Australian Government

Australian Fisheries Management Authority

National Compliance Risk Assessment Methodology

2023-25

Contents

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Draft	New document created for 2023-25 risk assessment	
Final		Approved out of session OMC 14 July 2022

1 Best Practice Risk Management Process

Risk is defined as the "effect of uncertainty on objectives"[1] and is most often measured in terms of likelihood and consequence. Effective risk management involves "the systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analysing, evaluating, treating, monitoring and reviewing risk."[2] It is divided into four main stages: risk context, risk assessment, risk treatment and risk monitoring with consultation occurring at all levels (Figure 1). The risk assessment process is intended to provide insight to the sources of risk and potential impacts, and take action against undesirable outcomes/risks.

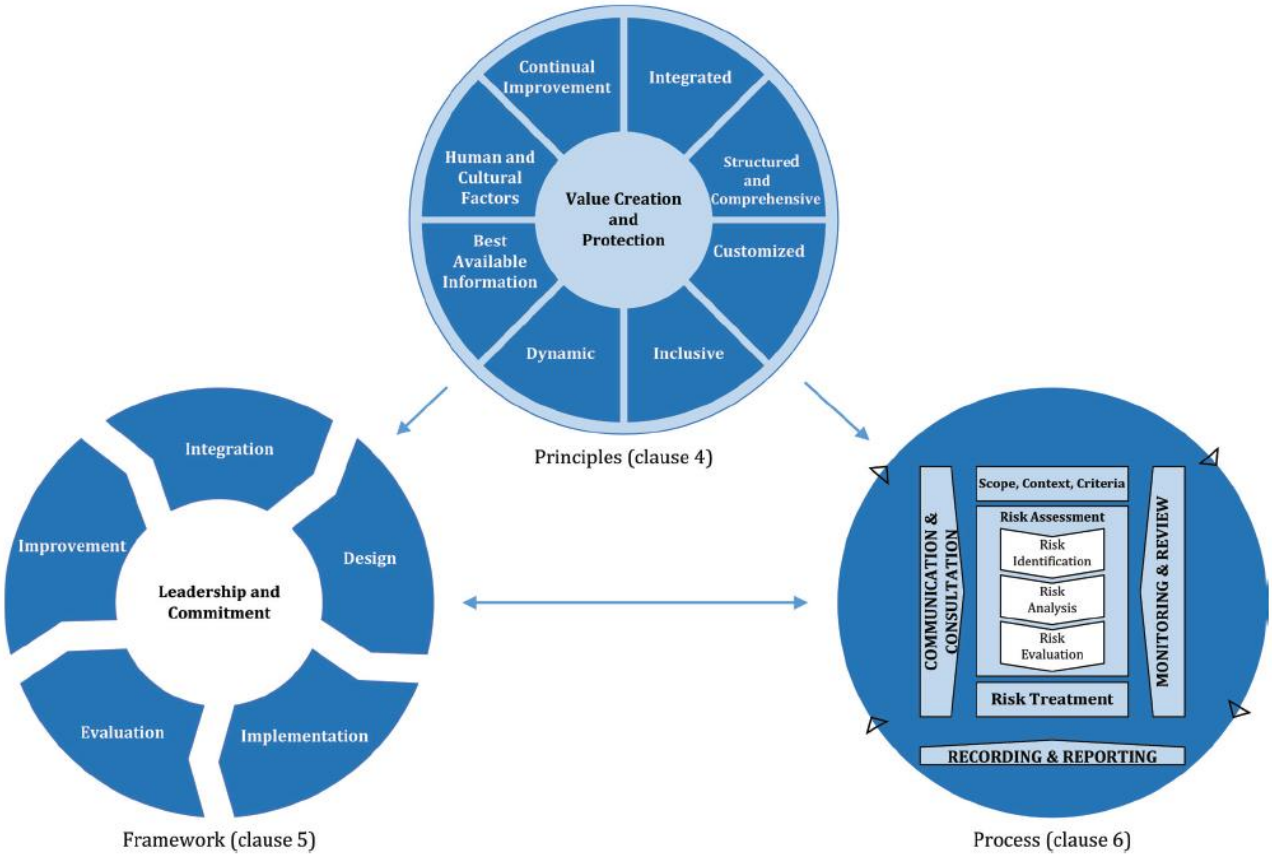

Figure 1: Principles, Framework and Process

[1] ISO 31000:2018(E), p.1.
[2] ISO 31000:2018(E), p.3.

1.1 Risk Communication and Consultation

At all levels of the risk management process, communication and consultation between those responsible for implementing risk management and those with vested interests occurs. This provides an understanding on how decisions are made and why particular treatments are required[3]. Focus should be on consultation rather than a one-way flow of information from the decision-makers to the stakeholders.[4]

1.2 Risk Context

Risk context is the first step in the risk management process and defines the parameters within which risks must be managed and sets the scope for the rest of the risk management process (refer Figure 1).[5] The risk context identifies undesirable event(s) or hazard(s), establishes the structure of the analysis, and determines the criteria against which risks are assessed. Stakeholders are identified and the spatial and temporal parameters within which risks must be managed are defined.[6] This step is critical as it sets the framework and scope for management.

1.3 Risk Assessment

Risk assessment is the second step of the risk management process and involves three stages: risk identification, risk analysis and risk evaluation (refer Figure 1).[7]

1.3.1 Risk Identification

The purpose of risk identification is to generate a comprehensive list of risks and events that may have an impact on the achievement of objectives (or key elements) identified in the risk context.[8] Comprehensive identification using a well-structured systematic process is critical to generate a complete list of risks. This can be completed through examination of historical risk assessments, discussions with expert panels, brainstorming, and stakeholder meetings to establish or determine opinions, perceptions and experiences.

[3] ISO 31000:2018(E).
[4] Ibid.
[5] ISO 31000:2018(E), p.14.
[6] ISO 31000:2018(E), p.15.
[7] ISO 31000:2018(E), p.14.
[8] ISO 31000:2018(E), p.4.

1.3.2 Risk Analysis

Risk analysis creates an understanding of identified risks.[9] This process involves the examination of the identified risks, the potential consequences (impacts) associated with each risk and the likelihood (probability) of that consequence occurring. The combination of these two factors produces an estimated level of comparative risk that is used for assessing and determining suitable management responses.

Risk analysis is an iterative process involving:

- the integration of qualitative and/or quantitative information, often including an uncertainty value for the sources of risk or different weightings; and
- the separation of the sources of risk into categories based on their estimated probability or likelihood of causing an undesirable event/action.[10]

Risk analysis may be undertaken to varying degrees of detail depending on the risk, the purpose of the analysis, and the information, data and resources available. The analysis may be quantitative, semi-quantitative or qualitative, or a combination of these, depending on circumstances.[11]

Box 1: Qualitative analysis and quantitative analysis definitions

Qualitative analysis: uses word form or descriptive scales to describe the extent of potential consequences and their likelihood.

Quantitative analysis: uses numerical values for consequences and likelihood using data from various sources and is able to be measured over time.

1.3.3 Risk Evaluation

The purpose of risk evaluation is to make decisions, based on the outcomes of the risk analysis, about which risks need treatment and the priority for treatment implementation.[12] Risk evaluation involves comparing the level of risk determined during the analysis process with the risk criteria established when the context is considered. Based on this comparison, the need for treatment can be considered. In some circumstances, the risk evaluation can also lead to a decision not to treat the risk in any other way than maintaining existing controls.

[9] ISO 31000:2018(E), p.5.
[10] NSW DPI, 2006.
[11] ISO 31000:2018(E), p.18.
[12] ISO 31000:2018(E), p.18

1.4 Risk Treatment

Risk treatment involves treating risks that are considered unacceptable during the risk evaluation process.[13] Risk treatment entails identifying options for treating individual risks, assessing those options, preparing risk treatment plans and following their implementation.[14] In some cases a combination of options may be appropriate in treating risks. Options for treating risk include:

- Risk aversion/avoidance;
- Risk reduction;
- Risk transfer; and
- Risk acceptance/retention.

Selection of the most appropriate type of treatment involves balancing the cost of implementing the treatment against the benefits derived from it, ensuring that the cost of managing the risk is commensurate with the benefits obtained.[15]

1.4.1 Risk Aversion

Risk aversion involves deciding to not proceed with a policy, program, project or activity that would incur a risk, or choosing an alternative course of action to achieve the same outcome.[16] However, risk aversion can cause other risks to become significant so ongoing monitoring of risks is still required.

1.4.2 Risk reduction

Risk reduction involves reducing the level of risk through minimising either the likelihood and/or consequence of a particular risk by implementing risk controls/treatments.

1.4.3 Risk transfer

Risk transfer involves reassigning a risk or a series of risks by shifting the responsibility to another party. Risks may be transferred in full or they may be shared between parties.[17] The transfer of a risk to another party or physical transfer to another location may reduce the risk to the party involved but may not diminish the overall level of risk. There are also ethical and policy related issues associated with risk transference that may need addressing. For example, risks may be transferred unfairly to organisations that are in a poor position to accept them, thus forcing these parties into inequitable situations.

[13] Sloan, 1998
[14] ISO 31000:2018(E), p.19.
[15] Ibid.
[16] Sloan, 1998
[17] Ibid.

1.4.4 Risk acceptance/retention

A risk may be accepted or retained after careful analysis of the cost of treating the risk. If the risk cannot be avoided, reduced or transferred, or where the cost to do so is not justified, usually because the likelihood or consequences are low or insignificant[18] these risks may be accepted. Accepted or retained risks should be continually monitored.

1.4.5 Risk monitoring

The ongoing monitoring and review[19] of risks is an integral component of effective risk management. Risks need to be monitored periodically to ensure that changing circumstances (resource based, political, social, economic, legal, environmental, and agency wide goals) do not alter risk priorities. Therefore, it is necessary to review the risk management process to ensure that the way in which risks are managed remains suitable.[20]

Factors, which may affect the likelihood and consequences of a risk or outcome, may change, as may the factors which affect the suitability, or costs associated with the various risk treatment options. Regular performance information can assist with identifying likely trends, trouble spots, bottle necks or other variables which may arise and influence risk treatment options. It is necessary to regularly review the risk management cycle and all risks and their associated risk treatment options.[21]

2 AFMA Compliance Risk Assessment Process 2023-25

AFMA has a responsibility to enforce the provisions of the *Fisheries Management Act 1991* and *Torres Strait Fisheries Act 1984* through the detection and investigation of illegal activities within Commonwealth managed fisheries. The Compliance section aims to provide a cost effective service, which aids to maintain the integrity and sustainability of Commonwealth fisheries.

Within natural resource agencies, such as fisheries management agencies, public scrutiny of decisions and expectations of performance have increased in recent years requiring a shift towards the use of more structured and transparent evaluation techniques to determine and justify decisions. This has generated a strong incentive to develop a process to ensure management actions and monitoring systems are initiated in areas only where necessary and to an appropriate level.[22]

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[18] Ibid at n.17.

[19] AFMA's operating environment may be subject to significant change, as such AFMA will review the existing risks on a periodical basis and will aim to capture those emerging and changing risks between biennial risk assessments.

[20] Sloan, 1998.

[21] Ibid.

[22] Fletcher, 2005

Risk management is a process that can be utilised to prioritise issues and improve management decisions. The risk management process utilised by AFMA is based on the International Standard 2018 ISO 31000 Risk Management – principles and guidelines. Each fishery is assessed individually to identify specific risks. A combined risk assessment is also completed to identify significant risks common to more than one fishery.

2.1 Risk Context

The context of this assessment stems from AFMA's need to determine the risk that operators will not adhere to fishery management legislation, whilst fishing within Commonwealth fisheries. The risk assessment process aids in maintaining the sustainability of fisheries through ensuring the integrity of AFMA's fisheries management rules.

2.2 Risk Assessment (Individual Fisheries)

The risk assessment process identifies where an undesirable or unexpected outcome could be significant or where opportunities for non-compliance are possible. Following the identification of potential risks, input from stakeholders and data analysis is used by AFMA's Operational Management Committee (OMC) to help in determining the priority risks for the coming year through risk analysis and risk evaluation.

2.2.1 Risk Identification

Compliance risks that were identified within each of the Commonwealth fisheries and sectors[23] assessed in the AFMA National Compliance and Enforcement Program for 2022-23 and the definitions of those risks were used as a basis for the 2023-25 process.

Input into the risk assessment is sought from a range of stakeholders including industry (through management advisory committees (MAC) and/or industry associations), data processing contractors, AFMA observer section staff, fisheries managers, domestic compliance staff and intelligence officers to avoid biased evaluations of risks. Stakeholders are provided with fishery specific templates which list a set of pre identified risks to be rated. The template also allows for stakeholders to provide comment on the risk assessment process generally and to identify any new or unlisted risks. The information provided by stakeholders is collated and analysed updating risk definitions and adding or removing risks. Furthermore, Commonwealth fisheries legislation, management plans and permit conditions are referred to and utilised when updating and finalising risk definitions (refer Figure 2).

2.2.2 Risk Identification

AFMA's 2023-25 risk analysis process will involve rating risks against a set of specific criteria. The analysis will consider the consequences associated with each risk and the

[23] Fisheries/sectors include: Eastern Tuna and Billfish Fishery (ETBF), Western Tuna and Billfish Fishery (WTBF), Gillnet, Hook and Trap (GHaT), Commonwealth Trawl Sector (CTS), Great Australian Bight (GAB), Small Pelagic Fishery (SPF), Southern Bluefin Tuna (SBT), Bass Strait Central Zone Scallop Fishery (BSCZSF), Northern Prawn Fishery (NPF) and Torres Strait Fishery (TSF).

likelihood of an event occurring in the absence of controls (inherent risk), and the extent to which the existing controls then reduce the level of inherent risk (residual risk) (refer Figure 2, Box 2). The compliance history for individual risks will be then weighted to determine if an increase in the level of residual risk is required. The four elements illustrated in **Error! Reference source not found.**, constitute the risk assessment process.

Figure 2: Risk Assessment Process

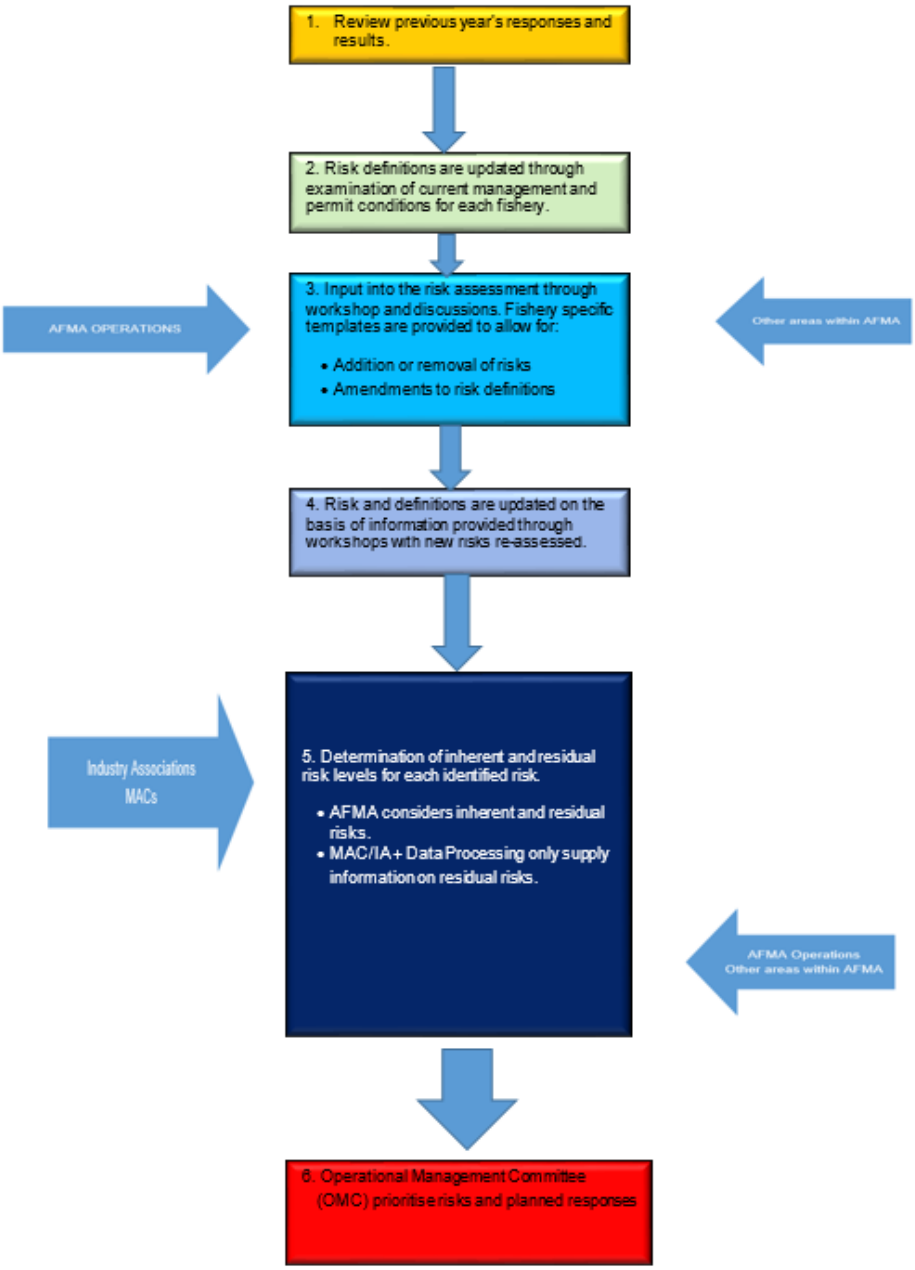


Figure 3: Step by step guide to the risk identification and assessment process

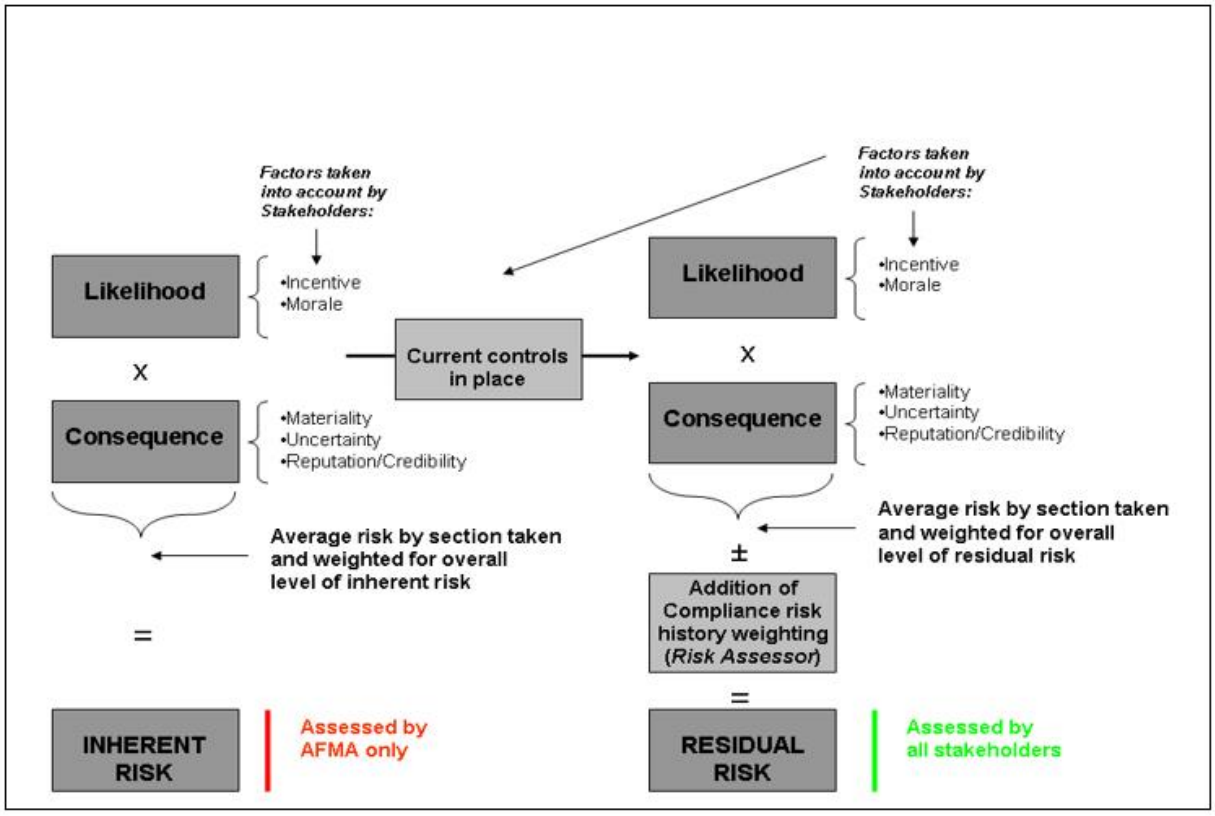


Figure 4 risk analysis process

Box 2: Inherent and residual risk definitions

Inherent Risk: The inherent analysis considers the consequence associated with each risk and the likelihood of each risk occurring in the absence of controls/treatments (a compliance program). Inherent risk is the product of the consequence and likelihood factors. This rating is viewed as the level of risk inherent to the activity without controls in place.

Residual Risk: Is the level of risk present after the existing controls/treatments have been assessed.

2.2.2.1 Consequence

AFMA and stakeholders take the following criteria into account when assessing the consequences (in terms of sustainability and/or regulatory integrity) of identified risks for individual Commonwealth fisheries:

Uncertainty

This criterion aims to quantify the amount of uncertainty associated with an activity (risk) (refer Table 1: Uncertainty ratings). By definition, risk arises out of uncertainty or an incompleteness of knowledge. The less knowledge AFMA has with regard to a particular activity (risk), the more difficult it becomes to manage the risk effectively. Uncertainty may also result in judgmental errors relating

to the management of risk. Thus, a precautionary approach should be applied when a high degree of uncertainty exists

Table 1: Uncertainty ratings

Level of uncertainty	Description
Significant	Extensive uncertainty exists due to significant information/knowledge gaps. As a result the ability to evaluate the consequence and likelihood risk factors with any assurance of accuracy is greatly inhibited.
Moderate	Some uncertainty exists due to known information/knowledge gaps. As a result the ability to evaluate the consequence and likelihood risk factors with some assurance of accuracy is moderately inhibited.
Certain	Very minor to no uncertainty exists due to sufficient information and knowledge. As a result the ability to evaluate the consequence and likelihood risk factors with substantial assurance of accuracy is not inhibited.

Consequence risk ratings

The ratings in **Error! Reference source not found.** are used as an aid for stakeholders in judging the consequence of each risk and have five ordinal levels of impact ranging from insignificant to severe.

Table 2: AFMA consequence risk ratings

Risk Rating	Rating description
Severe	The consequences would threaten**:** • the survival of the natural resource (fish stock) and subsequently any further commercial fishing venture, being contradictory to AFMA's goals and legislative objectives. • regulatory integrity, including; ○ the continued effective function of the regulatory regime; and/or ○ significant losses in resource rent; and/or ○ loss of AFMA's enforcement credibility and good will among clients (industry members and interest groups); and
Major	The consequences would probably threaten: • the survival of the natural resource (fish stock) and subsequently any further commercial fishing venture, being contradictory to AFMA's goals and legislative objectives. • regulatory integrity, including; ○ the continued effective function of the regulatory regime; and/or ○ significant losses in resource rent; and/or ○ loss of AFMA's enforcement credibility and good will among clients (industry members and interest groups).
Moderate	The consequences would probably not threaten regulatory integrity or the continued survival of the natural resource (fish stock). However the program may be subject to significant review or operational change.
Minor	The consequences would present minimal threats to regulatory integrity or the continued survival of the natural resource (fish stock). However it may threaten the efficiency or effectiveness of a particular component of the regulatory regime causing minor review or operational modification.
Insignificant	**The consequences would present minimal threats to regulatory integrity or the continued survival of the natural resource (fish stock) and would be dealt with via routine operations.**

2.2.2.2 Likelihood

The following criteria are taken into account by stakeholders when assessing the likelihood of identified risks for the individual Commonwealth fisheries:

Incentive

This criterion aims to provide a broad measure of the incentive that an individual fisher or entire fishing fleet has to violate existing regulatory arrangements. Knowledge of the current level of incentive that exists within the fishing fleet to breach existing regulations will strengthen AFMA's overall knowledge relating to the likelihood of the activity's occurrence. In quantifying this criterion, it may also be useful to identify between owners/operators and contracted skippers and establish the level of debt that exists throughout the fishing fleet (contributing to the need for short-term returns).

Morale

Morale is used, in this context, to gauge the general sentiment amongst operators/fishing fleet. The measure is intended to capture the overall level of acceptance of fisheries management regulations currently in operation.

Reputation and credibility

This refers to the possible effect that the continued occurrence of the activity (risk) has on the reputation and credibility of AFMA and the Minister for Agriculture and Water Resources. The media profile associated with the activity should be given careful consideration when assessing this criterion; i.e. a small well-publicised risk inherent to a high profile fishery may be more damaging to AFMA's reputation than a large risk existing in a low profile fishery.

Likelihood risk ratings

The ratings in **Error! Reference source not found.** are used as an aid for stakeholders in judging the likelihood of each risk and have five ordinal levels of impact ranging from almost certain to rare.

Table 3 – Likelihood risk ratings

Risk Rating	Rating description
Almost Certain	95 % probability exists that the activity will occur.
Likely	70 % probability exists that the activity will probably occur.
Moderate	50 % probability exists that the activity may occur.
Unlikely	30 % probability exists that the activity could occur.
Rare	5 % probability exists that the activity will occur under exceptional circumstances.

2.2.2.3 Risk rating (inherent and residual risk)

After assessing the likelihood and consequence of each risk and obtaining their risk rating using the risk matrix (**Error! Reference source not found.**) each of the inherent (before controls) and residual (after controls) risk rankings are given an ordinal value (1:Low – 4:Severe) and then averaged for multiple stakeholders by section. For inherent risk this included AFMA observers, compliance officers, intelligence officers and fishery managers. For residual risk this included MACs, data processors, AFMA observers, compliance officers, intelligence officers and fishery managers (See **Error! Reference source not found.**).

Table 4 – Risk matrix table

Risk Matrix		Consequence				
		Insignificant	Minor	Moderate	Major	**Severe**
Likelihood	Almost certain	**Moderate**	**High**	**High**	**Severe**	**Severe**
	Likely	**Moderate**	**Moderate**	**High**	**High**	**Severe**
	Moderate	**Low**	**Moderate**	**Moderate**	**High**	**High**
	Unlikely	**Low**	**Low**	**Moderate**	**Moderate**	**High**
	Rare	**Low**	**Low**	**Low**	**Moderate**	**Moderate**

2.2.2.4 Residual risk

Residual risk ratings are a factor of subjective assessment by all stakeholders of the effect of current controls in reducing inherent risk in all fisheries. A compliance risk history adjustment is also factored into the final ratings (see 2.2.2.4.2 below).

2.2.2.4.1 Current controls in place

The effectiveness of controls that AFMA currently have in place is assessed through the ranking of residual risks by AFMA stakeholders using the process detailed in Figure 3. Specific controls that can manage the likelihood and consequence of each risk activity include:

- assessment of the current domestic compliance policy and program, particularly whether there is sufficient field operations (e.g. at-sea and in-port vessel inspections;
- aerial surveillance and fish receiver inspections and audits) being conducted;
- the level of Integrated Computer Vessel Monitoring System (ICVMS) coverage and current education; and
- training and awareness programs for fishing operators education programs for stakeholders.

2.2.2.4.2 Compliance risk history

The utilisation of intelligence indices, as well as databases of detected compliance breaches and investigations, allows for an assessment of the detected level of non-compliance of risks detailed in the risk assessment. By gathering and analysing this information, the extent, the pattern and 'trouble spots' of non-compliance (risks) in fisheries can be identified. Risks ranked as low may, following stakeholder input, become a higher priority if information indicates that a high proportion of detected offences occur. This would lead to a re-evaluation of mitigation measures and enforcement activities to determine the exact level of the risk.

An incident is defined as a single breach of management rules where enforcement action or investigation is undertaken. Intelligence indices and prosecution/investigation databases will be interrogated to provide statistics on the number of identified incidents from 1 July 2018 to 30 June 2020. Data from these sources will be collated by year, fishery and incident type with a description of the incident used to determine the relevant risk category (if any).

Relevant residual risks will be increased by 0.5 for risks with 5-10 compliance incidents and by 1.0 for those with compliance incidents greater than 10. For risks with 0-5 incidents the level of risk will not be increased. Risks which have no detected compliance incidents will not change because it had been determined that the current surveillance and intelligence system may not fully expose all possible risks.[24]

2.2.2.4.3 Weightings

Each stakeholder group is given an equal weighting towards the final risk rating for individual risks. However, only AFMA compliance, observers and fishery manager's ratings are used for inherent risk ratings due to their expertise in the risk management process as it applies within AFMA, and for their knowledge of the integration of research and management information to individual fisheries. To determine final inherent risk level (Figure 4) for each identified risk, the results from AFMA compliance, observers and fishery managers will be averaged, as seen in the example below:

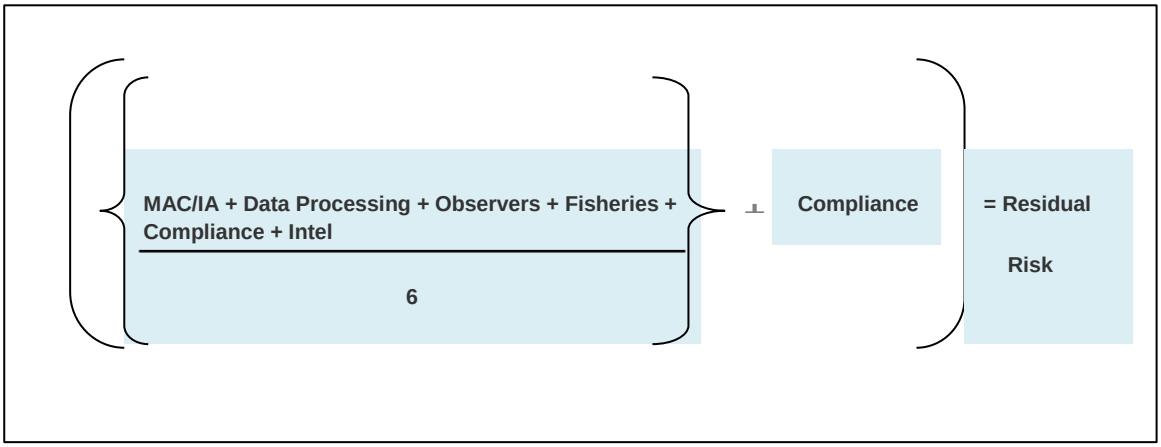
[24] The OMC makes the final decision on which residual risks should be increased and the amount those risks should be increased by.

Figure 4: To determine final inherent risk level

$$\frac{((\text{Fishery}) + (\text{Observers}) + (\text{Compliance}) + (\text{Intel}))}{} = \text{Inherent risk}$$

To determine final residual risk level (Figure 4) for each identified risk the results from MACs and/or Industry Associations, data processing, AFMA compliance, intelligence, observers and fishery managers will be averaged and the compliance history added for any relevant risks as seen in **Error! Reference source not found.** below.

Figure 5: Averaged risks example



2.2.3 Risk evaluation

Following the determination of final risk results, an enhanced risk table will be produced which will numerically split risks into seven categories by 0.5 rather than by 1. This gives less error and bias through the rounding of numbers. Risk levels are colour coded for ease of data analysis (refer Table 5). An example of one of the final colour-coded risk tables is provided in Figure 7: Example of a final risk table displaying inherent and residual risk results for all stakeholders and final colour-coded risk ratings

Figure 6: Example of a final risk table

Risk Range	Risk Level
0 - 1.0	***Low***
1.1 - 1.5	***Low/Moderate***
1.6 - 2.0	***Moderate***

Risk Range	Risk Level
2.1 - 2.5	***Moderate/High***
2.6 - 3.0	***High***
3.1 - 3.5	***High/Severe***
3.6 - 4.0	***Severe***

Through the production of risk matrices, graphs and tables of the results, the significant risks by fishery and across all Commonwealth fisheries will be determined by the OMC and prioritised for treatment.

Figure 7: Example of a final risk table displaying inherent and residual risk results for all stakeholders and final colour-coded risk ratings.

Risk category	Risks	Inherent Risk Raw data - No weightings appplied: Observers (Calculated from estimate of risk provided by AFMA Observers. Numerical figure derived from risk matrix and averaged.)	Inherent Risk Raw data - No weightings appplied: Fishery Managers (Calculated from estimate of risk provided by AFMA fisheries managers. Numerical figure derived from risk matrix and averaged)	Inherent Risk Raw data - No weightings appplied: Compliance (Calculated from estimate of risk provided by AFMA Compliance officers. Numerical figure derived from risk matrix and averaged for all states)	Inherent Risk	Residual Risk Raw data - no weightings applied: All states (Calculated from estimate of risk provided by SSPs. Numerical figure derived from risk matrix and averaged.)	Residual Risk Raw data - no weightings applied: MAC (Calculated from estimate of risk provided by MAC. Numerical figure derived from risk matrix and averaged.)	Residual Risk Raw data - no weightings applied: Fishery Managers (Calculated from estimate of risk provided by AFMA fisheries managers. Numerical figure derived from risk matrix and averaged)	Residual Risk Raw data - no weightings applied: Observers (Calculated from estimate of risk provided by AFMA Observers. Numerical figure derived from risk matrix and averaged.)	Residual Risk Raw data - no weightings applied: Compliance (Calculated from estimate of risk provided by AFMA Compliance officers. Numerical figure derived from risk matrix and averaged for all states)	Compliance History (Calculated from offence history and intel reports)	Residual risk
		x	y	z	(x+y+z)/3	A	B	C	D	E	F	(A+B+C+D+E/5)+F
Unauthorised fishing	*Unauthorised and unlicensed fishing*	*3.0*	*3.0*	*2.3*	**2.8**	2.0	1.5	1.5	3.0	2.2	0.0	**2.0**
	Not carrying required documents on board vessel	*1.5*	*2.0*	*2.0*	**1.8**	1.0	1.3	1.0	2.0	1.3	0.0	**1.3**
VMS & position reporting	*Failure to fit AFMA approved Integrated Computer Vessel Monitoring System (ICVMS) on board or have it operating at all times*	*3.0*	*2.0*	*2.3*	**2.4**	1.0	1.0	1.5	2.0	2.0	0.0	**1.5**
Logbook misreporting	*Failure to accurately complete or submit logbooks*	*3.0*	*1.0*	*2.8*	**2.3**	3.0	2.0	2.0	1.0	2.3	0.0	**2.1**
	Completion of logbooks by an unauthorised representative	*2.0*	*1.0*	*2.3*	**1.8**	1.0	1.0	1.5	1.0	1.5	0.0	**1.2**
By-catch and other species interactions	*Failure to report interaction/retention of protected or prohibited species*	*2.0*	*2.0*	*2.8*	**2.3**	2.0	1.3	2.0	2.0	2.2	0.0	**1.9**
	Shark finning and not retaining carcasses	*3.0*	*2.0*	*3.3*	**2.8**	2.0	1.3	2.0	2.0	3.0	0.0	**2.1**
Breaching trip, size & limitations	*Breaching trip and/or species size limits*	*2.0*	*2.0*	*3.2*	**2.4**	2.0	1.3	1.5	2.0	2.8	0.0	**1.9**
Processing catch at sea	*Processing catch at sea*	*4.0*	*2.0*	*3.3*	**3.1**	2.0	1.3	4.0	2.0	3.0	0.0	**2.5**
	High grading of quota species	*4.0*	*2.0*	*2.7*	**2.9**	2.0	1.3	4.0	2.0	2.5	0.0	**2.4**
Sale to unlicensed fish reciever	*Landing and selling catch to an unauthorised fish receiver*	*2.0*	*1.0*	*2.5*	**1.8**	1.0	1.0	1.5	1.0	2.3	0.0	**1.4**
Quota and CDR offences	*Taking in excess of allocated quota and failing to reconcile within the requried timeframe*	*0.0*	*3.0*	*2.7*	**1.9**	2.0	1.3	0.0	3.0	2.2	0.0	**1.7**
	Deliberate unreported take of quota species and/or misreporting in CDRs to avoid quota decrementation	*0.0*	*3.0*	*2.4*	**1.8**	2.0	1.3	0.0	3.0	2.6	0.0	**1.8**
Breaching TAP regulations	*breaching TAP regulations*	*3.5*	*2.0*	*2.8*	**2.8**	2.0	1.3	2.5	2.0	2.3	0.0	**2.0**
										Average Risk		**1.8**

0.1 - 1	*Low*
1.1 - 1.5	*Low/Moderate*
1.6 - 2.0	*Moderate*
2.1 - 2.5	*Moderate/High*
2.6 - 3	*High*
3.1 - 3.5	*High/Severe*
3.6 - 4	*Severe*

2.3 Risk Assessment (Combined Commonwealth Fisheries)

2.3.1 Risk analysis

The next step in the process will be to determine the overall rating of each risk across all Commonwealth fisheries

2.3.1.1 Risk rating (inherent and residual risk)

The inherent and residual risk factors are to be calculated by averaging the ratings for all fisheries (to which the risk applied), example below:

Figure 8 - Risk rating calculation example

$$\frac{\text{ETBF + WTBF + GAB + GHAT + CTS + NPF + SBT + BSCA + SPF + TSF}}{10} = \textbf{Average Risk Rating}$$

2.3.1.2 OMC weighting (residual risk)

The residual risk will then be further amended (where relevant) by the OMC, who will apply their own weightings to determine the final residual risk level:

Average Residual Risk Rating +/- OMC Weighting = Overall Residual Risk Rating

The OMC will consider resource implications and public perception when amending particular risks.

2.4 Risk Treatment

The highest identified risks across all Commonwealth fisheries (and ranked as moderate or higher) generally require treatment and/or risk reduction. Those risks rated as moderate/low or low will be considered ‘acceptable’ risks and whilst needing to be continually monitored do not generally need specific treatment. It should be noted that not all of the highest risks will be prioritised for treatment by the Operational Management Committee. The risk based approach allows AFMA’s resources to be targeted in the areas where they are most needed and will prove most effective, and therefore the ‘untreated’ higher risks are generally accepted risks (see 1.4.4).

The OMC will evaluate all risks to determine which (following on from the generic separation of risks detailed above) are:

- Endemic risks to be addressed by ongoing operations; and
- Sporadic risks to be targeted for treatment by Compliance Risk Management Teams (CRMT). The CRMT's are responsible for the development and implementation of the optimal strategy (ies) for reducing those high residual risks within and between fisheries.

3 References

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