AUSTRALIAN INSTITUTE OF MARINE AND POWER ENGINEERS

Minimum Rest Consultation Submission
Marine Order 504

Executive Summary

The Australian Institute of Marine and Power Engineers (AIMPE) appreciates the opportunity to contribute to the Australian Maritime Safety Authority (AMSA)'s review of Marine Order 504. The AIMPE represents marine engineers in the DCV sector and is dedicated to ensuring the safety and welfare of its members. This submission addresses the crucial issue of fatigue management on domestic commercial vessels (DCVs) and proposes the implementation of enforceable minimum rest periods.

Under the draft marine order, AMSA's role is to enforce whether a vessel operator has conducted a fatigue safety management plan. The system can only be effective if AMSA's role extends to evaluating these plans to ensure they provide an adequate amount of rest for crew members. Introducing a prescriptive 10-hour rest requirement within each 24-hour period would achieve this, giving AMSA better regulatory capacity on fatigue, enhancing industry safety, and ensuring that fatigue management obligations are better understood across the industry.

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Background and Regulatory Environment

Fatigue is a significant risk factor in the maritime industry, impacting crew performance, health, and overall safety. The 2019 AMSA fatigue survey highlighted that many seafarers experience inadequate sleep while at sea, which correlates with increased fatigue-related incidents. Current regulations under Marine Order 504 lack specific, enforceable rest requirements, leading to inconsistent fatigue management across the sector

The regulatory framework under Marine Order 504, which governs DCVs in Australia, has previously been criticised for its inadequacies in ensuring maritime safety and crew welfare. Despite its intentions to manage risks through safety management systems, the framework's lack of specific, enforceable safety requirements has resulted in inconsistent safety practices and heightened risks of fatigue-related incidents.

Lack of Specific Minimum Rest Requirements

Marine Order 504 mandates that vessel operators conduct risk assessments and develop safety management systems. However, it does not provide specific minimum safety standards, such as mandated rest periods for crew members. This contributes to significant variability in safety practices across the DCV sector. Unlike regulations for Regulated Australian Vessels and international standards under the STCW, which require a minimum of 10 hours of rest in a 24-hour period, Marine Order 504 leaves the specifics of fatigue management to the discretion of vessel operators, resulting in inconsistent implementation and enforcement.

Safety Enforcement Mechanisms

One of the critical issues with Marine Order 504 is the lack of direct enforcement measures available to interested parties, particularly workers and their representatives. While AMSA has discretionary enforcement powers, the ability of workers and WHS representatives to initiate their own enforcement or compliance actions, or to compel AMSA to use its investigatory powers, is currently very limited. This contrasts sharply with state and territory WHS laws, which provide significant powers to elected health and safety representatives and unions to ensure compliance with safety standards.

These matters are of particular relevance now, with AMSA taking a greater role in fatigue management since the signing of its most recent MOU with the state and territory WHS agencies.

Fatigue Management for Regulated Australian Vessels (RAVs) and International Standards

For Regulated Australian Vessels (RAVs) operating under the Navigation Act 2012, fatigue management is governed by more stringent regulations compared to Domestic Commercial Vessels (DCVs). Marine Order 28 (Operations standards and procedures) 2013 pertains to RAVs and incorporates the Standards of Training, Certification, and Watchkeeping for Seafarers (STCW). These regulations set forth explicit requirements for rest periods and work hours. According to STCW Regulation VIII/1 and Section A-VIII/1, seafarers must receive a minimum of 10 hours of rest in any 24-hour period, and at least 77 hours of rest in any seven-day period. These rest hours can be divided into no more than two periods, one of which must be at least six hours long.

The STCW Convention, adopted by the International Maritime Organization (IMO), provides a global framework designed to ensure that seafarers are well-rested and capable of performing their duties safely. The convention mandates that watchkeeping arrangements are organized to minimize fatigue and requires regular monitoring and enforcement by flag states to ensure compliance. This creates a uniform standard that significantly reduces the risk of fatigue-related incidents on vessels operating internationally and under the Navigation Act.

Crewing determinations for RAVs are also strictly regulated by AMSA under the Navigation Act 2012. Marine Order 21 (Safety of navigation and emergency procedures) 2012 outlines the requirements for safe manning, ensuring that vessels are sufficiently and efficiently manned to maintain safe operations. AMSA assesses and approves crewing levels based on the vessel's size, type, and operational requirements, considering factors such as the nature of the voyage and the machinery onboard. This rigorous process ensures that the crew size is adequate to manage the vessel safely and effectively, particularly concerning fatigue management.

Fatigue Management Regulation in Other Transport Sectors

Rail Transport
Under the Rail Safety National Law (RSNL), rail transport operators are required to manage fatigue-related risks with specific provisions for work and rest hours. The guidelines mandate that rail safety workers should not work more than 12 hours in any 24-hour period and must have a minimum of 12 consecutive hours off duty between shifts. This approach ensures a standardized fatigue management regime across the rail industry, promoting consistent safety outcomes.

Road Transport
Heavy Vehicle National Law (HVNL) and regulations set detailed work and rest hour requirements for heavy vehicle drivers. Drivers are restricted to a maximum of 12 hours of driving in any 24-hour period, and must take mandatory rest breaks, including a continuous 7-hour rest period within each 24-hour period. These regulations are enforced through logbooks and electronic recording devices, ensuring compliance and reducing fatigue-related risks on the roads.

Air Transport
The Civil Aviation Safety Regulations (CASR) Part 121 imposes strict flight and duty time limitations for flight crew. Pilots and other flight crew members are required to have a minimum of 10 hours of rest in any 24-hour period. This regulation is part of a broader framework designed to manage fatigue and ensure the safety and well-being of both crew and passengers in the aviation sector.

Proposed DCV Risk-Assessment Scheme under Marine Order 504

In contrast to the above examples, approaches in the DCV sector rely upon individual operators self-regulating without prescribing specific, enforceable minimum requirements. The current approach relies heavily on vessel operators interpreting the marine orders independent of specific regulatory input, and to do the right thing when undertaking these duties. The lack of prescriptive standards leads to significant variability in how fatigue is managed across the DCV sector, with some operators continuing to go above and beyond to ensure safety, while others lag far behind with impunity.

The current Marine Order 504 requires fatigue to be considered in determining appropriate crewing. The proposed changes expand on this by mandating a fatigue risk management plan (FRMP) as part of the vessel's safety management system. However, the absence of a clear, enforceable minimum rest period remains a significant shortcoming, and an obstacle to the achievement of consistent rest standards across the industry.

Limitations of the Proposed Approach
The proposed changes require a fatigue risk management plan, detailing strategies and procedures to manage fatigue among the crew. While this is a positive development, provisions of the proposed Marine Order lack specific guidelines on the level of detail required in these plans. This ambiguity could lead to superficial or inconsistent fatigue management outcomes across operators.

The proposed order mandates that fatigue be considered in crewing determinations, with a 10-hour rest period required for vessels under minimum crewing. However, this requirement continues to not apply to vessels with so called "appropriate crewing". Unfortunately, the implication of a lack of fatigue safeguards has meant that crewing arrangements, as they relate to fatigue, have often been anything but appropriate in recent years.

AIMPE submits that, without a stipulation for all vessel operators to provide, at minimum, 10 hours rest for their crew members, unscrupulous vessel operators will continue to seek out ways of putting their commercial interests ahead of safety.

Practical Implications for Different Vessel Categories

Larger Vessels (≥80 m or ≥3000 GT or ≥3000 kW)
These vessels require a robust and comprehensive FRMP to demonstrate safety compliance. The direct involvement of AMSA in the approval of crewing determinations within this category of vessel is an important safeguard, and the majority of larger vessel operators are doing the right thing. However, without clear rest period mandates, the burden falls on AMSA to rigorously enforce and review crewing plans. AIMPE submits that this process can be made more efficient, and ultimately lighten the regulatory load, if all vessels are required to operate under a consistent minimum rest obligation.

Vessels Under Minimum Crewing
For vessels operating with the minimum crew, the mandated 10-hour rest period provides a clear standard that enhances safety and reduces fatigue risks. It also provides a clear trigger for operators to abide by when considering if minimum crewing is a viable option for their operation.

Smaller Vessels with Greater Than Minimum Crewing
These vessels have more flexibility in managing fatigue, but the lack of a mandated rest period for appropriately-crewed vessels could lead to longer working hours and inadequate rest, especially if operators cut corners to maximize profits.

Under the proposed changes, smaller vessels must develop practical, tailored fatigue management strategies. However, the absence of AMSA approval for crewing determinations and the lack of a 10-hour rest requirement increase the risk of inadequate fatigue management. Without the minimum benchmark, we think it is operators of vessels in this category which will continue to be exposed to unnecessary fatigue risk into the future.

Self-Regulation and Inconsistent Fatigue Management

Overview
AMSA's current approach to self-regulation under Marine Order 504 places significant responsibility on vessel operators to manage fatigue risks. This model has led to significant variability in fatigue management practices across the industry, resulting in inconsistent safety outcomes.

The Role of the Regulator
The responsibility for setting and enforcing fair minimum benchmarks should lie with the regulator, not the unions. AMSA's current self-regulation approach places an undue burden on unions to enforce fair standards through industrial instruments. This leads to inconsistent approaches and undermines the overall effectiveness of fatigue management across the industry.

Unions can act – and have been acting – as safeguards against poor practices, but they cannot be present in every workplace or set consistent standards across all operators. This fundamental role of the regulator is to ensure consistent national benchmarks, which are currently absent, creating the circumstances discussed in this section.

Case Study #1 - Inconsistent Fatigue Management within a National Towage Company

A comparison of the Svitzer Growth Projects EA (non-union) and the Svitzer National EA (union-negotiated) underscores the challenges of relying on self-regulation and highlights the need for enforceable minimum rest periods.

Svitzer Growth Projects EA
The Growth Projects EA includes a provision for minimum aggregate rest of 77 hours in 7 days but lacks a daily rest period requirement, such as a 10-hour rest within 24 hours. It goes on to provide that: “Because of the unpredictability of vessel movements, the strict application of the above may not always be possible.”

Given standard rostering arrangements, this provision is wholly insufficient to ensure proper rest. The agreement allows for extended work periods beyond what would be reasonable any other part of the transport industry more generally, or on Regulated Australian Vessels. An employee could theoretically work long shifts over several days, with minimal rest, as long as the 77 hours are aggregated within a week.

For employees under the growth projects EA, operational demands take precedence over strict fatigue management, reflecting a prioritization of commercial pressures over safety.

Svitzer National EA
In contrast to the above example, the Svitzer National Towage EA provides clear, enforceable parameters for hours of work and rest periods, including a 10-hour rest break after 14 hours of continuous duty and a maximum of 16 hours of continuous duty. Scheduled hours of work should not exceed 12 hours, and jobs commenced prior to the 12th hour must be completed within this period.

The National EA includes provisions that preserve the status quo during disputes over changes to port operating procedures, which cover hours of work and are relevant to fatigue management. This prevents the employer from unilaterally implementing disputed changes, ensuring that any modifications are subject to negotiation and agreement. Dispute Resolution: The National EA offers detailed dispute resolution mechanisms, including binding arbitration at the Fair Work Commission. This provides a robust process for

resolving disputes and enforcing rights, ensuring that employees have a meaningful way to address and resolve safety concerns related to fatigue.

Implications of the Case Study

The divergent approaches within Svitzer's operations suggest a broader pattern of inconsistency across the industry. The reliance on self-regulation means that fatigue management practices can vary widely between operators. This has several implications:

Inconsistent Standards: The variability in EAs highlights the inconsistencies in fatigue management practices. Union-negotiated agreements typically provide stronger protections, but not all operators are bound by such agreements.

Vulnerable Workers: Workers under non-union agreements, such as the Svitzer Growth Projects EA, face higher risks of inadequate fatigue management. These agreements often lack enforceable rest periods, robust dispute resolution mechanisms, and commitments to maintain the status quo during disputes.

Evasion of Scrutiny: Operators who evade union scrutiny are likely the same ones exploiting loopholes in marine orders and laws to avoid compliance and enforcement by AMSA. This perpetuates a dynamic where the least diligent operators can avoid implementing best-practice fatigue provisions.

Limitations of AMSA's Compliance Approach: AMSA's approach to compliance has typically prioritized education over strict enforcement. While educational activities are essential, they must be complemented by robust enforcement actions to ensure compliance. The self-regulation model, without stringent oversight and enforcement, allows operators to prioritize commercial interests over safety, as evidenced by the provisions in the Svitzer Growth Projects EA.

Case Study #2 - Fatigue Self-Regulation at Engage Marine

Overview

This case study examines the consequences of self-regulation in fatigue management within Engage Marine's operations, highlighting the risks and inadequacies of AMSA's current approach. The narrative draws from communications between the Australian Maritime Officers Union (AMOU), AMSA, and SafeWork NSW to underscore the critical need for enforceable minimum rest periods.

Engage Marine Case

In December 2018, Engage Marine outlined operational standards for Sydney Harbour, emphasizing self-management of fatigue. Crew members were required to manage their fatigue around operational requirements without clear, enforceable minimum rest periods. In a letter to SafeWork NSW on 5 May 2022, the AMOU raised significant safety concerns, noting that employees often worked through the night into the next day with minimal rest.

The lack of defined rest periods led to excessive work hours, sometimes exceeding 24 or 30 hours without proper rest, demonstrating how operational demands took precedence over proper fatigue management. AMSA's response to the AMOU on 17 March 2022 acknowledged the existing legislative framework but revealed significant regulatory gaps, relying on operators to manage fatigue risks without specific, enforceable standards. This fragmented approach to fatigue management, suggesting cross-jurisdictional consultation, highlighted the inadequacies of AMSA's current strategy.

In a detailed reply on 30 March 2022, the AMOU criticized the lack of compliance with existing fatigue management frameworks and the double standards applied to large and small operators, emphasizing the need for consistent enforcement of fatigue management standards.

Implications of the Case Study

The case of Engage Marine exemplifies the broader industry implications of AMSA's self-regulation model. The lack of enforceable rest periods left employees vulnerable to severe fatigue, with operational demands often overriding the need for proper rest. Operators not under stringent union scrutiny exploited regulatory loopholes to prioritize commercial interests over safety, further endangering crew members. This inconsistency underscores the inadequacy of relying on self-regulation without clear, enforceable standards.

How Minimum Rest Can Strengthen AMSA's Compliance Approach

Consistent with AMSA's regulatory approach in the DCV sector, the proposed new fatigue provisions rely heavily on self-regulation by vessel operators and general education activities by AMSA. This model has inherent strengths and weaknesses.

The primary strength of AMSA's self-regulation model is the flexibility it provides. This allows vessel operators to tailor fatigue management strategies to their specific operational contexts, taking into account the unique demands and conditions of their operations. This flexibility can lead to more innovative and effective fatigue management practices that are well-suited to the particular needs of each operator. In the best cases, this approach encourages operators to take proactive measures to address fatigue, fostering a culture of safety and responsibility within the industry.

However, the self-regulation model has significant weaknesses, particularly when not supported by robust and nationally-consistent minimum safeguards. The lack of a mandatory rest period for appropriately-crewed vessels can lead to inconsistent and ineffective fatigue management across the industry. Reliance on operators to self-regulate may result in fatigue risks not being fully addressed, especially when commercial pressures take precedence over safety considerations. Unscrupulous operators can exploit the flexibility inherent in this model, leading to a higher incidence of fatigue-related incidents and undermining the overall safety and effectiveness of fatigue management practices within the maritime industry.

Detailed Requirements of a Fatigue Risk Management Plan
The current Marine Order 504 requires risk assessments to be reviewed when the master considers risks have changed and made available to the National Regulator or a marine safety inspector upon request. However, without minimum benchmarks, these requirements are likely to be less effective and harder to enforce.

The proposed Fatigue Risk Management Plan (FRMP) must address fatigue management, but the lack of specificity may result in inadequate plans. Enforceable minimum rest periods would provide a clear standard, enhancing the effectiveness of FRMPs by ensuring consistent rest and reducing fatigue risks. This approach would simplify AMSA's role in regulating and educating around fatigue management, as a clear and consistent benchmark would be easier to monitor and enforce.

AMSA's Powers and Interaction with Marine Order 504
AMSA's Compliance and Enforcement Policy emphasizes a risk-based approach, focusing on the most serious risks to safety. While AMSA employs a range of compliance measures, including education and guidance to encourage voluntary compliance, the absence of specific, enforceable standards runs the risk of complicating these efforts.

The discretionary enforcement powers under the National Law, combined with limited direct enforcement measures for workers and WHS representatives, further constrain AMSA’s ability to ensure consistent fatigue management practices. Introducing specific minimum rest standards would align with AMSA's strategy of promoting a safety culture, making compliance and enforcement more straightforward and effective. This would provide a clear, enforceable benchmark that supports AMSA's educational initiatives and enhances the overall effectiveness of fatigue management practices, leading to a safer and more consistent regulatory environment.

Recommendations

1. Adopt Prescriptive Fatigue Management Standards

Implement a mandatory 10-hour rest period within each 24-hour period for all DCV crew members, aligning with international standards and practices in other Australian transport sectors.

2. Enhance AMSA's Regulatory Role

Extend AMSA's role to include the evaluation and enforcement of fatigue management plans, ensuring they meet the prescribed rest requirements.

3. Education and Training

Implement industry-wide education and training programs on effective fatigue management practices to ensure compliance and enhance overall safety.

Conclusion

Implementing a mandatory 10-hour rest period within each 24-hour period and extending AMSA's regulatory role to evaluate and enforce fatigue management plans will significantly enhance the safety and well-being of DCV crew members. These changes will align with best practices in other transport sectors and international maritime standards, creating a safer and more consistent regulatory environment.