Broads Authority
Navigation Committee
22 February 2018
Agenda Item No 9

Broads Authority Safety Management System Audit Findings and Update Report by Head of Safety Management

Summary: This report sets out findings from the recent external audit of the

Authority's Safety Management System and the proposed update to

the SMS.

The Committee's views are sought on the audit findings, recommendations and the SMS update set out in the Appendices.

1 Background

- 1.1 The Broads Authority, as a Competent Harbour Authority under the Pilotage Act 1987, is required to comply with the duties and responsibilities set out in the Port Marine Safety Code (PMSC)¹.
- 1.2 The Code requires that all harbour authorities base their powers, policies, plans and procedures on a Formal Safety Assessment (FSA) and that they maintain a Safety Management System to ensure that risks are reduced to a level which is as low as reasonably practicable (ALARP).
- 1.3 In 2016, the Authority published a Safety Management System (SMS)² to meet the needs of the updated PMSC.
- 1.4 The PMSC requires that the SMS is monitored and audited to ensure that it continues to meet the requirements of the code.
- 1.5 The SMS sets out an audit schedule which culminates in a requirement for a full audit which is to be undertaken by an independent third party to gain an objective opinion of the effectiveness and suitability of the SMS to meet its objectives and to verify continued compliance with the PMSC.

2 Audit

2.1 TIAA, the Authority's auditors were selected to carry out the independent audit as they have had previous experience of auditing harbours against the PMSC. The Audit took place at the Broads Authority offices in September 2017.

Port Marine Safety Code, dated December 2012

Broads Authority Port Marine Safety Code Safety Management System, Issue 6, dated April 2016

2.2 The Audit reviewed version 6 of the Safety Management System which was issued in April 2016.

3 Audit Report

3.1 The TIAA Audit report which sets out the audit findings and recommendations and the Authority's response is set out in Appendix 1

4 Safety Management System Update

- 4.1 In response to the audit a draft update to the Safety Management System has been completed. This update reflects the recommendations from the audit and further updates the SMS to cover a number of routine revisions. These additional updates include, changes to the Broads Authority management structure, reference to the new Broads Plan 2017, references to the latest edition of the PMSC and updates to vessels and equipment and to include policies and guidance that have been developed.
- 4.2 There is also a format change as the document will no longer have other substantive documents appended as these have been changed to reference documents and hyperlinks will be provided to facilitate easier access to these documents when published on the Broads Authority website.

5 Next Steps

- 5.1 There are a number of recommendations which do not specifically relate to the SMS document, these items will be progressed in line with the timescales agreed in the report.
- 5.2 The Audit report and the SMS update will be taken to the Broads Authority meeting in March for adoption.

Background papers: None

Author: Steve Birtles
Date of report: 9 February 2018

Appendices: APPENDIX 1- Broads Authority Assurance Review of Port Marine Safety

Code 2017/18 (BA/18/02)

APPENDIX 2- Draft Safety Management System update version 6.9







Assurance Review of Port Marine Safety Code

2017/18 (BA/18/02)

FINAL

November 2017





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Assurance Review of Port Marine Safety Code

Executive Summary



ACTION POINTS

Control Area	Urgent	Important	Needs Attention	Operational
Governance*	0	4	4	0
Hazards**	0	0	1	0
Total	0	4	5	0

*Governance includes the areas of Roles and Responsibilities; Consultation; Management of the Navigation; and Monitoring and Auditing. ** This recommendation also applies to the area of Risk Assessment.

No weaknesses were found with regard to the areas of Conservancy, Pilotage; Marine Services and Emergency Response.

SCOPE

The objective of the audit is to undertake an independent audit of the Authority's Safety Management System, in line with the requirement of the Port Marine Safety Code (PMSC).





RATIONALE

• The systems and processes of internal control are, overall, deemed 'Reasonable' in managing the risks associated with the audit. The assurance opinion has been derived as a result of four 'important' and five 'needs attention' recommendations being raised upon the conclusion of our work.

POSITIVE FINDINGS

It is acknowledged there are areas where sound controls are in place and operating consistently:

- The Designated Person (DP) (Head of Safety Management) has direct access to the Duty Holder, which is the full Broads Authority. There is a standing item on every Broads Authority meeting agenda and DP has direct access to the lead member for safety, who also chairs the Navigation Committee and the Boat Safety Management Group (BSMG).
- The Harbour Masters National Occupational Standards have been reviewed and a responsibility matrix has been produced, which details those posts within the Authority where certain harbour master functions reside, such as the Director of Operations and the Head of Safety Management.
- There is a standing safety committee meeting, namely the BSMG, for which terms of reference include providing advice on the on-going maintenance and delivery of the Safety Management System (SMS) in a timely fashion.
- An annual training plan is in place for the Operation Directorate, which includes the key officers involved with the SMS.
- The approach to consultation is contained within section 4 of the SMS, which describes how consultation is undertaken with the Navigation Committee, BSMG, Broads Forum and Broads Local Access Forum. In addition, consultation is undertaken with a number of stakeholders that include other harbour authorities, statutory/legislative bodies, special interest groups and local groups.
- The Norfolk and Suffolk Broads Act 1988 gives the Broads Authority the power to make byelaws "for the good management of the navigation area". The SMS and Broads Authority website is up to date with the latest set of byelaws.





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- 2017/18
- A Hydrographic Policy audit has been undertaken which is due to be reported to the BSMG and there is a programme of hydrographic surveys in place which
 feeds into the dredging programme. The results of the surveys are also placed on the Broads Authority website so that this information can be viewed by users
 of the broads.
- The 2015/16 hazard review log is appended to the SMS and is reviewed every three years by way of a full stakeholder review. This is also reviewed on an ongoing basis by an annual and six monthly review and report to the BSMG of incidents that have occurred. Anything significant is also reported to the BSMG, in a timely manner, such as Hazard No. 26 Obstructions to navigation, which was reviewed at the 27 February 2017 BSMG.
- The Head of Safety Management monitors the Marine Accident Investigation Branch (MAIB) website and is sent reports from a variety of sources including the UK harbour masters and Boat Safety Scheme.





ISSUES TO BE ADDRESSED

The audit has highlighted the following areas where four 'important' recommendations have been made.

Governance

- To arrange for a peer review to be undertaken of the Broads Authority's Safety Management System (SMS) by the Canal and River Trust as a reciprocal arrangement in between external audit visits. This will help to mitigate the associated risks with safety management and contribute to assessing the performance of the SMS through benchmarking against other similar organisations.
- A PMSC dedicated page is developed on the Authority's website, to include a performance dashboard, and a link to SMS, to reduce the risk that the PMSC is not complied with and performance of the PMSC is not transparent.
- The Authority's annual report should refer to the PMSC, including compliance with this and the standard of performance, cross referenced to the performance dashboard to help mitigate the risk that the PMSC is not complied with and performance of the PMSC is not transparent.
- To update the Authority's SMS to include reference to the commitment of the Broads Authority to comply with the standards laid down within the PMSC; reference be made to the harbour revision order being progressed for the transfer of Mutford Lock to the Authority; inclusion of an overall section on contractors and their obligations in respect of the PMSC; and the general direction and special direction policies as agreed with the Navigation Committee. Inclusion of relevant policies and harbour orders mitigates the risk that the Authority's powers and procedures are not transparent.

The audit has also highlighted the following areas where five 'needs attention' recommendations have been made.

Governance

- To formalise the reporting of internal audits by the Head of Safety Management to the appropriate committees / groups, e.g. the BSMG, including the annual schedule / internal audit programme of audits. This will help to mitigate the risk that some areas may not be in compliance.
- The PMSC is included as a standard item in the Authority's officer induction pack / process to reduce the risk that staff undertake tasks that are not in compliance with the code.
- Briefings given to the Navigation Committee and BSMG on the risk assessment process, hazard identification and assessment and the ALARP principle are documented and recorded in the minutes. Briefing packs, in relation to the risk assessment process, hazard identification and assessment and the ALARP





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principle, are made available to all new appointees to the Navigation Committee and the BSMG. This will help reduce the risk that misinformed decisions are made resulting in inadequate port marine safety.

• A timescale is finalised for the roll out of the document management system in relation to the safety management team, to mitigate the risk that out of date or incomplete documents are used.

Hazards

• To review the SMS risk categories / criteria of 'people', 'environment' and 'assets' against the four criteria of: 'life, environment, business (reputation) and damage (port and shipping)' as contained in the latest PMSC Guide to Good Practice, mitigating the risk that the consequences of risks/hazards are not appropriately assessed and mitigated as required.

Operational Effectiveness Matters

There are no operational effectiveness matters for management to consider.

Previous audit recommendations

The last independent audit was undertaken in September 2014 by BMT Isis (technical consultancy firm) with the report issued in December 2014, which was reported to the full Broads Authority on 15th May 2015. Of the six recommendations made within this audit report, three remain outstanding which relate to the use of a reciprocal arrangement with another harbour authority for external audit purposes; the status of each performance indicator to be clearly presented on a designated page on the Authority's website; and all new appointees to the Navigation Committee and the Boating Safety Management Group receive training on the risk assessment process, hazard identification and assessment and the ALARP principle. These have been superseded by recommendations raised within this audit, the control issues are still present but the recommendations have been expanded and modified to reflect the testing results and current situation.





Report Findings and Management Action Plan

INTRODUCTION

1. This review was carried out in September 2017 as part of the planned internal audit work for 2017/18. Based on the work carried out an overall assessment of the overall adequacy of the arrangements to mitigate the key control risk areas is provided in the Executive Summary.

KEY FINDINGS & ACTION POINTS

2. The key control and operational practice findings that need to be addressed in order to strengthen the control environment are set out in the Management and Operational Effectiveness Action Plans. Recommendations for improvements should be assessed for their full impact before they are implemented.

SCOPE

3. The definition of the type of review, the limitations and the responsibilities of management in regard to this review are set out in the Annual Plan.

MATERIALITY

4. The PMSC was published by the Government in March 2000 and updated in November 2016. The Code establishes an agreed national standard for port marine safety, and formalises the duties and responsibilities for safety and environmental protection within UK ports and harbours. The Authority is designated a "Special Statutory Authority", affording the same level of protection as National Park status, but with tailor-made legislation relating to navigation. The Authority therefore balances the duties and powers of a harbour authority with those of a National Park authority. As a Special Statutory Authority, the Broads Authority has undertaken a pragmatic approach to the application of the PMSC. The Broads Authority undertakes the role of Duty Holder under the PMSC and has appointed the Head of Safety Management as the Designated Person who is required to provide independent assurance directly to the duty Holder that the safety management system is working effectively.

Failure to comply is not an offence in itself. However, the code represents good practice as recognised by a wide range of industry stakeholders and a failure to adhere to good practice may be indicative of a harbour authority being in breach of certain legal duties. Moreover, the organisation may suffer reputational damage if it has publicly committed to the code's standards and then fails to meet them. A successful prosecution has been brought against a harbour authority for breach of section 3 of the Health and Safety at Work Act 1974, in that non-compliance with the fundamental elements of the code evidenced a failure to provide a safe system of work.

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Management Action Plan

R	ec. Risk Area	Finding	Recommendation	Priority	Management Comments	Implementation Timetable (dd/mm/yy)	Responsible Officer (Job Title)
	1 Compliance	Governance – Independent assurance is provided by the three yearly external audit. This helps mitigate the risks associated with the DP not being an independent person to provide assurance to the Duty Holder that the SMS is working effectively. The DP is the Head of Safety Management. However, due to the current DP's involvement with the SMS, the 2014 audit recommended that a reciprocal arrangement with another harbour authority for external audit purposes is considered. The Head of Safety Management has been in contact with the Canal and River Trust, which has similarities with the Broads Authority including the DP also being the Head of Safety.	a peer review to be undertaken of the Broads Authority's Safety Management System (SMS) by the Canal and River Trust, or another suitable organisation, as a reciprocal arrangement in between external audit visits in addition to the 3 yearly external audit.		Agreed. The Authority has considered the issue of independence of the external auditors and the appointed designated person. The Authority is assured that the recent change in external audit providers adequately provides the assurance that the process is independent and complies with the requirements of the Port Marine Safety Code. However the recommendation of using a peer review or a MCA health check will give further assurance of independence. The Authority will commence talks with possible providers, by September 2018, regarding this proposal with the aim of scheduling an interim peer review or Health check in 2019.	31/01/19	Head of Safety Management





2	Compliance	Governance - The Authority's SMS, states that 'performance indicators will be monitored monthly to provide evidence of the continued functioning of the SMS, and enable progress towards (or away from) targets to be assessed. The status of each indicator, in relation to its defined target, will be recorded on the Authority's website.' However, as also highlighted in the recommendation from the 2014 audit, it is difficult to locate this information on the website. The Broads Authority 2015/16 annual report refers to some performance information in relation to the PMSC, but is not comprehensive. The 2014 external audit also recommended that the status of each indicator is to be clearly presented on a designated page on the Authority's website, detailing the target, current performance against the target and the historic trend. The PMSC is available on the Broads Authority's website, although this is quite difficult to locate as it is in an area not obviously linked to the PMSC.	PMSC dedicated page on the Authority's website. This should include: - A performance dashboard showing the status of each indicator, detailing the target, current performance against the target and the historic trend. - The Authority's SMS, highlighting the Authority's responsibilities as Duty Holder for the Broads. Rationale and risk: A dedicated page on the website would increase the awareness and prominence of the PMSC and a consistent approach to reporting performance, mitigating the risk that the PMSC is not complied with and performance of the PMSC is not transparent.	2	Agreed. A dedicated webpage will be developed to pull together the elements that are already published but scattered around the website. This "new" page will allow for the compliance statements to be located where a clear focus exists on the PMSC and the SMS	31/03/18	Head of Safety Management, Head of Communications





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3	Compliance	Governance - A statement regarding the standard of the organisation's performance should be included in the Duty Holder's annual Report. A review of the Broads Authority 2015/16 Annual report established no specific mention of the PMSC.	annual report should refer to the PMSC, including compliance with this and the standard of performance, cross referenced to the performance		Agreed. The Annual report is prepared during the spring of each year and published in the Summer. A statement to reflect the recommendation will be included in the next annual report and will feature as a standing item in future reports.	30/09/18	Head of Safety Management, Head of Communications
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4 Complian	Governance — The review of the Authority's SMS identified the following items were not included: - Commitment to comply with the standards laid down in the PMSC. The 2014 audit recommended that is included in the introduction section of the SMS; - Harbour revision orders are applicable to the Authority and there is one currently going through for the transfer of Mutford Lock to the Authority. This however, is not included in references made to Mutford Lock; - There are various references to the contractor obligations, in respect of the PMSC, but no overall section on contractors; - General direction and special direction policies as agreed with the Navigation Committee.	 Authority's SMS as follows: The Introduction chapter to include reference to the commitment of the Broads Authority to comply with the standards laid down within the PMSC; Reference is made to the harbour revision order being progressed for the transfer of Mutford Lock to the Authority; Inclusion of an overall section on contractors and their obligations in respect of the PMSC; Inclusion of the general direction and special direction policies as supported by the Navigation Committee. Rationale and risk: This will 	2	Agreed. The SMS will be updated during the winter of 2017 for adoption by the Authority at its meeting in March 2018. All of the recommended changes and additions will be included in the new version 7 of the SMS.	31/03/18	Head of Safety Management
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5	Compliance	Governance – The Head of Safety Management undertakes internal audits for elements of the PMSC on a rolling basis, the last element being the hydrographic policy in May 2017, with a planned audit of conservancy due in December 2017 as shown in the Authority's internal audit programme 2017/18. The hydrographic audit will be reported to the Broads Authority, Navigation Committee and the Boat Safety Management Group along with the results of this audit. There is, however, no standard procedure to report audit outcomes to a group/committee on a consistent basis.	the reporting of internal audits by the Head of Safety Management to the appropriate committees / groups, e.g. the BSMG including the annual schedule / Internal Audit Programme of audits. To ensure these cover all aspects of the PMSC. Rationale and risk: The BSMG would receive assurance that the SMS is reviewed against all aspects of the PMSC mitigating the risk that		Agreed. SMS audits for 2017 will be reported to the Boat Safety Management Group in Jan 2018, Navigation Committee Feb 2018 and to the duty holders in March 2018. The SMS will be updated to reflect this formal reporting requirement at its next issue in March 2018	31/03/18	Head of Safety Management
6	Compliance	Governance – Officers of the Authority are not required to read and sign the SMS, although related duties are included in officers job descriptions, where applicable. However, to re-enforce the Authority's obligations and commitment to the code, it is proposed that the PMSC is included in the Broads Authority induction pack/process.	included as a standard item in the Authority's induction pack/process. Rationale and risk: The requirements of the PMSC are far reaching and affects many aspects of the Boards authority work. Including this in the induction process helps	3	Agreed. Duty Holders and operational staff have received PMSC awareness training. Induction programme will be updated to include mandatory PMSC SMS awareness training for new starters	30/11/17	Head of Human Resources





7	Compliance	Governance – Members of the Broads Authority receive PMSC training, with refresher training provided in January 2017. Training to the Navigation Committee and the BSMG is provided via briefings from the Head of Safety Management when the hazard log is reviewed. However, these briefings are not evident from a review of the minutes. The stakeholder group involved in the review of specific hazards also receive a briefing pack.	to the Navigation Committee and BSMG on the risk assessment process, hazard identification and assessment and the ALARP principle are documented and recorded in the minutes. Briefing packs in relation to the risk assessment process, hazard identification and assessment and the ALARP principle (which are provided		All members of Boat safety management group, the stakeholder hazard review group, the navigation committee and the Broads Authority receive training on risk assessment and ALARP principles before dealing with the risk assessments process. This formal training will be recorded in the minutes of each of the groups/ committees at the next opportunity when hazards are reviewed/ assessed scheduled for Feb 2019 Any new members to the group will be trained in this regard prior to any risk review or assessment as part of the regular refresher training being delivered each time the risk review process is entered into.	28/02/19	Solicitor and Monitoring Officer, Head of Safety Management
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8	Compliance	recommended that the Broads Authority introduce a document control procedure to ensure that all safety related documentation is maintained, up to date and at the correct issue status. The Head of Safety Management has introduced a document version control	document management system in relation to the safety management team. Rationale and risk: Adequate document management provides a clear audit trail so that documents can be used in the right context and mitigate the risk that out of data or incomplete documents are		Agreed. A Document Management System work area is to be created where the Safety Management System documents will be stored with checkin and check-out monitoring including version control and tracking. All SMS document will then fall under strict version control and security systems. Meeting to scope project scheduled for 24 October. Timescales to be determined on completion of scoping; delivery is dependent on the IT work plan and priorities	31/12/2017	Head of ICT and Collector of Tolls
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9	Compliance	Hazards – The PMSC Guide to Good Practice states that risks and the impact of identified outcomes should normally be assessed against four criteria; the consequence to: life, environment, business (reputation) and damage (port and shipping). However, the Authority's SMS risk approach is assessed against people, environment and assets.	SMS risk categories / criteria of people, environment and assets against the four criteria of: life, environment, business (reputation) and damage (port and shipping), as contained in the latest PMSC Guide to Good Practice.	3	Agreed. A review of assessment criteria will be carried out by the Boat Safety management Group at its meeting in March 2018. Any "new" criteria will be used as the basis for the next formal stakeholder hazard review in February 2019	31/03/18	Head of Safety management	
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Operational Effectiveness Matters

Ref	Risk Area	ltem	Management
			Comments

No operational effectiveness matters were raised.





APPENDIX 1 - DEFINITIONS

RISK AREA ASSURANCE ASSESSMENTS

5. The definitions of the assurance assessments are:

Substantial Assurance	Based upon our findings there is a robust series of suitably designed internal controls in place upon which the organisation relies to manage the risk of failure of the continuous and effective achievement of the objectives of the process, which at the time or our review were being consistently applied.
Reasonable Assurance	Based upon our findings there is a series of controls in place, however there are potential risks that may not be sufficient to ensure that the individual objectives of the process are achieved in a continuous and effective manner. Improvements are required to enhance the adequacy and effectiveness of the controls to mitigate these risks.
Limited Assurance	Based upon our findings the controls in place are not sufficient to ensure that the organisation can rely upon them to manage the risks to the continuous and effective achievement of the objectives of the process. Significant improvements are required to improve the adequacy and effectiveness of the controls.
No Assurance	Based upon our findings there is a fundamental breakdown or absence of core internal controls such that the organisation cannot rely upon them to manage the risks to continuous and effective achievement of the objectives of the process. Immediate action is required to improve the adequacy and effectiveness of controls.

6. The definitions of the priority gradings are:

1		Fundamental control issue on which action to implement should be taken within 1 month.		2	IMPORTANT	Control issue on which action should be taken to implement should be taken within 3 months.	3	MEEDS	Control issue on which action to implement should be taken within 6 months.
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Operational Effectiveness Matters need to be considered as part of management review of procedures, rather than on a one-by-one basis.







APPENDIX 2 - AUDIT TIMETABLE

7. The table below sets out the history of this report.

	Expected Date:	Actual Date:		
Start of Fieldwork:	3 rd July 2017	3 rd July 2017		
Debrief Meeting:	19 th September 2017	19 th September 2017		
End of Fieldwork:	26 th September 2017	19 th September 2017		
Draft Report Issued:	3 rd October 2017	11 th October 2017*		
Exit Meeting:	10 th October 2017	N/A		
Final Report Issued:	12 th October 2017	1 st November 2017		

^{*}Delay due to timing of file review prior to issue.



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APPENDIX 3 - ACKNOWLEDGEMENT

- 8. We would like to thank staff at Broads Authority for their co-operation and assistance during the course of our work, in particular:
 - Steve Birtles Head of Safety Management
 - Dan Hoare Head of Construction, Maintenance and Environment

APPENDIX 4 - DISCLAIMER

9. The matters raised in this report are only those that came to the attention of our auditor during the course of the internal audit review and are not necessarily a comprehensive statement of all the weaknesses that exist or all the improvements that might be made. This report has been prepared solely for management's use and must not be recited or referred to in whole or in part to third parties without prior written consent. No responsibility to any third party is accepted as the report has not been prepared, and is not intended, for any other purpose. TIAA neither owes nor accepts any duty of care to any other party who may have received this report and specifically disclaims any liability for loss, damage or expense of whatsoever nature, which is caused by their reliance on our report.

