Concept of Operations

Queensland Blue Water Review

Revision History

Revision Date	Version No.	Author	Description of Change/Revision
21/05/2019	0.1	Campbell Darby	CONOPS Strawman
05/06/2019	0.2	Campbell Darby	Updated draft following Townsville Working Group Meeting
13/06/2019	0.3	Campbell Darby	Updated draft with feedback from Director, QFES Knowledge Hub
17/06/2019	1.0	Campbell Darby	Final Version

Table of Contents

1 Introduction and Background

1.1 In August the Queensland Government announced that a review of the Volunteer Marine Search and Rescue sector (the Blue Water Review) was to be undertaken. This followed numerous rank and file members of the organisations expressing significant disquiet to the Minister for Fire Emergency Services about issues within the sector. The Commissioner of Queensland Fire and Emergency Services (QFES) commissioned a Review that was handed down in December.

1.2 The review observed that there were a range of issues impacting the sector creating a less than optimal service to the boating public and an operating environment that had risks for the public, volunteers and Government. Poor governance practices, lack of commonality and consistency, limited interoperability and poor strategic planning had resulted in volunteer search and rescue (SAR) arrangements that were inefficient, and in some locations ineffective.

1.3 While both organisations generally worked well together having two service providers meant major sponsorship opportunities were lost, purchasing power through efficiencies of scale and equipment commonality were missed, and from the boating public's perspective the system was disjointed. Crucially, the sector when viewed from a perspective of providing state-wide capability was seen to be on an unsustainable trajectory due to financial pressures and diminishing volunteer capability.

1.4 A working group (WG) comprising stakeholder members and members of both volunteer marine rescue organisations was established. The WG was charged with examining the observations in the Blue Water Review and providing recommendations to Government on a way forward to address the issues in the sector.

1.5 The WG has recommended that a single new entity be established to provide maritime safety services to the Queensland boating public.

2 CONOPS Intent

2.1 This CONOPS articulates the mission and role of a new Queensland maritime rescue organisation and describes the future capabilities required to achieve these roles. It does so through the lens of the anticipated operating environment (and any constraints and limitations), and the anticipated future authorising and regulatory environment within which the sector operates. It provides the link between the outcomes required and the capability necessary to achieve these outcomes. In the future capability gap analyses and maritime risk assessments will be undertaken on the basis of this CONOPS.

2.2 In simple terms the CONOPS uses an "Ends, Ways, Means" approach to the question of volunteer marine rescue (a schematic is at Figure).

- What do we have to achieve (the ends);
- How will we achieve it (the ways);
- What resources/assets do we need (the means); and,
- What are the constraints and risks.

2.3 In order to remain relevant to internal audiences and external stakeholders the CONOPS is not a static document. It should be revised and renewed as circumstances change and the maritime operating environment evolves. In this iteration the CONOPS will be agreed by the Blue Water Review WG and approved by the QFES Board of Management. Future iterations will be determined and agreed by the future governance arrangements.
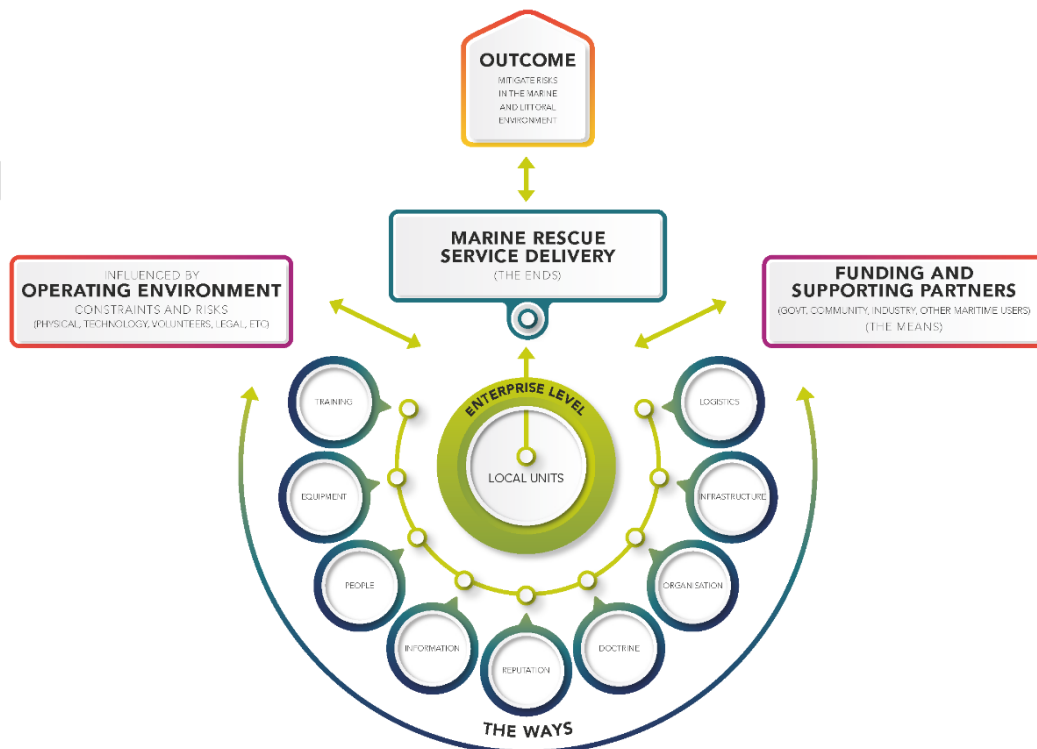

Figure 1 - Intent of the Concept of Operations

3   Scope and Definition

Scope

3.1   This CONOPS relates to the search and rescue and general support provided to those in or near the maritime environment by volunteers. While there are relationships and interactions with other volunteer groups working in the estuarine and surf (termed 'white water') environment this CONOPS is primarily restricted to the blue water environment and adjacent littoral areas. In describing capability, the CONOPS does so in generic functional terms, not in terms of assets such as vessel types or communication systems. Capability in this CONOPS is defined as '*the collective of fundamental inputs to enable the development and use of an operational effect to reduce the harm to those in or near the marine environment*'[1].

Role Definition

3.2   The glossary describes common terminology used in this CONOPS. However, it is worthwhile describing the broad scope of activities in which the sector engages. The roles are interrelated and mutually supportive. While mounting a SAR response is the key raison d'etre of the organisation the other roles are important from their potential to mitigate the risk of loss of life.

- *A search and rescue (SAR) response.* A serious event where safety of life at sea is an imminent possibility - either tasked by the SAR tasking authority or self-tasked by the volunteer rescue organisation in the first instance but meeting the criteria where formal SAR authority tasking is expected.
- *Maritime assistance.* Support to the boating or on-water public through: the provision of a communications network for information and assistance; and on-water response in the advent of misadventure generally due to technical failure, accident/illness or human errors. A response is required to return the person(s) to a place of safety or take action to minimise property or environmental damage.
- *Emergency situation support.* Support to non-maritime Emergency Service agencies in incidents on-land, in the littoral zones or at sea where the skills and capabilities of the organisation can value add (medical evacuations, emergency transport from isolated localities, emergency communications back-up, marshalling and guiding the public etc).
- *Community support and engagement.* Supporting community events or initiating activities to build profile and provide on-water safety education opportunities. Includes such activities as supporting on-water events, regattas, expositions, charity events, environment group activities and maritime related industry shows.

---

[1] This aligns with the QFES definition of Capability.

- *Non-crisis support.* Provided to Government agencies or private organisations where it is not excessively resource intensive and does not impact operations or training. Utilises the unique capabilities of the organisations to provide support to other organisations for roles such as transport, data gathering, environmental surveys, on water training support etc.

3.3   Annex B further describes the scope of activities responding to distress incidents on water.

Key Assumptions

3.4   This CONOPS makes a key assumption that the volunteer marine SAR (MSAR) sector will transition to a single new entity. Other key assumptions are:

- QFES remains the Department delivering the funding to the sector - and therefore derives its authority through financial accountability to ensure performance in delivery of services and public value.

- Volunteers remain integral to the MSAR System - therefore training, supporting and growing the volunteer base is essential.

- Technology in the maritime environment will continue to evolve (e.g. communications systems and methodologies will undergo a step change; technology-based vessel locator systems will become ubiquitous; and, computer and virtual-reality based training will expand). The CONOPS (particularly organisational structures and future capability) must be aspirational, flexible and adaptable.

- Volunteers and the community they service are inextricably linked.

- Governments desire for sector reform will persist.

- In its future state the new entity will adopt a risk-based approach to ensure capability is appropriately distributed within the constraints of remoteness and population density to meet community needs.

4   Mission, Objectives and Outcomes

Mission

4.1   It is important that the maritime rescue entity maintains a high public profile and strong community support. A mission statement that resonates and is easily understood by the public is key. The Queensland maritime rescue organisation's mission is "*Saving lives at sea and supporting those on or near the water*". This statement encompasses the spectrum from time critical SAR tasking, through support to the general boating populace, and non-crisis on-water support to private and government organisations.

Goal and Strategies

4.2   The goal of the Queensland maritime rescue organisation is to *"Provide a state-wide boating safety network, able to respond to on-water incidents, educate the boating public, and contribute their unique skills to support emergency service agencies during disaster and emergency events, and other organisations for routine tasks"*.

.   The strategies to achieve this goal include:

- Maintain a base of volunteers that are highly competent, responsive and well regarded for their professionalism and employ assets and equipment that is reliable and fit for purpose.
- Contribute to improving boating safety knowledge and risk mitigation through community education and engagement with consistent state-wide messages.
- Build an organisation that is transparent in decision making, focussed on the boating public and cultivates productive relationships with all partners and stakeholders.
- Safety and risk awareness is inculcated at all levels in the organisation.
- Develop outward looking communications networks and community interfaces that are simple, consistent and efficient; and internal information networks that employ appropriate technology to enhance effectiveness, commonality, and interoperability.
- Provide assets that are geographically distributed state-wide so as to provide a level of response capability that is commensurate with the risk (likelihood vs consequence).
- Develop strategies to better recognise, enable and support volunteers.
- Embed good governance practices which underpin a sustainable organisation.

Outcomes

4.3   Government has a reasonable expectation that an outcome of any funding increase will result in increased public benefit. The public as service users and tax payers will expect an improved service level. Outcomes attributable to the maritime rescue service goals are below. Methods of assessing the success of these outcomes are also suggested:

- The organisation has mounted effective responses to maritime SAR and on-water requests for support. *Measured through historical response data, routine activity reports, debriefing and post activity reports for major incidents.*
- Government, service users and stakeholders have justifiable confidence in both the operational and administrative competence of the organisation. *Measured through*

effective strategic, operational and future capability plans, financial reporting and compliance, as well as qualitative measures.

- The organisation has strong brand recognition and it is viewed positively as the provider of essential search and rescue support, localised marine area knowledge, and at the local engagement level, the 'go to' people for community-based recreational boating safety. *Measured through such things as increases in log-on/log-off statistics, on-water incidents from MSQ reporting, attendance at education activities promoting boating safety, sponsorships and community satisfaction surveys etc.*

- Volunteers are confident in the organisation, feel they are well supported and consider they undertake activities that are fulfilling. *Measured by changes in the number of volunteers and their demographic, their tenure in the organisation, numbers qualified, numbers of reports of personal redress or grievance and workplace culture and satisfaction surveys.*

- The community and the boating public retains strong links with the local constituents of the organisation. *Measured through fundraising success, attendance at local community events, contribution to local disaster planning.*

- The organisation contributes to community safety more broadly and this is recognised and utilised by the Emergency Management system. *Measured through exercises/activities with other ES agencies, ES requests for support, embedding in Local Government Disaster Management groups and local disaster plans.*

- Asset maintenance, management, and renewal is cost effective and timely. *Measured by a costed and sustainable plan and subject to external audit, and compliance with AMSA vessel requirements.*

5   Current Operating Environment

5.1   The physical operating environment for maritime rescue in Queensland is complex, diverse and challenging. With a benign climate, expanses of relatively sheltered or semi-sheltered waters and numerous islands and reefs the attraction of boating is obvious. This attraction however provides its own challenges. For example:

- The relatively sheltered waters from the Broadwater to Bribie Island has very high boating numbers with a commensurate increase in the risk of collision.
- Inner reef waters and the attraction of water-borne recreational activities entice boaters to travel distances offshore in small vessels that may be considered imprudent.
- Remote far northern coastal areas attract the more intrepid recreational boaters, but some have limited experience and little safety redundancy, in an area where there is minimal immediate response.
- Bar conditions in some of the more popular boating areas can be treacherous for those with limited experience (e.g. Wide Bay bar, Jumpinpin, Caloundra etc.)

5.2   For many people recreational boating is easily accessible and relatively inexpensive. Queensland has a strong boating culture with recreational boating numbers increasing significantly faster than population growth. Anecdotally the level of boating safety knowledge is poor, and awareness of the service provided by volunteer rescue units is relatively low. Reliance on technology (and sometimes technology that is not always appropriate in the maritime environment) provides some in the boating community a level of on-water confidence and comfort that is not warranted. And as societal cultures change the risks of accidents from waterborne recreation activities increases.

5.3   Unique to Queensland are the large numbers of populated offshore islands and the marine rescue organisations fill an important role supporting the residents of these islands. Populated remote islands have unique challenges with large numbers of the residents regularly undertaking long sea journeys to the mainland or other islands such as in the Torres Strait and in the Gulf of Carpentaria. Offshore sea conditions are also variable leading to a variety of vessel types that individual units consider best suited to their sea states.

5.4   The supporting environment for marine rescue services has evolved in an ad hoc manner. Across the current rescue organisations there is a mix of processes, systems and technology (especially radio communications) that challenges an integrated approach. The management and ownership of supporting infrastructure (buildings, pontoons, launching ramps, radio towers etc) varies between direct ownership, leases, and permitted occupancy arrangements. All levels of government and many private organisations have an interest in much of the supporting infrastructure.

5.5   There are many positives for the organisation to leverage its future position. The community is highly supportive of volunteers and their contribution, and volunteers are strongly motivated and enthusiastic about providing boating safety services. Government and government agencies also recognise the value of the services provided by the sector and are determined to see the sector move forward to a sustainable and effective footing. Technological advances combined with the reducing cost of technology will provide continuing improvements in on-water safety for both the boating public and marine rescues service providers.

5.6   The key implications of this environment scan are twofold. One relates to risk and the need for a consistent and integrated state-wide risk framework. The geographic diversity of the State means that the capability to provide maritime safety in all regions inevitably differs and the future capability distribution should reflect the risk involved.

5.7   While the populated south east corner is well served by maritime rescue capability to support the large boating community the numbers of on-water requests for help is commensurately high. There is an inverse relationship between vessel density and population in remote areas - while vessel density in remote area decreases, the risk remains relatively constant because of the paucity of emergency response assets in these areas due to the limited population base. Therefore, 'expectations' of a timely emergency response in remote areas must be carefully managed. Future marine rescue capabilities must be commensurate with the risk in remote areas and tempered by cost practicalities.

5.8   The second implication is related and recognises that greater consistency and commonality in service provision and capability (especially assets and equipment) will better support the boating public and improve effectiveness. There is also the potential for greater efficiencies and financial gain through commercial associations and the buying power of a single entity.

6 Organising Framework

6.1   This section outlines the links and interaction between the various agencies and elements that influence and enable the new organisation to provide maritime rescue services.

Stakeholders and Partners

6.2   The following organisations are fundamental to the sector's undertaking.

- **Executive Government**. Supports the sector though approving financial allocations and setting/approving the policy settings to facilitate the strategic operating environment.

- **QFES**. Accountable Department. Oversights the operation of the sector and manages the resources allocated to the sector to ensure the public monies are used appropriately and in accordance with Government priorities. Draws its authority from the Financial Accountability Act and Disaster Management Act.

- **Queensland Police Service (QPS)**. The State tasking authority for Search and Rescue as agreed at the national level. Maintains strong links with the sector, assists with SAR training and exercising, reimburses fuel costs for activities where they task sector assets.

- **Australian Maritime Safety Authority (AMSA)**. The national marine SAR authority coordinating major SAR events or those offshore in coordination with State Police services. AMSA is the commercial vessel regulatory authority setting vessel, equipment and crew standards.

- **Maritime Safety Queensland (MSQ)**. Responsible for improving maritime safety through regulation and education. Responsible for boat user licenses.

- **Queensland Recreational Boating Council**. Represents the views and concerns of the boating public through affiliation with boating/sailing clubs.

- **Queensland Ambulance Service (QAS)**. Closely linked to the sector through informal agreements to provide medical evacuation services from offshore islands and vessels at sea. Not a formal tasking authority.

- **Local Governments and Local Disaster Management Groups**. Should develop strong links in order to facilitate the sector's support with tasks appropriate to their capabilities during emergency or disaster events. Having strong relationships Local Government can also be a key player in supporting the profile of units in their area.

- **Air Services Australia**. Responsible for aviation rescue firefighting rescue services therefore links with maritime rescue where airport approach corridors transit across the water.

6.3   Other partner and supporting organisations or groups include;

- Queensland based volunteer associations
- Australian Skills Quality Authority (ASQA)
- National Volunteer Marine Search and Rescue Committee
- Vessel Traffic System Communications centres (operating under MSQ)
- Marine Radio Moreton Bay
- Service clubs and community groups
- Fire and Rescue Service (Queensland)

- Rural Fire Service (Queensland)
- State Emergency Service
- Surf Life Saving Queensland
- Bureau of Meteorology
- Australian Defence Force
- Australian Border Force
- Retrieval Services QLD (including Community Helicopter services)

Authorising Environment

6.4   The formal legislative and regulatory framework for the sector is comprehensive and the specific Acts are shown at Annex A.

6.5   Authorised under an Inter-Governmental Agreement on National Search and Rescue Response, QPS are the formal SAR tasking authority within the State. Other agencies (particularly QAS) may seek assistance directly through volunteer marine rescue units but for events where safety of life at sea (SOLAS) is at imminent risk QPS should be involved. Units retain the autonomy to respond immediately to any potential SOLAS events prior to any formal QPS tasking keeping QPS informed at the earliest opportunity.

6.6   Maritime search and rescue service providers operate their assets primarily under National Law. Administered by AMSA it specifies standards for the issuance of;

- Certificates of Competency (crew standards of training);
- Certificates of Service (vessel and equipment standards); and,
- Certificates of Operations (the crew can operate the vessel within the parameters of the onboard safety management system).

6.7   The sector also operates under various State laws that specify the duty of care requirements for paid and volunteer workers, the reporting and recordkeeping requirements as associations, and financial obligations more broadly.

6.8   QFES as the accountable agency charged with managing the public funds attributed to the sector has a strong oversight role, ensuring public funds are spent appropriately and supporting the sector. In anticipation of a move to a single entity QFES' future role will encompass strategic policy and planning, governance, strategic partnership management, and accreditation of units.

7   Organisational Structure

7.1   The organisational structure and governance arrangements must support the objectives of the organisation and build the principal attributes that are seen to be key to the success of the organisation. To achieve this aim, the structure is built upon the following organisational principles;

- operate efficiently minimising unnecessary administrative burden;
- demonstrate clear lines of accountability and responsibility;
- have the capacity and oversight authority to ensure the Governments investment in the sector is appropriately targeted and achieves the public benefit desired;
- have a mechanism for volunteer (rank and file) members to have their feedback or concerns aired; and

- permit an appropriate level of autonomy (especially for timely operational responses) while operating within an agreed high level and common framework that allows adaptability and ongoing improvement.

7.2 Figure 2 represents an organisational framework that supports the principles above. The following should also be noted:

- The Maritime Rescue Service Board will comprise members of the sector (both elected and selected), appointed independent members and representatives of the QPS as the State SAR authority.
- Units (deemed to be AVCGA Flotillas and VMR Squadrons under previous structures) may be incorporated as a single association or a number of small units may be aggregated into one incorporated association.
- QFES Regional Authorities and units in their regions will maintain a partnering relationship. This will ensure visibility of capability, and appropriate utilisation of units and their assets during disasters. It will also allow regional authorities to assist with local issues impacting on a Unit's ability to carry out its role.
- Technical sub-committees (such as capability, finance, training etc) drawing on volunteer members' and supported by QFES will provide advice and support to the Board and to the Assistant Commissioner Maritime Rescue Service.

Figure 2 2 - Proposed Maritime Rescue Service Organisational Structure

8   Organisation's Attributes

8.1   Envisaging success, the future marine search and rescue organisation will have the following attributes:

- The organisation is customer (the boating public) focussed and retains strong local community links.
- A single organisation with capable vessels, appropriately located, operated by skilled, motivated and well-supported volunteers.
- A values-based organisation where respect, integrity, teamwork and trust are attributes deeply inculcated.
- A deep and intuitive base of maritime experience and skills.
- The organisation has strong brand identity through which it is able to leverage positive public support (as recognised members of Queensland's emergency services).
- A state-wide profile that permits economies of scale (in purchasing) to deliver value for money in its operations and capability enhancement/development.
- State-wide, units are effectively integrated and interoperable for systems, people and processes and closely linked to relevant government agencies (QFES, QPS, QAS, MSQ and AMSA). From the boating public's perspective, the system is "seamless".
- There is effective command and coordination at all levels, supported by efficient and responsive information management and communications systems.
- The organisation provides added public value through being able to contribute their skills and capabilities to assist in other situations including emergency events (such as for example, evacuating people and radio communications support during natural disasters).
- Government has confidence in the level of public benefit provided and see the resources allocated being expended effectively leading to a sustainable funding base.

9   Capabilities Requirements

9.1   Previous paragraphs outlined five broad categories of activities undertaken by the sector;

- Search and Rescue.
- Responding to general maritime assistance incidents.
- Supporting other emergency service control agencies in emergency/disaster situations.
- Community support and education.
- Routine (non-crisis) support to other agencies.

9.2   To undertake these activities a range of capabilities are essential. These can be described as;

- **Core capabilities**. These are operational in nature, public facing and are essential for the organisation to fulfil its role.
- **Enabling capabilities**. These are administrative or business in nature and supports frontline staff and volunteers delivering the core capabilities.

There is no hierarchical relationship between core and enabling capabilities. They are indivisible in their importance to the effective functioning of the organisation. Supporting both core and enabling capabilities are the fundamental inputs to capability. These are inputs (or elements) that when combined and integrated give the organisation the holistic capability to achieve its outcomes.

9.3 **Core Capabilities**

9.3.1   Incident Management capability. This capability includes the functions of; command, control, coordination and communication; intelligence and information flows (C4I). This permits effective organisational planning and response; for example, identify and initiate responses to incidents; ensure assets are directed and managed appropriately; and collect data and conduct post-activity reviews for example.

9.3.2   Search and Rescue Capability. The operational capability to respond in a time critical way to SOLAS incidents with on-water assets, undertake on-water liaison with tasking authorities and other search assets and participate effectively in search procedures.

9.3.3   Incident Response. The operational capability to respond to; maritime distress situations, initially less time critical where misadventure has left the person(s) disabled or in need of general on-water assistance; and, other near-water emergency situations supporting other agencies (e.g. medical evacuations).

9.3.4   Build safer communities. The capability to develop programs and activities in concert with local communities, service users and Government Agencies to reduce boating risks through engagement and education; and, support other emergency service agencies in reducing community risks.

9.4 **Enabling Capabilities**

9.4.1   Governance. The capability to set high level priorities and drive the vision and outcomes. Includes establishing high level policies, monitoring performance, and identifying and responding to corporate or enterprise risks.

9.4.2   Strategic planning. The capability to establish long term realistic plans for future requirements and direction that are innovative and adaptable to changes in the operating environment. Can be part of governance but it is a capability crucial to the sustainability of the organisation.

9.4.3   Resource management. The capability to manage on a day to day basis all elements that comprise the holistic capability. People, vessels and their maintenance, technical systems, infrastructure, logistics skills, contractor management.

9.4.4   Business support. Includes the capability for data capture, information transfer, financial management, technical and logistic planning systems, human resource management systems, and legal support.

9.4.5   Partnership management. Manage the key partnerships that through their support enable the service provision - Executive Government, communities, Boating Associations, Sponsors etc. Includes strategic communications to shape the environment, public information campaigns, and brand management.

9.5 **Fundamental Inputs to Capability**

The following elements are 'fundamental inputs' to the capability hierarchy for Queensland maritime rescue. There is obvious crossover between some capability descriptors and elements that are shown as comprising that capability. These capability inputs are crucial to the organisation's operations.

Capability Input	Elements *(i.e. the capability to manage, undertake, provide or develop…)*
People	Volunteers, paid employees, experienced, diverse, motivated. Maintenance of an intuitive maritime skills base.
Organisation	Leadership, accountable hierarchy, stakeholder and volunteer connection, decision making transparency, modern constitution.
Information	Operating area knowledge, boat registration data, incident data, lessons learnt information and dissemination, Volunteer call out data, operational readiness/serviceability information by region and state, capability data search/mine.
Support	Agreements with industry or user groups. Property/infrastructure, lease arrangements, maintenance contracts. Legal coverage for operations, protection for volunteers, building/vessel/3rd party insurance, legal recognition, employee protection for volunteers, incorporated association management.
Training	Standardised, accredited, professional, relevant, accessible. Utilise synergies between units and like organisations. Virtual/on-line systems. Collective training with/between units and other agencies.
Equipment	Vessels fit for purpose, in-survey, reliable communications systems, communications towers/repeaters, automation of data and tracking, information support systems. Includes building, plant and equipment (Vehicles, trailers, pontoons etc).
Documentation	Charter of Operations, operating procedures, regulatory certifications, human resource procedures and records, operating logs, records of incorporation.
Identity	Clear and unambiguous, single vision, wholly volunteer supported, state-wide, brand management and protection.

10 Operating Doctrine

10.1   The following operating principles are established to support the diversity of roles that volunteer maritime rescue units are likely to undertake. It recognises that while QPS are the responsible MSAR authority in most cases any MSAR will have multiple agencies involved in different ways. It also recognises the autonomy of units in providing non SOLAS maritime assistance. These principles also cater to the diversity of capability, operating areas, and operating parameters that exist across the state. Nothing in any of these principles diminishes the overarching responsibility of the vessel's skipper for the safety of the crew and the vessel.

10.1.1   *Establishing Priorities.* Search and rescue to prevent loss of life at sea remains the organisation's prime role. While activities that support other agencies provide valuable at-sea experience they should not be undertaken if there is the possibility of a significant reduction in the capacity to respond to SOLAS incidents.

10.1.2   *Risk Culture. A strong and consistent risk approach must be an embedded culture.* Risk assessments prior to any activity are a given and highly developed risk awareness during all activities a must.

10.1.3 People over property. In undertaking MSAR the priority is the safety of the person(s) not the property unless the distinction is indivisible (for example, it is safer to tow the vessel with the passengers onboard than transfer them to another vessel).

10.1.4 Autonomy in responding. When aware of any possible time-critical MSAR event units should commence appropriate actions in advance of any formal tasking from QPS advising the tasking authority of the actions underway at the first available opportunity. In all other situation's units retain the authority to respond or support in accordance with their own procedures.

10.1.5 Value for money/public value operations. In the manner in which they undertake activities units should be conscious that they are expending tax payers' money. Activities should be able to demonstrate value for money in accordance with the mission of the sector and take reasonable steps to minimise costs (e.g. proceed at economical speeds where appropriate, vessel care etc).

10.1.6 Coordination and interoperability. Units should look for opportunities to build local level interoperability, coordinate activities and training to make the most effective use of resources and where necessary be prepared to move or share assets and/or people between units to ensure appropriate and ongoing operational response coverage.

10.1.7 Operational Readiness. Understanding state-wide operational readiness and capacity will be important for ongoing sustainability. A status report will provide visibility to senior managers and regional commanders. Units will be asked to report by exception on any of degradation of their readiness.

10.1.8 Training. Adherence to common training curriculum and standards is a must. Opportunities for coordinated or collective training both internally to the maritime rescue organisation and with other agencies is both efficient in resource use and broadens the organisation's overall capability. Australian Quality Training Framework (AQTF) alignment and endorsement should be pursued where appropriate.

10.1.9 Education and safety campaigns. There will be consistent messaging for state-wide education and safety campaigns - where appropriate safety campaigns should be conducted in concert with agencies such as Maritime Safety Queensland.

10.1.10 Reporting of negligence. Boating public who repeatedly seek the general (non-SOLAS) assistance of the organisation due to their own negligence (out of fuel, aground etc) should be reported to the authorities.

10.1.11 Communicating with the Boating Public. Opportunities to streamline communications services will be pursued (includes radio communications, mobile telephone, hand held device applications etc) The aim is to both reduce the impost on volunteers and improve the service to the boating public through frequency rationalisation, coordination and watch sharing in units, and simple, accessible non-radio communications technology.

10.1.12 Memorandum of Understanding for Services. Where State agencies regularly seek the support of the sector (such as QAS) an enterprise-wide level MOU will be developed between the maritime search and rescue organisation and the relevant agency. Units should develop MOUs with local groups regularly seeking to use their services.

10.1.13 Grouping of Units. Subject to the desires of the units involved, some units where geographically convenient, may be combined into a single administrative unit as a way of minimising the administrative overheads.

10.1.14 Operations during transition. In the transition to a new organisation until a mature state is achieved an overriding principle will be to maintain the current level of capability and local community links.

11   Constraints and Risks

11.1   There are numerous constraint and potential risks impacting the sector that must be either accommodated within the future operating model or mitigation measures enacted. They include:

- Highly divergent levels of capability between units across the State.
- Remote expanses of the State with little or no volunteer maritime rescue service coverage.
- Recruitment and retention of volunteers is a challenge.
- Vessel costs or vessel refit costs are growing faster than inflation and the fleet is generally ageing with little vessel commonality.
- Some units and localities have no capacity fund raise from the local population.
- A radio communication system (including repeaters and towers) that is variable, inconsistent and ageing.
- Minimal integration of systems and processes between units.
- AMSA regulatory requirements that can be taxing for small units.
- Large variances in the arrangements for building and other infrastructure leases or ownership.

11.2   Central to the strategic plan of the future entity will be an effective risk framework and risk assessment guidelines. A risk register to cover both enterprise level risks and operational risks will be required. This will draw on the experience of operational units for operational risks, and for enterprise risks, the experience of those appointed to the Maritime Rescue Services Board.

12   Reporting and Review

12.1   As a measure of success and to support continued funding a strong evidence base of activities and response availability will be compiled. Much of the data already collected on requests for assistance, radio calls etc will be continued. Metrics will be determined to seek more detail on incidents that are deemed to be serious and/or noteworthy (especially where the lessons can be applied across the whole organisation). Furthermore, an activity-based reporting matrix will be developed so that non-boating support activities can be captured.

12.2   Units will provide an annual report which details their activities. It will also provide a capability statement that includes such things as:

- Vessels: for example: type/length/engine type, nominal crew numbers, role/operating area, next survey, next significant maintenance activity. Any special capabilities/equipment. Vessel is fully/partially/non-operational? New vessels coming online and timeframe.
- Volunteers: Numbers of trained crew, numbers of Coxswain, increase/decrease from last period.
- Other major equipment acquired over the period.
- Current financial state (including committed funds).

12.3   At the unit level regular documented internal audits are to be conducted and an annual program of audit should be developed. In some instances, it is appropriate for parts of the audit to

be carried out by competent third parties. Reports should be kept of each internal audit including issues found and actions taken to improve the system. Significant issues that may be common to others should be raised through the system. The program should include, but not be limited to;

- *Vessel(s)*. Audit of vessel condition against AMSA requirements, regular checks of all equipment, maintenance programs etc.
- *Safety Management System*. Regular audits of risk register. Risk register must be reviewed following any reported vessel incident. Review of each element of the SMS within a -month period.
- *Operational Safety.* Record of safety drills, and any modifications to safety procedures.
- *Crew Competency*. Regular crew member checks and audit of crew training records and assessments.

12.4   In its mature state the sector as a whole will be subject to a number of high-level review processes aimed at ensuring its continued improvement and identifying any enterprise level risks. These reviews may be part of the internal QFES Audit Plan. Or alternatively the sector may be subject to examination by the Public Safety Business Agency, The Queensland Auditor General or the Inspector General of Emergency Management.

Annex A

Relevant Legislation and Regulations

- *Marine Safety Queensland Act (2002).*
- *Transport Operation (Marine Safety Act) (1994) Qld and Regulations (2002).*
- *Marine Safety (Domestic Commercial Vessels) National Law Act 2012(Cwlth) (Harmonised in QLD through the Marine Safety Domestic Commercial Vessel National Law Application Act 2016).*
- *EX – Marine Safety (Emergency service vessels & crew) Exemption (AMSA EX24).*
- *Inter-Governmental Agreement (IGA) on National Search and Rescue Response Arrangements (2012).*
- *Work Health and Safety Act.*
- *Associations Incorporation Act (1981) and Regulations (1991).*
- *Disaster Management Act (2003) and Regulations (2013).*
- *Financial Accountability Act (2009).*
- *Criminal Code Act.*
- *Fire and Emergency Services Act (1990).*

Annex B

Activities

Marine search and rescue incidents may include but are not limited to:

- A situation where the master of a vessel believes the vessel is in grave or imminent danger.
- A vessel that has suffered hull damage and is in danger of sinking.
- A vessel that is sinking, with its passengers and crew abandoning ship.
- A vessel that has suffered mechanical failure, equipment damage, can no longer maintain a desired course and is drifting or has become subject to the vagaries of wind and tide.
- A vessel containing injured or sick persons.
- A vessel where the person in command and responsible for safe navigation is injured, or incapable, and no other person on board being able to bring the vessel back to safety.
- A vessel that has run aground and cannot free itself.
- An aircraft that has crashed or has had to make an emergency landing on the water.
- A person or persons who have fallen overboard from a vessel.
- A person or persons who have been swept out to sea or are in difficulties in the water.
- Medical evacuation of a person or persons from islands or shore locations which other land.
- vehicles or where a boat evacuation is more appropriate than by aircraft.
- Medical evacuation of person(s) from vessels unable to enter port or harbour.
- A lost or overdue vessel or persons on water.
- Responding to EPIRB or other marine distress signals.
- Assisting other emergency service agencies during disaster events as requested.

Glossary