

Fatigue Risk Management System (FRMS) Integration

A practical guide for small and medium-sized operations who want to run their FRMS within a safety management system (SMS)

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Chapter 1: Introduction

The major audience for this guide is small and medium-sized operations, which CASA defines as those employing up to 50 full-time pilots. Small, non-complex organisations may decide that they do not need to develop and implement a fatigue risk management system (FRMS). Rather, a fatigue management approach may be more appropriate for these organisations.

This guide is intended to provide all basic required information for operators with either:

- An SMS and a stand-alone FRMS which they are committed to, or considering, integrating; or
- An SMS and they are committed to, or considering, developing and implementing a FRMS for integration with the SMS.

What is fatigue?

Fatigue is a natural human response to certain conditions. These can include working hours that reduce the opportunity for recovery sleep, operational demands requiring a sustained high-tempo workload, as well as simply being awake when you would normally be asleep.

The symptoms of fatigue are many and varied, and are both physical (e.g. yawning, micro-sleeps) and mental (e.g. loss of vigilance). When impairment due to fatigue, such as impaired memory or poor communication, coincides with other operational risks in the environment, incidents and accidents can result.

A definition of fatigue for use within an operational context is therefore:

‘A state of physical and/or mental performance impairment, resulting from factors such as sleep loss or extended wakefulness, circadian phase and workload, that can impair alertness and the ability to perform safely.’

Why might you need an FRMS?

For an FRMS to be of value, you need a level of complexity and systems thinking, and importantly, to acknowledge that poor implementation of any FRMS, SMS or other safety-related initiatives can *increase* safety-related risks. Therefore, the decision to develop and implement an FRMS needs to be made carefully, after considering all relevant and foreseeable factors.

An operation that is able to operate safely and satisfactorily within the limits of prescriptive rules, such as flight and duty time limitations and rest requirements for flight crew, is unlikely to need an FRMS. In contrast, operators that cannot safely sustain themselves within the single defensive layer of such rules are clear candidates for an FRMS.

What is a fatigue risk management system (FRMS)?

- An FRMS aims to ensure that personnel are sufficiently alert so that they can operate to at least a satisfactory level of performance.
- An FRMS applies principles and processes from the field of safety management system (SMS) development and use, tailored to the specific risks relating to fatigue.

- As detailed in industry resources such as ICAO's *FRMS Implementation Guide for Operators*, an FRMS (like an SMS) seeks to achieve a realistic balance between safety, productivity and costs.

ICAO defines an FRMS as:

‘A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.’

In the ICAO *Guide*, as outlined in the table below, the structure of an FRMS is based on an SMS framework. The core activities are safety risk management and safety assurance. These activities are governed by FRMS policy and processes and supported by activities including FRMS promotion. Like an SMS, the FRMS must be documented.

SMS Framework	FRMS Framework
Safety policy & objectives <ul style="list-style-type: none"> • Management commitment and responsibility • Safety accountabilities • Appointment of key staff members • Safety response planning • SMS documentation 	FRMS policy & documentation <ul style="list-style-type: none"> • Management commitment • FRMS accountabilities, responsibilities and authorities • FRMS objectives • FRMS processes and procedures • FRMS training records
Safety risk management <ul style="list-style-type: none"> • Hazard Identification • Risk assessment and mitigation 	Fatigue risk management <ul style="list-style-type: none"> • Identification & assessment of fatigue-related risks • Fatigue-related risk mitigation/controls • Implementation • Evaluation
Safety assurance <ul style="list-style-type: none"> • Safety performance monitoring and measurement • Management of change • Continuous improvement 	FRMS safety assurance Monitor FRMS effectiveness <ul style="list-style-type: none"> • Processes for managing change (to the operational/organisation environment and/or to the FRMS itself) • Continuous improvement of the FRMS
Safety promotion <ul style="list-style-type: none"> • Training and education • Safety communication 	FRMS promotion <ul style="list-style-type: none"> • Training programs • FRMS communication plan

For an SMS or an FRMS to be effective, all of the elements shown need to be in place, and they must be appropriate for the complexity, maturity and size of the organisation. An FRMS can include specific tools and resources, the use of which must be considered in the context of the SMS. This is to provide assurance that defensive layers add a net benefit individually and in combination.

Examples of tools and resources relevant to an FRMS are:

- Bio-mathematical models used to estimate and predict fatigue. See CASA's *Bio-mathematical Fatigue Models Guidance Document* for more information: www.casa.gov.au/fatigue
Such models can be used during roster scheduling/planning as well as assessing actual

working hours after the event. In some cases, models can be fully automated when integrated with rostering and scheduling software.

- Objective and subjective tools to record sleep (e.g. using wrist-worn actigraphy devices and self-reporting mechanisms respectively). See Appendix B of ICAO's *FRMS Implementation Guide for Operators* for detailed descriptions of such approaches and their pros and cons. See the next Chapter for a link to this resource.
- Objective performance measurement using laboratory-type tests in an operation or data directly from the operation (e.g. flight data). Laboratory-type tests such as the psychomotor vigilance task (PVT) that can be used to obtain surrogate or proxy measures of fatigue are also referred to in Appendix B of ICAO's *FRMS Guide for Operators*.

Why integrate an FRMS into a safety management system (SMS)?

- Since fatigue affects fitness for duty, which also relates to impairment from other sources such as alcohol and other drugs, fatigue management logically is an integral part of safety management.
- Due to the level of inter-connectedness between fatigue, fitness for duty, human factors and safety management, it could be argued that the 'correct' place for an FRMS is within the SMS.
- In many cases the desire, or need, not to separate the FRMS from the SMS leads to their early integration. In fact, for operations that do not yet have a formal FRMS it is possible, and possibly even desirable, to integrate the FRMS into the SMS while it is being developed and implemented.

Case study

Helicopter Response Pty Ltd is a small rotary-wing operator with seven aircraft and three bases. The company has been operating for 33 years with a steadily improving safety record and is widely acknowledged in Australia as having an effective safety management system (SMS). In 2006 the management team decided to develop and implement an FRMS; a decision also had to be taken as to whether the FRMS would stand alone or be integrated into the SMS.

After considering the options and implications it was unanimously agreed that the FRMS would be built into the SMS from the outset. The reasons for this included:

- All other fitness-for-duty components were already embedded in the SMS
- The person accountable for the SMS was also going to 'own' the FRMS
- The approach would avoid an unnecessary project to integrate the two later on

The critical role of communication in an FRMS

In many ways, the safety promotion activities such as communication associated with an FRMS are considered part of the FRMS. However, safety promotion is critical to the success or failure of an FRMS and/or integrating an FRMS with SMS. The obvious stakeholders tend to be those directly involved with day-to-day operations. However, there is a need for wider communication—to

include the executive management team and the board, scheduling and rostering personnel and possibly others such as unions and/or CASA.

If FRMS implementation, or FRMS integration into an SMS, is to succeed, and be effective, all relevant stakeholders must be involved. Senior management especially, have to be committed to providing all the necessary resources. If you do not inform, engage and work with such stakeholders, at best the results will be sub-optimal; and at worst, this could contribute to non-compliance, confusion, inefficiency and, potentially, increased operational risks. Promotion activities and communication are outlined in the next section of this *Guide*.

Chapter 2: Developing an FRMS

Some of the many resources available to support FRMS development, and its integration into an SMS include:

- The ICAO FRMS Implementation Guide for Operators
<http://www.icao.int/safety/fatiguemanagement/FRMS%20Tools/FRMS%20Implementation%20Guide%20for%20Operators%20July%202011.pdf>
- The ICAO Annex 19 documentation related to safety management
<http://www.icao.int/safety/SafetyManagement/Pages/Annex-19,-1st-Edition---Executive-summary.aspx>
- The CASA Fatigue Management Resource Kit and associated resources
http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_90315
- The CASA *SMS for aviation: a practical guide* resource kit – 2nd edition, 2014
http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_101005
- The CASA Civil Aviation Advisory Publication (CAAP) SMS-1(0): *Safety Management Systems for Regular Public Transport Operations*
<http://www.casa.gov.au/wcmswr/assets/main/download/caaps/ops/sms-1.pdf>
- The CASA *Safety Behaviours: Human Factors for Engineers* resource kit
http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_100999
- The CASA *Safety Behaviours: Human Factors for Pilots* training resource
http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_93254

FRMS basics

Given both work (e.g. rosters) and non-work (e.g. individual sleep health) factors contribute to fatigue, individuals and employers must acknowledge that they share responsibility for fatigue management. Without this acknowledgment adequate or sustainable management of fatigue-related risk is impossible. If individuals or organisations fail to manage fatigue-related risks adequately, the integrity of the FRMS will be compromised. If there is genuine understanding and commitment from employees and employers, supported by appropriate systems and processes, fatigue risks can be managed in a way that supports safe, compliant and productive operations.

Leadership and the FRMS

- As with any safety-related initiative, FRMS leadership is vital for success.

- Effective leadership requires consistently demonstrated commitment to a relevant, practical and safe approach.
- The most senior levels of the organisation must demonstrate leadership:
 - by making it personal—sharing their own experiences of fatigue in the workplace—senior managers can raise the profile of fatigue and safety.
 - by allocating the necessary resources to the FRMS in the right timeframe, and according to FRMS priorities

FRMS governance

Larger commercial organisations are likely to need what ICAO has defined as a fatigue safety advisory group (FSAG) involved in all aspects of their FRMS. Alternatively, you could include FRMS as a standing component of a broader safety-related working group or committee, or as a sub-group. An FSAG (or equivalent) generally comprises front-line operational representatives (e.g. flight crew), operational management, commercial management, rostering and scheduling and other areas.

FRMS policy and documentation

In a similar way to SMS policy, FRMS policy must articulate:

- Management/leadership commitment
- FRMS accountabilities, responsibilities and authorities
- FRMS objectives

You need to clearly define the objectives of the FRMS to ensure that you meet all essential safety, compliance, operational efficiency and other requirements. You also need to develop FRMS documentation to cover all FRMS processes and procedures, including training records.

Fatigue risk management

Probably more than any other aspect, the FRMS risk management steps have been defined in detail in other freely available publications. These publications include the ICAO and CASA resources referred to above, so this Guide will not cover them in any depth.

The main steps associated with assessing fatigue-related risk, which are complemented by elements such as setting the context, as well as communication and consultation, are:

- Risk identification and assessment
- Risk control/mitigation/treatment
- Risk monitoring and reporting

Fatigue risk management processes should include FRMS implementation. Implementation is likely to be progressive and the steps involved will form part of the system as it evolves. Other components, including a confidential reporting system for fatigue-related information, are also

essential. As defined by ICAO, an FRMS must be data driven. This means that documentation is needed to define:

- The data needed
- How frequently this data is required
- Who is accountable for collecting, analysing the data and reporting on it
- How often larger reviews of data are required
- What the data means for the suitability of the current FRMS structure

Data is categorised by ICAO in three distinct categories, as follows:

1. Predictive: this data generally relates to examining future schedules and rosters (e.g. using bio-mathematical models). It could also include monitoring of individuals by validated technologies to inform users of their impairment before they are consciously aware of it.
2. Proactive: this data generally relates to scanning for possible risks in expected operating conditions. Proactive data, therefore, can come from routine, planned reports from crewmembers about their fitness for duty with respect to fatigue. Similarly, risk assessments undertaken before any triggering incidents where fatigue was found to be a causal or contributory factor would be classified as proactive data generating.
3. Reactive: data generated during or after an event. Sources include flight data, confidential reports, fatigue reports, audit reports and incident reports.

Each type of data has a unique value; however, most organisations tend to have much more reactive data than predictive or proactive data. The types of data available in each category are also further defined into objective data, that is directly measured (e.g. warnings triggered by a breach of minimum parameters); and subjective data that is self-reported as a reflection of a professional and/or personal assessment (e.g. confidential reports).

Both objective and subjective data streams have a clear role to play within an FRMS; the degree to which this occurs will depend on the size of an operation and its inherent complexity. For example, a small operator might routinely use reactive data from incident and confidential reports and audits; proactive data from company training and risk assessments; and predictive data from analysis of future flight schedules.

A medium-sized operation might do all of these; and use wrist-worn sleep monitoring of crewmembers on certain schedules to obtain objective data as to whether they are getting enough sleep. They might also use advanced crew resource management (CRM) techniques to regularly scan for the effects of fatigue on an operating crew (with any results being recorded). For a comprehensive description of the steps involved in a full risk management process refer to the ICAO *Implementation Guide for Operators*.

FRMS safety assurance

FRMS safety assurance forms another layer of defence against an operator's fatigue-related risk exposure. FRMS safety assurance processes are also part of the routine operation of the FRMS: they monitor how well the entire FRMS is functioning. Simply, the safety assurance steps involve:

1. Checking the FRMS is functioning as intended against the specific metrics defined for each required area (such as safety, compliance, operational flexibility, etc.)
2. Identifying where changes in the operating environment have the potential to increase fatigue-related risk exposures (e.g. new schedules, increased use of night or emergency response flying etc.)
3. Identifying areas for improving the management of fatigue-related risks in response to operational experience and associated data

Ongoing improvement: operators are expected to monitor and maintain data to demonstrate the reasons for changes to the FRMS. This data could include eliminating and/or modifying risk treatments because they are no longer needed/relevant, or because of indications there have been unacceptable negative consequences in certain circumstances. The ongoing improvement data could also relate to feedback from crew members about FRMS procedures/processes/sections in documentation that are lacking clarity and the need for new content due to new or future changes to the operational demands and effectiveness of current risk treatments.

FRMS promotion

FRMS promotion is critical to maintaining FRMS effectiveness. FRMS communication should coordinate with the rollout of training, as well as consultation with the workforce and any other stakeholders.

It is sensible to develop a specific plan for FRMS promotion and communication activities clearly defining their context, purpose and objectives. Ideally the FSAG (or equivalent) should do this, and identify the desired audience/stakeholder groups to be addressed.

The next stage is to identify issues such as each group's likely needs, their concerns, and their perceptions of current management of fatigue-related risk. Then, keeping in mind the stated FRMS objectives, and with this understanding of stakeholders, develop key messages for each stakeholder group.

This might include messages common to all stakeholders, such as the identification of fatigue as a critical risk to the business. Other messages might be specific to particular stakeholders; for example, a key message for the workforce and unions might be that safety is the primary driver of the project and that no change to people's take-home pay is expected from the changes.

Promotion activities should progress naturally through the stages of SMS/FRMS development and integration. One effective, simple breakdown of these stages is:

1. Awareness: sharing information about FRMS and the project—what it means for each stakeholder group (e.g. training required, any changes in work schedules, answering any questions that have been raised etc.).
2. Understanding: building on the initial awareness to create more detailed knowledge about who does what (accountabilities), timelines, what is in and out of scope, etc.

3. Adoption: the final phase—continuing to answer relevant and important questions, as well as demonstrating where earlier suggestions have been woven into the updated design.

Case study

Northern Skies Pty Ltd is a medium-sized company with 19 fixed-wing aircraft used primarily for fly-in-fly-out workers servicing the mining industry. Following the implementation of their FRMS, which was integrated into their existing SMS, Northern Skies developed and implemented a communications plan to share the post-implementation review (PIR) results with key stakeholders. The following table is an excerpt from the plan, summarising the critical communication plan rollout details.

Stakeholder group	Method for communication	Details	Date	Responsibilities
All operational workers (employees, contractors, etc.)	Chief pilot weekly video	High-level overview of post-implementation review (PIR) outcomes & the importance of continuing to manage fatigue-related risk. Announcement of staff meetings	26 April	FSAG to provide key points to chief pilot
	Weekly safety update email	Include key findings, planned changes, change schedule and points of contact	5 May	FSAG to develop and provide key points
	Staff meetings	Include update of progress with planned changes against schedule	July (dates as required)	FSAG to develop and provide to chief pilot for delivery
	Intranet safety page	Post slides from staff meetings as well as content of chief pilot video and safety email	Within 7 days of each activity above	FSAG and chief pilot to provide content
Board of Directors	Monthly board meeting	Overview of PIR outcomes including the change in risk profile, ongoing assurance content and timing as well as links to resources made available to all employees.	22 April for all content excluding that shared in staff meetings	FSAG to provide content to Company Secretary
	One-page reference document	Summary of all information provided for future reference and records	22 April	FSAG to provide content to company secretary
CASA	Annual FRMS update meeting	Overview of PIR outcomes including system changes	21 August	FSAG to develop content and deliver

Chapter 3: Implementing an FRMS

No 'off-the-shelf' FRMS is available and, because each aviation organisation is unique, that is unlikely to change. Some elements, such as training packages, might be identical from site to site, or possibly even from company to company. However, other elements such as feasibility and the appropriateness and effectiveness of risk treatments are likely to be specific to each operation.

One of the most difficult decisions many organisations have to make relates to how quickly to implement what is seen as the ideal FRMS. On the one hand, fatigue is known to be a significant risk factor and there is an argument for implementing the 'ideal' FRMS as soon as possible. On the other hand, most organisations have experienced well-meaning initiatives, which were not delivered as intended. This can create new risks and impacts, and cause avoidable frustration.

Consequently, there is a strong case for starting small in any FRMS project. The initial focus could be on:

- Setting outer limits for duty times, minimum rest requirements etc. (e.g. based on legislation).
- Getting into the organisational discipline of fully analysing planned and actual hours of work with a bio-mathematical model.
- Learning all possible organisational lessons from complete investigation of incidents where fatigue may be a causal/contributory factor.
- Raising fatigue awareness via targeted training.

Over time, if these initial activities occur as planned, and are well received because they add value to personnel and the operation, then organisational engagement and trust is likely to be in a good state for the next stage of FRMS implementation. ICAO sets out a specific example of a phased approach: one example of several ways in which implementation could occur. ICAO's four phases are:

1. Planning. This should include:
 - Explicitly identifying gaps between the current system(s) and what is intended
 - Developing policy and other documentation
 - Developing an implementation plan to address the gaps identified in all key systems including reporting, risk management, etc.
2. Implementation of reactive FRMS processes (e.g. improve use of fatigue-related incident data)
3. Implementation of proactive and predictive FRMS processes (e.g. complete risk assessments and enhanced risk treatment of higher exposures, introducing peer monitoring in crews)
4. Implementation of FRMS safety assurance processes (e.g. monitoring of FRMS performance including all relevant components such as management of fatigue risks in schedules, rosters and flight and duty times, as well as training, monitoring, audit, etc.)

How to integrate an FRMS into your SMS

Integrating an FRMS into your SMS effectively treats FRMS data in the same way as other essential streams of data instead of a more stand-alone stream. This is the primary distinguishing feature of an integrated FRMS compared with a stand-alone system. For effective integration, the incorporation of FRMS components/streams would need to be extended throughout the SMS.

Having decided to integrate FRMS into the existing SMS, you need the following process steps:

Step		Remarks
1	Form a fatigue safety action group (FSAG) or equivalent	The FSAG may be separate to, or a subcommittee of, the safety committee, and will be responsible for coordinating and overseeing all FRMS activities. As appropriate to the size of the operation, the FSAG should include operational management, project resources, operations support staff, union/employee representatives, subject matter experts.
2	Draft FSAG terms of reference,	FSAG to consider which SMS accountabilities,

	FRMS accountabilities, responsibilities and authorities	responsibilities and authorities might appropriately be 'read across' to the FRMS, or whether they need to be different.
3	Do a gap analysis of existing SMS documentation, procedures and processes and FRMS requirements	<p>The gap analysis results should indicate:</p> <ul style="list-style-type: none"> • Which SMS documentation, procedures and processes you can apply to the FRMS without change • Which SMS documentation, procedures and processes you can apply to the FRMS with modification • Where neither of the above apply, which FRMS-specific documentation, procedures and processes you require
4	Develop FRMS policy and objectives	<p>FRMS policy should:</p> <ul style="list-style-type: none"> • State the purpose/objectives of the FRMS including the responsibility management and employees share for managing fatigue-related risk <p>Reflect the commitment of management to:</p> <ul style="list-style-type: none"> • Ensure that sufficiently qualified staff, resources and equipment are available to meet FRMS requirements • Ensure that initial and recurrent FRMS training is provided to all relevant employees • Continuous improvement of the FRMS <p>- Indicate that all employees involved with the FRMS are required to comply with its requirements (i.e. making appropriate use of rest periods, undertaking FRMS-related training, reporting fatigue-related risks and incidents etc.)</p>
5	In light of the results of the gap analysis, develop FRMS-related documentation, procedures and processes	You must decide how you will incorporate FRMS-related documentation etc. into the SMS suite of documentation. FRMS procedures and processes should also cover the way you will identify fatigue-related risks (i.e. reactively, through reporting mechanisms; and proactively, by fatigue surveys/questionnaires/performance data).
6	Develop a project/ implementation plan for SMS/FRMS integration	<p>The project/implementation plan should cover the whole process of integrating the FRMS with the SMS and indicate a timeline for all activities and who is responsible for them. This plan should also indicate a timeline for implementation of the different elements of the communication plan (see below).</p> <p>At this stage you also need to confer with CASA regarding approval of the FRMS (see below).</p>
7	Develop a comprehensive FRMS communication plan	<p>The communication plan should cover all information that needs to be shared with relevant stakeholders.</p> <p>FRMS-related communications need to be carefully crafted in order to manage employees' expectations, explaining how the FRMS will, and importantly will not, affect them. Communication to employees should commence at an</p>

		early stage—the appropriate timing of FRMS-related communications is vital.
8	Review current operations to assess where/when fatigued-related risks may exist and use the risk management process to determine the best way to control them. These results should be reflected in FRMS documentation.	This stage of the process should include a review of rostering arrangements and possible rostering improvements aimed at managing fatigue-related risk better. FRMS procedures and processes must also reflect how you will monitor the effectiveness of your fatigue-related risk management.
9	Develop fatigue- and FRMS-related training material	The initial fatigue-related training effort should establish a common level of understanding among employees about fatigue and the impairment it causes. As the FRMS develops, training content should then expand to cover the FRMS itself.
10	Consider the use, or otherwise, of one, or more, bio-mathematical models to assist in identifying potential increases in fatigue-related risk.	If you decide to use a bio-mathematical model, you will need to cover its application in the FRMS documentation and processes. This material should reflect when and how the model will be used (e.g. when developing rosters, fatigue studies, incident investigation etc.).
11	Develop the processes for ongoing assurance and periodic review of FRMS capability, operational integrity and fitness for purpose, and how FRMS performance will be measured to ensure continuous improvement	Audits and reviews serve specific functions within the FRMS as they do within the broader SMS. Specific merit comes from internal and independent external audit; FRMS components can be assessed separately, or as part of more general safety audits.

Case study

Medical Response Pty Ltd provides stand-by medical transport throughout regional and country Australia. The company covers a large proportion of the country from five bases and included integration of FRMS into their SMS as one of five safety-related priorities for the year. Based on the lessons learned from changes to the SMS following the integration of alcohol and other drugs content the year before, the company committed a dedicated project manager (one day per week for six months) to ensure that operational, management and regulatory stakeholders were supported and kept informed throughout the change.

The key tasks of the project manager were to implement the changes to documentation that had been identified by the safety department, while also managing the roll-out of the associated communications plan in conjunction with safety, IT and the managing director's support team.

The process for getting approval to trial an FRMS

CASA resources, including a dedicated webpage, clearly define the process for getting formal approval to trial an FRMS:

www.casa.gov.au/scripts/nc.dii?WCMS:STANDARD:1001:pc=PC_101422

This webpage outlines the guidance documentation referred to above, as well as specific forms (Form 824A – Statement of Intent to Request CASA Approval of a FRMS

Form 824B – Application for approval of a FRMS and

Form 817 FRMS Progress Monitoring Tool for Operators).

The webpage also details the specific steps for initial approval to trial an FRMS and the later sequence of steps to apply for, and be granted, a full FRMS approval.

- Step 1 – Complete and submit a statement-of-intent form
- Step 2 – Send completed and signed statement-of-intent form and documents to the Permission Application Centre
- Step 3 – Attend a pre-application meeting
- Step 4 – Submit your formal application
- Step 5 – Review of your application
- Step 6 – Payment of costs and submission of required supporting documents
- Step 7 – Assessment of your application
- Step 8 - Detailed assessment
- Step 9 - Recommendation and approval
- Step 10 - Issue of full FRMS approval

[Getting approval to implement an FRMS](#)

As detailed online as per step 8 above, CASA expects that an operator should be ready three months before the end of the trial FRMS period for its evaluation team to conclude an assessment for a full FRMS implementation approval. An operator who intends to apply for a full FRMS will need to notify their appropriate CASA regional office to schedule a final assessment.

When progressing to the recommendation and approval Step (Step 9) and once the assessment for full FRMS implementation approval is complete, the assessing regional office begins the certification process for the full FRMS implementation approval.. The regional office prepares a recommendation to a CASA delegate to issue, or not issue, the approval. At this stage, the applicant will also be informed if the recommendation varies from what has been applied for.

Finally, if approved, your formal approval documents will be emailed or faxed; and the original approval forwarded by mail. Please note that CASA will reconcile your account and, if required, issue a refund or require payment of the balance of any monies owing before issuing the approval.