



AUSTRALASIAN INSTITUTE  
OF MARINE SURVEYORS

# Shipshape

March 2024



**FIRE ALARM**

**LITHIUM BATTERY INCIDENTS INCREASING**

**Brisbane 2024 AIMS Conference**

AUSTRALASIAN INSTITUTE  
OF MARINE SURVEYORS

*Embracing Change and Uncertainty*

Stamford Plaza Brisbane, Friday 27 September



# Shipshape

March 2024

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Front Cover: Fighting a fire at sea. (Photo courtesy Kustwacht / Dutch Coastal Guard.)



From the Bridge (Page 4.)



Fire alarm! Batteries burning. (8.)



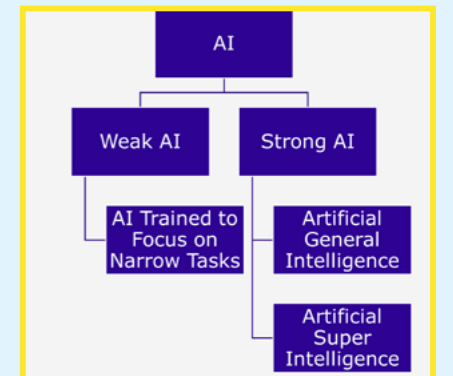
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# Does diversity deliver?

BUSINESS owner members of the Australasian Institute of Marine Surveyors who operate small marine surveying businesses will all attest to the highly competitive nature of our profession as we move into 2024.

Business owners are considering how to cope with this competition through a variety of mechanisms, with one of the more common being to diversify what they can provide to both existing and potential clients.

Diversification can be as simple as increasing the number of marine surveying categories that a business can competently deliver, with some businesses already well entrenched in this approach, providing income over several streams that tends to level out the highs and lows experienced throughout the year.

Additionally, this may require a geographical expansion of operations and the associated issues that comes with it, but more on this later.

However, for those businesses seeking to grow beyond the boundaries of the marine survey sphere (already a diverse range of activities), there are numerous areas that align with, complement or rely upon marine surveying: stevedoring, cargo hold preparation and cleaning, Authorised (biosecurity) Officers, sampling and testing, bio-fouling and hull cleaning, vessel repair and maintenance, slipway operations, safety equipment supply and servicing, shipping providore and husbandry, and shipping agency.

This is by no means an exhaustive list; however, it does present a wide range of services from which a business owner may choose to explore opportunities for diversification.

Where and how to expand business operations often comes through circumstance rather than deliberately targeted planning, so being in the right place at the right time and having the ability to identify opportunities when they arise probably accounts for the greater number of business diversity models within our profession.

Your business may have started as a marine surveying or consultancy and branched into stevedoring as a result of an identified need that benefits both you and your client.

Okay, we have established how one thing can lead



to another, but what precautions should we take? What other things must be considered?

Circling back to geographical footprint, one consideration is how to service a huge continent like Australia or, indeed, across the Asia Pacific region or globally? Simply increasing the number of employees will require substantial income to cover not only a salary package but also accommodation and travel, depending on the chosen business model.

Alternatively, engagement of sub-contractors may provide a solution to servicing all areas. Given the ease of creating a slick website, your business may appear to have a wide footprint. Reports appear on your letterhead, but how would you ensure quality of service and reputation that you have worked so hard to achieve?

Now common practice across the big ship industry, the sub-contract model certainly presents challenges and risks that must be carefully managed.

Considering some of the aforementioned expansion opportunities, what other challenges and risks do you face in diversifying your business?

Competence immediately comes to mind when looking to extend services into new areas of operations. Do you already have, or can you even obtain, personnel with the skills required? What about additional insurance cover, special licences or certifications? Would conduct of a new activity be construed as a conflict of interest? Does this conduct meet the “pub test”?

Let’s look at some of these in greater detail. You currently conduct cargo-hold inspections

and you have identified an opportunity for hold-cleaning services required when ship’s crew cannot successfully undertake the necessary cleaning and preparation without outside assistance.

This is not uncommon and would naturally present a smart business move; however, how does the wider shipping and, more importantly, marine surveying community view the conflict of interest that this represents? Sure, ship owners may be willing to accept a “special deal” to inspect, fail, clean and pass holds, but is this an ethical transaction?

Another recent example was the provision of FTL (fitness to load) and AO (authorised officer) services for the loading of grain at Australian ports being conducted by entities which both have common beneficial ownership. They may appear as different companies with the same directors.

I am pleased to hear that this practice has been curtailed in line with the AGSA Scheme conflict of interest guidelines. Should any member know of continuing such action, please contact me or the AIMS CEO, Eric Perez.

Other areas of concern for members over recent years include shipping agencies with inhouse marine surveying capability. It goes without saying that there is clearly potential for conflict of interest in such cases, not to mention questions around anti-competitive behaviour.

Marine pilots being utilised to conduct marine surveys has also come into question; however, in remote ports where this has taken place, there may be little alternative to achieve a reasonable and cost-effective outcome.

What have we learned from this peek into business expansion and diversity? As marine surveyors and business owners, we must always carefully consider our actions and potential consequences, weighing the risks and benefits, mindful of our obligations as company directors, and how we wish to be judged by our peers.

When I say “consider our actions”, this is exactly what I mean. Closely examine what is planned, how it stacks up ethically and legally, and eliminate parts that don’t meet the highest standards, like judge and jury towards your own actions.

Never place net worth above self-worth because, in the end, all we have left will be our integrity.

As a business owner that has taken this path, I can attest to the many challenges it has presented; nonetheless, there can be benefits under a considered approach avoiding potential pitfalls, some of which have been highlighted in this article.

## AIMS Conference

Last but not least, I want to remind all members of the AIMS Conference and Awards for Excellence dinner on 27 September 2024.

Our CEO, Eric Perez, is determined to make this a great event with something for everyone.

I hope our members will give the Conference their full support. I encourage you all to extend invitations to clients and other interested parties in efforts to ensure a successful event!

**John Holden**  
Chairman of the AIMS Board





# A busy start to 2024

A VERY busy start to 2024 and I am looking forward to meeting members throughout this year, at SCIBS 2024 in May and of course our Conference in Brisbane in September.

I agree with our Chairman John regarding the impact and contribution made by Andrew Graver and I thank him for his guidance as I transitioned into the CEO role.

## Continuing professional development

I would like to thank members for sending through their Continuing Professional Development (CPD) materials to the office.

CPD is a mandatory requirement for all levels of membership of the AIMS apart from students. The Institute requires all members to undertake activities which will keep them abreast of professional developments, new skills and broaden their experience.

Members are required to obtain a minimum of 10 points per calendar year; however, points can be accrued and rolled over to the following year where a member has exceeded the minimum points in one year.

Members will need to provide evidence that they have obtained 10 points per calendar year or 30 points during each consecutive three-year period.

Evidence is required to support your activities, and this may include a receipt, a copy of a certificate of attendance, email confirmation or trail, diary notation or log, or any other means of confirming your activities.

Please send through your CPD to the office at [gm@aimsurveyors.com.au](mailto:gm@aimsurveyors.com.au)

## Industry workshops

### Workshop: Greg Hansen, 15 March 2024

Greg Hansen is a Director at Austbrokers Countrywide, an insurance broker who specialises in managing professional indemnity and public liability insurance facilities for professional associations. He will present the following topic: "Professional Indemnity and Public Liability Fundamentals".

### Workshop: Nick Best, 26 March 2024

Nick Best is a seasoned professional with 8 years of dedicated service in the fire protection industry in



Australia. With a strong background in face-to-face training and engagement, he ardently advocates for industry education and collaboration towards shared objectives. For the past 5 years, Nick has led the development and roll-out of the Field Engagement Program at the Fire Protection Industry (ODS & SGG) Board, fostering daily interactions with permit holders to ensure optimal industry compliance and safety standards. He will present the following topic: "Scheduled fire extinguishing agents in the marine industry".

The workshops and any topic-specific podcasts will be converted to AIMS members-only video and audio podcast content. In the near future, I will reach out to members interested in accessing the audio version of the workshops.

## Sanctuary Cove International Boat Show

The Sanctuary Cove International Boat Show (SCIBS) is the Southern Hemisphere's leading marine event, showcasing a selection of marine products and services, and is taking place between Thursday 23 and Sunday 26 May 2024.

SCIBS will attract more than 47,000 visitors and 300 exhibitors and display 740 boats and 2,500 marine products, and the Australasian Institute of Marine Surveyors will be one of those hundreds of exhibitors. AIMS Board members will be in

attendance at the stand, providing a wonderful opportunity to meet and speak with them in person.

## 2024 AIMS Conference

The AIMS Conference will be held in Brisbane on Friday, 27 September 2024 at the Stamford Plaza. The Conference is the premier event for marine surveyors and is also attended by representatives of the broader marine industry and government.

We are finalising our speaker list for the event.

I would like to thank our speakers for agreeing to share their insights and experience with members in September this year, and help make the Conference a success.

Our speakers for the event include:

- ❑ Keynote speaker - Dr Luke van der Laan, Professor Leadership and Foresight, University of Southern Queensland;
- ❑ Kenny Crawford, Deputy Chief Executive, Maritime New Zealand;
- ❑ Nick Best, Fire Protection Industry (ODS & SGG) Board;
- ❑ Kell Dillon, General Manager, Maritime Safety Queensland;
- ❑ Eric McIlwain, Principal Surveyor, Hastings Marine and Engineering;

- ❑ Greg Hansen, Director, Professional Risks, Austbrokers Countrywide;
- ❑ Jonathan Mamaril, Director, NB Lawyers;
- ❑ Andrew Fielding, Business Development Manager, Boating Industry Association; and
- ❑ Kerryn Woonings, Senior Marine Surveyor & Loss Adjuster - Global Technical Services, Crawford & Company.

On behalf of the Board, I want to thank the following organisations for their pledging of support for the Conference:

- ❑ Australian Marine Surveys;
- ❑ Austbrokers Countrywide;
- ❑ Hastings Marine and Engineering;
- ❑ Pacific Maritime Lawyers;
- ❑ Maritime New Zealand; and
- ❑ Propel Marine;

You can book Conference tickets, find more information on supporter' packages and accommodation options here: <https://www.aimsurveyors.com.au/AIMS-2024-Conference>

## Your Institute

Please contact me on +61 2 6232 6555 or send me an email with feedback, and ideas at [gm@aimsurveyors.com.au](mailto:gm@aimsurveyors.com.au).

Dr Eric Perez  
Chief Executive Officer

## Andrew Graver

I FIRST met Andy at an AIMS event and believe we hit it off immediately. All members who know Andy will agree that his easy-going style makes him a likeable bloke. Straight-talking without saying too much. These attributes made him a valuable member of the AIMS executive over the past 10+ years. Alongside Past President Peter Murday, inaugural CEO Susan Hull and me, Andy was a steadying and calming influence during these years.

As a staunch Carlton supporter, he was often at odds with Susan, an equally steadfast Melbourne supporter. Peter being an old boy rugby player was equally dedicated to his sport, so there were many jibes thrown about during executive meetings that had a tendency to drag out for way too long.

As the AIMS progressed past the original association structure to become a not-for-profit company, Andy, in company with me and Peter, remained as part of the new board of directors, ensuring continuity and guidance to new board members, reinforcing the values and direction established by the past executive and easing the burden upon our transition for GM Stacey Taylor and current CEO Eric Perez.

I think of Andy as a good friend as well as a professional colleague. We have solved most of the industry's and world's problems over a cold beer over the years but, despite our best efforts, both officially through the AIMS and personally within the profession, there is always another issue to contend with as marine surveyors attempt to address change in an evolving



industry that remains steeped in tradition.

If I find myself between a rock and hard place, Andy Graver is on my go-to list!

As part of the group of members who served on the executive over this time, I offer thanks to Andy on behalf of all members for your service to the Institute and the marine surveying profession at large and wish you all the best for the future.

John Holden  
Chairman of the AIMS Board



# At sea lithium-ion battery incidents are on the rise

INCIDENTS involving lithium-ion batteries have been well documented recently and are causing concern for shippers, shipping lines, vessel operators and other stakeholders in the supply chain.

Even a small incident recently, where one of the cells in a lithium-ion battery for a handheld radio exploded, causing a fire on the bridge of a ship in port, could have

had far-reaching consequences, especially if this happened when the ship was at sea in a remote part of the ocean.

A number of insurers, including international freight transport insurer and member of ICHCA TT Club, claim that the current categorisation of lithium-ion batteries in the International Maritime Dangerous Goods (IMDG) Code as Class 9 is

outdated and needs reviewing. Class 9 Miscellaneous Dangerous Goods are substances and articles which, during transport, present a danger or hazard not covered by other classes in the Code.

This classification was assigned in the 1980s, when lithium-ion batteries first came on the scene. But with the advent of new technologies and the increased maritime transport of lithium-

ion batteries, either in containers or as part of an electric vehicle (EV), TT Club believes that this classification is unsuitable and needs urgent review.

The International Marine Organization (IMO) reviews the IMDG Code every couple of years but, as usual, market demand has outpaced the development of safety regulations for the transport of lithium-ion batteries, with the results for all to see.

The most serious incidents have been in several car-carrier fires, where the ship and its cargo were partly damaged, such as the *Fremantle Highway* fire in the North Sea in July last year.

Even worse was the case of the *Felicity Ace*, carrying thousands of luxury cars from Germany to the United States, which sank in the mid-Atlantic in February 2022, 13 days after a fire broke out on board. This incident was most likely caused or exacerbated by having EVs on board with lithium-ion batteries.

Some experts say that the batteries themselves are not the problem but burning plastics in the cars, whilst others argue that gas generated from the burning EVs can cause explosions as well. One life was lost in the case of the

*Fremantle Highway* and all crew on the *Felicity Ace* were rescued before it sank.

So, where to from here? In the case of packing lithium-ion batteries in containers, it is essential to use the Container Transport Unit (CTU) Packing Code Guide (ICHCA was one of the organisations that helped develop the Code), as well as following the IMDG Code.

In the case of car carriers, the problem is more complicated as sprinklers and CO2 dispensers, which are currently fitted on all car carriers' decks, have little impact on lithium-ion battery fires.

Mitsui O.S.K. Lines, Ltd (MOL) has decided to install cameras and an AI system (developed by Captain's Eye) in the cargo holds to provide early fire detection capabilities. The devices will be installed on 10 vessels currently on order and scheduled for delivery in 2024 or later. The company will consider retrofitting current in-service vessels with the system.

The system sends an alert to the crew on board the vessel and to the onshore ship management company when it detects abnormal images captured by

the cameras on the car carrier's decks.

These images can be viewed by the vessel and by the onshore ship management company, leading to a faster response in the case of fire. Hopefully, further design improvements to prevent and/or suppress fires will be incorporated in the new build of car carriers in the future.

In the meantime, it is prudent to ensure that ships' crews, being first responders in most cases, are familiar with the latest fire-fighting techniques to extinguish or suppress lithium-ion battery fires. Unfortunately, approved courses such as the IMO's Fire Prevention and Fire Fighting courses are outdated and well overdue for a revision to incorporate the latest techniques.

**Peter van Duyn**  
Master Mariner  
Director of International  
Cargo Handling Co-ordination  
Association (Australia)

Footnote: Upon migrating to Australia in the early '80s my first job was as a marine surveyor with SGS Australia in Port Melbourne.



A number of fires at sea are thought to have been caused or exacerbated by lithium batteries. (Photo courtesy of Kustwacht / Dutch Coastal Guard.)

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# Lithium batteries white paper

IN November 2022, insurers TT Club, UK P&I Club and scientific consultant Brookes Bell published a white paper arguing that the risk of transporting lithium-ion batteries poses a threat to the maritime supply chain. The following is an extract from the publication.

## Introduction

Despite significant fire incidents, it is apparent that the broad maritime community and logistics supply chain remain predominantly unaware of the hazards and potential consequences when a lithium-ion battery fails and goes into thermal runaway.

When a lithium-ion battery fails, the speed of failure (seconds), production of significant quantities of toxic, corrosive and flammable gases (thousands of litres), as well as the rapid development of intense heat and explosive situations (+450°C) continue to be underestimated.

The paper was produced to provide some insight into this phenomenon as we move towards “greener” power sources. While there may have only been a small perceived risk, the following text profiles some of the numerous challenges and was aimed at raising awareness of the potentially catastrophic situations caused by a battery failure.

Recognising the various challenges presented by Li-ion batteries, the topics covered in the paper included background science on Li-ion batteries, the dangers associated with transporting them and why they arise, battery testing and correct declaration.

The paper also provided a review of dangerous goods (DG)

regulatory provisions, focusing on the International Maritime Dangerous Goods (IMDG) Code, with recommendations for change or further work.

The final section of the paper reviewed available firefighting provisions and improvements that could be implemented.

## The science of lithium-ion batteries

Accidents will always be a part of everyday life. Damage (contact, crushing, water submersion etc) of any battery will potentially cause it to fail or become unstable. In the case of vehicle collisions, given that in pure EVs the batteries are likely built into the chassis, impacts may result in them being compromised.

It is difficult for a layperson to know if a battery has been damaged internally following an accident (unless it starts to heat and vent vapours). It may only become apparent during charging sometime after the damage has occurred.

This is also relevant in relation to transporting second-hand EVs on a ship — how would the crew or stevedores know if a vehicle had been involved in an accident, particularly if the shell had been repaired? The battery is not a visible, external component, so assessing the condition of the battery would be extremely difficult.

Using an incorrect charger for a lithium-ion battery pack can cause a range of problems. Most chargers for Li-ion batteries are designed to prevent overcharging. However, using the wrong or a defective charger can cause overcharging or over voltage of the battery pack leading to breakdown of the battery structure with overheating and swelling of the casing.

While new products will typically be manufactured to hold a safe state of charge for transportation, this could be problematic on the journey through the supply chain if one considers second-hand, used or end-of-life equipment, phones, computers, or cameras where the state of charge and condition of potentially hundreds of individual items is unknown.

Users of lithium battery packs must be careful of over-discharge as much as overcharging of the battery. A Li-ion battery should never be allowed to discharge completely such that the voltage falls below 2V. This issue can happen when the battery has not been in use for some considerable time, or it's been placed into storage for a long period of time, allowing it to discharge.

With the voltage below 2V, both the cathode and the anode begin to break down. Such degrading of components can lead to an increased risk of short circuits.

A lithium-Ion battery pack should never be charged in cold temperatures (below 32°F/0°C). Charging at this temperature can cause lithium plating. (This is when the lithium ions collect along the anode's surface as metallic lithium becomes deposited there). This plating cannot be removed; it becomes permanent.

Once this occurs, the battery becomes more susceptible to damage, such as high-rate charging that can lead to short circuits. It can also become more easily damaged from crushing or impact.

As charging can lead to the production of heat, it is very important to allow the heat to dissipate from the battery. For example, charging a mobile phone on a soft surface, such as



*A smoking lithium phone charger.*

a bed, pillow or in a pocket, can insulate the battery and prevent the heat from dissipating away, leading to possible failure.

As mentioned in the introduction, dangerous gases can be emitted from a damaged battery. The latest large long-range EVs have around a 200 kWh capacity – this potentially equates to a total vapour release of around 1.2 million litres of toxic fumes from one vehicle during failure.

Extrapolate this to 10 such EVs onboard any vehicle ferry/pure car, truck carrier (PCTC)/container ship and authorities will not want that ship anywhere near a port during a battery related incident! In these circumstances, the ship should perhaps warn all other ships in the vicinity to implement positive pressure in accommodation and engine room to keep the fumes out.

## Transport regulations

The testing requirements under Section 2.9.4 (UN Model Regulations) need to be satisfied only once for each type of battery but do not require separate testing for each manufactured battery or production batch.

This testing is more a type approval for the design of the battery but cannot detect risks arising from manufacturing inconsistencies or defects, low-quality raw materials or components, or risks arising only when batteries are built into equipment or during use.

The requirements of Section 2.9.4 can be met by in-house quality management and do not require a third-party certification.

The wording suggests that the test summary is not a required document for submission to the carrier as part of the standard shipping documents but needs to be specifically requested on a case-by-case basis. Given the dangers associated with Li-ion batteries when issues arise, it is recommended for this document to be provided and checked prior to loading as standard.

Currently, UN 3171 covers all battery-powered vehicles, irrespective of battery type, whereas, for the other UN numbers, they are divided depending on whether they contain Li-ion batteries or not. In addition, UN 3171 covers battery-powered equipment but only if the batteries are not of the Li-ion type.

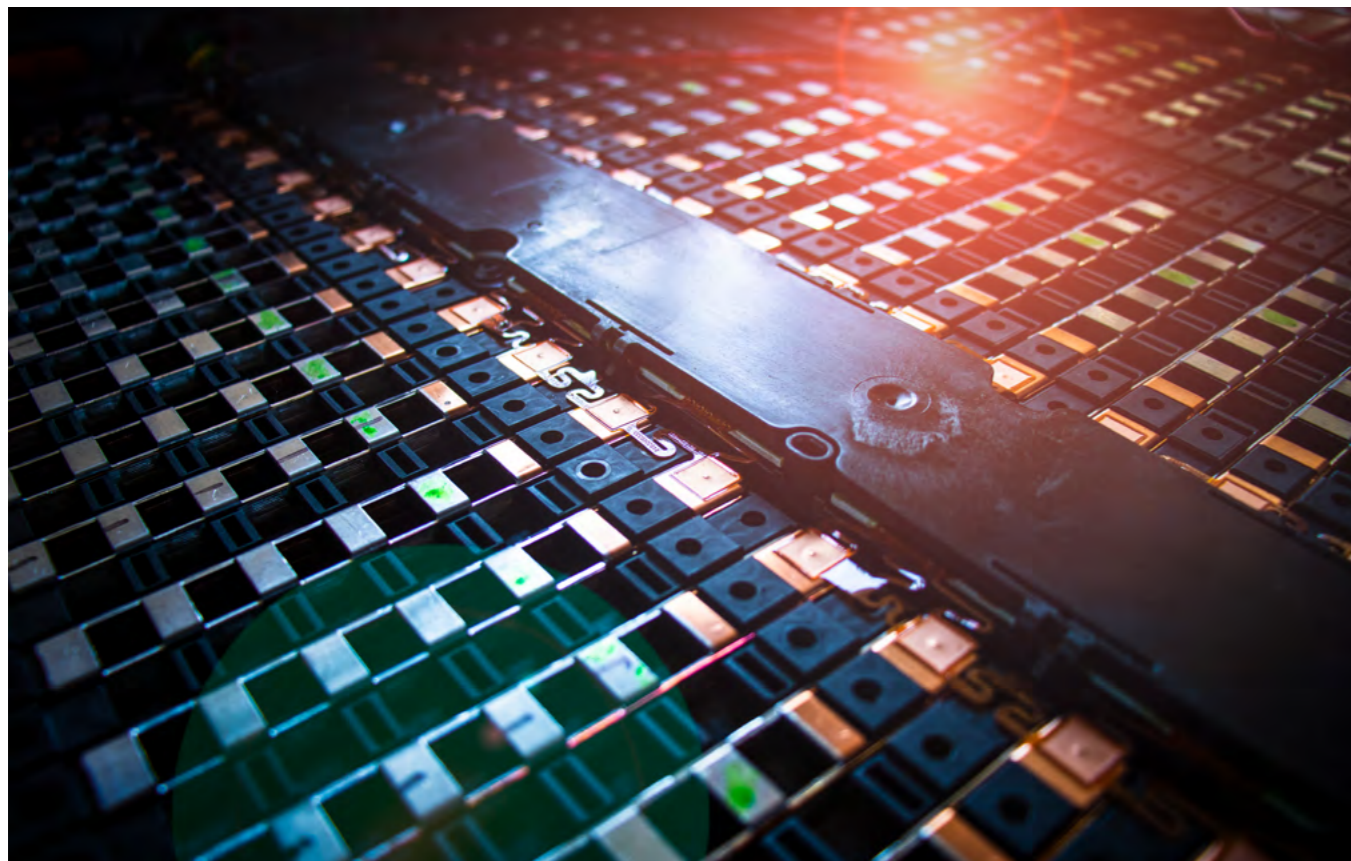
In view of the distinct risks associated with Li-ion batteries, and the rapidly increasing number of EVs powered by them, a distinct UN number for Li-ion battery powered EVs would be preferable.

Damaged or defective Li-ion batteries, as well as batteries transported for disposal or recycling, must be specially packed and identified in the documentation. They are likely to be high-risk consignments as they no longer conform to the tested type. However, there is no individual test requirement to identify the risks posed by such shipments.

Batteries declared as UN 3090 or UN 3091 may contain rechargeable Li-ion batteries in addition to primary Li-metal batteries. Such shipments may therefore present greater transport risks than is apparent solely from the UN number.

When shipping Li-ion batteries by air, IATA regulations specify a maximum state of charge (SOC) of 30 per cent of their rated capacity. No such SOC criteria are currently in place for transportation by sea or other surface modes.





An electric vehicle battery module.

EVs do not need to be declared as DG or identified to the carrier when loaded into the vehicle decks of car carriers, ro-ro ships or car ferries. As a result, the carrier will not generally know how many EVs are on board or where they are located on the ship.

Vehicles with defective or leaking batteries, or where the batteries do not meet the type approval testing requirements, need to be declared as DG in all circumstances. However, identification of such defective batteries is not generally practical or even possible at the point of loading and there are no provisions for individual safety inspections.

This is a significant safety concern, especially in case of used vehicles and batteries as would be expected on car ferries. However, as previously mentioned, the batteries will have undergone at least some use, even in new vehicles.

Packing provisions P911 and

LP 906 (damaged or defective batteries liable to rapidly disassemble, dangerously react and produce a flame or dangerous evolution of heat or vapours under normal conditions of transport) apply to damaged or defective batteries liable to react dangerously, ignite and/or produce vapours in normal conditions of transport and require the packaging performance to be verified by a test specified by the Competent Authority, and the verification report to be made available.

However, there are no guidelines on how to identify such dangerous shipments and distinguish them from other damaged or defective batteries carried under the less stringent packing provisions P908 and LP904 (damaged or defective batteries).

#### Call to action

With technology rapidly advancing and batteries increasing in trade volume and individual capacity, regulations have been slow to catch up.

The above review has identified a number of specific concerns:

**Test certificates** – Although there is a requirement for manufacturers to test batteries, and for manufacturers and subsequent distributors to make the test summary available, there is at present no explicit requirement on shippers to submit either the test summary or any document issued by an independent laboratory when consigning lithium-ion batteries for transport. This is despite the fact that such testing is a requirement for exemption of certain types of batteries under SP 188. Without this documentation, the carrier cannot verify whether the requirements have been satisfied, increasing risk during transport.

**Classification of lithium-ion powered electric vehicles** – At present, UN 3171 covers battery-powered vehicles and equipment. This includes all electric vehicles, including Li-ion powered EVs, whereas SP388 specifically excludes equipment (other than

vehicles) powered by lithium-ion batteries (those are assigned the respective UN numbers for the batteries they contain). This appears an anomaly. In view of the distinct hazards associated with lithium-ion batteries and the rapid increase in volume of manufacture and transport of lithium-ion powered EVs, a separate UN number for such EVs would provide greater clarity, with specific requirements for declaration and documentation (e.g. state of charge, battery chemistry, type of battery, capacity and/or details on safety system in place).

**Exemption for EVs carried on ro-ros and car carriers** – At present, SP 961 excludes EVs carried on ro-ros and car carriers from the requirements under UN 3171. Because of this, carriers do not generally have a list of all EVs on board, or their respective locations. Revoking this exemption would allow carriers to plan stowage locations and the monitoring of

EVs during the voyage in greater detail, with a view to developing early detection, evacuation and/or firefighting procedures.

**Mandatory markings for EVs** – At present, there is no requirement for EVs to be identified either during consignment procedures or by external markings on the vehicle. Mandatory marking would assist stowage and emergency response.

**Preventing short circuits** – Batteries are required to be packaged in such a way as to prevent short circuit, but there is no explicit requirement as to how this may be achieved, e.g. by covering the terminals.

**State of Charge (SOC)** – When shipping Li-ion batteries by air, IATA regulations specify a maximum SOC of 30 per cent of their rated capacity. No such SOC criteria are currently in place for transportation by sea, or other surface modes of transport.

**Battery condition on loading** – Current regulations do not take into consideration that a significant proportion of batteries are transported immediately after having been used or charged, as is the case for EVs having been driven onto a ro-ro or car carrier. Enhanced risk detection procedures may include checks before loading on SOC and battery condition/temperature.

**Damaged or defective batteries** – These no longer conform to their design safety testing and therefore may present unforeseeable levels of risk. Current regulations contain stringent packing requirements for shipments that are considered high risk, but do not specify how such high-risk shipments are identified and differentiated from “low-risk” damaged or defective batteries.

Marcus Johns  
Managing Director  
Thomas Miller

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Friday, 27 September

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# Lithium battery BMS installation

WITH the increasing use of lithium batteries within the maritime industry, every surveyor is now seeing more and more of these types of installations during their surveys.

The uptake is being driven by suppliers spruiking all the advantages and ease of installation. However, not all lithium battery BMS configurations are compliant with the installation type being used. With the attending surveyor noting a new lithium battery installation, this will warrant a closer examination for its safety compliance.

The DCV surveyor needs to be able to look objectively at the advice and documentation given to them by the electrical installer for compliance of lithium batteries for ELV and LV installation.

For example, the below circuit wiring (Fig: 1) is a system that was presented to me, and I was

advised that the supplier had said this was a compliant installation.

The suggestion was that this configuration is compliant with NSCV and AS/NZS 3004.2, based upon the assumption that the internal BMS and the Smart Shunt are in communication.

After consulting VICTRON, they have indicated that the fitting of a Smart Shunt does not meet the compliance requirements of the Standard for lithium batteries with internal BMS that has no communication ports.

This arrangement was then not approved, as it was not compliant for two reasons:

1. not meeting the requirement of the Standard, as the fitted BMS had no communication ports fitted to allow comms between such systems as power conversion equipment, charging systems, alarms, and cooling systems (if applicable); and

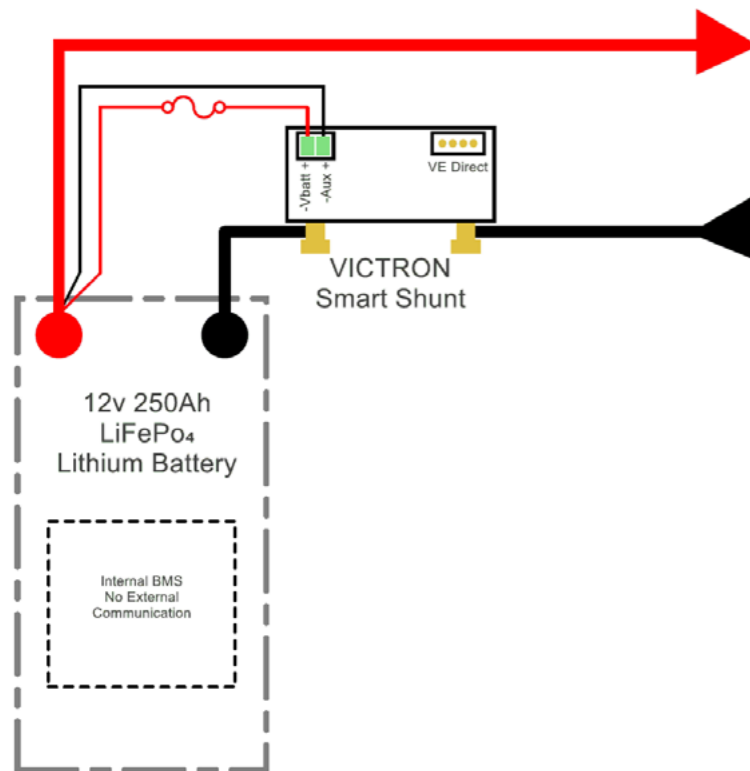


Fig: 1 - Proposed compliant system for battery monitoring

2. outboard engine charging (alternator failure).

Note: Reference VICTRON Web page: Careful - Alternator Charging Lithium

<https://www.victronenergy.com/blog/2019/10/07/careful-alternator-charging-lithium/>

This is but one of the many areas in which a surveyor needs to have sufficient knowledge to engage with the installer to determine the type of installation, and if the BMS meets its compliance for the configuration for the communication needed.

Generally, this information is available in online forums that provide guidance notices and/or factsheets. To date, I have not been able to locate any guidance notices and/or factsheets related to lithium battery installations that are useful to pass on for reference to surveyors.

The purpose of this article is to start a discussion regarding lithium battery installations and to develop guidance notes to assist surveyors when inspecting these installations.

Firstly, it is important to use as a baseline guide AS/NZS 3004.2, Section 2.9.3 - "Additional requirements for lithium-ion batteries".

The following guidance notes that I used, may be helpful to others. This is not a definitive list by any means and is just a starting point to create a forum, to discuss and help surveyors develop their own guidance notes. This will help in the survey process of identifying safety issues involving lithium batteries.

The following clauses in BLUE are from Section 2.9.3 of the Standard:

*a. Lithium-ion batteries shall be installed in locations that ensure the battery manufacturer's specified operating temperature limits cannot be exceeded and are appropriate for the IP rating of the battery and its management system.*

Guidance Notes:

- ❑ Batteries of mixed chemistry are not to be stored in the same enclosure.
- ❑ Check the IP ratings for all systems (eg. Inverters are not generally rated for mounting in engine rooms).

*b. Each lithium-ion battery shall be provided with a battery management safety system (BMS) either integrated into a battery pack or as a separate component located adjacent to the battery. The BMS shall continuously monitor the voltage and temperature of each cell in the battery.*

Guidance Notes:

- ❑ The BMS is to monitor the voltage and temperature of each cell. This is typically not how these are monitored, as the cells are grouped into packs of 4, with this pack's voltage being monitored and a single temperature probe is fitted to detect a rise in temperature within the casing (Fig: 2).

❑ This arrangement does not fulfil the clause in the Standard that requires that the voltage and temperature of each cell are to be monitored. There are two observations to make for this battery-type BMS configuration for voltage and temperature monitoring:

- i. Each cell is not monitored for voltage, but for a series of cells.
- ii. Each cell is not monitored for temperature and only the internal moulded casing is monitored.

However, it may be reasonable to consider that if all is mounted



Fig: 2 - Typical internal arrangement for a lithium battery (courtesy of Sunbeam Systems).

within a moulded casing the lithium battery is compliant for a single battery 12V system only.

- ❑ The other problem that arises is when lithium batteries are placed in parallel or series: how will these batteries with internal BMS communicate with each other if not fitted with comms ports?

*c. All charging sources shall be automatically disconnected by the BMS when voltage exceeds the manufacturer's recommended maximum.*

Guidance Notes:

- ❑ With a single charging source to a single 12V lithium battery, the internal BMS will meet some of the requirements with no communication ports.
- ❑ Internal BMS with no comms, does not provide an audible or visual alarm to external devices.
- ❑ A further problem here is if the batteries are in parallel or series, as when a battery shuts down due to a warning or fault. It should be able to communicate with other batteries and devices such as power conversion equipment, charging systems, alarms and cooling systems.
- ❑ Lithium batteries generally

require a DC/DC charger (reference VICTRON Web page: Careful - Alternator Charging Lithium).

*d. All connected loads shall be automatically disconnected by the BMS when the voltage falls below the manufacturer's recommended minimum.*

Guidance Notes:

- ❑ See Guidance Notes clause c).
- e. The battery shall be automatically disconnected by the BMS from all connected load and all charging sources when the temperature exceeds the manufacturer's specified maximum.*

Guidance Notes:

- ❑ See Guidance Notes clause c).
- f. The BMS shall provide an audible and visual alarm at the normal vessel operating position before a disconnection event occurs.*

Guidance Note:

- ❑ An internal BMS fitted without communication ports cannot provide an audible and visual alarm at the normal vessel operating position before a disconnection event occurs and is therefore NOT compliant.



g. *Lithium-ion battery ventilation air flows shall be in accordance with the manufacturer's requirements. If specific air flow data is not provided the requirements of Clauses 2.9.2.2 or 2.9.2.3 shall be applied.*

NOTE: Care must be exercised when disabling charging sources to avoid the risk of elevated voltages that may damage the equipment.

#### Guidance Notes:

- ❑ Check adequate venting is available, as charging lithium batteries generates significant heat.
- ❑ Lithium batteries generally require a DC/DC charger (reference VICTRON Web page: *Careful – Alternator Charging Lithium*).
- ❑ An internal BMS fitted without communication ports cannot provide a signal to operate cooling systems.

A further important development to be aware of about BMS, is there has been a recent review of AS/NZS3004.2, concerning batteries with an internal BMS. It has been proposed to adopt the notion that communication can be a wired or wireless configuration. This reference to wireless is a direct pull out of the recently released AS/NZS 3001.2:2022 Electrical installations – Part 2: Connectable electrical installations – Clause 5.4.12.3.4.

Currently, the monitoring via Bluetooth conductivity to an app, means the following parameters of the State of Charge data are displayed:

- ❑ battery voltage;
- ❑ battery current; and
- ❑ power.

The failure here is that these apps do not communicate with other devices to control shutdowns of battery banks, power conversion equipment,

loads, charging and cooling systems or initiate BMS alarms.

This may be an appropriate system for land-based recreational vehicles, in that if it all goes wrong you can pull the car over to the side of the road and get out to watch it burn at a safe distance. However, with a vessel at sea, if it all goes wrong, the last thing you want to do is to get off into the water and be reliant on lifesaving appliances, while you watch it burn.

An old seafarer's adage is, "Always step up to lifesaving appliances and never step down". That is to say that the last option is to get into the water. To avoid this option, warning alarms inform you of a problem before it becomes critical, thereby allowing you to take corrective action or suppress fires before the situation gets out of hand.

#### Summary

The issue highlighted is that batteries with an internal BMS and no communication ports fitted cannot communicate with other batteries and devices such as power conversion equipment, charging systems, alarms and cooling systems.

The fitting of a Smart Shunt will not overcome this problem, as it does not communicate with the BMS but operates independently of it and monitors the following State of Charge data:

- ❑ battery voltage;
- ❑ battery current;
- ❑ power; and
- ❑ aux input reading (starter battery, midpoint or temperature).

These above monitoring parameters do not fully cover the requirements as set out in the Standard for the BMS and do not allow for an alarm relay like the VICTRON BMV series hardware, for example.

Therefore, a lithium battery with an internal BMS to

effectively work must have communication capability with other batteries and devices such as power conversion equipment, charging systems, alarms and cooling systems.

To provide further clarity, I have further referenced \*AS/NZS 5139:2019 - Electrical installations – Safety of battery systems for use with power conversion equipment, to provide further clarification on this matter.

From this Standard in Clause 1.3.16 (and I paraphrase):

*BMS – Electronical system that monitors and manages a battery or battery systems electrical and thermal states enabling it to operate within its safe region for the particular battery. The BMS provides communication between the battery or battery system and the power control equipment and potentially other devices.*

Quite simply, lithium batteries with an internal BMS, that have no communication ports, do not provide the level of safety that is required for marine installations.

Additionally, the use of Bluetooth-connected devices does not provide communication with other devices to control other batteries, power conversion equipment, loads, charging and cooling systems.

Also, with the reliance upon an app that will turn off after the connected device (iPhone, iPad, etc) is powered-down, once the connected device is powered up again, it then requires user intervention to turn the app back on.

Note: It is good practice when researching safety compliance standards to reference other Standards, Guidelines and/or Class Rules to provide additional clarity on clauses.

**Mark Smith**  
SET Maritime & Electrical  
AIMS Member

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# Fire suppression and environmental responsibility in local flagged vessels and the Australian maritime sector

SAFETY is paramount in the Australian maritime sector and one critical aspect is fire suppression safety. As many people within the Australian maritime sector know, the marine industry is exposed to various fire hazards, ranging from engine room mishaps, galley accidents and more.

Vessels that can be affected by fire range from leisure craft through to fishing boats, work boats, tugs and tenders to ferries, roll on-roll off ships, offshore supply vessels, cruise ships, bulk carriers, tankers, LNG carriers, container ships and warships.

Significantly, all forms of vessels can be prone to fire danger so it's important to take precautions and safety at sea seriously.

So, what is the best way to stay safe on the water and where should you look to make sure you're adhering to applicable fire safety laws and regulations? One such place for advice is the Fire Protection Industry Board (FPIB).

Acting on behalf of the Federal Government's Department of Climate Change, Energy, Environment & Water (DCCEEW), the FPIB plays a pivotal role in setting guidelines and recommendations to ensure that the maritime industry adheres to the highest standards of fire safety.

Additionally, in line with global environmental initiatives, the Board administers the fire protection division of the Ozone Protection and Synthetic Greenhouse Gas Regulations

1995 (the Regulations) on behalf of the Australian Government, managing the permit and licensing systems of individuals, workers and businesses who handle scheduled extinguishing agents for fire protection.

To mitigate the risks of fire on board vessels, the FPIB has developed comprehensive guidelines for fire suppression systems on ships, whilst working to ensure all fire suppression agents adhere to environmental regulations set by the Federal Government.

Primarily, the most commonly used scheduled extinguishing agents within the maritime sector are: FM-200®, FE-227™ and NAF S-III because of their ability to act as leading alternatives to the now banned extinguishing agent halon.

Notably each of these agents must be obtained from companies who hold an EATA (Extinguishing Agent Trading Authorisation), a permit which is issued by the FPIB. FM-200® can protect from most of the hazards that halon does but is significantly less toxic. Halon was banned from being imported into Australia or used on commercial flagged vessels in 1993 as agents controlled under the Montreal Protocol.

This is because the ozone depleting potential (ODP) and global warming potential (GWP) of halon is far higher than carbon dioxide (CO<sub>2</sub>). Notably, halon also has an ODP of 10 (meaning that it is 10 times more potent in destroying the atmosphere) and

a GWP of 6200 (meaning that it is 6200 times as potent as CO<sub>2</sub> in warming the atmosphere).

So what are the Board's suggestions for keeping you, your crew and your vessel safe and protected from fire?

Firstly, the Board recommends that builders, operators, and owners of vessels with gaseous fire suppression systems containing scheduled extinguishing agents ensure that the installation and maintenance of these systems is done by licensed technicians.

Regular maintenance and service of gaseous fire suppressions should be conducted frequently to ensure full functionality in the event of a fire and all technicians working with scheduled extinguishing agents must hold the appropriate licence, authorisation or permit.

The value and effectiveness of marine gaseous fire suppression systems requires that they be properly designed, installed, commissioned, and maintained effectively. Put simply, if you don't get these elements right your fire protection system is more likely to fail when you need it.

Taking these steps will also help ensure you are acting in compliance within relevant Government acts and legislations, and, whilst there is no requirement to replace systems, owners should consider changing systems to environmentally friendly alternatives where possible.

There are a number of extinguishing agents that are not reg-



ulated under the Government. For example, owners may wish to consider systems which use Novec™ 1230, inert gas or condensed aerosols.

Not only is following the recommendations outlined by the Board an important way of keeping yourself, your vessel and crew members safe, but staying compliant with the relevant government regulation is critical in helping Australia uphold its international duty and obligations in reducing ODSs and Synthetic GSGs under the Montreal Protocol.

The environment is protected by strictly controlling the discharge of scheduled extinguishing agents (other than for putting out fires) and federal regulations govern the acquisition, possession, handling, storage and disposal of scheduled extinguishing agents used in Australia.

So, what is the Montreal Pro-

col and what does it have to do with extinguishing agents?

The Montreal Protocol is an international treaty adopted in 1987, which aims to protect the ozone layer by phasing out the production and consumption of ODSs. While the primary focus has been on substances like chlorofluorocarbons (CFCs) and halons, recent attention has also moved towards synthetic greenhouse gases (SGGs) due to their impact on climate change.

Compounds within the scheduled gases used within many fire suppression systems and extinguishing agents, when exposed to intense UV light in the stratosphere, release chlorine and bromine.

These atoms, when in the stratosphere, destroy ozone molecules, which contributes to creating larger holes in the stratosphere. Stopping the release of these gases from entering the atmosphere and creating damaging

holes in the earth's ozone layer is crucial in helping avert environmental disaster.

Essentially, a depleting ozone layer results in an increase of UV radiation passing through the stratosphere. Increased UV radiation leads to poor human health, especially increased skin cancer, and has potentially dire consequences to the rest of the environment.

Ultimately, environmental responsibility and care using fire suppression systems and extinguishing agents in the maritime sector goes beyond regulatory compliance. It is a moral imperative and the shipping industry, and in particular cargo and freight, is a significant contributor to domestic and global trade that must also bear the responsibility of minimising its environmental footprint.

By adopting fire suppression systems where possible that don't rely on ODS or SGGs, or preventing entirely the required use of an extinguishing agent, the industry can demonstrate a commitment to sustainable practices and safety, and help meet the targets of the Montreal Protocol. It is crucial for Australia in upholding its international obligations and leading by example for the global community.

The maritime sector's contribution to these efforts involves proper maintenance and disposal of existing systems containing ODSs and SGGs.

By integrating both safety and sustainability measures, through the acquisition of the appropriate licence, training and maintenance, the maritime sector can navigate the challenges ahead while leaving a positive impact on both industry and the environment.

**Robert Henningham**  
Communications Coordinator -  
Ozone Protection  
Fire Protection Industry (ODS &  
SGG) Board



# Professional indemnity claims

THIS article was the basis of Greg Hansen's presentation in late November 2023.

## Property damage claim

A marine surveyor inspected a vessel in dry dock. Did everything correctly, followed guidelines, even had the client present for the inspection.

Unfortunately, the surveyor got out of the boat, didn't check all the valves were shut. Boat was put in the water and sank.

The matter settled for \$170,000 for recovery of the vessel.

Thirty surveyors paying \$3,000 each = \$90,000 and the insurer was instantly losing money after the above loss. A good example of needing to buy in bulk as a profession.

## Pre-purchase inspection claim

A marine surveyor was engaged to undertake a pre-purchase survey of a vessel.

During voyage from WA to Newcastle NSW, the bridge deck delaminated, resulting in a 200mm void between the wet deck and floor.

Survey suggested that the boat was never built right and had hollow areas where the bond between the wet deck and floor were not connected.

Anaval architect was appointed and there was debate over if it would have been discoverable by doing an acoustic inspection. It was ultimately agreed that the only way to determine the fault was to cut the hold in the boat.

The claim was dropped by client and claim closed with NIL cost.

A marine surveyor was engaged to survey a cargo of wheat and certify the holds of a bulk carrier as fit for loading. The surveyor issued a certificate of fitness to load and 70,000MT of wheat was loaded. The local authorities ordered the stevedores to stop discharge operations as they suspected that the cargo was heat damaged.

A subsequent survey report, obtained by the shippers, indicated that the cargo was contaminated by delaminating paint, rust, dirt and paint powder from the ship's holds.

The shippers negotiated a reduction in price with the receivers as a result of the deterioration of the cargo and pursued a claim against the shipowners under the terms of the contract of carriage. That dispute was resolved at a mediation but the shippers then brought a separate claim against the surveyor.

They were seeking to recover alleged losses, including loss of sale proceeds, additional hire paid to the owners and costs, on the basis that the surveyor had negligently certified the vessel as fit for loading in circumstances when it was not.

The claim was for in excess of USD1,000,000.

The PI insurer appointed lawyers. Expert evidence suggested that the damage may have been caused by bobcats used in discharging the cargo. The surveyor also had terms and conditions which – if properly incorporated into their business dealings – would have reduced their liability to a fraction of the shipper's claim.

Unfortunately, the surveyor had not explicitly made the

shipper aware of the terms and conditions, so it was unlikely that a court would find that these had been incorporated.

It also became apparent that, after the surveyor had inspected the vessel, Customs inspectors had carried out an inspection and had ordered that the vessel should be cleaned prior to loading.

This was both helpful and unhelpful for the surveyor: while it was a strong indication that the surveyor had failed to properly carry out his survey, it also arguably meant that it was not the surveyor's report that the shippers were relying on, but instead Customs' approval to load.

A mediation took place but the claim could not be settled. Negotiations continued nevertheless, and the matter was resolved with the surveyor contributing to around 30 per cent of the claim, which was covered by the PI insurer.

## Risk management

Have clear terms of engagement with your client:

- what services are you delivering?
- what are you not doing?
- has it been clearly communicated?
- combating customer-driven contracts; and
- standardised templates for reports / surveys and standardised disclaimers.

Greg Hansen  
Director  
Austbrokers Countrywide

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# Six key provisions of the Fair Work Legislation Closing Loopholes Amendment

IN recent developments with this legislation, the Federal Government, in collaboration with the Greens and cross-bench Senators, has effectively split the Fair Work Legislation Amendment (Closing Loopholes) Bill 2023.

This strategic division resulted in the first part of the bill being passed.

In summary, some of the key changes include:

- ❑ “same job, same pay” orders for labour hire workers;
- ❑ the introduction of the federal criminal offence – “wage theft”;
- ❑ restrictions to small business redundancy exemptions;
- ❑ federal industrial manslaughter laws;
- ❑ increased union delegate rights; and
- ❑ strengthening discrimination protections for family and domestic violence victims.

Royal Assent for the bill was made on 14 December 2023 for the Fair Work Legislation Amendment (Closing Loopholes) Act 2023.

## Key elements

### Labour Hire Reforms – Same Job, Same Pay

The Act now allows for the Fair Work Commission (FWC) to make a “regulated labour hire arrangement order” (RLHA Order). This requires a labour hire provider to pay at minimum an equivalent rate of pay as the host business’ own employees for performing “the same” work.

To receive the same pay as set out under the Act, a labour hire employee must apply for a RLHA Order in the FWC. The FWC may then grant or deny

the application after considering whether:

- ❑ an employer supplies, or will supply one or more of its employees (directly or indirectly) to perform work for a host organisation; and
- ❑ the host business is covered by an enterprise agreement, a workplace determination or a public service determination that would apply to the labour hire employees if they were directly employed by the host to perform “the same” work.

Relevantly, the FWC will not grant an order if it determines if the work performed under the labour hire arrangement is for the provision of a service as opposed to a supply of labour.

There are several factors to decide if it is a provision of a service:

- ❑ the specialised or expert nature of the services;
- ❑ the level of control the employee has; and
- ❑ the access to host systems, plant, equipment, or structures.

There are limited exemptions available to labour-hire employers, namely where:

- ❑ the labour hire arrangement is for three months or less – which will therefore exclude surge or temporary work; or
- ❑ the employer is a small (labour hire) business. Small businesses are those with less than 15 employees.

### Wage theft

Wage theft laws similar to those already seen in Victoria and Queensland are set to be rolled out nationwide. In particular, the new wage theft laws are geared to target the intentional underpayments of wages and superannuation by companies and responsible individuals.

If found guilty, offending corporations are liable to incur a hefty fine of (whichever is the greater amount):

- ❑ three (3) x underpayment amount; or
- ❑ a \$7,825,000 fine.

Offending individuals will also be personally liable and may face:

- ❑ up to a \$1,565,000 fine; or
- ❑ maximum 10 years’ imprisonment.

Fortunately, the introduction of the “Voluntary Small Business Wage Compliance Code” (Compliance Code) provides a level of protection to employers.

If the Fair Work Ombudsman (FWO) is satisfied that an employer has complied with the Compliance Code following an underpayment, they will be unable to pursue further regulatory action.

These changes are set to come into effect on 1 January 2025, or a date earlier as fixed by Proclamation.

### Industrial manslaughter

The updated legislation introduces criminal charges for industrial manslaughter, aligning federal occupational health and safety (OHS) laws with those in many States and Territories.

Under these changes, federal public servants accountable for a worker’s death could face imprisonment of up to 25 years.

Additionally, Commonwealth departments might incur fines as high as \$18 million.

The revisions also elevate the maximum penalties for a category-one offence in the federal OHS laws, which involve reckless or criminally negligent



Jonathan Mamaril

violations, to \$15 million in fines and up to 15 years’ imprisonment.

The new industrial manslaughter provisions will commence on 1 July 2024.

### Rights for union delegates

Under the new regulations, employers, excluding small businesses, must permit workplace delegates to participate in paid training relevant to their role during regular work hours without any loss of pay.

The new laws also set forth restrictions on employers, including:

- ❑ prohibiting unreasonable refusal or failure to interact with a workplace delegate;
- ❑ banning knowingly or recklessly making false or misleading statements to a workplace delegate; and
- ❑ forbidding any unreasonable actions that hinder, obstruct or prevent a workplace delegate from exercising their rights.

Non-compliance with these provisions can lead to financial penalties under the Fair Work Act 2009 (Cth).

These changes are now in effect.

Starting from 1 July 2024, modern awards, enterprise agreements and workplace determinations are required

to incorporate a “delegate’s rights” clause that mirrors these stipulations. This clause will be applicable to enterprise agreements voted on from 1 July 2024 onwards and does not necessitate amendments to existing enterprise agreements.

### Redundancy and small business

Relevantly, section 121(1) of the Fair Work Act exempts small businesses from the obligation to pay redundancy pay. However, the current section 121(1)(b) creates a loophole that allows larger employers to avoid paying redundancy pay if they downsize due to insolvency, and the number of employees falls below 15 (the threshold for a small business employer).

To address this issue, the new law introduces a new subsection that will close this loophole by specifying that redundancy is still owed in circumstances where an employer becomes a small business employer following termination of employment resulting from bankruptcy or liquidation.

This change is now in effect.

### Further discrimination protections

The new law also seeks to provide strengthened protection for employees who are subject to family and domestic violence. As such, family and domestic violence are to be added as a protected attribute under the FW Act, shielding current and prospective employees from adverse action resulting from any domestic violence experienced.

This will come into play in General Protections claims.

### Future developments

The second part of the bill, dubbed The Closing Loopholes Bill No. 2, is slated for 2024. It will address gig economy regulations, road transport, casual employment conversion

and additional bargaining regime modifications.

Immediate actions and solutions from a human resources perspective include the following list.

- ❑ **Implementation Timeline** – The labour hire provisions are set to commence upon the bill’s assent, superseding the initially planned date of 1 July, 2024. However, Fair Work Commission orders related to “same job, same pay” cannot start before 1 November, 2024.
- ❑ **Preparation for New Laws** – HR teams should anticipate union applications once the laws take effect and prepare for potential claims in bargaining contexts influenced by these new regulations.
- ❑ **Labour Hire** – If you are a labour hire employer, be prepared for a regulated labour hire arrangement order – what will need to be considered to combat the application is whether an exemption applies or that the supply of labour is for a provision of service. Advice should be sought well in advance to give some clarification for what could be utilised (or even changed) to comply with an exemption or come under a provision of service – with a review undertaken to mitigate liability and risk.
- ❑ **Wage theft** – This is the time for employers to undertake wage audits. Even sample wage audits will suffice. With so many changes to modern awards in recent years, there are probably going to be issues with employment contracts, pay structures and individual flexibility arrangements. In particular, with automated pay systems and brand name companies such as Woolworths having been caught out, this is a good time to get the payroll house in order. NB Employment Law can help read more [here](#).
- ❑ **Industrial Manslaughter** –



With increased health and safety regulations, an active step to take is due diligence workplace health and safety training. The NB Employment Law team undertook quite a number of WHS training workshops which received very positive feedback. You can read more [here](#).

- ❑ Union Delegate Rights – Employers who have strong union representation in workplaces need to avail themselves of the new changes: namely, that union delegates have the ability to access paid training and prohibiting interactions with a workplace delegate. Management training on these new rights should be part of the early 2024 training schedule – This is something the NB Employment team can



help with. You can read more [here](#).

- ❑ Redundancy Pay and Small Business – Insolvency practitioners and accountants

Provision(s)	Commencement
Small business redundancy exemption (Sch 1, Pt 2)	The day after Royal Assent
Closing the labour hire loophole (Sch 1, Pt 6)	The day after Royal Assent
Workplace delegates' rights for employees (Sch 1, Pt 7, Div 1)	The day after Royal Assent
Protections against FDV discrimination (Sch 1, Pt 8)	The day after Royal Assent
Wage theft – majority of provisions (Sch 1, Pt 14)	A single day to be fixed by Proclamation – however, if the provisions do not commence before 1 January 2025, they commence on that day
Wage theft – compliance and enforcement policy provided by the FWO (Sch 1, Pt 14)	6 months after Royal Assent
Right of entry – assisting health and safety representation	The day after Royal Assent

The legislation has a variety of operative dates.

in particular should be aware of these changes. Advice should be sought by NB Employment Law before advising on redundancies in these circumstances.

- ❑ Further Discrimination Provisions for Family and Domestic Violence – Paid domestic violence is already in place. Expect to see General Protections claims enlivened much more in this area and managers should be very carefully trained on dealing with family and domestic violence disclosures by employees under their management.

#### Commencement dates

Once again, the legislation has a variety of operative dates, as set out in the table (left).

#### What's next?

The Closing Loopholes Bill No. 2 remains under Senate consideration, with a report from the Senate Education and Employment Legislation Committee expected soon. This bill's focus will be on the remaining provisions not covered in the first part.

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## WORKPLACE BULLYING CHECKLIST

### 10 questions every HR and people-and-culture team needs to know the answer to

WORKPLACE bullying is becoming an increasingly problematic area for Employers and Human Resources. Safe Work Australia recently provided that 39 per cent of mental disorder claims were caused because of harassment or workplace bullying.

#### What is workplace bullying?

There are differing definitions of workplace bullying across jurisdictions in Australia but generally they are defined as conduct towards one or more persons which is:

- ❑ unreasonable;
- ❑ repeated; and
- ❑ creates a health and safety risk.

Importantly, reasonable management is not workplace bullying and firmness does not mean harshness<sup>1</sup>.

Some examples of workplace bullying include:

- ❑ aggressive or intimidating behaviour;
- ❑ threatening someone with work equipment;
- ❑ teasing or practical jokes;
- ❑ humiliating or belittling comments;
- ❑ sexual harassment;
- ❑ spreading rumours;
- ❑ using rosters to deliberately inconvenience someone;
- ❑ hazing or initiation ceremonies;
- ❑ excluding someone from work-related events;
- ❑ assigning unreasonable, demeaning or pointless work demands;
- ❑ withholding important information needed for effective performance;
- ❑ displaying offensive material; and

- ❑ pressuring someone to behave inappropriately or even illegally.

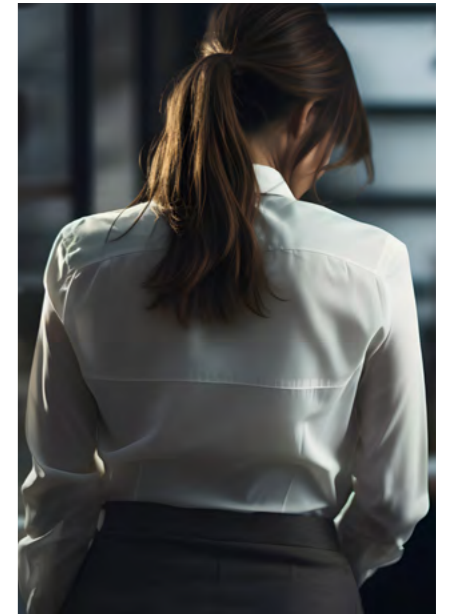
#### What can help?

There are now specific obligations under health and safety legislation, especially psychosocial hazards<sup>2</sup>, which require active steps to be taken due to the positive obligations to take reasonable steps to prevent workplace bullying.

Policies and workplace training are integral to demonstrate you have taken active steps to prevent workplace bullying.

Following is a checklist of questions that will give you a great start.

- ❑ Does the Company have a Workplace Bullying Policy?
- ❑ Does the policy provide information on what is bullying and what is not bullying?
- ❑ Does the policy state clearly what are the ramifications if workplace bullying is substantiated?
- ❑ Does the policy provide information on what steps need to be taken if there is a complaint of workplace bullying?
- ❑ Does the policy provide some guidance or even steps for management to take when a complaint of workplace bullying is received?
- ❑ Has there been specific management and leadership training on workplace bullying?
- ❑ Does the training provide opportunities for discussion, role plays and analysing case studies to build capability to mitigate liability and risk?
- ❑ Does a people manager know what steps need to be taken



when a complaint of workplace bullying is received?

- ❑ Is it made clear to all managers that records should be kept of discussions and correspondence regarding any workplace bullying complaints or incidents?
- ❑ What other steps have been taken to prevent workplace bullying?

These 10 questions form the basis for steps that can be taken to prevent and deal with workplace bullying.

<sup>1</sup> <https://noborderslawgroup.com.au/articles/workplace-bullying-vs-reasonable-management-action-firmness-does-not-mean-harshness/?site=employment>

<sup>2</sup> <https://noborderslawgroup.com.au/articles/psychosocial-risks-lawyers-for-employers-jonathan-mamaril/?site=employment>

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# Accredited Grain Surveyor Scheme

By Susan Hull

THE Grain & Seed Export team at the Department of Agriculture, Fisheries & Forestry (DAFF) and the Australasian Institute of Marine Surveyors (AIMS) continue to meet regularly to discuss the ongoing progress of the Accredited Grain Surveyor Scheme.

Improvements have been made in regard to ensuring that accredited surveyors have access to information on the standards required to conduct fitness to load surveys and that all surveyors know and understand the requirements.

All accredited surveyors have now signed acknowledgment of receipt of the standards and have committed to applying the standards to their surveys. Surveyors should note that monitoring of adherence to the standards will also be conducted by the Grain Export team at DAFF. The AIMS will be monitoring and auditing surveyors on application of the standards later in the year.

The complaints processes have been finalised and uploaded to the AIMS website, along with a guidance notice on how to identify and manage conflicts of interest.

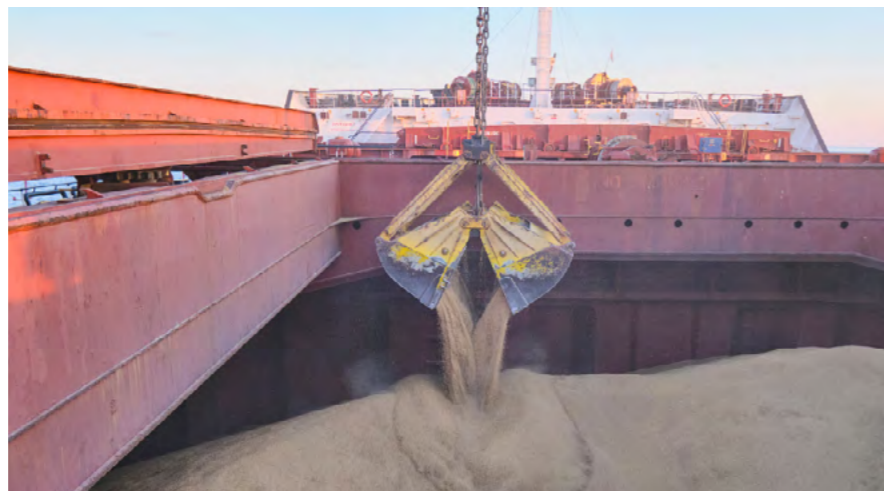
The team is also refining the agents declaration requirements and it is expected that there will be a standard template for surveyors to provide to agents / shippers / owners etc. to complete prior to the appointment of the surveyor.

This documentation will be required to be provided to the Authorised Officer, either by the surveyor or the appointing agency, to confirm that the surveyor appointed holds or held current accreditation at the time of appointment.

All grain surveyors will be notified via email when this work is complete and any new documentation requirements will be provided via email and available on the website.

There are current discussions on the need for bilge testing as outlined in the standards. Any developments made will be communicated to all surveyors.

Surveyors should also note that monitoring of adherence to the standards is being conducted by the Grain Export team at DAFF. Both the Grain Exports team and AIMS are currently monitoring standards via a range of mechanisms.



The AIMS will begin desktop audits in March. The first range of audits will focus on employment documentation, verification of the 10 initial ship documentation, currency of insurance and a general review of evidence provided in the application process.

If your employment situation has changed, it is a requirement of your accreditation that you notify the AIMS within seven days, so now is the time to review your documentation and let us know if any changes have been made.

Surveyors who have not provided the correct

documentation will be suspended until correct documentation is received by the AIMS.

The Grain Export team have also advised that they are actively monitoring Authorised Officers and that suspensions are happening. They are checking inspection records in detail and are concerned that some Authorised Officers are not recording the full time of the survey on their cameras, cameras are not being used properly, declarations of appointment are not being received and some Officers are not undertaking their work in accordance with BVIA Instructions.

Both the AIMS and the Grain Export Team have noted that some Authorised Officers and surveyors do not respond to emails and there is a clear directive to do so. It is a condition of accreditation that surveyors have provided the correct email address and are able to be contacted by AIMS and DAFF at all times.

Accredited surveyors should also note that the payment of re-accreditation fees must be made prior to July 1 to retain continual accreditation. In order to facilitate this, the AIMS will send invoices to accredited surveyors on 1 June 2024.

Surveyors must be aware that, if payment is not received by Monday, June 17, the AIMS may not have sufficient time to process re-accreditation applications and cannot guarantee that all current surveyors will be processed and listed on the Accredited Grain Surveyor prior to their expiry date.

Those surveyors who have an expiry date later than 31 August 2024 are not expected to be impacted; however, they must apply for re-accreditation at least 14 days prior to their expiry date.



## The Strategic Fleet Review Final Report

Some members may remember the January 2022 announcement by the then Opposition Leader, Anthony Albanese, that a Labor Government would strengthen Australia's economic sovereignty and national security by building an independent Strategic Fleet to secure our ongoing access to fuel supplies and other essential imports.

Less than 1 per cent of Australian seaborne trade is carried by Australian ships, forcing our nation to rely on foreign governments and companies for our essential imports.

The Prime Minister announced the Government will establish a strategic fleet of up to 12 Australian-flagged and crewed vessels. The Government

appointed a task force to guide it on the establishment of the fleet, noting it would be privately owned and operate on a commercial basis but could be requisitioned by the Government in times of national crisis (such as natural disaster or conflict).

The work of the strategic fleet review commenced in 2022 and the members of the taskforce were appointed by the Hon. Catherine King MP, Minister for Infrastructure, Transport, Regional Development & Local Government. Appointments were based on their expertise in one or more of the maritime, logistics and defence sectors.

The task force members were:

- Mr John Mullen (Taskforce Chair) – Chairman of Telstra, Brambles, former Chairman of Toll Logistics;
- Ms Angela Gillham – Chief



Executive Officer, Maritime Industry Australia Limited;

❑ Dr Sarah Ryan – Non-Executive Director (in no particular order) Aurizon, OZ Minerals, Viva Energy, Woodside Energy;

❑ Mr Paddy Crumlin – National Secretary, Maritime Union of Australia; and

❑ Major-General Jason Walk – Commander, Joint Logistics, Department of Defence.

The Taskforce focused on four major areas:

❑ the strategic fleet itself, its composition and the regulatory environment that needs to be put in place to ensure its success;

❑ requisitioning, the mechanism by which the strategic fleet will be called on by Government in times of disruption or national interest;

❑ maritime workforce initiatives, provided to support the sustainable growth and maintenance of our maritime workforce, who will crew the strategic fleet and other major Australian vessels; and

❑ other complementary measures, provided to Government in support of the strategic fleet in line with the task force terms of reference.

The task force reported 17 recommendations to Government, based on the terms of reference, and the final report of the strategic fleet review was published in November 2023. It sets out the task force findings and their recommendations to Government. Some recommendations are listed below but it is certainly worth reading the full report.

The report outlined that:

❑ The cost gap between Australian and foreign vessels be addressed through a combined measure of shipping taxation incentives in line with international norms, and Australian Government

financial assistance provided to ship owners and operators.

❑ That the strategic fleet comprise vessels of the following types, and be of a size that will meet the three prime strategic purposes of the fleet:

– container vessels with geared ship cranes capable of independent container operations;

– multi-purpose vessels (MPV) capable of carrying project cargo, containers and some bulk cargoes, and unload these using geared ship cranes;

– roll-on roll-off/roll-on lift-off (RO-RO/RO-LO) vessels;

– liquid bulk vessels configured to carry multiple grades of fuel and chemical products in independent tanks;

– dry-bulk vessels; and

– break-bulk vessels.

❑ That the Government establish a levy on vessel arrivals as a mechanism to fund the strategic fleet.

❑ That strategic fleet vessels must be registered on the Australian General Shipping Register (AGSR).

❑ The task force considers there is merit in reviewing the provisions of the Australian International Shipping Register (AISR) to identify if they can be made more attractive to encourage the registration of vessels under this Australian register.

❑ That the Government should review the *Coastal Trading (Revitalising Australian Shipping) Act 2012* to ensure the object and the provisions of the Act support the implementation of the strategic fleet.

❑ That the Government legislate the power to requisition Australian-flagged vessels and establish a complementary capacity to requisition vessels through contractual arrangements with vessel

owners and operators of strategic fleet and non-strategic fleet vessels to provide it with the greatest flexibility and assurance of access to vessel capability when required. The extent of the legislative power and terms of the contractual arrangements must provide certainty to stakeholders regarding issues such as the terms of requisition, threshold for requisitioning, and compensation including circumstances of liability and indemnity.

❑ That the maritime training package is fit for purpose and considers the needs of Australia's maritime industry in the context of implementation of the strategic fleet.

❑ That the Government should legislate to implement a training levy on maritime industry participants that are beneficiaries of STCW qualified seafarers to fund a financial assistance package to assist employers and sponsors of trainees and cadets to meet the costs of training seafarers to obtain STCW qualifications.

❑ The Taskforce recommends the Government consider targeting an increase in migration for STCW qualified seafarers to help alleviate labour shortages in Australia's maritime industry until such time as the supply of appropriately qualified Australian seafarers increases sufficiently.

Report link: <https://www.infrastructure.gov.au/departments/media/publications/strategic-fleet-taskforce-final-report>

### References

- <https://anthonyalbanese.com.au/media-centre/labor-create-strategic-fleet-protect-national-security-economic-sovereignty>
- Strategic Fleet Report 2023.
- Strategic Fleet Report 2023.

# Future of AI in marine cargo survey businesses

This article provides a detailed discussion of artificial intelligence (AI) and the implications for industry.

OVER the summer, Van Ameyde McAuslands Managing Director Jeff Wilson spoke at the Annual Conference of the International Institute of Marine Surveyors on the subject of artificial intelligence (AI) and the potential impacts that AI may have on the future and shape on marine surveying.

## Introduction

The marine industry has long relied on the expertise and knowledge of cargo surveyors to ensure the safe and efficient transport of goods across the world's oceans. In today's rapidly evolving information age, knowledge and expertise are not just power they are a strategic asset that drives innovation, growth, and competitive advantage.

As marine survey businesses navigate an increasingly complex landscape, the integration of AI has the potential to revolutionise the way knowledge is harnessed, analysed and applied across all industries, and the marine survey industry is no different.

The foundation of knowledge businesses – such as marine surveying – lies in the ability to efficiently access, organise and interpret vast amounts of data and information, and then use that data and information productively and profitably.

AI technologies, such as natural language processing, machine learning and semantic analysis are empowering organisations to use data and extract meaningful insights from unstructured data sources such as text documents, research papers and online content.

Moreover, AI-driven knowledge management systems are revolutionising information retrieval and knowledge

sharing within organisations. By employing sophisticated algorithms, these systems can automatically tag, categorise and connect relevant pieces of information, allowing for efficient search and retrieval of and then fostering collaboration between teams and facilitating knowledge transfer across organisations.

AI is also propelling knowledge businesses toward data-driven decision-making. By leveraging predictive analytics, AI algorithms can identify patterns in data, predict trends and generate accurate forecasts in markets, resourcing needs, skills demands and pricing, empowering businesses to make decisions with confidence.

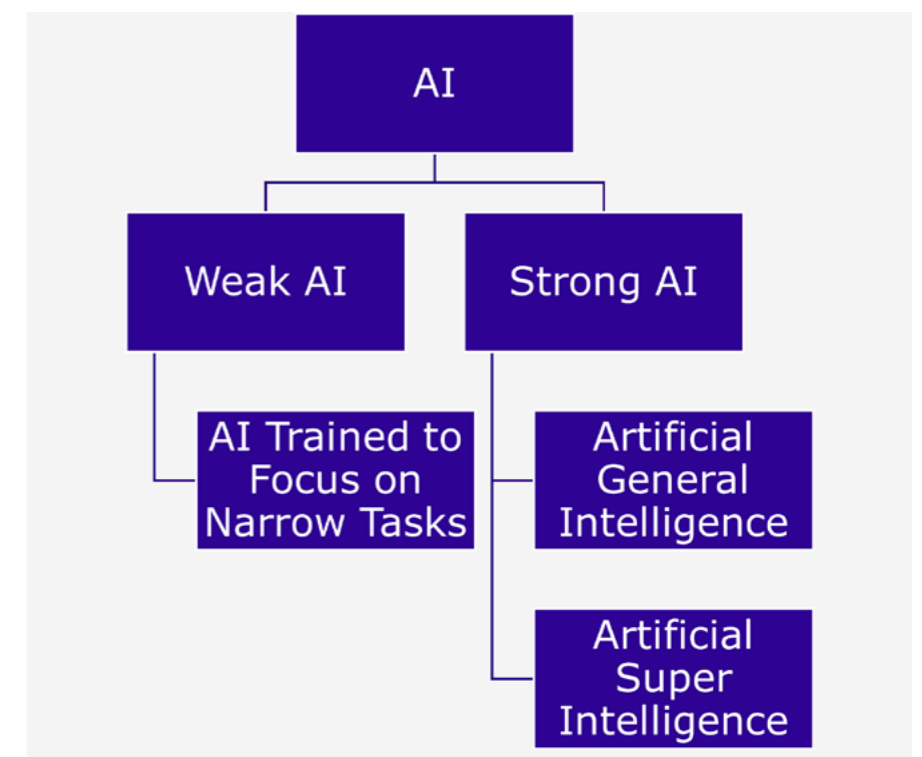
This enables organisations to stay ahead of the competition, anticipate market changes and adapt to dynamic customer demands.

Additionally, AI-powered virtual assistants and chatbots

are transforming customer service and support in knowledge businesses. These intelligent agents can provide instant, personalised assistance both inside the business and to its clients. With natural language understanding and machine learning capabilities, virtual assistants offer unparalleled access to support and knowledge, and have the potential to transform knowledge businesses in the future.

The forward path of the marine cargo surveying industry will be tied to the development of AI and future applications of AI, there can be no doubt about that. AI's ability to analyse vast amounts of data, learn from patterns, and support intelligent decision making is poised to revolutionise the way marine businesses work, enhancing efficiency, accuracy, and sustainability.

Before we look into one possible game-changing application of AI in marine surveying and





consulting, it's worth defining what we mean by AI, and what we do not currently define as AI.

### What is AI?

The term “artificial intelligence” is often ill-defined, and occasionally mis-defined, so it's useful to consider what AI is and it is not, at least at the time of writing this article.

Is AI a computer and algorithm driven system able to perform tasks that would require human intelligence? Is it machines that copy intelligent human behaviour or the simulation of human intelligence processed by machines? Is AI a set of systems that think like humans? Or is it systems that act like humans? Or systems that think and act rationally (in a way that humans may not always act)?

Or is AI a combination of machine learning based on user inputs and deep learning where the machine examines its own algorithms and adjusts them to get better at a task?

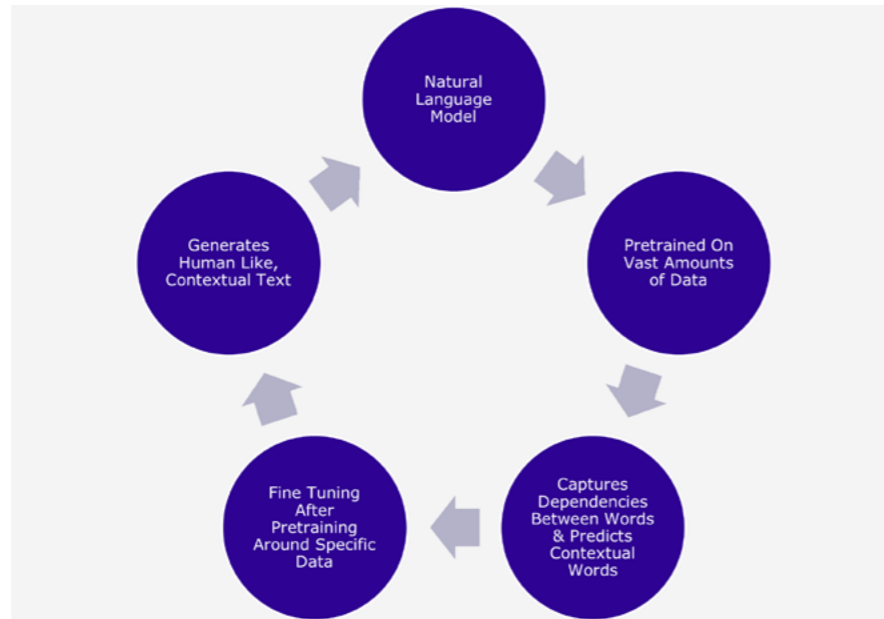
AI is all of this, depending on the application and the context of the application. We must be clear about what AI is not at this moment in time and for that we have to split AI into two broad groupings of “Weak AI” and “Strong AI”.

### Weak AI – Your Helpful Friend, Today

Weak AI refers to artificial intelligence systems or technologies designed to perform specific tasks or solve specific problems within a limited domain.

Unlike Strong AI, which aims to mimic human intelligence and possess general intelligence across multiple domains, Weak AI focuses on accomplishing well-defined tasks with a narrow scope.

Weak AI systems are built to excel in specific areas and



are trained or programmed to perform a particular function or set of functions. They operate based on predefined algorithms and rules and rely on data input to generate outputs or make decisions. These AI systems are task-specific and do not possess the ability to understand or generalise beyond their specific domain.

Examples of Weak AI applications are applications that provide speech recognition, image recognition, recommendation systems, virtual assistants and autonomous vehicles. For instance, voice-activated virtual assistants like Siri or Alexa can understand and respond to user queries within a limited context but they lack the comprehensive understanding and reasoning capabilities of human intelligence.

Weak AI systems are typically developed using techniques that leverage large datasets to learn patterns and make predictions or classifications within their designated domain of work. However, these systems do not possess consciousness or self-awareness and are not capable of independent thinking or understanding the broader context of their actions.

While Weak AI systems may

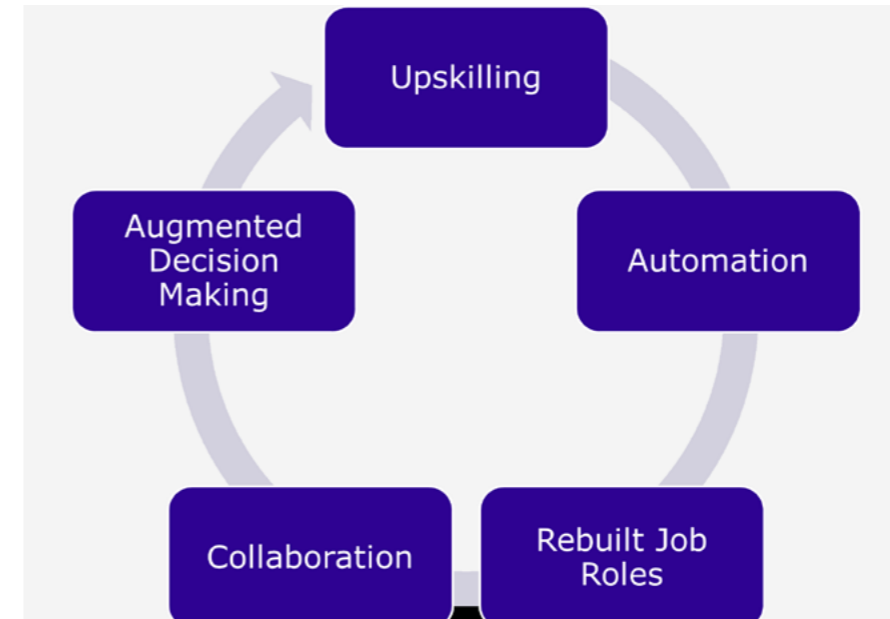
exhibit impressive performance within their specific tasks, they lack the flexibility and adaptability of human intelligence. They are designed to excel in well-defined and constrained environments, making them valuable tools for solving specific problems and enhancing productivity. However, they are limited in their ability to transfer knowledge or generalise their learnings to different domains.

### Strong AI

Strong AI, also known as Artificial General Intelligence (AGI) or human level AI, refers to artificial intelligence systems or technologies that possess the ability to understand, learn and apply knowledge across a wide range of domains and tasks at a level equal to or exceeding human intelligence.

Unlike Weak AI, which is designed for specific tasks, Strong AI aims to replicate human-like intelligence and cognitive abilities.

The goal of Strong AI is to create intelligent machines that exhibit consciousness, self-awareness and the capacity for independent thought. These systems possess the ability to understand natural language, reason, learn from experience, solve problems and adapt to new situations.



Strong AI seeks to mimic the cognitive processes of human beings and exhibit a level of intelligence that is indistinguishable from human intelligence, capable of autonomous learning and reasoning. It can understand and process information from diverse sources, make sense of complex data and apply knowledge to solve problems across various domains.

### Artificial Superintelligence

Artificial Superintelligence (ASI) is an additional strand of Strong AI and refers to a theoretical future state of artificial intelligence where machines surpass human intelligence across virtually all domains and tasks.

ASI represents a level of intelligence that exceeds human capabilities to such an extent that it is difficult for humans to comprehend or predict its full range of capabilities and implications.

ASI would possess not only the ability to understand and reason but also the capacity for unlimited learning, creativity, problem-solving, and adaptability. It would be capable of self-improvement, constantly enhancing its own intelligence and surpassing the limitations of its initial programming.

ASI would have an unparalleled ability to process and analyse vast amounts of data, make accurate predictions, and generate innovative solutions to complex problems.

The implications of ASI are profound and uncertain. Some argue that ASI could bring unprecedented advancements, leading to solutions for complex global challenges, advancements in science and medicine, and breakthroughs in technological innovation. However, the development of ASI also poses significant risks and challenges.

The impact on society, including job displacement, economic disparities and ethical considerations are subjects of intense debate. Safeguarding against the risks associated with ASI requires careful consideration of safety measures, transparency and ethical frameworks.

While still an ongoing pursuit, achieving Strong AI would have profound implications requiring careful consideration of its ethical, societal and philosophical impacts, leaving aside the obvious implications for all knowledge industries.

### Generative Pretrained Transformers – A Weak AI Making a Difference Now

We're not living with Strong AI at this point but Weak AI is everywhere. Almost every consumer smartphone application is a form of Weak AI, supporting human decisions by providing prompts based on the prior behaviour of the user.

A simple autocorrect function in a texting application is a form of Weak AI, and it takes little time to identify the other Weak AI that each of us uses every day.

However, the recent emergence of one particular application is especially worth investigation in the context of the immediate future of marine survey businesses.

One of the most prominent and intriguing emerging Weak AI applications is the Generative Pretrained Transformer, GPT.

These have been discussed in the pages of this journal before but it's worth digging into GPTs and looking at how they can support businesses now.

GPTs are artificial neural networks, pretrained on large data sets of unlabelled text and able to generate novel, human-like content.

In effect, the user asks the GPT to perform a task and the GPT produces content that responds to the question that has been asked via a natural language model.

Use of a GPT requires absolutely zero technical coding capability and access to a GPT is by a chatbot. Ask it a question – and in particular a detailed and complex technical question – and you'll get a complex and detailed technical answer.

GPTs at present produce astonishing detail in technical content. At a recent live demonstration of a GPT at the IIMS Conference, a GPT



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produced a detailed procedural plan for the loading of steel coils on to a vessel, and when secondary and tertiary questions were asked, the detail of the plan became even more impressive in real time.

The potential of that capability should be self-evident but it has to be balanced against the reality that GPTs do not possess understanding or reasoning capabilities and – at this stage of their development – they can act as support to decision-making and thereby free up technical expert time to concentrate on the reasoning element of decision making, the procedural piece having been generated by the GPT.

GPTs rely on statistical patterns learned from training data to generate text and their output is based on the statistical likelihood of certain sequences of words. If under trained they can produce responses that are grammatically correct but semantically incorrect.

However, further pretraining and then specific fine tuning can iron out that problem and there can be little doubt that the GPT application will become a disruptor in the same way that Google began democratising knowledge 25 years ago.

ChatGPT – one of several GPTs – was released in November 2022 with ChatGPT-4 released in March 2023. The latest version of ChatGPT takes images as well as text, and produces informational summaries from visuals and diagrams as well as text.

It has been shown to be capable of passing professional examinations at the level of the top 10 per cent of students in fields such as oncology, engineering and plastic surgery.

In April 2023, Microsoft and Epic Systems announced plans to provide healthcare providers with GPT-4 powered systems

to assist in responses to patient questions and with analysis of patient records.

Clearly, something is happening around the latest generation of GPTs and their ability to summarise and contextualise complex technical questions, and everybody in every consulting industry needs to be aware of these tools and their ability to support, impact and disrupt business environments.

Very clearly, the integration of GPTs into consulting-type businesses and their use as a procedural content generator at this point is something that all expert professions should take seriously and consider as they build their practices now and into the future.

## Five thoughts on AI in business

More generally, AI has the potential to transform the maritime survey business in numerous ways, offering opportunities for automation, collaboration, augmented decision-making, upskilling and changing job roles.

**Automation:** AI can automate repetitive and mundane tasks, freeing up human resources to focus on more complex and strategic activities.

By leveraging machine learning algorithms businesses can streamline repetitive workflows, improve operational efficiency and reduce errors.

Automation also minimises errors and accelerates processes, leading to increased productivity and scalability.

Obvious applications are the extraction of data from forms, management of invoicing and financial data the production of standard reports and data validation work, all of which take many, many hours of laborious work when done by people.

We'd do better freeing people from that kind of drudgery and put them into a position where they can bring their creativity to bear in the business.

**Collaboration:** AI technologies enable enhanced collaboration among teams and across departments. Intelligent chatbots and virtual assistants are an unbeatable source of rapid information sharing amongst a team and provide a fast and accurate platform for collective problemsolving.

Using a GPT in a team setting allows procedural plans to take shape quickly in real time and then frees the team to perform their actual task and get their expertise into play.

**Augmented Decision Making:** Machine learning algorithms can analyse vast amounts of data, identify patterns, and generate predictions or recommendations.

An obvious application would be that of scenario modelling in project cargo operations, where an AI would run several different heavy lift scenarios and simulations to quickly discard expensive or less effective options ahead of time.

That frees up hours of project time that can then be spent on more productive tasks, and also points up the truth that a machine is much more capable of performing this type of work accurately and quickly.

**Upskilling:** AI can support the upskilling and professional development of employees. Businesses can leverage AI-powered learning platforms to deliver personalized training, adaptive learning experiences and skill assessments.

This allows businesses to foster a culture of continuous learning and adaptability, ensuring that employees possess the necessary skills for evolving job roles.

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**Changing Job Roles:** AI will reshape job roles and create new opportunities, no doubt.

While automation may eliminate certain repetitive tasks, it also leads to the emergence of new roles that require human-AI collaboration.

Businesses can focus on leveraging human skills such as creativity, critical thinking, problem-solving, and empathy, which are complementary to AI capabilities. This encourages the evolution of job roles towards more strategic and value-added activities.

### Conclusion

In conclusion, AI in business has become increasingly prevalent and transformative across various industries.

AI technologies are revolutionising how organisations operate, make decisions, and engage with customers.

From automation and process optimization to data analysis and customer personalization, AI is proving to be a powerful tool that drives efficiency, productivity and innovation.

While the integration of AI in knowledge businesses brings remarkable advantages, it also raises important considerations.

Ethical concerns surrounding data privacy, algorithm bias and transparency must be addressed to ensure the responsible and trustworthy use of AI in marine businesses.

Striking a balance between the power of AI and the human touch in knowledge businesses is crucial to maintain the integrity and value of human expertise as the future unfolds.

**Jeff Wilson**  
Managing Director (UK)  
Van Ameyde Marine

## Supporting local seafarer welfare providers

THE Mission to Seafarers, the Flying Angel or the “Seaman’s Club”, as it’s fondly referred to by seafarers, has been operating in Australian ports for over 100 years. In fact, services in Brisbane have just started their 132<sup>nd</sup> year of operation, having commenced in 1892.

Twenty-eight Australian ports have a Mission to Seafarers on their doorstep, the vast majority of which run on a shoestring budget and rely heavily or entirely upon volunteers to underpin their services to seafarers.

The future survival of many of these centres hang precariously

by a thread as they walk a thin financial tightrope, now coupled with a depleted volunteer base and limitations on services, all brought on by the pandemic.

In conjunction with these limitations, how seafarers take shore leave, if at all, and how our maritime community provides support are all impacting the sustainability of these services that are widely recognised as being vital for the physical, emotional, and spiritual wellbeing of seafarers.

The Maritime Labour Convention (MLC2006) captures the need for seafarer



support services and the Australian Government is fully committed to this requirement.

A 2023 Federal Government survey, which indicated Australia’s significant decline in community engagement, has the Assistant Minister for Competition, Charities & Treasury championing the Building Stronger Communities initiative. Whether it be involvement in a sporting team, membership of a large community organisation, such as an RSL or Lions club, or volunteering for a charity, Australians have become more “me” focussed and less “we” focussed.

This decline in community engagement, which accelerated during the pandemic, has impacted a broad range of Australian industry sectors, including education, health care, your local community “not for profit” and the seafarers centre in your local port.

This widening gap in volunteer resources has placed increased demands on the already stretched generosity of employees, both paid and voluntary, and is ultimately impacting the level of services that can be provided to the seafarers.

While the world ashore is now more connected than ever, seafarers are now more isolated physically, emotionally and culturally as they juggle a demanding role in a challenging and diverse work environment for periods up to 11 months. This is evident to all those working on the “coal face” in the maritime industry.

Whether you’re a corporation or an individual, volunteering provides benefit that can’t be measured in dollars. Whether it be a sense of community, just “giving back”, a personal achievement that can improve your own wellbeing or a significant step in supporting your corporate

social responsibility goals, this tiny sector in our maritime community needs assistance to survive.

As members of a port community, your knowledge and experience of the port and its operations, along with the interaction with the seafarer in a professional capacity, can be pivotal for your local seafarer’s centre.

Whether it be Mission to Seafarers or Stella Maris, we encourage you to consider how you can contribute as an individual or an organisation and reach out to see how you can assist.

Be prepared to be welcomed with open arms.

**Capt. Ross Nicholls**  
President, Mission to Seafarers  
Brisbane  
Chair, Port Welfare Committee  
Brisbane





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