



Australian Government

Australian Maritime Safety Authority

ALTERNATE FATIGUE RISK MANAGEMENT PLAN (FRMP) APPLICATION PROCESS

January 2013

Review Process Summary

Background

Marine Order 54 details the requirement of a pilotage provider to comply with either the Fatigue Risk Management Plan (FRMP) published by AMSA or an Alternate FRMP approved by AMSA.

To assess any pilotage provider's application to work an Alternate FRMP, a comprehensive review of the proposed FRMP and the provider's overall Fatigue Risk Management System is required. The main tasks carried out as part of this review include:

1. Review of relevant organisational and operational documents relating to their Fatigue Risk Management Plan (FRMP) such as the proposed Alternate FRMP description, fatigue and/or fitness for duty policy and procedures, incident reporting and investigation tools, contingency plans, etc. For an exhaustive list of the types of documents that could be provided as part of an application see the separate one-page DOCUMENTATION REQUESTED summary;
2. Review of relevant training, training records, etc.;
3. Review of existing and proposed roster(s), system to document actual hours of work; and
4. Development and provision of a detailed response letter with specified conclusions about:
 - a) The differences between the FRMP published by AMSA and the proposed alternate one, and
 - b) The likely increase in fatigue-related risk exposures and the adequacy of risk treatments to manage them, as well as any possible recommendations for the pilotage provider (such as additional detail required to support and complete their application prior to approval, suggested additional risk treatments that would need to be applied prior to approval, etc.).

The Alternate FRMP, including all supporting documentation, will be compared against the 5 Alternate FRMP criteria (detailed below) and the critical elements of the International Standard for Risk Management ISO 31000 as shown in Figure 1.

5 criteria for Alternate Fatigue Risk Management Plan (FRMP), incorporating requirements of the QCPFMP

1. Risk identification and assessment

A risk assessment should be undertaken and documented to identify and assess the potential fatigue-related risks associated with the Alternate FRMP. Current and planned additional fatigue-related risk treatments need to be detailed, including how they are/will be monitored and reviewed.

2. Scheduling of rosters

Scheduling of pilot rosters must help ensure that pilots have adequate leave time between tours of duty and adequate rest periods between pilotage tasks. Rosters should incorporate all recommended fatigue management principles.

3. Fitness for duty

Pilots must always be in a fit state to safely perform required duties. Pilots also need to have an appropriate level of medical fitness (and have a current medical certificate) and be well rested prior to performing pilotage tasks. Therefore, pilots should participate in a health management process to identify and manage fatigue risks, and details of the company process are to be included in the application. Also, all pilots are required to undertake mandatory fatigue management training as determined by AMSA, and participation needs to be demonstrated.

4. Responsibilities

Pilotage providers should demonstrate that the authorisations, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of their operations under the FRMP are current, clearly defined and documented and carried out accordingly.

5. Records, monitoring and review

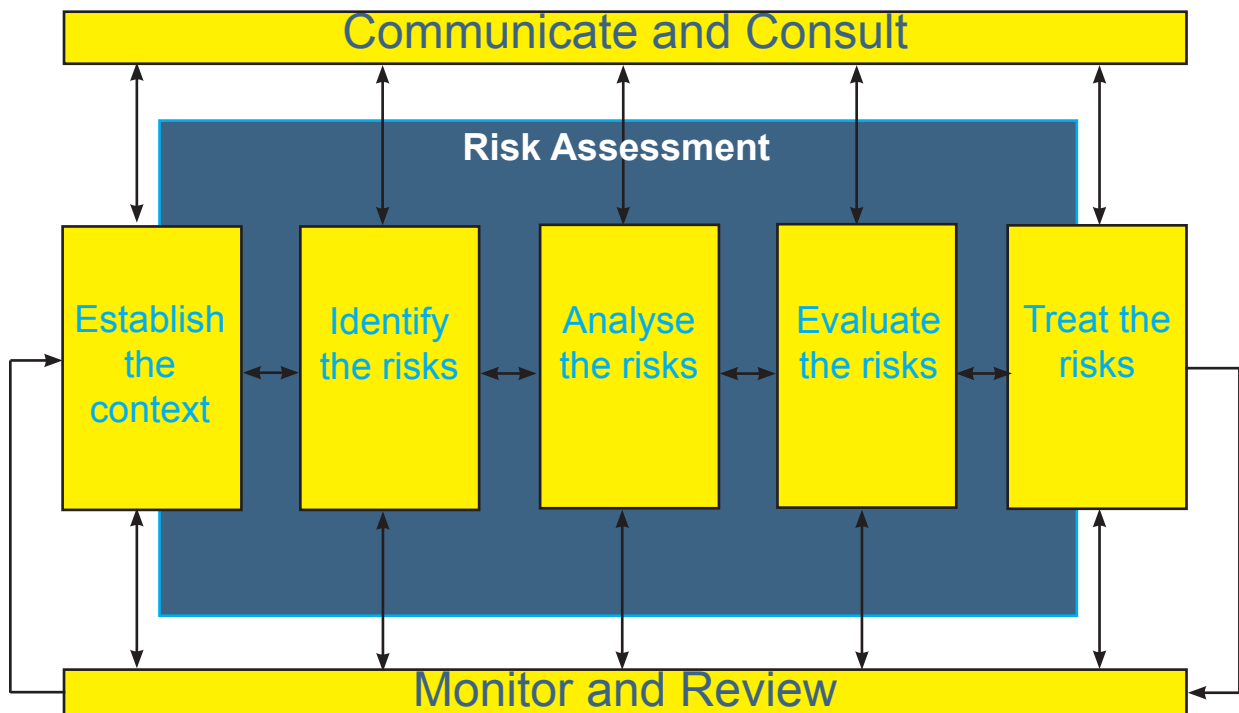
All pilots are required to monitor and record their hours of work and rest aboard vessels.

The pilotage provider must record pilot's hours of rest between vessels and will implement, authorise, maintain and review documented policies and procedures that ensure the effective management, performance and verification of the Alternate FRMP in accordance with the criteria. Records that demonstrate the compliant operation of the Alternate FRMP are to be collected, stored and maintained to verify compliance.

The pilotage provider will ensure that all aspects of the Alternate FRMP undergo an internal audit at least annually. The internal audit and the addressing of any non-conformances will be undertaken as part of the providers internal audit program and procedures that are documented in their SMS.

Records that demonstrate the compliant operation of the Alternative FRMP are to be collected, stored and maintained to verify compliance.

Figure 1: A schematic version of the critical elements of any risk-based management system, as defined by the International Standard for Risk Management ISO31000.



Supporting documentation

- **AMSA Alternate FRMP application process DOCUMENTATION REQUESTED**

Provides an exhaustive list of the types of documentation that might be relevant to support the application.

- **AMSA Alternate FRMP application process SUGGESTIONS FOR APPLICATIONS**

Provides a summary of the key suggestions for pilotage providers to consider when developing their application.

- **AMSA Alternate FRMP application process CHECKLIST FOR APPLICATIONS**

Provides a checklist of the key recommendations for pilotage providers to check off if a particular aspect of their system has or has not been addressed (or if it is considered to be not applicable). A completed checklist should accompany any application for an alternate FRMP, and the more elements that have been addressed the more likely it is that an application will be successful.

Alternate Fatigue Risk Management Plan (FRMP) application process

Suggestions for Applications

Below is a summary of the key suggestions that have been collated for pilotage providers who intend to apply for an alternate Fatigue Risk Management Plan (FRMP) to be approved. The suggestions from this document are also reflected in the accompanying CHECKLIST FOR APPLICATIONS document.

General recommendations:

1. In the application document briefly summarise:
 - a) the operational demands of the business including the required hours of service, and
 - b) the reason(s) why an alternate FRMP is considered necessary.
2. Include a summary table of the proposed maximum work times and minimum rest requirements, as well as an overview of the risk treatments used. The risk treatments may need to be differentiated into two groups:
 - a) those that are permanently in place (e.g. fatigue training), and
 - b) those that are available to use tactically if/when necessary (e.g. napping).
3. When explaining fatigue risk treatments, provide as much detail as possible (i.e. the time of day they are most used, why they are effective in night pilotage operations, how they fit within the schedule of work, and anything else that is relevant for their context of use).
4. Outline how decisions are made regarding fatigue issues discussed between pilots and management. Include a brief statement outlining the decision-making process, and how this process is formally documented and retained for future reference.
5. If possible, structure the application with subheadings that reflect the order and content of each of the 5 Alternate FRMP criteria. This makes for an application that is easier to review.

The 5 Alternate FRMP criteria :

1. Risk identification and assessment

Provide details of the risk assessment undertaken to identify and assess the potential fatigue-related risks associated with the alternate FRMP.

Describe what current and additional fatigue-related risk treatments are/will be implemented.

2. Scheduling of rosters

Detail how scheduling of pilot rosters will ensure that pilots have adequate time between tours of duty and adequate rest periods between pilotage tasks. 'Adequate time' means enough time for sleep requirements, eating and attending to other personal needs, commuting (where relevant), etc.

Add a clear statement acknowledging how rosters will incorporate fatigue management principles.

3. Fitness for duty

Provide an example of the checklist and/or any other process that pilots must complete in order to assess their own fitness for duty.

Provide details of what information is provided to pilots to promote and encourage better management of their health with respect to sleep and fatigue (i.e. what topics do they address, how are these communicated to pilots?).

Clearly state that the details of workplace fatigue risk management training are recorded. Specifically:

- What training occurred?
- Who delivered it?
- When it was delivered?
- Where records of relevant training completed to date are kept?
- If and when refresher training is required?

4. Responsibilities

State what the various responsibilities are that relate to the FRMP, and how these responsibilities are communicated to all appropriate personnel. It will also help to explain when communications occur to all key stakeholders to inform them of their responsibilities and any other information about the FRMP.

5. Records, monitoring and review

Specify what records are stored (i.e. pilot rosters, pilot hours of work and rest aboard vessels, details of non-conformances, etc.).

Clearly state how documents are approved, issued, reviewed, modified and accounted for in accordance with your prescribed procedures.

Explain how frequently internal reviews of the FRMP effectiveness are conducted, and state when the next one is scheduled for completion. Some level of formal review should be undertaken each year. Ideally, also note the position title of the person responsible for completing the internal review.

Explain what procedures are in place to investigate incidents and which specific aspects of the process would help identify fatigue if it was a contributing or causal factor. It would also be of value to give examples of relevant data collected previously or asked about in investigations to support this statement.

Alternate Fatigue Risk Management Plan (FRMP) application process

Checklist for Applications

On the following two pages is a checklist of the key recommendations that have been collated for pilotage providers who intend to apply for an Alternate Fatigue Risk Management Plan (FRMP) to be approved. The details contained in this document are also detailed in the accompanying SUGGESTIONS FOR APPLICATIONS document.

This document is separated into two tables: one on page 2 which covers the 5 Alternate FRMP criteria that can be applied to the overall system and one on page 3 which relates specifically to the associated risk management processes.

The tables are intended for any pilotage provider to check off if a particular aspect of their system has or has not been addressed (or if it is considered to be not applicable). A completed checklist should accompany any application for an alternate FRMP, and the more elements that have been addressed the more likely it is that an application will be successful.

The 5 Alternate FRMP criteria

Criteria	Item	Yes	No	N/A
1. Risk identification and assessment	A risk assessment of potential fatigue-related risks associated with the Alternate FRMP has been undertaken and documented.			
	Current and additional fatigue-related risk treatments are detailed.			
2. Scheduling of rosters	Scheduling of rosters ensures that pilots have adequate leave time between tours of duty.			
	Scheduling of rosters ensures that pilots have adequate rest periods between pilotage tasks.			
	Rosters incorporate fatigue management principles.			
3. Fitness for duty	Pilots have an appropriate level of medical fitness (including current medical certificates).			
	Pilots are well rested prior to performing a pilotage tasks.			
	Pilots participate in a health management system to identify and manage fatigue risks.			
	All pilots undertake mandatory fatigue management training as determined by AMSA.			
4. Responsibilities	Authorisations, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of their operations under the FRMP are current, clearly defined and documented.			
5. Records, monitoring and review	All pilots monitor and record their hours of work and rest aboard vessels.			
	The pilotage provider records pilot's hours of rest between vessels.			
	The pilotage provider implements, authorises, maintains and reviews documented policies and procedures that ensure the effective management, performance and verification of the alternate FRMP in accordance with the criteria.			
	The pilotage provider ensures that all aspects of the Alternate FRMP undergo an internal audit at least annually.			
	The internal audit and the addressing of any non-conformances is undertaken as part of the providers internal audit program and procedures that are documented in their SMS.			
	Records that demonstrate the compliant operation of the Alternate FRMP are collected, stored and maintained to verify compliance.			

Specific risk management system elements (informed by the International Standard for Risk Management, ISO 31000)

Element	Item	Yes	No	N/A
1. Communicate and consult	All key stakeholders have been involved in the discussions relating to the Alternate FRMP development process.			
	Stakeholders' objectives, needs, and concerns have been fully considered.			
	There is documented evidence of consultation occurring and what the key considerations were.			
2. Establish the context	All unique and/or specific operational fatigue-related factors have been identified and discussed in the broader context of the operation.			
3. Identify the risks	Potential/possible fatigue-related events/situations have been identified.			
	Causes and consequences of the events/situations have been determined.			
4. Analyse the risks	The consequences and likelihoods of the fatigue-related risks have been determined.			
	The effectiveness of existing controls has been determined.			
5. Evaluate the risks	The full profile of treated and untreated fatigue-related risks has been determined and documented.			
	It has been decided which risks require additional risk treatment.			
	The priorities, resources, timelines and responsibilities for the implementation of any additional treatments have been decided and documented.			
6. Treat the risks	A fatigue risk treatment plan has been developed and documented, outlining actions, accountabilities, timelines, reporting and monitoring requirements.			

Element	Item	Yes	No	N/A
7. Monitoring and review of risk treatments	Responsibilities for monitoring and review of the fatigue risk treatment plan are clearly defined. These responsibilities include who will periodically review and update the entire plan.			
	Management indicators to determine the effectiveness of the fatigue risk management system have been established and documented.			
	Planned rosters are kept in electronic format.			
	Actual hours of work are kept in electronic format.			
	Fatigue management training records are kept.			
	Incident report and investigation tools are capable of capturing fatigue as a potential causal or contributing factor.			
	Non-conformances to the requirements of the system are recorded, tracked and systematically addressed.			

Documentation Requested

As part of the process of considering an application for alternate Fatigue Risk Management Plan (FRMP) approval, a detailed assessment is conducted. Review of risk identification processes, as well as risk assessment, treatment and monitoring are key elements of the assessment. In addition, the assessment includes a detailed investigation of the suggested pilot roster, and the contingencies available within the documented management system.

In order to fully consider the merits and limitations of each application, AMSA will need to be provided with specific system documentation for review. The list below represents an exhaustive list of the types of documents that might be available for submission. The information required may be included in alternatively named documents, or combined into larger documents, so this list is intended only as a general guide.

Please provide electronic copies of all relevant documents that are available. They can be emailed to coastal.pilotage@amsa.gov.au. If files are too large to email, please use the service available at www.yousendit.com (or similar) to send the files. This is a secure web-based service that is free of charge for files smaller than 100MB in size. Possible documents that may be available and considered relevant for submission as part of the Alternate FRMP application process include:

- Proposed Alternate FRMP description document
- All policies or procedures relating to fatigue (as detailed in the company SMS)
- Current and proposed rosters, hours of work, etc.
- Risk identification summaries, risk assessment workshop outputs, hazard

registers, etc.

- Minutes from consultation meetings
- Information about risk treatments other than rest periods (e.g. training, cross-checking of communications, use of radio calls, napping, etc.)
- Fitness for duty checklist
- Responsibilities/accountabilities flow chart for fatigue management
- Incident reporting and investigation tools and templates
- Details of information provided to pilots to promote and encourage better management of their health, including fatigue
- Details of records kept for actual hours of work
- Information on the assurance data that will be recorded from the system and periodically reviewed by AMSA during audits required under Marine Order 54.

