Maritime Safety Authority:
Progress in implementing
recommendations of the
Review of Safe Ship
Management Systems

December 2005

This is the report of a performance audit we carried out under section 16 of the Public Audit Act 2001.

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Foreword

In 2002 the Maritime Safety Authority of New Zealand commissioned an independent review of the Safe Ship Management System – a system aimed at making ship owners and operators responsible for the daily safe maintenance and operation of their vessels throughout the year.

The independent review identified a number of concerns with the Safe Ship Management System and made a number of recommendations aimed at improving the system. My audit looked at the progress the MSA has made in implementing the recommendations, and I am pleased to report that progress has been good.

Moreover, I believe that the changes made because of the review – particularly the introduction of the new Safe Ship Management Code of Practice – will improve safety systems applying to vessels by providing a consistent and mandatory basis for defining and monitoring safety in the maritime industry.

K B Brady Controller and Auditor-General

8 December 2005

Contents

Summary	5
Background	6 7
Part 1 – Introduction	9
Why we conducted an audit Objectives of our audit How we conducted the audit	9
Part 2 – Background	11
The Maritime Safety Authority of New Zealand Development of Safe Ship Management and Safe Operational Plans	
Part 3 – Reviews of, and changes to, Safe Ship Management	16
Independent consultant's report in 2000	16 19
Part 4 – Implementation of the SSM Review recommendations	22
Use of project management	23
Part 5 – Effectiveness of consultation	26
Consultation with Safe Ship Management companies Consultation with owners and operators Other issues raised by owners and operators	27
Part 6 – Progress in implementing changes	30
New mandatory Safe Ship Management Code of Practice The Maritime Safety Authority reclaims most of the Safe Operational Plans services Other key changes	32
Addendum – Changes in Policy	37
Appendix	40
Figure 1 The MSA's Safe Ship Management System	12

Summary

Background

In 1997, we reported to Parliament that the Maritime Safety Authority of New Zealand (the MSA) was introducing Safe Ship Management for New Zealand-owned commercial vessels operating in New Zealand, such as small domestic cargo, passenger and fishing vessels, to improve their day-to-day safety.

Safe Ship Management replaced the earlier system of annual surveys, and aimed to make ship owners and operators responsible for the daily safe maintenance and operation of their vessels throughout the year.

Safe Ship Management was introduced in February 1998. It was followed a year later by Safe Operational Plans – a scaled-down version of Safe Ship Management, designed to provide a practical and affordable set of safety requirements for smaller commercial operators, such as commercial jet boat and river rafting operators.

The new system of Safe Ship Management required inspections and audits to supplement the daily obligation on owners and operators to maintain and operate their vessels safely. The audits and inspections were carried out by approved service providers (SSM companies). In the case of the Safe Operational Plans system, Authorised Persons carried out inspections and audits.

Problems with Safe Ship Management

The introduction of Safe Ship Management and Safe Operational Plans was not without problems. A report commissioned in 2000 by the MSA Board (and conducted by Pacific Marine Management Limited) expressed concern at evidence of growing risks associated with the new systems. The report identified problems including a lack of consistency, overcharging, and reluctance by some owners and operators to undergo audit.

In March 2002, the MSA Board initiated another independent review of Safe Ship Management and Safe Operational Plans, conducted by Thompson Clarke Shipping Pty Limited (Thompson Clarke) – an Australian company with internationally recognised expertise in the maritime field. The Board received Thompson Clarke's comprehensive *Review of Safe Ship Management Systems* (the SSM Review) in September 2002.

On 17 December 2002, the MSA Board approved the implementation of 11 of the SSM Review's 29 recommendations, and noted the remaining 18.

The changes resulting from the 11 recommendations represent a major shift from the initial Safe Ship Management system of self-regulation and the delegated monitoring and enforcement of safety standards towards direct MSA regulation of, and involvement in, the administration and monitoring of the system.

Because of our previous interest in Safe Ship Management, we decided to:

- examine whether the MSA Board had adequate information to make well-informed decisions on which SSM Review recommendations to implement;
- examine the time frames involved in implementing the recommendations and whether the MSA Board was monitoring the implementation of the approved recommendations;
- examine whether the MSA Board properly considered the costs to the maritime industry of implementing the proposed changes;
- examine the effectiveness of consultation with key stakeholders; and
- examine progress in implementing the approved recommendations.

Findings of our audit

Our findings cover the MSA's approach to the recommendations of the SSM Review and its progress in implementing changes to the Safe Ship Management and Safe Operational Plans systems.

The MSA's approach to the SSM Review recommendations

In our view, the MSA adopted an appropriate approach to receiving and implementing the recommendations from the SSM Review.

We are also satisfied with the MSA Board's reasons for not implementing all the SSM Review's recommendations.

It is our view that, the MSA did not estimate the costs to the industry of the MSA implementing the SSM Review's recommendations for auditing and, from the perspective of relationship management, it may have been useful to estimate these costs, and to inform owners and operators of them. Management of the MSA and the MSA Board consider that this work was conducted when SSM was introduced.

We also consider that the MSA did not provide written specific or summarised feedback to stakeholders who provided submissions when they were invited to do so. It is good practice to provide such feedback.

Progress in implementing SSM Review recommendations

The most significant change resulting from the SSM Review is the introduction of the New Zealand Code of Practice for Safe Ship Management (the new Code of Practice). The Code of Practice is the main way the MSA has implemented the SSM Review's recommendations. It requires vessel owners, operators, and SSM companies to keep extensive safety management documentation, and – on request – to either display it or make it available to the MSA. The Code of Practice also has inbuilt performance indicators for SSM companies.

Our view is that introduction of the new SSM Code will significantly improve the Safe Ship Management system by providing a consistent and mandatory basis for defining and monitoring the implementation of safety in the maritime industry. However, the MSA must ensure that it undertakes appropriate monitoring, and, if necessary, enforcement action to ensure that the SSM Code is complied with.

The Safe Operational Plans Authorised Persons scheme has been largely abolished, and replaced by use of the MSA's own safety auditors. This change will ensure that there is greater consistency in the provision of audit services to Safe Operational Plans vessel operators.

There are 2 exceptions to the revised Authorised Persons scheme. In the first, the MSA allows New Zealand Underwater (which represents individuals and recreational groups concerned with the maintenance, preservation, and protection of the underwater resource) to manage the Authorised Persons scheme for dive boats 6-metres and under. Secondly, the MSA allows the Queenstown Lakes District Council to audit adventure tourism vessels (jet boats and white water rafts) in its district. In our view, these exceptions could result in different audit and safety standards in the Queenstown Lakes District Council or for dive boats 6-metres and under. The MSA must ensure that they have appropriate monitoring procedures to ensure that this does not happen.

The MSA has also reclaimed from the SSM companies the initial audit of all Safe Ship Management vessels. The initial audit is an important part of the establishment of the Safe Ship Management baseline standard for vessels, and therefore helps create consistency. This action by the MSA is also intended to help address another SSM Review finding that the MSA was losing hands-on expertise and experience in one of its key areas of responsibility. We endorse the MSA doing the initial audit.

The SSM Review also looked at the MSA's safety profiling system and suggested that the MSA needed to give proper attention to the safety profiling system in order to ensure that the potential benefits can be fully realised. Although we did not audit the MSA's safety profiling system, we endorse the use of such systems, so long as they are reliable indicators of risk.

References to the Maritime Safety Authority and Maritime New Zealand

Our report refers to the Maritime Safety Authority in relation to our findings because this was the name of the organisation at the time of the audit. However, our recommendations are directed at Maritime New Zealand, being the new name of the entity from 1 July 2005.

Recommendations

We have made 2 recommendations:

Recommendation 1

We recommend that Maritime New Zealand adopt an approach of continuous improvement in respect of its communication with owners and operators of small specialist commercial vessels.

Recommendation 2

We recommend that, when Maritime New Zealand invites written submissions on proposed changes in future, it provide written specific or summarised feedback and explanations to stakeholders who make submissions.

Part 1 – Introduction

Why we conducted an audit

- 1.1 In 1997, when we reviewed risk management in the Maritime Safety Authority of New Zealand (the MSA), we noted that it was introducing the Safe Ship Management System to improve the day-to-day safety of domestic commercial vessels. We said this system had the potential to be more effective than the annual ship inspection system that existed at that time, but that much would depend on the MSA enforcement system.¹
- 1.2 Safe Ship Management was introduced in 1998, and Safe Operational Plans – a scaled down version of Safe Ship Management for smaller commercial vessels – was progressively introduced in 1999 (see paragraphs 2.8-2.27).
- 1.3 In 2000, the MSA commissioned a report on the new system by independent consultant Pacific Marine Management Limited, which highlighted some issues needing attention.
- 1.4 In 2002, the MSA commissioned an independent review of the Safe Ship Management System by maritime safety experts Thompson Clarke Shipping Pty Ltd. This review (the SSM Review), while endorsing the philosophy and intent of Safe Ship Management, did contain some criticism of the administration and delivery of the Safe Ship Management and Safe Operational Plans systems, and made 29 recommendations aimed at improving them. The MSA Board approved the implementation of 11 of those recommendations.
- 1.5 Because of the extent of the findings and recommendations from the SSM Review, we wanted to determine how effectively and efficiently the MSA has implemented the review's recommendations.

Objectives of our audit

1.6 Specifically, our key audit objectives were to:

- examine whether the MSA Board had adequate information to make wellinformed decisions on which SSM Review recommendations to implement;
- examine the time frames involved in implementing the recommendations and whether the MSA Board was monitoring the implementation of the approved recommendations:
- examine whether the MSA Board properly considered the costs to the industry of implementing the proposed changes;

Report of the Controller and Auditor-General, Fourth Report for 1997, parliamentary paper B.29[97d], pages 109-119.

- examine the effectiveness of consultation with key stakeholders; and
- examine progress in implementing the approved recommendations.

How we conducted the audit

- 1.7 We interviewed the Chairperson of the MSA Board and MSA staff, making use of standard questions focusing on our audit objectives. We examined key MSA documents to verify responses.
- 1.8 We interviewed representatives of the 3 largest SSM companies approved private service providers which provide 87% of Safe Ship Management services to operators.
- 1.9 We also interviewed 5 commercial adventure tourism operators based in the Rotorua and Christchurch areas.

Part 2 – Background

- 2.1 In this Part, we provide background information on:
 - the MSA;
 - the development of Safe Ship Management and Safe Operational Plans; and
 - the importance to the MSA and the maritime industry of commercial vessels operating under Safe Ship Management and Safe Operational Plans.

The Maritime Safety Authority of New Zealand

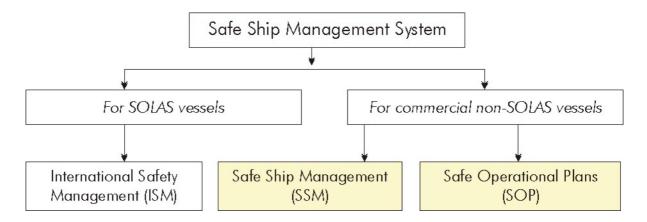
- 2.2 The MSA is a Crown entity established in August 1993. Its main role is to promote maritime safety, prevent marine pollution, provide maritime search and rescue response co-ordination and co-ordinate maritime security. From 1 July 2005, the MSA was renamed Maritime New Zealand.
- As a Crown entity, the MSA is governed by an Authority of 5 members appointed by the Governor-General on the recommendation of the Minister of Transport. For the purposes of this report, we refer to the 5-person Authority as the MSA Board.
- 2.4 The MSA Board appoints the Director of Maritime Safety, who has independent statutory powers of enforcement under the Maritime Transport Act 1994. The Director is the employer of almost 130 permanent staff of the MSA.
- 2.5 The MSA's functions relevant to our audit are to:
 - promote maritime safety;
 - license ships, their operation, and their crews;
 - provide maritime transport information and advice; and
 - investigate and review maritime transport accidents and incidents.
- 2.6 In addition, the Director's statutory functions relevant to this audit are to:
 - control entry into the maritime transport system through the granting (and suspension or revocation) of maritime certificates;
 - enforce the provisions of the Maritime Transport Act, and the regulations and rules made under the Act;
 - monitor adherence within the maritime transport system to any regulatory requirements relating to safety; and
 - ensure regular reviews of the maritime transport system to promote the improvement and development of its safety.

2.7 MSA staff members also oversee the services provided (under delegated authority of the Director) by private organisations in the area of maritime safety management systems, which replaced the traditional survey of ships in 1998.

Development of Safe Ship Management and Safe Operational Plans

- 2.8 Before 1998, the MSA required vessels to be surveyed once a year by private survey providers under powers delegated by the Director. The annual survey approach meant, in effect, that vessels were known to be safe only on the day of survey.
- 2.9 In 1998, a new system called Safe Ship Management was introduced for domestic commercial ships, such as fishing, small passenger and small cargo vessels, operating in inland and coastal waters in New Zealand (see paragraphs 2.14-2.23).
- 2.10 The new system incorporated elements contained within the draft (at that time) International Safety Management (ISM) Code for large ships that trade internationally, and simplified these for application to commercial domestic ships (for example, fishing vessels, tugs, work boats and the Auckland ferries). It focused on prevention, and having a positive safety culture aimed to ensure that commercial vessels were maintained and operated safely throughout the year and not just on survey day.
- 2.11 The Safe Operational Plans system was progressively introduced from 1999 for smaller commercial vessels such as maritime adventure craft, dive boats and small fishing boats (see paragraphs 2.24-2.27).
- 2.12 Safe Ship Management and Safe Operational Plans comprise 2 of the 3 core business areas in the MSA's Safety Management Systems, as shown in Figure 1. The other area, International Safety Management (ISM), covers the safety of ships operating internationally, both New Zealand-owned vessels and foreign-flagged vessels visiting New Zealand, which are known as SOLAS or (Safety of Life at Sea) vessels.
- 2.13 The MSA's involvement in managing ISM on vessels which are not New Zealand-owned or flagged is restricted to inspection only, using internationally agreed standards. These inspections are known as Port State Control, and is practised by most countries that have international ships trading to them.

Figure 1
The MSA's Safe Ship Management System



What is Safe Ship Management?

- Safe Ship Management requires ship operators to have, and follow, an operating manual the safety manual that specifies the procedures necessary to ensure that the ship is safely operated, identifies limitations on areas of operations, and identifies the training/qualification requirements for ship crews. Inspections and surveys of the physical condition of the ship and audits of the safety systems are carried out by private service providers (called SSM companies) to ensure that the vessel's safety is being maintained. A certificate is issued by the SSM company if the physical condition and safety systems are satisfactory. Out-of-water inspections are generally carried out generally every 2 years, and in-depth system audits are carried out 6 months either side of that inspection.
- In essence, Safe Ship Management is a structured and documented safety system that records everyday safety procedures and ensures that all crew are trained to follow them. SSM puts the onus on commercial operators to ensure that they are operating their vessels safely at all times, not just at the predetermined survey date.
- 2.16 Every aspect of a vessel and its operations is covered. This includes its construction, stability, equipment, operating limits, operating parameters, the qualifications and training of its crew, vessel maintenance, and emergency procedures.
- 2.17 SSM companies ensure that the manuals are in place and being followed; for example, they monitor that a vessel's safety systems are properly maintained. A commercial vessel operator, with the guidance of an SSM company, documents all vessel safety procedures in a safety manual, and ensures that all members of the crew are trained to follow these procedures.
- 2.18 This includes using audits and inspections to check that there are appropriate safety equipment, safety manuals, and safe operating procedures on board, and that ships are complying with both the safety manual and the procedures.

- 2.19 If the vessel's safety systems are found to be satisfactory, the SSM company issues a Safe Ship Management Certificate (SSM Certificate). This certificate is a vessel's maritime document and replaces the survey certificate. Commercial operators cannot operate legally without a current SSM Certificate.
- 2.20 After each inspection or audit, or after a significant event such as an accident or change of ownership, the vessel's safety profile is assessed. Higher risk vessels are inspected more often, and MSA inspectors are empowered to conduct random spot checks to verify compliance with Safe Ship Management. SSM companies are periodically audited by the MSA.
- 2.21 Since 1998, Safe Ship Management has applied to every New Zealand vessel which is:
 - a fishing vessel; or
 - a commercial vessel, other than a fishing vessel, which does not proceed beyond restricted limits; or
 - a passenger vessel of less than 45 metres in length that proceeds beyond restricted limits, but not on an international voyage; or
 - a non-passenger vessel of less than 500 gross tonnes or less than 45 metres in length that proceeds beyond restricted limits; or
 - a barge which carries any persons during a voyage.
- 2.22 Safe Ship Management also applies to every foreign non-passenger ship of less than 500 gross tonnes or any foreign fishing vessel operating on the New Zealand coast.
- As at 6 December 2005, 2980 commercial vessels were covered by Safe Ship Management (924 fishing vessels, 1341 passenger vessels, 710 non-passenger vessels, and 5 barges).

What is a Safe Operational Plan?

- 2.24 Safe Operational Plans were first introduced in 1999, a year after the introduction of Safe Ship Management. It is a scaled-down version of Safe Ship Management, designed to provide a practical and affordable set of safety requirements for the following small commercial boats:²
 - jet boats operating at planning speed on rivers;

The main legal support for Safe Operational Plans is provided by Maritime Rule Part 80. It prescribes requirements for safety and a code of practice for commercial jet boats operating on rivers at planning speeds, and requirements for safety and a code of practice for commercial rafting on rivers. In both cases, the operators are required to have in place an approved Safe Operational Plan. Operations must be audited, and the plan must be approved by persons with relevant knowledge of the maritime industry, authorised by the Director of Maritime Safety. Part 80 came into force on 11 February 1999.

- white water rafts operating on rivers;
- fishing vessels of 6-metres or less in length; and
- recreational diving vessels of 6-metres or less in length.
- 2.25 A vessel's Safe Operational Plan must be approved by an MSA-appointed Authorised Person or an MSA Safety Auditor.
- 2.26 When the Safety Auditor or Authorised Person is satisfied that a vessel's Safe Operational Plan meets the MSA's safety requirements, a Certificate of Compliance is issued. Commercial operators cannot operate legally without a current Certificate of Compliance.
- 2.27 As at 6 December 2005, 548 vessels were covered by Safe Operational Plans (89 diving vessels, 331 fishing vessels, 50 jet boats, 54 rafts, 4 hovercrafts, and 20 others).

Part 3 – Reviews of, and changes to, Safe Ship Management

- In this Part, we look at 2 independent reviews of the Safe Ship Management System

 a report completed in 2000 by Pacific Marine Management Limited, and a more
 comprehensive review completed in 2002 by Thompson Clarke Shipping Pty
 Limited. We set out:
 - the nature and findings of both reviews; and
 - whether the MSA Board responded reasonably and appropriately to the recommendations made by the 2002 review.

Independent consultant's report in 2000

- 3.2 A paper by an independent consultant,³ commissioned by the MSA Board in 2000 *Review of Safe Ship Management* concluded that: "In overall terms, the introduction of SSM has been beneficial, as is its continuation. The administration of SSM, by both the MSA and the SSM companies, is satisfactory, but there are several specific issues that need attention".⁴
- 3.3 The issues needing attention included:
 - inconsistencies in standards and interpretation by SSM companies;
 - concerns about the competence of unqualified SSM company inspectors; and
 - non-acceptance of the Safe Ship Management System by 20-30% of owners and operators.
- As a result of this review, the MSA decided to work closely with the maritime industry to improve the industry's understanding of the Safe Ship Management System and to resolve the issues identified in the report. No other action was taken in respect of the report. We consider that this was a reasonable response.

Independent review in 2002

3.5 By 2002, the MSA had identified a number of issues with Safe Ship Management. These issues had arisen as a result of further developments in safety management systems such as the introduction of the Safe Operational Plans concept and the merger of some SSM companies. Issues identified included:

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Pacific Maritime Management Limited.

Review of Safe Ship Management, Pacific Maritime Management Limited, page i.

- increasing concerns about the safety management systems, including lack of consistency in the application of SSM from various service providers, overcharging, lack of reward for good operators, lack of support for MSA safety initiatives, and reluctance to undergo MSA audits;
- an increased number of deficiencies detected by inspections and audits;
- lack of understanding by some SSM companies and vessel owners and operators of their responsibilities and obligations, particularly to the MSA; and
- diminished economic viability of the system to deliver safety at reasonable cost over the longer term.
- 3.6 The MSA recognised that, although the SSM was still relatively new, there were implementation problems, and it took action, in accordance with its statutory mandate to promote a safe maritime environment.
- 3.7 On 20 March 2002, the MSA Board formally decided to commission an independent review of Safe Ship Management and Safe Operational Plans. The Board engaged a firm of safety experts from Australia, Thompson Clarke Shipping Pty Limited (Thompson Clarke), to enquire into the Board's concerns and to report back to the Board on the operation of Safe Ship Management and Safe Operational Plans.

Findings of the Review of Safe Ship Management Systems

- 3.8 The MSA Board received Thompson Clarke's comprehensive 214-page *Review of Safe Ship Management Systems* (the SSM Review) in September 2002.
- 3.9 The SSM Review painted a critical picture of the way in which Safe Ship Management and Safe Operational Plans safety provisions were being administered and delivered.
- 3.10 The SSM Review also raised specific issues that needed immediate attention. For example:
 - a significant number of private service providers (SSM companies and authorised persons) were not meeting minimum procedural requirements;
 - private service providers were not always effective and consistent; and
 - the MSA was playing an increasingly remote role under SSM because of the involvement of SSM companies, which meant it was losing "hands-on" vessel survey experience and understanding of small vessel operations.
- 3.11 The SSM Review also found that the MSA lacked adequate management control over private service providers, with the consequence that the providers were not always working in the best interests of the SSM system. The review noted that vessel safety management systems were excessively complex and costly for smaller owner-operated vessels, and that owners of these vessels lacked the resources to manage systems developed for larger vessels. The main findings of the SSM Review are set out in the Appendix to this report.

SSM Review recommendations approved for implementation

- 3.12 At a meeting on 17 December 2002, the MSA Board approved 11 of the SSM Review's 29 recommendations for implementation, and noted the remaining 18.
- 3.13 The recommendations which the MSA Board approved included that the MSA should:
 - take a more direct role in delivering SSM services to ensure that its expertise is maintained;
 - improve its overall strategic management of SSM delivery;
 - improve its management control over SSM companies;
 - introduce national standards and performance indicators for SSM companies;
 - improve its targeting of SSM vessels;
 - promulgate a Safe Ship Management standard that SSM companies would implement; and
 - abandon the Safe Operational Plans Authorised Persons scheme and replace it with an in-house Safe Operational Plans scheme.
- 3.14 Since adopting the recommendations, the MSA undertook a consultation process with key stakeholders (SSM companies and the owners and operators of Safe Operational Plans vessels) to obtain their commitment and "buy-in" to the proposed changes.
- 3.15 The changes can be grouped into 3 main areas:
 - introduction of a New Zealand Code of Practice for Safe Ship Management. The new Code of Practice was originally going to be implemented and be effective from 1 February 2004. However, it was not implemented until 1 February 2005. We comment more about this in paragraphs 6.3-6.14;
 - the MSA reclaiming most of the Safe Operational Plans services from private sector providers. This change took place from 12 July 2004. We comment more about this in paragraphs 6.15-6.26; and
 - other changes relating to risk management processes and improving communications with key stakeholders. The MSA has progressively implemented these changes.
- 3.16 Specific progress in implementing the changes is discussed in Part 6. We have also included recent developments in Safe Ship Management and Safe Operational Plans in an Addendum following Part 6.

- 3.17 We believe the MSA Board approached the review of the Safe Ship Management System in a timely and reasonable manner. The MSA Board first reviewed the new system by commissioning an independent consultant's report in 2000, which was less than 2 years after the system was introduced. Although the 2000 report identified some issues with the new system, these were not so significant as to require a fundamental review. Moreover, given the nature of the findings, the MSA's response to them was appropriate.
- 3.18 However, by early 2002 there were indications of a number of significant shortcomings with the Safe Ship Management System and the MSA Board, appropriately in our view, asked Thompson Clarke to undertake a more comprehensive review of the system. This review led to Thompson Clarke making some significant recommendations.

The Maritime Safety Authority's process for adopting recommendations

- In order to decide which of the SSM Review's recommendations to approve, the MSA Board had access to the full report of 214 pages, and had the opportunity to question MSA staff about the review. At a meeting on 19 November 2002, the author of the report gave a verbal analysis and debriefing of the SSM Review and answered the Board's questions.
- 3.20 At a further meeting on 17 December 2002, the MSA Board considered and adopted a paper recommending that 11 of the 29 review recommendations be approved for implementation, and noting, rather than requiring MSA action on, the remaining 18 recommendations.

Our findings

- The MSA Board's decision-making process was well-informed and open. Moreover, we are satisfied that the information received by the Board prepared by the MSA's Strategic Review Group was accurate and balanced, and fairly reflected the SSM Review's key findings and actions. In developing this advice, the Strategic Review Group used 19 separate criteria to rank the options and mixes of recommendations suggested for approval by the Board.
- 3.22 The criteria included:
 - vessel safety outcomes;
 - reasonable costs to operators and the MSA;
 - nationally consistent standardisation;
 - coverage and compliance;

- effective MSA control over service delivery;
- strategic management of Safe Ship Management; and
- improved risk management.
- 3.23 The criteria selected allowed the Strategic Review Group to appropriately balance some of the competing priorities inherent in the SSM Review and to give the MSA Board appropriate advice.
- 3.24 The SSM Review focused on how to improve Safe Ship Management and Safe Operational Plans for small specialist commercial vessels. We expected that recommendations for possible improvements would be assessed in terms of their effectiveness and efficiency in fulfilling the relevant MSA statutory responsibilities. This was the case.

The Maritime Safety Authority's reasons for not adopting all recommendations

- 3.25 The MSA did not take any action on 18 of the recommendations. One of the aims of our audit was to look at the reasons why the MSA Board did not adopt all the review recommendations.
- 3.26 In this respect, we note that the SSM Review itself never expected that all the recommendations would be implemented. In particular the SSM Review noted that –

For its part, TCS does not expect universal acclamation for all the Findings contained in this Review, neither does TCS expect that MSA will implement necessarily all the Review's Recommendations; our expectation, however, is that this Review will generate a robust and constructive debate in New Zealand amongst all involved in the attainment of maritime safety outcomes about the future direction of Safe Ship Management.⁵

- 3.27 The MSA Board's reasons for not adopting particular recommendations were that:
 - the recommendation concerned wider policy issues; or
 - the Board disagreed with the recommendation; or
 - the recommendation was contained in other recommendations; or
 - the recommendation was being addressed through other MSA initiatives.

⁵ SSM Review, page 23.

- 3.28 We are satisfied with the reasons that the MSA has provided for not adopting all the recommendations. As we see it, the MSA has picked out the key recommendations and is moving to implement them, primarily through the Code of Practice.
- We consider that this approach of the MSA Board is based on carefully reviewing all the recommendations and implementing the main ones.

Part 4 – Implementation of the SSM Review recommendations

- 4.1 In this Part, we discuss the implementation of the SSM Review recommendations; in particular:
 - use of project management to implement the 11 approved recommendations;
 - monitoring of implementation; and
 - the costs of implementation.

Use of project management

- 4.2 Because of the length of time and the complexity envisaged to implement the approved recommendations (in particular, the Code of Practice, which encompassed most of the recommendations but was not going to be implemented until 1 February 2004), we expected that implementation would have been project-managed. This would involve a planned and managed approach within defined parameters of time, cost, and performance targets, with an individual staff member responsible for the day-to-day management of the project.
- 4.3 The MSA Board did consider and note a detailed process and timetable for considering and implementing the SSM Review's main recommendations. The project manager was the General Manager, Maritime Operations.
- 4.4 The completion date on the original project plan was subsequently extended for an additional year (to 1 February 2005) to allow enough time for, in particular:
 - necessary amendments to the Maritime Rules to align them with the new New Zealand Code of Practice for Safe Ship Management; and
 - improvements in the MSA's strategic and operational management of the SSM system, including a structural review and the appointment of new staff.
- 4.5 Although the Code of Practice was implemented and became operational from 1 February 2005, the MSA says it now seems likely that full implementation can be no earlier than late 2005. Primarily, this is because the MSA is still having difficulty getting all SSM companies to be compliant with the Code of Practice.
- 4.6 We note that the MSA has now written to all SSM companies setting out what SSM companies need to do to become fully compliant with the Code of Practice, and senior MSA staff have recently visited all SSM companies to re-emphasise the requirements.

- 4.7 The SSM Review was received by the MSA in September 2002 and the Code of Practice was implemented and became effective from 1 February 2005.
- 4.8 The recommendations particularly the new Code of Practice have taken a long time to implement. However, implementation of the recommendations required a Rule change and also the development of the new Code of Practice, which were significant undertakings. Moreover, implementation of the recommendations was hindered by the MSA not having enough resources initially to make progress in implementing the relevant recommendations.
- 4.9 Development and introduction of the new Code of Practice has proved particularly time consuming. Its development involved consultation with the maritime industry. Moreover, there have been ongoing difficulties with ensuring that all SSM companies are compliant with the Code of Practice. For example, as late as July 2005 the MSA sent all SSM companies a letter outlining areas where it believed some companies were not compliant with the Code of Practice, and asking them to make the necessary changes so they become compliant.
- 4.10 Although the recommendations have taken a long time to implement, we believe that the MSA has done what it could do to implement the recommendations in a timely fashion. The main issue now facing the MSA is to ensure that SSM companies comply with the Code of Practice.
- 4.11 However, there are some lessons to be learnt from this experience. In particular, when undertaking such a significant project, appropriate levels of staffing must be allocated to the project. Moreover, it is important not to underestimate the difficulty in getting the sector to "buy in" to significant change.
- 4.12 We were also told that the MSA has been under extensive financial restraint, and is currently the subject of a review for sustainable funding. The allocation of internal resources was limited by the financial resources available. However, we note that where, as in this situation, the lack of resources may inhibit the ability to implement required changes, it is incumbent on all interested parties particularly the MSA in this case to ensure that appropriate resources are requested to implement the required changes.

Monitoring implementation of the recommendations

4.13 In approving some recommendations and noting others, the MSA Board also approved an implementation strategy that required it to be kept informed of progress in the implementation of approved strategies through monthly and strategic monitoring and compliance reports.

- 4.14 The MSA Board received updates on progress in implementing the recommendations. However, we note that between June 2003 and January 2004 a period of 8 months the MSA Board received no formal updates on the progress. The Chairperson told us that, although this item was not a formal agenda item for its meetings during this 8-month period, she believed that the Board was being kept up to date by other means such as members hearing at first-hand about issues in their other capacities, (e.g., through professional associations), through their contact with the maritime industry, or through verbal submissions at Board meetings.
- 4.15 We subsequently met with the MSA Board to discuss the extent to which they believed they had been kept informed of progress on implementation of the recommendations. The Board confirmed that they had always been kept fully informed of progress.

Costs of implementation

4.16 We expected that the MSA would have determined how much implementation of the recommendations would cost to the industry.⁶ This is usual practice when an organisation proposes changes such as those contemplated by the MSA.

Costs to the maritime industry

4.17 The SSM companies we interviewed told us that their costs would increase because of the additional auditing work required of them by the new Code of Practice (see Part 6). Auditing of Safe Ship Management was always required under the original Maritime Rule Part 21. However, while auditing was not a new requirement, it had not been practised effectively; nor understood by SSM companies, operators and owners. The companies said these cost increases would be passed on to the Safe Ship Management vessels' owners and operators, some of whom (the smaller ones) have indicated that they are already having difficulty coping with SSM company charges and any additional costs necessary to remedy faults found by the audit/inspection, even before the changes formally come into effect.

We note that a cost/benefit analysis was undertaken in the 2000 review undertaken by Pacific Marine Management Limited. The analysis showed a net present benefit at the time of \$146.2 million, with a benefit to cost ratio of 6.5:1.0.

- 4.18 We saw no evidence that the MSA estimated the additional costs to those owners and operators subject to the requirement to have their safety systems audited. When we discussed this with MSA management, they said they did not see this as a new cost, but rather an existing cost; hence separate costings were not estimated.
- 4.19 The MSA's view that these were not "new costs" may have some validity. However, the owners and operators we talked to certainly regarded the costs as new. Accordingly, from the perspective of relationship management, it may have been useful to estimate these costs and to inform owners and operators of them.

Part 5 – Effectiveness of consultation

- 5.1 In this Part, we discuss the effectiveness of consultation about the proposed changes with 2 key stakeholder groups affected by the changes to Safe Ship Management and Safe Operational Plans as a result of the SSM Review recommendations:
 - Safe Ship Management companies (SSM companies) which, before
 implementation of the recommendations, provided all operational Safe Ship
 Management services to Safe Ship Management vessel owners and operators
 under powers delegated by the Director. The companies ensured that operators
 documented all safety procedures, ensured that all crew were trained in those
 procedures, regularly audited compliance with the procedures, and issued Safe
 Ship Management Certificates to vessels that complied; and
 - owners and operators covered by both Safe Ship Management and Safe Operational Plans.
- 5.2 We expected that key stakeholders would be informed of, and would have the opportunity to comment on, the proposed changes, and that those comments would be considered by the MSA Board before final decisions were made.

Consultation with Safe Ship Management companies

- Part 6 discusses how the SSM companies are significantly affected by the changes, a major change being introduction of the Code of Practice.
- The companies will now have to comply with national standards and performance indicators. They will also lose some revenue through losing a part of their former work (e.g., under the Code of Practice, initial audits of ship owners and operators are now undertaken directly by the MSA see paragraph 6.12). Moreover, they operate under the sanction that, if they do not comply with the Code of Practice by August 2005, they may lose the Director's approval to operate in the Safe Ship Management business.
- 5.5 The MSA undertook the following consultation with SSM companies;
 - June 2003 SSM companies received a 35-page discussion document examining each recommendation of the SSM Review, and inviting comment on ways to implement the recommendations.
 - September 2003 SSM companies were able to discuss with the MSA the draft copy of the Code of Practice (see paragraphs 6.3 to 6.14).
 - December 2003 SSM companies received a revised draft Code of Practice, for final comment.
 - March 2004 SSM companies and the MSA met and reached final agreement on the draft SSM Code of Practice.

- April 2004 to June 2004 SSM companies' views and final agreement were solicited for the amendments to Maritime Rule Part 21 that will make the above changes legally binding.
- Between July 2004 and February 2005 and ongoing until June 2005 The MSA talked and continues to talk with SSM companies about their level of compliance with the Code of Practice, to enable the Director to assess their suitability to continue with SSM activity after August 2005.

The amount of consultation the MSA undertook with SSM companies was significant. Moreover, through the consultation period we believe that the MSA explained to owners and operators why the proposed changes were needed and how they would benefit the maritime industry.

Consultation with owners and operators

- 5.7 The MSA also organised a nationwide series of 18 safety awareness seminars targeting all owners and operators of small specialist commercial vessels. The aim of the seminars was to inform as many as possible of the 3900 small-vessel owners and operators about the proposed changes. Topics covered were:
 - the Safe Ship Management manual;
 - the new Code of Practice;
 - owner and skipper responsibility; and
 - health and safety in employment.
- However, we note that attendance at these seminars was particularly poor with only about 1% of the target group attending.
- MSA staff members were so concerned about the low attendance after the first few seminars that a renewed effort was made to contact small-vessel owners and operators to encourage them to attend. This included writing to each owner, as well as requesting MSA safety inspectors to "spread the word". These measures produced some localised improvement in the Auckland region, but when the seminars ended, average participation still stood at only 1%.
- 5.10 In response to the low turnout, the MSA has established an industry communications group to provide advice and assistance to the MSA on how to improve communication with owners and operators of small vessels.

Notwithstanding the best endeavours of the MSA in promoting these seminars, the series failed to achieve the primary objective of large-scale participation and information sharing with small-vessel owners and operators, and there was very limited participation. We believe the establishment of the industry communications group to provide advice and assistance on how the MSA could improve communications is a useful initiative.

Recommendation 1

We recommend that Maritime New Zealand adopt an approach of continuous improvement in respect of its communication with owners and operators of small specialist commercial vessels.

Other issues raised by owners and operators

Two other issues arose during our audit. We spoke with several experienced owners and operators who were dissatisfied at not being given a final opportunity to comment on proposed changes with which they disagreed, before the changes were finalised. They were also dissatisfied with the lack of MSA feedback on their written submissions, given the significant time and effort they put into preparing them.

Our findings

- 5.13 The issue of lack of feedback from the MSA is important. At the outset of the process, the MSA placed a great deal of importance on consultation with the maritime industry. Generally, we consider that the MSA undertook effective consultation. However, it is good practice to provide feedback to stakeholders who make submissions when invited to do so. We would have expected the MSA to provide feedback to those who had taken the time to make written submissions.
- 5.14 The feedback could have been specific to the person or organisation making the submission or, if this was too burdensome, general feedback could have been given on the outcome of the consultation.
- We note, however, that resources available to the MSA at that time were limited, and this may have impacted affected its ability to provide such feedback.

Recommendation 2

We recommend that, when Maritime New Zealand invites written submissions on proposed changes in future, it provide written specific or summarised feedback and explanations to stakeholders who make submissions.

- With respect to owners and operators not having a further opportunity to comment before changes were finalised, in our view the MSA is entitled to "draw a line" and determine when consultation ends.
- Maritime NZ has, subsequent to the drafting of this report, introduced policy regarding the frequency of audits and surveys, which will provide relief to safe operators, and focus attention on non-compliant operators. This is in line with the philosophy of SSM, and should eliminate or reduce these "new costs".

Part 6 – Progress in implementing changes

- 6.1 In this Part of the report we explain the intended changes from the 11 approved SSM Review recommendations, and discuss the progress achieved by the MSA in implementing them.
- We have grouped the changes into 3 main areas:
 - the Code of Practice:
 - the MSA reclaiming of most of the Safe Operational Plans services; and
 - other changes, relating to risk management processes and to improving communications with stakeholders.

New mandatory Safe Ship Management Code of Practice

- 6.3 The SSM Review found that SSM companies and Authorised Persons were not applying consistent standards when assessing and auditing owners and operators.
- 6.4 Under the system as it was in 2002, each SSM company was, to a considerable extent, free to interpret the rules in its own way and to develop its own SSM standards, which differed from company to company. This led to inconsistency in the way SSM companies surveyed, inspected and audited owners and operators.
- 6.5 The SSM Review also found that the MSA exercised inadequate management control over SSM companies, which perpetuated inconsistent SSM company practices.
- Thirdly, under that previous system, SSM companies undertook the initial audit of owners and operators. The SSM Review noted that this led to inconsistency of service delivery, and also that the MSA, through exclusion from the process, ran the risks of reducing its relevance to the maritime industry and eroding its store of technical expertise.

Our findings

- 6.7 The MSA has developed a Code of Practice that came into force on 1 February 2005.
- 6.8 The Code of Practice is a national standard covering competencies, performance measures and procedures for SSM companies, vessel owners and operators and the MSA. The Code of Practice is mandatory, in that participants will no longer be free to develop their own practices and standards.
- 6.9 The main aims of the Code of Practice are to ensure that the MSA has the appropriate management control and oversight of the industry, and that there are

national standards of performance and behaviour that participants must adhere to if they are to remain in the system.

- Greater management control by the MSA has been advanced through the Code of Practice, because of its mandatory obligations, standards, and procedures, including its documentation requirements. In particular, approval by the Director of Maritime Safety of an SSM company depends on its ability to comply with the Code.
- 6.11 Secondly, the Code of Practice now sets out a series of performance indicators that SSM companies must report on to the MSA. These indicators allow the MSA to assess how well a company is performing and include:
 - time taken to approve safety management manuals for ships;
 - number of vessels in an SSM company's system without a current Safe Ship Management Certificate (see paragraph 2.19);
 - number of vessels in an SSM company's system with a current Safe Ship Management Certificate but where the MSA database has not been updated; and
 - number of vessels in an SSM company's system where the Director is not satisfied that a successful subsequent audit conducted by a Maritime Safety Inspector has been completed.
- Thirdly, under the Code of Practice, the MSA now undertakes the initial Safe Ship Management audit of ship owners and operators. This has 2 advantages it allows the MSA to maintain its technical expertise, and it allows the MSA to set the "benchmark" under which future audits can be conducted, thereby ensuring consistency.
- In our view, the Code of Practice has the potential to fix many of the problems identified in the SSM Review. In particular, it has the potential to:
 - improve the overall strategic management of Safe Ship Management by the MSA:
 - improve the MSA's management control over SSM companies; and
 - improve performance and service delivery standards of SSM companies.
- However, introduction of the Code of Practice will not by itself achieve these goals. In order for the full benefit of the Code to be realised, the MSA must:
 - ensure that the Code of Practice is accepted by the maritime industry;
 - actively oversee the provisions of the Code of Practice; and
 - keep the Code of Practice up to date.

The Maritime Safety Authority reclaims most of the Safe Operational Plans services

- Prior to the SSM Review, Safe Operational Plans service providers were called Authorised Persons. The Authorised Persons' role was to liaise with owners and vessel operators, and to inspect, audit, and approve vessels and operations on behalf of the Director of Maritime Safety.
- The SSM Review found that were too many Authorised Persons for too few Safe Operational Plans operations. It also identified faults in the selection, training, auditing and support provided for Authorised Persons. These faults resulted in significant omissions in areas of audit competency and procedure, and non-fulfilment of the legal requirements of some maritime rules.
- 6.17 In particular, the Review noted the following faults in the services delivered by Authorised Persons:
 - failure to check operators' SOP reviews;⁷
 - failure to verify owners' compliance with the applicable Maritime Rule or Safe Operational Plan;
 - failure to verify whether a complete and accurate record had been maintained of accidents and incidents, and whether the MSA had been notified of them;
 - failure to check during the initial audit whether the Safe Operational Plans complied with the applicable Maritime Rule;
 - exempting operators from certain requirements of the applicable Maritime Rule, without due MSA approval;
 - not understanding the audit requirements of the applicable Maritime Rule; and
 - not providing owners and operators with a written record of the required corrective actions, although this is required by the applicable Maritime Rule.
- 6.18 In summary, the use of Authorised Persons was clearly not always working as effectively as it should, and was found by the reviewers to need fundamental improvement.

Our findings

6.19 The MSA has now dispensed with the services of about 50 private Authorised Persons, and has introduced a new national Safe Operational Plans audit scheme using its own 2 safety auditors who can be more effectively trained and supervised in

[&]quot;SOP review" means a mandatory review of the Safe Operational Plans by the owner on a regular basis and following any accident. A written record must be made of each such review, which must include a summary of any conclusions drawn, and any actions taken, as a result of the review. Maritime Rule Part 80.6, Appendix 1 (8.4c), and Part 80.9 Appendix 2 (4.2 (vi) (ff).

the implementation of national standards. These auditors have assumed responsibility for auditing jet boats and white water rafts.

- 6.20 There are 2 exceptions to the new Safe Operational Plans audit scheme one is for dive boats under 6-metres and the other is the Queenstown Lakes District Council.
- 6.21 For dive boats under 6-metres, New Zealand Underwater will recommend to the MSA who the Authorised Persons should be. Moreover, New Zealand Underwater and not the MSA will audit the Authorised Persons every year. We are told that the reasons for this approach is that New Zealand Underwater has an excellent understanding of this particular sector of the maritime industry, and is well placed to identify those persons suitable to act as Authorised Persons. Further, the MSA will ensure that New Zealand Underwater undertakes appropriate audit and monitoring activity of the Authorised Persons by entering into a memorandum of undertaking with New Zealand Underwater.⁸
- With regard to the other exception, for the Queenstown Lakes District Council, the existing rule recognises that Authorised Persons working in the Queenstown Lakes District "must be engaged, employed or contracted by the Queenstown Lakes District Council for that purpose".
- Because of the existing rule, and the fact that the Queenstown Lakes district contained a large and important proportion of the adventure tourism industry in New Zealand, the MSA accepted the Council's continuing right to approve appointment of an Authorised Person in its district. The MSA nevertheless intends to oversee the Authorised Person appointment, and to audit the quality of the safety management work for commercial jet boats and white water rafts. The Queenstown Lakes District Council Authorised Person will not be able to issue Safe Operational Plans Certificates of Compliance. This will be done by the MSA on receipt of acceptable audit and inspection reports.
- In our view, these changes to the Authorised Persons scheme, whereby 50 private Authorised Persons have been replaced by 2 MSA Safety Auditors, will significantly improve the delivery of effective and consistent Safe Operational Plans services to adventure tourism.
- 6.25 However, we note that, just as the MSA is promoting the acceptance of more consistent and universal safety standards among its stakeholders, it has granted exemptions to both the Queenstown Lakes District Council and for dive boats under 6-metres.
- Both these exceptions mean there are risks of different standards of service provision. Accordingly, the MSA must ensure that such risks are managed. In respect of dive boats under 6-metres, the MSA must finalise the memorandum of understanding with New Zealand Underwater and, once it is finalised, ensure that New Zealand Underwater adopts and follows the memorandum. In respect of

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We note also that the SSM Review said that, for dive boats under 6-metres, there would appear to be no justification for imposing the SOP system on them as they were such a low risk. A voluntary Code of Safe Working Practice might be more appropriate in all the circumstances.

Queenstown Lakes District Council, the MSA must undertake the appropriate audit and quality inspections of Authorised Persons employed by the Council. Moreover, we believe that the MSA should keep these exemptions under review to ensure that the exemptions are not adversely affecting the Safe Operational Plans system.

Other key changes

Other changes relate to safety profiling and improving communication with stakeholders.

Safety profiling

- 6.28 The SSM Reviewers were not specifically requested to look at the MSA's safety profiling system (Safety Profile Assessment Number or SPAN), but did make some comments on the system.
- Broadly, the aim of the SPAN system is to improve the overall safety performance of the maritime industry by allowing the MSA and SSM companies to permit better selective targeting of high-risk vessels. The SSM Review was generally supportive of selective targeting, but had a number of reservations with the SPAN system in particular that:
 - too much weight was given to third party views of a particular vessel, and not enough weight to the vessel owner's self-assessment;
 - it would be difficult to reconcile the potentially different views of these third parties;
 - there may be issues concerning who will pay for the increased audit of "poor operators"; and
 - there would be issues (e.g. privacy) around the use made and circulation given to the safety profile of any particular operator or vessel.
- 6.30 The MSA uses the SPAN system to assess the risk profile of each vessel. A high rating may result in more audits of the vessel. The MSA also encourages operators to use the system to determine their own safety performance, and to determine which aspect of their operation needs to be reviewed so their rating can be improved.
- Two of our recent reports, *Civil Aviation Authority: Certification and surveillance functions* (June 2005) and *Effectiveness of controls over the taxi industry* (June 2005), endorse the use of risk profiling techniques in the New Zealand transport industry. However those reports show that, to be effective, risk profiling needs to be:
 - accurate, in that the assessment given as a result of the risk profiling reflects actual risk;
 - meaningful, in that some action (or non-action) is taken as a result of the risk profiling (e.g. more or less audit activity); and

- flexible, in that the risk profiling system must be able to deal with development in the particular sector.
- 6.32 The MSA needs to ensure that the SPAN risk profiling system has these attributes, so that all the potential benefits of the system can be realised.

Informal communication

- 6.33 Prior to the SSM Review, there were some successes in introducing Safe Ship Management to small-vessel owners and operators. These successes occurred when SSM companies used a range of informal communication and discussion forums to encourage the sharing of information and perspectives on maritime safety, with a view to engendering safety awareness. The review said that such low-key and informal means of communication, if further developed and refined, would also deliver tangible benefits for a much greater proportion of small stakeholders.
- 6.34 The SSM Review suggested a number of ways of encouraging more operators to commit to the Safe Ship Management system, and observed that an existing industry advisory group the Fishing Industry Safety and Health Advisory Group (called FISHGroup) had made a significant contribution in this regard. If other similar groups were established to consider maritime safety, health, and operational issues affecting the maritime industry, this might significantly improve communication between stakeholders and the MSA in relation to safety issues.

Our findings

- 6.35 The MSA is working with the SSM companies to ensure that the risk management database, SPAN, is accurate, up-to-date and correctly calculated. The Code of Practice reinforces risk management by the MSA and SSM companies by specifying more frequent and earlier audits and inspections of vessels that are high risk as determined by SPAN or in the estimation of an SSM company.
- 6.36 The matter of more informal processes to encourage uptake of Safe Ship Management was addressed by more general liaison and advisory contacts between the owners and operators of small vessels and maritime safety inspectors and safety auditors. Among other things, the Code of Practice specifically aims at using these informal methods (such as consultative and advisory groups and industry partnerships) to improve safety awareness in the maritime industry, and to continually advance the implementation of Safe Ship Management.
- 6.37 For example, 3 industry advisory groups have been convened by the MSA to provide advice and assistance on the development of relevant policy. They are FishSAFE (the Target F1 Advisory Panel which is composed of 2 groups representing commercial jet boating and rafting industry representatives respectively) and the Target B Advisory Group (representing the SSM passenger/non-passenger sector).

In addition, another industry advisory group was established to provide advice and assistance to the MSA on how to improve communication with that target group. The establishment of this advisory group followed the unsatisfactory attendance in 2004 of owners and operators at a nationwide series of seminars aimed at informing and exchanging views about the pending changes.

Addendum – Changes in Policy

Maritime New Zealand (Maritime NZ) advised us that the following changes in policy regarding safety management systems have been approved and implemented subsequent to finalisation of this report.

Safe Operating Plans: Fishing Vessels

A potential conflict of interest, and risk to Maritime NZ, has been identified through an external audit of the Whangarei office regarding its current role in assisting operators of fishing vessels of 6-metres and under to develop Safe Operating Plans, issuing the certificates, and then carrying out a monitoring and compliance role through audits.

As a result it has been decided that "fishing vessel Maritime Safety Inspectors", (and all other Maritime Safety Inspectors), will revert to their traditional role of identifying non-compliant operators of fishing vessels of 6-metres and under, and advising them of their responsibilities, and of the appropriate contacts such as Authorised Persons or SSM companies. They will then monitor these vessels to ensure that they are under a Safe Ship Management system or Safe Operational Plan, and will take appropriate action if not. Maritime NZ will not conduct the auditing function for these vessels – this role will be retained by Authorised Persons.

Maritime NZ staff will audit these Authorised Persons to ensure that they are carrying out their authorised role in a consistent and appropriate manner.

This change in policy took effect on 24 June 2005.

Safe Ship Management

Maritime NZ notes that it is critical to the success of the safety management system that the auditing process be carried out in the manner required by the Director of Maritime Safety to enhance responsibilities of vessel owners. If this cannot be achieved in a satisfactory manner, the recommendation of the Thompson Clarke review that Maritime NZ take back all audit functions will be revisited. The time period for such assessment of the success of SSM companies conducting auditing will be limited to December 2007.

As our report was being concluded, Maritime NZ had developed further initiatives as to how the Director's intent in the delivery of SSM may be achieved under the existing Rule; that is, an emphasis upon risk-based interventions between the mandatory out-of-water surveys, a focus upon high-risk vessels by Maritime NZ and Safe Ship Management companies, and an incentive for owners to take full daily responsibility with commensurate rewards.

These initiatives were developed in conjunction with other strategies now in place, which include (and have been discussed in this report) that:

- from September 2005 Maritime NZ district office staff will conduct initial audits of all new vessels entering Safe Ship Management;
- the same staff will use SPAN to carry out risk assessments of high-risk vessels. This will require the Maritime Safety Inspectors physically attending the vessel for a system check and general inspection;
- there will be no requirement for in-water inspections;
- the 2- and 4-yearly out-of-water "inspections" will be surveys, carried out by the SSM company surveyors in attendance;
- there will be no requirement for inspectors (the system now recognises only auditors and surveyors);
- all safety and other equipment will be thoroughly checked at the 2- and 4-yearly surveys; and
- risk-based audits by Maritime NZ staff will be carried out between the out-of-water surveys.

Maritime NZ is proposing a maximum interval between risk-based audits of 24 months Operational experience has, however, identified that this proposed cycle has been used for a strict annual cycle (in conjunction with the 2-yearly survey) to be perpetuated regardless of how well a vessel is being managed and operated. This was not the original intent of SSM.

The following proposals are now being developed in consultation with the maritime industry:

- SSM companies will carry out one in-depth systems audit within a 12-month period, 6 months either side of the mid-term survey. This will be carried out, with the vessel in the water and fully operational, on all vessels regardless of risk.
- SSM companies will retain the ability to require more frequent audits based solely upon the outcome of that audit; that is, risk-based. They will also retain the ability to require a full survey of the vessel and/or its equipment if necessary as an outcome of the audit. Should an SSM company require a shorter period for audits than the 24 months proposed, then this must be communicated to the operator explaining why a shorter period is required.
- Separate from these SSM company surveys and audits, Maritime Safety Inspectors will carry out a risk assessment of **all** vessels in SSM at least once every 4 years.
- Maritime Safety Inspectors will assess the risk of vessels operating within their district through SPAN and will target high-risk vessels. They will require the SSM company to survey the vessel and/or its equipment if necessary dependent on their findings.
- SSM staff will continue to carry out risk assessments of all vessels within their systems at least once every 4years (usually at the mid-term audit).

In summary: SSM companies will carry out routine surveys, coupled with checks of the vessel's equipment, at 2- and 4-yearly intervals (2.5-yearly and 5-yearly for oil-lubricated shafts), and a thorough systems audit of the vessel's safety management system at mid-term.

Maritime NZ will carry out risk assessments of all vessels within the 4-yearly cycle; (as will SSM companies), will undertake initial audits, and will use SPAN (with input from SSM companies) to identify and assess high-risk vessels.

When required, and dependent on the findings of audits, an SSM surveyor is to be used for physical inspection of a vessel outside of the survey cycle.

Appendix

Main findings of the *Review of Safe Ship Management Systems*

	Safe Ship Management findings	Safe Operational Plans findings	
1	The MSA is not directly involved in service delivery, which has been devolved to 11 SSM companies, with loss of hands-on vessel survey expertise and lack of understanding of operating smaller vessels.	The MSA is not directly involved in service delivery, which has been devolved to 51 Authorised Persons, with a comparable loss of expertise and understanding.	
2	The MSA has difficulty exercising adequate management control over the activities of the SSM companies and delivery of the SSM system.		
3	Implementation of the SSM system is too complex for most operators of small specialist commercial vessels, and encourages indifference.		
4	There are increasing concerns within the MSA of the vulnerability, fragility and sustainability of the SSM system. Delivery of the SSM system could be improved through strategic management, MSA control, standards of service delivery, and targeting of vessels.	There are similar concerns with Safe Operational Plans as were held for Safe Ship Management in terms of vulnerability, fragility and sustainability.	
5		There are increasing concerns about the selection and capabilities of the Authorised Persons.	
6	The quality assurance certification of the SSM companies is insufficient to provide the MSA and the Government with certainty that the SSM system will be adequately delivered by the companies.		
7	There are increasing concerns that the SSM companies, in their capacity as the MSA's safety auditors and inspectors, are not always working in the interests of the MSA.		
8	Better performance indicators of the SSM system's effectiveness could help stakeholders deliver safety at a reasonable cost.	The effectiveness of the Safe Operational Plans system is constrained by the inconsistency of Safe Operational Plans service standards, appointment processes for Authorised Persons and their level of competence, and inadequate support for their training and administration.	
9	A significant number of SSM companies are not meeting the minimum competence and procedural requirements.	Similarly, a significant number of Authorised Persons are not meeting the minimum competence and procedural requirements for consistent quality of service delivery.	
10	The MSA could choose to do nothing, but the result would "lead inevitably to a diminished standard of maritime safety".		