These include standards such as those published by ISO or similar bodies.

## Scoring of Checks

33. The scoring of checks is based upon the following principles:
- 33.1. The standard that must be achieved is identified. This shall be based upon a combination of the following:
    - 33.1.1. Minimum standards necessary to adhere to any legal or regulatory requirements;
    - 33.1.2. Best practices as already defined by or appropriate to the industry most commonly using the equipment; and
    - 33.1.3. Acceptable practices as appropriate or applicable to the maritime environment.
  - 33.2. The equipment is compared by the TET to determine how the equipment's performance with respect to the individual question compares to those standards. This is remarked upon in the appropriate section;
  - 33.3. The rationale for the scoring is provided for each question on the questionnaire.
  - 33.4. Once the scoring is complete, the scores are tallied (automatically) by the working tool;
  - 33.5. For equipment to pass the validation phase, it must meet the scoring criteria as defined in the Outcomes section below.

## Outcomes

34. The Association will require that the assessment clearly indicate whether or not the good or service falls into the following categories:
- 34.1. **Fully endorsed** –this is reserved for assessments where the results do NOT include a failure of a critical question, the overall score is greater than 88% and all scores are over 80%;
  - 34.2. **Endorsed** – this is reserved for assessments where the results do NOT include a failure of a critical question, the overall score is under 88% or two or more scores are under 80%;
  - 34.3. **Supported** –this is reserved for assessments where the results do NOT include a failure of a critical question, the overall score is under 77%, or two or more scores are under 75%;
  - 34.4. **Not-Supported** –this is reserved for assessments where the results include a failure of a critical question, the overall score is under 66%, or two or more scores are under 70%; and
  - 34.5. **Incomplete** – This is reserved for occasions when the questionnaire cannot be completed or if critical questions cannot be answered.



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35. The owner or provider of the good or service may have the score elevated where it can be shown that steps were taken that reasonably ought to increase the score. This may be the result of the following.
- 35.1. Additional work is undertaken that causes specific items to be addressed in the scoring;
  - 35.2. Existing work is modified, resulting in conditions where a higher score would be achieved; and
  - 35.3. Work that was unnecessary and was reducing the overall score is removed.
36. It should be clear that there is no second standard for the verification of work. All verifications must be able to meet the standards associated with internal audits that are subject to third party review.

### Costs to Maintain Endorsement

37. There is no cost to the company to maintain the endorsement. The endorsement is maintained as a matter of course for so long as none of the conditions identified in the report change.
- 37.1. Should the company wish to support IAMSP as the result of the receipt of a positive review, the following options are available:
    - 37.1.1. A donation of an amount suitable to the company made directly **to the Association**;
    - 37.1.2. A donation to an **accredited maritime institution** within the operating environs of the company in the name of the company and the Association;
    - 37.1.3. A donation to the **Seafarer's Welfare Fund** with the caveat that it is to support mariners that have been injured while performing maritime security functions or their beneficiaries;
    - 37.1.4. A donation to an **accredited veterans rehabilitation fund** targeting maritime-related trades, members of the Coast Guard, or civilians that were performing services within the maritime industry on behalf of their nation when injured. This may also be done through an appropriate veteran's association, such as the Legion or Wounded Warrior program.
  - 37.2. A member of the Executive (performing oversight functions) or a member of the TET that performs an evaluation on behalf of the Association may not receive any monetary benefit or other consideration from the Company in return for the performance of the work beyond those reasonable expenses paid (travel, accommodations, food, and per diem).

### Use of Logos

38. The use of logos is covered under the *Use of Logos* policy covered on the Association website.

### Reporting and Returns

39. Annually, based on the date of the original endorsement, the Submitter must provide a report that indicates the following:
- 39.1. Any changes made to the technology being evaluated material;

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- 39.2. The changes in the user community or any changes to the operations the technology supports; and
- 39.3. Any comments regarding the utility of the vetting / endorsement process.
- 40. Where a report is determined to be deliberately misleading, it is considered to be a clear violation of the Code of Practice and will automatically result in the removal of all endorsements and privileges of the individual.

### Revisions

- 41. This document is subject to annual review by the Board of Directors and Core Operating Staff.