Irish Coast Guard: Value for Money Review

Final Report

April 2012

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Irish Coast Guard:

Value for Money Review

Final Report
April 2012

Prepared by Fisher Associates
on behalf of

Department of Transport, Tourism and Sport, Ireland

Document Control

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<th>Details</th>
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<td>Draft Report</td>
<td>15th March 2012</td>
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<th>Meaning</th>
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<td>AAIU</td>
<td>Air Accident Investigation Unit</td>
</tr>
<tr>
<td>AGO</td>
<td>Attorney General’s Office</td>
</tr>
<tr>
<td>AIS</td>
<td>Automatic Identification System</td>
</tr>
<tr>
<td>ALARP</td>
<td>As Low As Reasonably Possible (Practicable)</td>
</tr>
<tr>
<td>AOR</td>
<td>Areas of Responsibility</td>
</tr>
<tr>
<td>BAU</td>
<td>Business As Usual</td>
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<tr>
<td>CGUs</td>
<td>Coast Guard Units</td>
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<tr>
<td>CIL</td>
<td>Commissioners of Irish Lights</td>
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<tr>
<td>CMP</td>
<td>Compliance Monitoring Patrols</td>
</tr>
<tr>
<td>COLREGS</td>
<td>Convention on the International Regulations for Preventing Collisions at Sea</td>
</tr>
<tr>
<td>Cospas/Sarsat</td>
<td>The International Cospas-Sarsat Programme provides accurate, timely, and reliable distress alert and location data to help search and rescue authorities assist persons in distress</td>
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<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
</tr>
<tr>
<td>CRBI</td>
<td>Community Rescue Boats of Ireland</td>
</tr>
<tr>
<td>CUSM</td>
<td>Coast Guard Unit Sector Managers</td>
</tr>
<tr>
<td>D4H</td>
<td>Decisions for Heroes (Software)</td>
</tr>
<tr>
<td>DC / DDC</td>
<td>Divisional Controller / Deputy Divisional Controller</td>
</tr>
<tr>
<td>DSC</td>
<td>Digital Selective Calling</td>
</tr>
<tr>
<td>DTTAS</td>
<td>Department of Transport, Tourism and Sport</td>
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<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<tr>
<td>EMEX</td>
<td>Training Database</td>
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<tr>
<td>EMSA</td>
<td>European Maritime Safety Agency</td>
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<tr>
<td>FIR</td>
<td>Flight Information Region</td>
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<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
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<tr>
<td>GLA</td>
<td>General Lighthouse Authority</td>
</tr>
<tr>
<td>HEO</td>
<td>Higher Executive Officer (a Civil Service administrative grade)</td>
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<tr>
<td>HF</td>
<td>High Frequency</td>
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<tr>
<td>HLPR</td>
<td>High Level Process Review</td>
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<tr>
<td>HSAW</td>
<td>Health and Safety at Work</td>
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<tr>
<td>HSE</td>
<td>Health Service Executive</td>
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<tr>
<td>IAMEAC</td>
<td>Irish Aeronautical &amp; Maritime Emergency Advisory Committee</td>
</tr>
<tr>
<td>IAMSAR</td>
<td>International Aeronautical And Maritime Search And Rescue Manual</td>
</tr>
<tr>
<td>IAA</td>
<td>Irish Aviation Authority</td>
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<td>IAU</td>
<td>DTTAS Internal Audit Unit</td>
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<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<tr>
<td>ICS</td>
<td>Incident Command Structure</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
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<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
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<tr>
<td>IMSARC</td>
<td>Irish Maritime SAR Committee</td>
</tr>
<tr>
<td>IPRZ</td>
<td>Irish Pollution Responsibility Zone (contiguous with EEZ)</td>
</tr>
<tr>
<td>Acronym</td>
<td>Meaning</td>
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<tr>
<td>IR</td>
<td>Industrial Relations</td>
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<td>IRB</td>
<td>Inshore Rescue Boat</td>
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<td>IRCG</td>
<td>Irish Coast Guard</td>
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<td>IRSSR</td>
<td>Irish Search and Rescue Region</td>
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<td>ISD</td>
<td>Information Services Division [DTTAS]</td>
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<td>ISO</td>
<td>International Organisation for Standardisation</td>
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<tr>
<td>KPIs</td>
<td>Key Performance Indicators</td>
</tr>
<tr>
<td>LRIT</td>
<td>Long Range Identification and Tracking (of ships)</td>
</tr>
<tr>
<td>MARPOL</td>
<td>Convention for the Prevention of Maritime Pollution from Ships</td>
</tr>
<tr>
<td>MAS</td>
<td>Maritime Assistance Service (as defined by the IMO)</td>
</tr>
<tr>
<td>MCA</td>
<td>[UK] Maritime and Coastguard Agency</td>
</tr>
<tr>
<td>MCC</td>
<td>Mission Control Centre</td>
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<tr>
<td>MCIB</td>
<td>Marine Casualty Investigation Board</td>
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<tr>
<td>MF</td>
<td>Medium Frequency</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>MOC</td>
<td>Maritime Operations Centre</td>
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<tr>
<td>MRCC</td>
<td>Marine Rescue Co-ordination Centre (a SAR Co-ordination Centre for an IMO SAR Plan Region)</td>
</tr>
<tr>
<td>MRSC</td>
<td>Maritime Rescue Sub Centres (a divisional sub Centre of an MRCC)</td>
</tr>
<tr>
<td>MSI</td>
<td>Maritime Safety Information</td>
</tr>
<tr>
<td>MSO</td>
<td>Marine Survey Office</td>
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<tr>
<td>MSWG</td>
<td>Marine Safety Working Group</td>
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<tr>
<td>NAVTEX</td>
<td>Navigational Teletype Exchange</td>
</tr>
<tr>
<td>NCP</td>
<td>National Contingency Plan</td>
</tr>
<tr>
<td>NMCI</td>
<td>National Maritime College of Ireland</td>
</tr>
<tr>
<td>NMOC</td>
<td>National Maritime Operations Centre (incorporates the MRCC, Ship casualty, Pollution response, VTMIS and various SPOC functions)</td>
</tr>
<tr>
<td>NSAI</td>
<td>National Standards Authority of Ireland</td>
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<tr>
<td>OHSAS</td>
<td>Occupational Health and Safety Management System</td>
</tr>
<tr>
<td>OIC</td>
<td>Officer-in-Charge (of a CGU)</td>
</tr>
<tr>
<td>OJT</td>
<td>On-the-job training</td>
</tr>
<tr>
<td>OPRC</td>
<td>International Convention on Oil Pollution Preparedness, Response and Co-operation 1990</td>
</tr>
<tr>
<td>OPW</td>
<td>Office of Public Works</td>
</tr>
<tr>
<td>ORA</td>
<td>Operational Readiness Audit</td>
</tr>
<tr>
<td>OTO</td>
<td>Operations and Training Officer</td>
</tr>
<tr>
<td>POL/SAL</td>
<td>Pollution &amp; Salvage Division, a Branch of the IRCG Operations Division</td>
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<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
</tr>
<tr>
<td>RCC</td>
<td>Rescue Co-ordination Centre</td>
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<tr>
<td>RFT</td>
<td>Request for Tender</td>
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<tr>
<td>RNLI</td>
<td>Royal National Lifeboat Institution</td>
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<tr>
<td>SAR</td>
<td>Search &amp; Rescue</td>
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<tr>
<td>SAR/OPS</td>
<td>Search &amp; Rescue Operations, a Branch of the IRCG Operations Division</td>
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<tr>
<td>SCA</td>
<td>State Claims Agency</td>
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<tr>
<td>Acronym</td>
<td>Meaning</td>
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<tr>
<td>SILAS</td>
<td>Shared Incident Logging and Analysis System (a proposed ICT system similar to the MCA’s “Vision” system)</td>
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<tr>
<td>SMC</td>
<td>SAR Mission Co-ordinator</td>
</tr>
<tr>
<td>SOLAS</td>
<td>International Convention for the Safety of Life at Sea [SOLAS], 1974, as amended</td>
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<tr>
<td>SOSREP</td>
<td>Secretary of State’s Representative for Maritime Salvage and Intervention [UK]</td>
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<tr>
<td>SOTW</td>
<td>Safety on the Water</td>
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<tr>
<td>SPOC</td>
<td>Single Point of Contact</td>
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<tr>
<td>SSI</td>
<td>Safe Seas Ireland</td>
</tr>
<tr>
<td>STS</td>
<td>Ship-to-Ship (transfers)</td>
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<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TRs</td>
<td>Traffic Reports</td>
</tr>
<tr>
<td>TSS</td>
<td>Traffic Separation Scheme</td>
</tr>
<tr>
<td>VFM</td>
<td>Value for Money</td>
</tr>
<tr>
<td>VHF</td>
<td>Very High Frequency</td>
</tr>
<tr>
<td>VS&amp;T</td>
<td>Volunteer Services &amp; Training, a Branch of IRCG Operations Division</td>
</tr>
<tr>
<td>VTMIS</td>
<td>Vessel Traffic Monitoring and Information System</td>
</tr>
<tr>
<td>VTS</td>
<td>Vessel Traffic Management System</td>
</tr>
<tr>
<td>WTE</td>
<td>Whole Time Equivalent</td>
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1 Introduction

The Department of Transport, Tourism and Sport [DTTAS] required a review of the Irish Coast Guard [IRCG] to:

- Examine work practices that are a barrier to efficient service delivery.
- Assess the scope for alternative service models, which can deliver public services more efficiently.
- Make appropriate recommendations.

Fisher Associates was therefore appointed to undertake a value for money [VFM] Review. VFM is about obtaining the maximum benefit with the resources available. VFM is high when costs are relatively low (good Economy), productivity is high (good Efficiency) and successful outcomes have been achieved (good Effectiveness). Value for money centres around these “3Es”, and the following shows how these relate to the terms of reference.

<table>
<thead>
<tr>
<th>3 Es</th>
<th>TOR</th>
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<tbody>
<tr>
<td>Economy</td>
<td>(i) Examine the existing provision of services by the IRCG and review the cost (and efficiency) of such service provision;</td>
</tr>
<tr>
<td>“Can cost be reduced for the same output?”</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>(iii) Examine the scope for enhanced efficiencies in the delivery of the services, including enhanced use of ICT;</td>
</tr>
<tr>
<td>“Can greater output be achieved for the same cost?”</td>
<td>(iv) Examine the scope for alternative means of delivering the services or elements of the service, such as outsourcing or other options;</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>(ii) Examine and report on the range of functions performed by the IRCG;</td>
</tr>
<tr>
<td>“Are policy goals and objectives met?”</td>
<td>(v) Examine future additional service obligations which will arise from International legal obligations, EU Regulations or Directives;</td>
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The methodology centres upon “review and challenge” in terms of:

- Identifying what the service does.
- Reviewing the cost of providing this.
- Finding out what key stakeholders think about the quality of the service.
- Analysing the opportunities for improving VFM.
- Providing recommendations.

Our approach to this work was based on several pillars:

- Discussions with IRCG.
- Review of information collected.
- Consultation with key stakeholders.
- Application of our own experience.
We would like to record our thanks to the management of IRCG for their willingness to share information and opinions with Fisher Associates throughout the process, and to all staff for their input, especially those who attended the various meetings and who provided written submissions. We would also like to record our thanks Volunteers who travelled in their own time to meet us in Dublin, and gratefully acknowledge the participation of all external stakeholders who have contributed to this Review.
2 Description of Service

IRCG is Ireland’s fourth (“blue-light”) emergency response service and provides the country’s 24/7/365 maritime and coastal Search and Rescue [SAR] service, locating persons in distress or imminent risk, providing paramedic treatment where required, and evacuating people to an appropriate place of safety. However, IRCG is not a member of the Major Emergency National Steering or Working Groups and there needs to be better engagement with the regional steering and working groups - see further comment below regarding engagement with the other emergency services.

IRCG is also obligated by Government decision and statute to prevent or minimise damage to the marine environment within the 132,000 square miles of the Irish Exclusive Economic Zone, including harbours and local authority areas.

2.1 Regulatory basis

2.1.1 General powers

The IRCG has two primary functions:

- Pollution prevention, casualty intervention and response, which are the responsibility of the Pollution & Salvage [POL/SAL] Branch.
- Search And Rescue, which are the responsibilities of the Search & Rescue [SAR] and Volunteer Services & Training [VS&T] Branch.

The powers to undertake such activities have been conferred by Government Decision S.15675D of 3rd May 1988 in respect of responsibilities for pollution, and Government Decision S.21910 of 2nd August 1990 in respect of search and rescue. These allow the IRCG to fulfil the most important of Ireland’s Coastal State responsibilities under IMO Conventions.

2.1.2 National legislation

The Government Decisions confer delegated powers. The rights and obligations in the exercise of these powers are contained in national legislation in the form of primary and secondary legislation.

Pollution and salvage

The primary Acts of the Oireachtas in respect of sea pollution and ship casualty intervention are the Sea Pollution Acts 1991 to 2006. These, and related pieces of primary legislation, enable secondary legislation in the form of Statutory Instruments which provide for the implementation of the IMO MARPOL Convention and Annexes. Powers in respect of salvage are contained in the Merchant Shipping (Salvage and Wreck) Act 1993 and subsequent legislation.

Search and rescue

Search and rescue powers are also contained in the Merchant Shipping (Salvage and Wreck) Act 1993. The Maritime Safety Act 2005 provides additional powers. Other powers derive from primary and secondary legislation.


SAR is provided by a variety of “declared” resources (Coast Guard assets, RNLI, CRBI, Lifeguards, etc.), “as available” resources (Navy, Air Corps, Civil Defence, CIL, etc.) and craft and persons of opportunity. It is the NMOC/MRSC’s function to co-ordinate this matrix of assets into an organised response, leading to search, rescue and recovery.
2.1.3 International conventions
Ireland is signatory to a significant number of IMO Conventions, including the 10 Mandatory Conventions and the 1979 SAR Convention.
Implementation of these Conventions is achieved through national legislation.

2.2 Summary of services
The following are the core services of the IRCG:

- **Lifesaving Services**
  - Provide an offshore, coastal, inland and mountain marine search and rescue service.
  - Provide an air ambulance, emergency and humanitarian response service to the offshore islands.
  - Manage, train, equip and provide for the health and safety of a National Coast Guard volunteer service on the coast and inland waterways of Ireland.
  - Manage SAR helicopter contract.
  - Provide helicopter search and rescue services in Northern Ireland and the UK Search and Rescue Region.
  - Provide search services over land in aid to An Garda Síochána.
  - Assist other primary emergency agencies and services, such as An Garda Síochána or the SHE, during major emergencies or as requested.

- **Aeromedical services:**
  - Air transport of patients from offshore islands to mainland hospitals.
  - Recovery of patients from remote access locations where recovery by vehicle is not reasonable.
  - Recovery of patients deemed Life or Death scenario where the patient is not in a place of safety.
  - Transportation of response teams to Offshore or Inland Waterways Emergencies.
  - Transportation of Medical / Ambulance personnel, including Incident Response Teams to Major Emergencies or incidents, where the specialist skills of the IRT personnel are required.
  - Air Transport of Neonates requiring immediate medical intervention in Ireland.
  - Inter-Hospital Transfer of patients with serious injury and illness between hospitals.
  - Air Transport of patients requiring emergency organ transplant in the UK.

- **Services to Shipping**
  - Provide a coastal vessel traffic management and information system.
  - Act as the National independent decision making authority in places of refuge incidents including the authority to overrule other statutory authorities.
  - Provide a response to marine casualty incidents and to monitor/intervene in marine casualty salvage operations including the authority to overrule other statutory authorities.
  - Provide the National Maritime Assistance Service [MAS] as required by international law and acts as a national point of contact between vessels and coastal states.
- Provide the National Single Point of Contact [SPOC] in maritime shipping and port security incidents.
- Develop and co-ordinate an effective regime in relation to marine pollution response including Plan Approval for harbours, oil and gas rigs, wind farms, oil reception facilities and local authorities.
- Provide Virtual Aids to Navigation Service for the Commissioners of Irish Lights [CIL].

• **Services to Aviation**
  - Provide a search and rescue and salvage and recovery service for downed aircraft on behalf of the Irish Aviation Authority and Air Accident Investigation Unit.

• **Communications and Safety Services**
  - Provide the National maritime safety telecommunications and responder alerting and notification service.
  - Provide the National Automatic Identification System (ship tracking).
  - Act as SafeSeaNet 24/7 Co-ordinator for the European Maritime Safety Agency [EMSA].
  - Act as the National Co-ordinator for Radio Navigational Warnings.
  - Act as the National Co-ordinator for Maritime Safety Security and Information Services.
  - Provide a safety awareness and public information service in relation to the discharge of the functions set out above.

• **Miscellaneous Services**
  - Provide a sea sampling service to the Marine Institute.
  - Provide traffic data analysis for safety of navigation and offshore platform assessments.

• **Preventative SAR**
IRCG promotes a year round campaign to promote Safety on the Water [SOTW] by producing safety literature, visiting schools, giving SAR demonstrations, attending boat shows and exhibitions and communications with leisure and industry organisations, and providing boat patrols to monitor compliance with national regulations. A notable success for the Irish Coast Guard is said to be increased safety awareness, particularly in the leisure boat and fishing industries.

• **Cross-border and International Co-operation**
Both the IRSRR and IPRZ adjoin the search and rescue regions and pollution responsibility zones of several nations, in particular the UK and France.
IRCG has an operational agreement with its UK counterpart, the Maritime and Coastguard Agency and with the French Prefecture Maritime de l’Atlantique, which sets out the co-ordination arrangements between the organisations in the event of emergencies.
IRCG is a member of the North Atlantic Coast Guard Forum [NACGF] and currently chairs the Forum of the Heads of the European Union Coast Guards.
IRCG is also a member of the North Atlantic MRCC Conference.
The terms of reference for this forum are:
  • to further promote international SAR co-operation and liaison between those RCCs of the North Atlantic rim;
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• to promote greater understanding and knowledge amongst members of the SAR Service in those of the North Atlantic rim;

• to share experiences of SAR operations, lessons learned and promote best practices; and

• to promote a forum for RCC Managers and Operators to meet in person thus easing the way for future co-operation.

With respect to SAR, there are borders but no boundaries, as was evidenced by the co-operation offered by IRCG to UK MCA when the mv “Swanland” sank in the Irish Sea in December 2010.

Although Ireland has a well developed and equipped SAR organisation, in the event of a major marine incident involving mass rescue, IRCG would need to seek assistance from its neighbours and, where available, other vessels of opportunity at sea.

SAR co-operation is provided for as follows:

1. The State has enacted legislation allowing for the entry of foreign military aircraft on SAR missions in SI 74/1952.

2. The Irish Coast Guard has an operational agreement with the UK Maritime and Coastguard Agency providing for co-operative arrangements between the two agencies.

3. The National Maritime SAR Framework, Section 1.17.3.

4. Co-ordination of Operations, Section 1.17.3.

The Coast Guard, in consultation and approval from the Department of Foreign Affairs, grant permission for military SAR facilities from other countries, entry into Ireland when required. Such permission may include over-flight or landing of SAR aircraft, for fuelling, medical or other appropriate operational support.

The Coast Guard may grant permission for non-military SAR facilities from other countries, entry into Ireland when required and will thereafter advise the Department of Foreign Affairs as necessary. Such entry may include over-flight or landing of SAR aircraft, for fuelling, medical or other appropriate operational support.
2.3 Management structure overview

The Director, IRCG, is supported functionally by a Deputy Director, Operations, an Assistant Director, (Engineering and Logistics) and a Finance section.

Following a previous independent review of IRCG in 2002, a complement of 84.5 was established, of which about 20% is currently vacant.

The Operations Division of the IRCG is made up of three Branches reporting to the Deputy Director, Operations, each headed by a Manager. These are Search & Rescue Operations [SAROPS], Volunteer Services & Training [VS&T], and Pollution and Salvage [POL/SALV]. The functions and spans of responsibility of the managers of these three Operations Branches are:

- **Search & Rescue Operations [SAR/OPS]:** The Manager, Search & Rescue Operations, is responsible for day to day running of all SAR operations, which are co-ordinated from the National Maritime Operations Centre (incorporating the Marine Rescue Co-ordination Centre) based in Dublin HQ and two Marine Rescue Sub Centres based at Valentia Island and Malin Head (total: 3 locations). The overall establishment is 54 posts. The reporting structure below the Manager involves three levels of seniority: Divisional Controllers (responsible for the running of his geographic AOR), Deputy Divisional Controllers (responsible for the running of the Centre) and Station/Watch Officers (responsible for running of the watch).

- **Volunteer Services & Training [VS&T]:** The Manager, Volunteer Services & Training, is based in Dublin and supported by three Operations & Training Officers, three Coastal Unit Sector Managers and one stores operative. Two of the Coastal Unit Sector Managers are based in Cork and Castlebar, Co. Mayo in order to service their sectors. All financial transactions relating to the Volunteer Services & Training activities are undertaken by the Dublin Finance function.

- **Pollution and Salvage [POL/SALV]:** This is the smallest of the Operations Branches, with an establishment of one Manager and three Operations & Training Officers. At present only one Operations & Training Officer is in post.

The Assistant Director, Engineering and Logistics manages 6 Electronics and Engineering Officer posts and two stores posts. Electronics and Engineering Officer posts are primarily based in Dublin but are deployed to Malin Head and Valentia according to operational requirements.
2.4 Activity

IRCG collects data on activities (the number of incidents), and on its response to these (taskings / callouts) and other activity such as receiving Traffic Reports [TRs] and maritime safety broadcasts.

There were 1,839 incidents in 2010, and Dublin and Valentia handled the bulk of these (Figure 2-1).

Figure 2-1: IRCG incidents by Centre

The largest cause of incidents is the leisure boat sector, followed by shoreline activities (inc. swimming / angling), and fishing vessels (Figure 2-2). It is notable that IRCG deals with a significant number of non-maritime incidents, particularly medical related and missing person incidents. It also operates inland (rivers / lakes / mountains).

Figure 2-2: IRCG incidents profile
Figure 2-3 shows the trend in the number of incidents over the period 2002 to 2010. The data indicates that incidents peaked slightly in 2007, and has since been on a slight downward trend. This would be consistent with targeting a long-term reduction through better education and targeting intervention as appropriate to the incident profile.

Figure 2-3: IRCG incidents trend

In terms of the response to incidents, Figure 2-4 indicates the activity undertaken by the three Centres. As would be anticipated from Figure 2-1, most of the activity is undertaken by Dublin and Valentia. Significant use is made of the RNLI and IRCG’s own CGUs.

Figure 2-4: IRCG tasking activity
In terms of outcomes, Figure 2-5 shows the number of persons assisted / saved / bodies recovered.

**Figure 2-5: IRCG outcomes**

![IRCG outcomes 2010](image)

- “Person saved” is defined as a person whose life is in grave and imminent danger and but for the intervention of the Coast Guard would have been lost.
- “Persons assisted” is defined as a person who is not in grave danger but has been assisted by the Coast Guard to alleviate the predicament in which they found themselves.

### 2.5 Cost of service

Excluding the helicopter service (€27.5 million current costs in 2010), IRCG had operating costs of €10.1 million in 2010 including salaries. Capital costs were an additional €6.1 million (see Figure 2-6).

**Figure 2-6: IRCG costs summary (€ million)**

<table>
<thead>
<tr>
<th>2010</th>
<th>Current</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGUs</td>
<td>1.225</td>
<td>2.692</td>
</tr>
<tr>
<td>VS&amp;T</td>
<td>2.514</td>
<td>1.349</td>
</tr>
<tr>
<td>POL/SLAV (P&amp;S)</td>
<td>0.343</td>
<td>0.187</td>
</tr>
<tr>
<td>SAR Ops</td>
<td>3.936</td>
<td>0.314</td>
</tr>
<tr>
<td>Eng</td>
<td>1.882</td>
<td>1.211</td>
</tr>
<tr>
<td>HQ Admin</td>
<td>0.246</td>
<td>0.342</td>
</tr>
<tr>
<td>Total</td>
<td>10.146</td>
<td>6.095</td>
</tr>
</tbody>
</table>
The trend in current costs over the period 2006 to 2010 is shown in Figure 2-7. Costs were fairly stable over the period 2007 to 2010, but there were some significant changes in the cost structure, with reductions in SAR Operations costs being counteracted by increases in VS&T costs, which also reflects a restructuring of cost subheads in 2008 following an internal review.

Figure 2-7: IRCG current costs trend

![IRCG current costs trend 2006 - 2010 (mill €)](image_url)
3 Consultation

3.1 Consultees

3.1.1 Internal consultation - IRCG

In the course of this Review, extensive discussions were held on a number of occasions with the senior management of the Coast Guard, with input on occasion from other members of the organisation. These meetings principally concentrated on strategic issues affecting the operations of IRCG as an organisation, as well as looking at the support functions offered by Corporate Services within DTTAS and relevant follow ups.

It was also important to seek the views of operations staff, and group consultation meetings were held with the IRCG management and watch-keepers at all three locations (Dublin, Valentia and Malin). A number of staff were unable to attend these meetings due to watch-keeping and other commitments, but some of them provided written submissions to this Review.

The opportunity was also taken to meet with members of the IRCG Administration team who provided valuable input regarding the “backroom” work associated with the operation of the organisation. All these meetings provided a very good insight into the operation of the service - both what it does well, and what could be done better.

Following the initial review period, further meetings were held in Dublin in January 2012 to consider Fisher Associates’ preliminary considerations. These meetings concentrated on the following matters:

1. Provision of IRCG Services – is IRCG meeting its obligations under the:
   - SAR Convention and the International Convention on Civil Aviation
   - IMO Resolution A.950(23) - Maritime Assistance Service
   - SOLAS
   - OPRC Convention
2. Has IRCG the legal basis and mandate to meet the above through:
   - Govt. Decision S.15675D
   - Govt. Decision S.21910
   - Sea Pollution Act 1991, as amended in 1999
   - Merchant Shipping (Salvage & Wreck) Act 1993
   - Maritime Safety Act 2005?
3. What is the relationship between IRCG plans and procedures and the Emergency Framework Document?
4. Are there gaps in the provision of IRCG services?
5. What are the future service obligations?
6. Does the structure of IRCG deliver the services in an efficient manner? What are the alternatives? What are the assumptions surrounding service delivery?

As a result of these further meetings, Fisher Associates identified a number of “key issues” that are addressed in Section 4 of this Review.
3.1.2 Internal consultation - DTTAS
The opportunity was also taken to consult with members of the Management Board at DTTAS who have long-standing experience of the operation of the organisation.

3.1.3 External consultation
A number of meetings were held with external stakeholders at the Dublin [HQ] offices.

Paying particular regard to the VFM “3Es” approach, our internal and external interviews were based on a semi-structured format to permit discussion of the following topics:

- **Strengths**: What does IRCG do well?
- **Weaknesses**: What should they be doing better?
- **Opportunities for Improvement**:
  - Costs?
  - Saving money (or making money)?
- **Efficiency**:
  - Doing more with the same?
- **Effectiveness**:
  - What other things should they be doing?
  - What are they doing that they should NOT be doing?

In most of the consultation meetings, the discussions were quite wide ranging around these basic topics.

3.2 Feedback

3.2.1 General perception
Almost all of the external stakeholders were complimentary about the SAR and navigation safety services provided by IRCG.

There was a clear general perception amongst consultees that IRCG could improve the manner in which it communicates its strategic direction and purpose. There was also a perception that the service is strongly independent. It is recommended that IRCG should consider how it might improve liaison with other Government Departments or Agencies, and with other land-based rescue service providers.

IRCG contends that such perceptions are misplaced, and we note that IRCG does produce a strategic plan. As noted elsewhere, IRCG manages a number of consultative committees with its service providers and users. Nonetheless, it is worth considering why these impressions might exist, and perhaps consider how communication with stakeholders can be better developed.
3.2.2 Internal views

Internal consultations resulted in three main issues being identified.

Communication: Although it is accepted that IRCG is a front-line emergency service provider and must be managed with a clearly defined decision-making structure, it appears that increased engagement between IRCG management and staff would be beneficial. The opinions and concerns of staff below senior management level could be bettered canvassed and acted upon.

Communication is not always easy, particularly when considering the interaction between managers and watch-keepers - on some roster patterns, they may not see each other for several weeks at a time. Senior management and watch-keeping staff meetings at the Rescue Co-ordination Centres are often poorly attended because of the challenge to staff of maintaining watch and leave patterns, and the distances travelled by some watch officers. Modern ICT such as video conferencing, newsletters or online systems may be beneficial and prove to be cost effective.

Training: There was also a sense at middle management level that the service should demonstrate better focus in establishing operational and training priorities and requirements. For example, it was suggested that the overall training for all CG staff and Volunteers would take between 2 and 3 years to bring them fully up-to-date, although we note that this is a current area of focus for the Deputy Director, and we recommend that this is followed through and resourced.

We note that the training issue is somewhat complicated by the relationship between the various divisions within DTTAS: training for HQ-based and operational staff is a function of the central HR division, but the training of Volunteers is overseen by VS&T officers. This is discussed later in the Review.

SOPs: Many of IRCG Standard Operating Procedures [SOPs] were originally written in 1993 and concern was expressed that there does not appear to have been a systematic and planned revision of these SOPs. Fisher Associates understand that there has been a programme of regular review of SOPs - unless there is a need for significant change, it is accepted that it may not be necessary to revise them.

However, Fisher Associates believes that this review process for SOPs could be improved and should be dovetailed with a systematic incident review process. Fisher Associates also recognise that this programme of revision and review has been constrained as a consequence of the lack of appropriate resources within the organisation.

There was a strong sense that a great deal of internal effort was spent in ‘fighting fires’ to maintain the operational status of the service - said to be due, in part, to a lack of control over vacancies and staff in the appropriate grades - and that much of this effort was reactive rather than proactive.

Fisher Associates recommend that a formal, documented review of all SOPs should be carried out in the near future, and that a QMS document tracking and revision system is clearly identified with respect to all SOPs (and other important documentation) and properly resourced (see Section 4.2).

3.2.3 External views

“What does IRCG do well?”: The majority of stakeholders considered that the provision of 24/7 SAR and navigational safety functions of IRCG are delivered well. In particular, the availability of the SAR Helicopter service is seen as a very worthwhile and reassuring capability. The locally based volunteer CGUs are well regarded, and the levels of planning and exercises are considered to be good.

The service is considered to be approachable, flexible and realistic in its dealings with stakeholders, particularly with respect to unusual or novel operations, such as may occur in the offshore energy development sector.
“What should IRCG be doing better?”

Cooperation between IRCG and MSO: A number of stakeholders expressed the opinion that there seemed to be only sporadic cooperation between the IRCG and the MSO - they both appeared to be operationally separated with respect to their respective responsibilities and capabilities. There was also a perception within both MSO and IRCG that such inter-departmental co-operation was “not allowed” (although the origin of this contention or its formal standing is not clear).

It may be argued that there is little need for greater co-operation on a day-to-day basis as the operational remits of both organisations are significantly different, and that the MSO does not need IRCG’s cooperation for the MSO to function effectively in line with its legal obligation.

However, in the event of a major shipping casualty, IRCG may need resources available from the MSO to assist with emergency response. The technical staff within the MSO have knowledge, skills and experience that could be of great benefit to IRCG at such times, and there will be a need for both groups to collaborate closely to mitigate the impact of the casualty and to effectively manage the emergency response. There is a perception that the MSO is concerned by its potential liability in such incidents, and that this may constrain its ability to assist with, and to mitigate the consequences of such events.

We understand that there are agreements in place with UK-based companies for assistance in the event of major marine incidents:

- Oil Spill Response Ltd [OSRL] may provide equipment and technical assistance and the company is paid a retainer for this.
- London Offshore Consultants Ltd [LOC] will make resources available to IRCG as and when required, on agreed call-out rates. Fisher Associates understand that this arrangement was activated during a recent incident but the external resources were not available for at least 24 hours after the event.

With similar resources available locally, it is recommended that some form of Memorandum of Understanding or Technical Protocol should be established between IRCG and MSO, providing outline commitments from both parties with respect to the resources that may be needed. It is essential that formal joint training programmes are established and that these arrangements are jointly tested during IRCG major exercises to ensure that they are adequate and appropriate.

Safety awareness: The “Safety on the Water” campaigns and the Compliance Monitoring Patrols [CMP] by volunteer CGUs are seen to contribute to the safety of people on the water, but they have no enforcement capabilities.

We note that IRCG previously considered this issue, but concluded that it was not feasible to give Volunteers enforcement powers. It may be desirable, on occasion, to deploy full-time staff who have enforcement powers to accompany the CMP and to issue ‘on the spot’ fines. It may also be appropriate to take on Volunteers on a part-time basis to carry out this role. To do so, it will be necessary to have the appropriate SOPs in place and for training to be carried out. A media awareness campaign should also be carried out prior to commencing enforcing the legislation on the leisure boating community.

Resource deployment: A number of stakeholders questioned whether or not the volunteer CGUs and other rescue service providers, such as the RNLI and the Community Rescue Boat of Ireland [CRBI] units, are located to provide the most effective and cost-efficient service, and whether their location is a result of history rather than analysis. It would seem that a more robust analysis of the number of SAR incidents by type, location, units deployed etc. as envisaged within the SILAS project, will provide a fuller appreciation of the most effective use of resources available.
Training and assessment of CGU boat crews: Questions were also raised with regard to the training and assessment of CGU boat crews and their competence. An independent assessment of CGU fast boat training was carried out in 2009, and a further internal review in 2010 in partnership with the Irish Sailing Association and Irish Water Safety. The findings included a number of recommendations, but the reports were considered to be incomplete. A further review has been commissioned in 2012, and it is important for IRCG to address any findings to improve training and safety procedures in a timely fashion.

“Could IRCG offer greater economy / efficiency / effectiveness?”

Some stakeholders perceived that with greater clarity and communication of direction and purpose (notwithstanding IRCG’s views on this), there could be better allocation / management / co-ordination / supervision of IRCG’s resources. Thus whilst IRCG provides a well-regarded SAR service, there is a perception amongst some that IRCG could better manage its resources.

Consultees were generally very aware of the potential for greater economy through reducing the number of Centres and CGU’s, but clearly doubted the Government’s political resolve to make such contentious decisions. This is further discussed later in the Review.

Now that resources have become scarcer, some consultees felt that prioritisation might be needed. Some considered that IRCG could provide more output with the same resources (improved efficiency). This is also considered later in the Review in the context of proposals discussed with IRCG to make efficiencies, and redeploy people to areas that need more resource.

Some consultees considered that a thorough review of assets deployed jointly with other rescue service providers such as CRBI and RNLI, might lead to rationalisation overall, maintaining effectiveness but reducing costs / improving efficiency (as commented above).
4 Key Issues

In the course of this Review, the following key value for money issues were identified:

1. How can IRCG interact more effectively with the various internal and external stakeholders within the machinery of Government, to ensure that it has adequate and appropriate resources (both financial and human) to deliver its commitments?

2. How does IRCG ensure that its services are delivered through an effective Quality Assurance [QA] programme, taking into account operational risk assessments and effective oversight of all activities?

3. How many Rescue Co-ordination Centres does IRCG need to deliver its commitments under the SAR Convention and the VTMIS Directive?

4. How many CGUs will provide the most effective and efficient delivery of volunteer services for SAR and community-related services?

5. How can IRCG effectively and efficiently demonstrate and deliver its ship casualty and pollution preparedness and response in the event of a major incident within the Irish Pollution Response Zone/EEZ?

This section investigates these issues “in the round”, considering current operations and practices, problems, opportunities for improved VFM, and associated recommendations.

Recommendations have implications for the overall structure of IRCG, and this is addressed in brief at Section 4.6.

4.1 Efficient and effective relationships with other Government Departments and Divisions

It is clear that many of the perceived and actual problems with the current delivery of IRCG services are directly related to the intricate and complex mechanisms by which one section of the Civil Service interacts with another. This raises a number of issues concerned with:

- Corporate governance
- Management of human resources
- Training
- Application of ICT
- Legal services
- Media services

4.1.1 Corporate governance

IRCG operates as a division of the Department of Transport, Tourism and Sport [DTTAS]. The IRCG is headed by a Director who reports to the Assistant Secretary, responsible for maritime safety, freight, ports and shipping. Upward reporting is through the Secretary General of DTTAS to the Minister. Oversight is provided through civil service and ministerial processes and procedures and the Management Board of DTTAS.

Direction is provided in the form of Government and Ministerial policy, statements of strategy, departmental policy, management board decisions and civil service rules. DTTAS produces its own strategy, and IRCG develops a Business Plan that sits below this. The plan includes numerous objectives and milestones, principally operational KPIs, but few of these are focused on monitoring and improvement of value for money.
This reflects the normal structure and governance of an executive branch of Government, but governance of a service delivery driven organisation such as IRCG could be improved from a VFM perspective. IRCG operates within a political context, and decisions on economy and efficiency may be politically constrained. As a result, IRCG’s management are not fully accountable for delivering economy and this may also impact negatively on efficiency. Furthermore, the governance model does not demand sufficient information from management related to productivity and financial efficiency – essentially by the use of KPI’s specifically targeting improved economy / efficiency / effectiveness. We understand that this is a general area of focus for the current Government.

Ongoing uncertainty over the future “home” of the IRCG has complicated matters, and inevitably led to organisational stasis. This has included the move out of the Department of Communications in 2006, attempts at rationalising the number of Centres and CGUs in 2008, cancelled decentralisation plans in 2009, shelved agency status in 2010, and a proposed change of “parent” Government Department for IRCG in 2011.

### 4.1.2 Management of human resources

IRCG staff operate from several locations:

- Its National Maritime Operations Centre [NMOC] in Dublin;
- Two Maritime Rescue Sub Centres [MRSC] at Malin Head and Valentia Island;
- An Engineering and Logistics Centre in Blanchardstown; and
- Offices in Cork and Castlebar.

In the context of the earlier 2002 review, there are currently 17 vacancies out of the complement of 84.5 identified. Clearly current Government restrictions on recruitment of staff will have an impact.

There are a number of vacancies in important posts at IRCG that have not been filled, to the detriment of the delivery of service, leaving IRCG (and hence the State) very exposed to some risks – such as dealing with a major shipping casualty or a pollution incident. The recent sinking of the cruise vessel “Costa Concordia” in Italy and the “Deepwater Horizon” explosion and subsequent pollution in the Gulf of Mexico are examples of such incidents. As noted elsewhere in this Review, POL/SALV Branch is effectively a single person, who could not be expected to respond effectively to such an incident without seeking assistance from his colleagues elsewhere within the organisation, to the possible detriment of the delivery of other essential services.

It is also noted that the current staffing levels are only maintained with significant overtime - the cost for year 2011 is estimated at approx. €241,000 (Valentia €88k, Malin €88k, Dublin €65k). It is recognised that overtime working may have significant detrimental effects on the delivery of IRCG’s core services, because watch-keepers may become fatigued through overtime and thus be less effective.

It is vital that IRCG should have in place the people to man its agreed establishment, because as later sections of this Review demonstrate, there are important deficiencies in its capability.

In addition to its own staff, IRCG also manages approximately 900 Volunteers in 49 locations nationwide who are on call day and night to respond to emergencies at sea or on the coast or inland. This is a reduction of 150 Volunteers and 6 teams compared with 2008.

The Volunteers are trained in several core competencies including cliff and heights rescue, shore search and rescue boat handling, as well as legislative compliance patrolling. These competencies are intrinsically hazardous and require appropriate management, training and supervision.
4.1.3 Training

4.1.3.1 General

Training is another issue that highlights the complexities of inter-departmental relationships.

As noted earlier, training for HQ based staff is a function of the central HR division, but the training of Volunteers is overseen by VS&T officers. There is concern throughout IRCG that specialist training needs are not being adequately or appropriately addressed.

There is an established training programme for IRCG watch-keeping staff at the NMOC and MRSCs, which includes Induction training, Basic SAR, Refresher training, CPD and OJT. Exercises are also an important part of RCC staff training. However, the capacity to deliver exercises and CPD is severely stressed by human resource shortages – there is no in-house trainer for SAR Ops staff and CPD requires overtime expenditure, which is highly limited.

An annual training plan is developed for IRCG staff through their Performance Management Development System. This training plan is prioritised for the year. Training records are maintained for all IRCG staff by the DTTAS HR Training Unit. Records for professional courses organised by the IRCG are held by IRCG administration.

Watch-keeping staff at NMOC / MRSCs are required to undertake refresher training for their SMC qualifications by an IMO mandate. This training currently takes place at NMCI, Cork.

With limited manpower available, it is not always possible to release staff for training during their normal working hours - either for “on-the-job” training or for “succession planning” training, i.e. superior courses to the current level of appointment.

As a result, training tends to incur overtime payments, or requires staff to take training courses during their annual leave or rest periods.

By implementing the restructuring proposals contained in Section 4.6 below, there should be sufficient manpower within IRCG to allow for the release of watch-keeping staff to satisfy the refresher training noted above, without the need for incurring overtime payments or loss of leave.

4.1.3.2 Training - NMOC / MRSC

IRCG’s ability to respond effectively to a major shipping casualty without significant risk to the State will depend in great part upon the expertise and knowledge of the staff responding to that incident, and upon the capacity to ‘surge’ trained on-call staff to the scene of the incident and NMOC as quickly as possible.

Current training needs have focussed on the ability to provide effective SAR services, but the VTMIS Directive requires a more comprehensive professional maritime capability. There is a need to provide training to ensure that NMOC / MRSC staff have a better knowledge of shipboard operations, including navigation and ship stability, as well as the interpretation and application of the COLREGS.
4.1.3.3 Training - POL/SALV Branch - see also §4.5 below

In the report of the most recent IMO Audit (dated February 2011), the following was noted:

**“Coastal State Obligations”**

**Observation**

74 CG pollution investigators are not receiving adequate training to carry out pollution investigation interviews nor do procedures exist to assist them with same (Code, Part 2, paragraph 38).

**Corrective action**

75 Relevant training standards will be identified and added to the CG training matrix. Initial training requirements will be identified by the end of March 2011. To ensure continuous compliance with this requirement in the future, the training regime will be revised and procedures will be implemented to assist the Coast Guard officers in carrying out investigations in relation to pollution incidents.

**Root cause**

76 There is an absence of a training regime for Coast Guard personnel in pollution investigation or procedures to assist with same.

It is noted that the OTO in POL/SALV has commenced but not completed this training: it is essential that this is completed at the earliest opportunity. Fisher Associates recommend that this should be rolled out to all deployable on-call operational staff.

Further in the same report, under “Areas for further development”, IMO reported that

1.6 The marine administration is encouraged to ensure that the new marine operations centre focuses on preventative measures versus current reactive posture, through extensive training on the new equipment as well as the development of AIS/VTS training protocols. (coastal State obligations)

Fisher Associates recommend that these training initiatives are adopted at the earliest opportunity. If they are not addressed, it is likely that they will be the subject of more stringent comment by the IMO at the time of the next audit.

4.1.4 The more effective use of ICT

4.1.4.1 Background

We understand that IRCG collects 75 operational datasets on a daily basis, and that they are evaluated at least monthly. However, the transformation of this data into management information is not clear, and the tables of data do not communicate cost-efficiency and productivity information.

IRCG have recognised for several years that the current ICT system [“DataEase”] is outdated and subject to limitations. It is limited in its capability to provide effective analysis of the many records kept by IRCG, and it does not have the ability to integrate with other ICT systems.

This approach of applying temporary and ad hoc measures regarding the maintenance and development of effective and appropriate ICT systems, which would have provided the basis for better economy and efficiency, is not necessarily unusual but nor is it desirable. This needs to be addressed as soon as possible.

To achieve a major and important upgrade to its ICT, to support more efficient business processes, IRCG must develop a proposal which will then go into a pool with other bids for ICT funding from other constituencies with DTTAS, and then matters are effectively out of its hands. The Assistant Secretary with responsibility for that area will define priorities across the whole range of bids.
It appears that the process is complicated and bureaucratic and does not necessarily satisfy the needs of an emergency response service within Government, although it is accepted that there has to be some system.

The relationship between IRCG and DTTAS Information Services Division [ISD] is also pertinent. The ISD division of DTTAS is set up and resourced to meet the needs of a typical Civil Service Department with appropriate ICT office support needs. However, it does not appear to be sufficiently resourced to provide ICT support for a 24/7 emergency service, which requires complex and technically-specific programmes, which must be constantly available and supported.

There are additional ICT systems that have been adopted over time, including “EMEX” - a Volunteer management system - which was superseded in some areas of the service by D4H (“Decisions for Heroes”). The latter was developed for local use by volunteer Coast Guard Units [CGUs] but this does not have an overall management capability, nor can it manage the complex and outdated system for payments to Volunteers. It is expected that there will be a RFT for further improvement of D4H in Q2, 2012.

IRCG recognise that the systems deployed by the UK-based RNLI and MCA’s “Vision” have great benefit, and it is intended to go to tender in 2012 for comprehensive new ICT systems, under the project name “SILAS” [Shared Incident Logging and Analysis System] and a Volunteer management system. It is expected that SILAS will provide the Rescue Co-ordination Centres with an improved incident management tool similar to the MCA’s “Vision”. It is also anticipated that the information management tool will provide a more effective Volunteer management system. Not only will it record the “who, what, when, where” aspects of Volunteer attendance, and make the payments to Volunteers a simpler process, but it is also expected to deliver better monitoring of competency training and development. Delivering such improvements must have a high priority.

Coupled with the lack of financial resources to spend on ICT to improve business processes, IRCG has also been restricted on the availability of human resources to progress ICT development.

IRCG is attempting to become more ICT centric, and there is a need for an internal ICT specialist. Fisher Associates recommend that DTTAS should consider how it might effectively engage more ICT specialists that can provide support to IRCG and other maritime functions within the Department.

4.1.4.2 High Level Process Review

In November / December 2011, IRCG undertook an external consultant-led High Level Process Review [HLPR] which produced a final report in January 2012. The purpose of this HLPR was to assist the consultations between DTTAS ISD and IRCG, and to assist with the scoping and prioritisation of existing systems into the upgrade or replacement processes, by mapping out the main processes undertaken by IRCG across all divisions of the organisation.
4.1.4.3 Ongoing and future operational ICT Requirements

There will be additional ICT requirements placed upon IRCG to ensure compliance with the VTMIS Directive. These relate to the integration of additional data feeds, and have formed a part of the IRCG bid for 2012.

To develop better decision making and assistance tools, with particular reference to ship casualty and pollution incidents, as well as requests for Place of Refuge, IRCG have run a joint project with Cork Maritime Research Centre, working as a part of the Irish Maritime Emergency Research Centre. The outcome should provide an integrated information model that will take into account environmental data, weather and tidal data, as well as port information. It will be integrated with other surveillance information, including AIS, space AIS, LRIT, Clean Seas Net, VMS and environmental data and feed into SSI.

For example, the AIS systems can be programmed to generate automatic alarms to alert NMOC / MRSC staff. In the event of a ship proceeding along a Traffic Separation Scheme [TSS] in the wrong direction in contravention of the Collision Regulations [COLREGS], for example, or for unexpected or unexplained changes of direction or speed (perhaps an indication of a vessel in trouble), IRCG would be aware of these events at an early stage. This would be particularly important given Ireland’s lack of emergency towage or dispersant spraying capacity.

With respect to pollution prediction for HNS and oil pollution incidents, there is an ongoing need to ensure that the potential scenarios are mapped and that they can be translated into an ICT function.

There is a lot of work to do in order to ensure that all of these requirements are identified, and appropriate capabilities are developed.

It has been suggested that “SafeSeasIreland” [SSI] may assist with IRCG’s operational ICT needs. We note that the current SSI system will not address all the needs of IRCG, for example the monitoring of fishing vessels and leisure craft. It seems possible that further development of SSI might contribute to these needs. Specialist advice is needed to assist with determining whether integration with SSI or some other alternative offers the most cost-efficient and effective solution to IRCG’s needs. This should consider the wider DTTAS context, and the wish to avoid developing overlapping systems.

We recommend that DTTAS should make appropriate resources available at an early stage to ensure that the HLPR is delivered within its stated objectives, allowing for the development and implementation of additional ICT systems as needed.

We further recommend that DTTAS makes appropriate resources available at an early stage to ensure that potential HNS and oil pollution scenarios are identified through a similar process to the HLPR, and that this should lead to recommendations regarding appropriate ICT development and delivery.

4.1.5 Legal services

With increasing responsibilities being placed upon IRCG through adoption and implementation of the VTMIS and other Directives, there is concern amongst the IRCG management team that some aspects of the Regulations pose inherent legal implications for the State.

For example, in the event of a request for a vessel to proceed to a place of refuge, or for operational advice to vessels in bad weather, the legal validity of the advice and/or instructions given to such vessels may be called into question.

There is also concern regarding the indemnity for the persons / organisation providing the advice.
Although IRCG has close working ties with the Attorney General’s Office [AGO], it does not have a dedicated always-available point of contact within this office.

The potential for serious liability issues may seem distant based on experience to date. This does not detract from the need for a dedicated point of contact in the AGO who has appropriate maritime legal expertise, because the potential impact of such an issue might be extremely high. It is desirable that this dedicated point of contact should have maritime emergency experience.

It is considered likely that this requirement may increase in the near future, because IRCG will increasingly need to provide advice and directions to shipping in compliance with new codes / regulations.

IRCG also has involvement with the AGO in the development of appropriate national legislation for compliance with EC Directives that may impact upon IRCG. In particular, there is ongoing work on the ratification and implementation of the HNS Convention, which falls under the responsibility of POL/SALV Division.

4.1.6 Media services

We understand that the public can raise criticism at a political level of the conduct of IRCG on the basis of media reports. It is essential that there is a consistent media message throughout a major incident, as this will influence public confidence.

The current arrangement for media contact relating to IRCG activities - whether it be a cliff rescue off the north west coast or a major ship casualty in Dublin Bay - rests with the on-call person.

There is concern that ill-informed information given to the media, as a result of a lack of understanding of an incident in the Media Unit, may lead to reputational damage to the IRCG, the Department and the Minister. All Media staff should be trained to attend on-scene at major incidents and to prepare regular briefings and bulletins.

There is also a need for a dedicated 24/7 point of contact within the Government’s or DTTAS’s media relations unit who has appropriate knowledge and experience of maritime matters and who can travel with IRCG Incident Managers to major incidents. A media resource with specialist maritime knowledge could be shared with the MSO.

4.1.7 Conclusion

The question must be asked: who manages IRCG? It is perhaps easier to answer this question with reference to some of the issues that IRCG’s Managers do not control:

- The number of staff.
- Employment of staff or their terms & conditions of employment.
- Provision of personnel services including training.
- Provision of support services for ICT, legal, and media.

All of these are issues relevant to improving efficiency, and lack of control of these by IRCG Managers impacts on the effectiveness of IRCG. Managers within IRCG cannot be held accountable for the problems if they have little or no control over the solutions.

Who is accountable for these issues? In practice responsibility is spread throughout the machinery of Government, leading in effect to diluted accountability.

Furthermore, IRCG Managers do not control key decisions relevant to improving VFM such as how many Centres should be operated, or the number of CGUs that should be retained. These are political decisions made by Government or the Minister of the day. Once again, IRCG Managers cannot be accountable if economies / efficiencies have not been implemented.
We recommend that Government should put the control of more aspects of managing IRCG into the hands of and control of Managers of the service. This is an important step if IRCG is to be managed with a view to VFM in the longer term. Notwithstanding the current move in Ireland away from “Agencies”, this may require an alternative institutional form such as an Agency or Executive Office.

We recommend that Government considers how improved accountability can be achieved, with or without such institutional changes.

4.2 Quality assurance

There is a clear need to ensure that all risks to the service and to its personnel are minimised to As Low As Reasonably Possible - the “ALARP” principle. A part of this process will be internal reviews of existing practices and procedures in all areas of activity with IRCG, while another part will come through external review of incidents and activities.

There is also a clear need to ensure that all activities are carried out to the best of the organisation’s abilities, and in line with current best practices adopted by similar organisations in Europe and around the world.

4.2.1 Oversight of IRCG Activities

Delivery of IRCG services are currently subject to both internal and external oversight, including by the IMO, EMSA and ICAO, as well as the Controller and Auditor General, and the Internal Audit Unit.

There is an agreement with the UK MCA to undertake peer reviews of IRCG Co-ordination Centres, which is done annually.

4.2.1.1 ICAO

During the last ICAO Audit (March 2010), it was noted that:

The IAA [Irish Aviation Authority] has established a mechanism to carry out safety oversight of the search and rescue services [SAR] (rescue coordination centre and rescue coordination sub centre) under its responsibility; however, the DoT has not established a mechanism to ensure that effective safety oversight is being carried out for those entities for which it is responsible.

As a result, ICAO made the following recommendation:

The DoT should establish a mechanism to ensure the safety oversight of the entities under its responsibility who provide SAR. In addition, the DoT should ensure that:

a. the SAR inspectorate is comprised of a sufficient number of qualified staff;
b. functions, job descriptions and minimum qualifications requirements of SAR inspectors are established;
c. a training programme detailing types of training, a training plan highlighting priorities and satisfactory completion of on-the-job training are established for SAR inspectors;
d. a manual/handbook which incorporates applicable procedures for all functional areas to covered (including procedures for the conduct of oversight of all SAR entities) is developed; and
e. a mechanism with timeframe for elimination of the deficiencies identified is established and implemented.
Although the State\(^1\) partially accepted this finding, the SAR Inspectorate has yet to be established. It was the opinion of the State that:

**SAR inspectorate functions and responsibilities carried out by IAMEAC and officers of the Irish Coast Guard are outlined in IAMEAC terms of reference and in the job specifications and role profiles of Coast Guard staff.**

This statement recognises that the SAR Inspectorate functions are occasional rather than continuous.

However, the State also proposed to ICAO as follows, with a view to completing this work by December 2011:

*The DoT will make appropriate arrangements to engage a suitably qualified entity to carry out safety oversight of those entities carrying out maritime SAR for which it is responsible. This will be conducted in consultation with the IAA and relevant competent organisations. Particular emphasis will be placed on supervision of the maritime SAR functions as outlined in the finding.*

This has not been completed as yet, but an RFT is scheduled for 2012. It is important that an inspectorate body should be independent of the organisations that it inspects.

A Memorandum of Understanding exists between IRCG and IAA with respect to the co-ordination of SAR activities, but we understand that this MOU does not extend to oversight / inspection of those activities. It may be appropriate to consider that the SAR Inspectorate should be incorporated into the same division of DTTAS as the Marine Casualty Investigation Board [MCIB] and the Air Accident Investigation Unit [AAIU] or as a contracted service reporting directly to Assistant Secretary Level.

### 4.2.1.2 IAMEAC

The Irish Aeronautical & Maritime Emergency Advisory Committee performs the co-ordination and oversight functions of a National SAR Committee as recommended in IAMSAR. It was established by Government Decision S.21910 of 1990 (at the Marine Emergency Advisory Group) and updated (and re-named) by Ministerial Decision in 2010.

It functions as a supervisory board and strategic advice committee.

Its Terms of Reference are given below.

**IAMEAC Terms of Reference**

1. To ensure that an appropriately trained and resourced emergency management team, reflecting the Committee members mandates, can assemble as a crisis management committee at the IRCG marine emergency room during major emergencies to advise the Director and/or the Minister on the appropriate response.

2. (a) Provide a standing national forum for co-ordination of administrative and operational SAR and emergency management matters;

(b) Provide an interface with other national and international organisations involved with the provision of emergency services;

(c) Oversee the National Maritime and Aviation SAR Framework for Ireland, and develop and maintain a national SAR Manual(s);

(d) Promote effective use of all available facilities for SAR;

(e) Serve as a co-operative forum to exchange information and develop positions and policies of interest to more than one Party to the Framework;

\(^1\)Reference to “the State” is taken from the responses provided to ICAO by DTTAS.
(f) Promote close co-operation and co-ordination between civilian and military authorities and organisations for the provision of effective emergency services;

(g) Improve co-operation among aeronautical, maritime and land SAR communities for the provision of effective emergency services; and

(h) Determine other ways to enhance the overall effectiveness and efficiency of SAR services within the State and to standardise SAR procedures and equipment where practicable.

IAMEAC meets 2 or 3 times pa, and is chaired by the Director of IRCG and includes senior representatives of the main elements of the SAR system. These are:

- The Irish Aviation Authority [IAA];
- The Health Service Executive [HSE];
- An Garda Siochana [AGS/National Police];
- The Department of the Environment, which also represents the land based National Steering Group on the Major Emergency Management Framework;
- The Air Corps [AC];
- The Naval Service [NS];
- The Royal National Lifeboat Institution [RNLI];
- Department of Transport - Aviation Safety and Security Division.

4.2.1.3 Other bodies with oversight functions

Additional oversight of IRCG is undertaken as follows:

1. **IMSARC** - the Irish Maritime SAR Committee.

   Its Terms of Reference are as follows:

   The IMSAR Committee meets twice yearly and its general functions are to:

   - Keep under review the general arrangements for marine search and rescue in Ireland, and to make recommendations for any improvements considered necessary.
   - Consider the implications of any intended changes in equipment, deployment or organisation in any arm of the search and rescue service in advance of such changes and to take any measures necessary.
   - Consider as necessary liaison with neighbouring search and rescue organisations and any regional search and rescue agreements in which Ireland is a participant.

   The IMSARC provides a forum for service providers and IRCG “end users”.

2. **MSWG** - the Maritime Safety Working Group

   This group meets 4 times per annum and has the following responsibilities and activities:

   - It is responsible for agreement on and the co-ordination of marine safety promotion to the wider public.
   - It attempts to co-ordinate and develop a common set of safety data metrics across all agencies - see earlier reference to RNLI format.
   - It monitors the “Safety on the Water” website, although this needs revamping and is a part of the IRCG bid for ICT for 2012.
   - It does not have an operating budget.
4.2.2 Risk and Safety Management

In December 2010, the IRCG commissioned the National Standards Authority of Ireland [NSAI] to carry out a review of its compliance with OHSAS 18001 - the international standard for health and safety management systems and compliance. This focussed in particular on the activities of the VS&T Division and considered the following responsibilities:

- Compliance with national Health and Safety at Work [HSAW] legislation.
- Risk management.
- Operational control.
- Performance measurement and management.

The report made a number of recommendations that have yet to be implemented in full - mainly on the basis that there are insufficient resources within the service to deliver on these.

We recommend that IRCG, in conjunction with DTTAS and the State Claims Agency [SCA], review all the recommendations in the NSAI report and adopt OHSAS 18001 as early as possible. There is a need to ensure that many of those recommendations are adopted and implemented at an early date, if only to reduce the organisation’s potential exposure to inspection, investigation and/or prosecution by the Health and Safety Authority in the event of an accident or serious injury involving CG Volunteers. It may also be appropriate to consult with the AGO to ensure that any policies and procedures that may be adopted are in compliance with the appropriate Health and Safety legislation. This has resource implications.

Given the high number of Volunteers who undertake relatively hazardous tasks on behalf of IRCG, the implications on the service of the 2007 Bray fire tragedy cannot be ignored. In that fire, two Fire Fighters died, and Wicklow County Council (as the entity responsible for the Wicklow Fire Service) has subsequently been charged in the Central Criminal Court on four charges relating to alleged breaches of the Safety, Health and Welfare at Work Act 2005. Wicklow Fire Service is a retained fire service - i.e. Fire Fighters are part-time and so have some similarities to CG Volunteers.

Fisher Associates further recommend that, as a part of the restructuring of the service (explained later), a senior manager is appointed as Safety Systems Manager, and is given the responsibility for safety oversight throughout IRCG. This should be at Assistant Principal Officer level as a minimum.

This role may be likened to that of the Designated Person required under the ISM Code (IMO Resolution A.741(18) as amended) - that role is defined as follows:

**DESIGNATED PERSON(S)**

To ensure the safe operation of each ship and to provide a link between the Company and those on board, every Company, as appropriate, should designate a person or persons ashore having direct access to the highest level of management. The responsibility and authority of the designated person or persons should include monitoring the safety and pollution-prevention aspects of the operation of each ship and ensuring that adequate resources and shore-based support are applied, as required.

For IRCG, the job description should be re-worded along the following lines:

To ensure the safe operation of each CGU and other operational units and to provide a link between IRCG management and each unit, the Safety Systems Manager has direct access to the Director and to the Assistant Secretary. The Safety Systems Manager has the responsibility and authority to monitor the safe operations of IRCG, ensuring that adequate resources and management support are provided as required.
4.2.3 ISO 9000 / ISO 14000 - Quality and Environmental Management

In the spirit of a process of continuous improvement, Fisher Associates also recommend that IRCG should consider the desirability and feasibility for the adoption of ISO 9000 - Quality Assurance Management - and ISO 14000 - Environmental Management. Adoption of these standards not only demonstrates a commitment to international best practice, but will also focus on the effective and efficient delivery of IRCG services and commitments.

The Safety Systems Manager would take responsibility for these systems. We note that MSO is currently developing its own organic QA system. The “in house” knowledge and experience in MSO from undertaking this may be of benefit to IRCG.

4.3 Efficient and effective delivery of commitments under SAR Convention and VTMIS Directive

4.3.1 Current set-up - SAR Operations

4.3.1.1 Irish Search and Rescue Region [IRSRR]

The Irish Search and Rescue Region [IRSRR] is established in co-operation with neighbouring nations and is internationally recognised and described in relevant documents of IMO [IMO SAR plan] and ICAO (Regional Air Navigation plans). The Irish maritime and aeronautical SRR boundaries are coincident with the Shannon Flight Information Region [FIR] determined by ICAO.

The Irish SRR is contiguous with the UK SRR and, in fact, is bounded on all sides by the UK region. Mutual co-operation and assistance will be provided and the existence of SRR limits should not be viewed as a basis to restrict, delay or limit in any way, prompt and efficient action to relieve distress situations.

Within the boundaries of the Irish SRR, Ireland accepts primary responsibility for co-ordinating and providing SAR services.

For maritime SAR co-ordination, the Irish SRR is subdivided into three divisions with each associated Co-ordination Centre at MRCC Dublin, MRSC Valentia and MRSC Malin Head.

For pollution, ship casualty and environmental response, IRCG has responsibility within the Irish EEZ. It is common practice that if a SAR incident occurs in the Irish EEZ, co-ordination may be transferred to IRCG co-ordination from the UK Coastguard or there may be shared responsibilities between the two nations.

4.3.1.2 Marine Operations Centre, Rescue Co-ordination Centres and Sub Centres

MRCC Dublin is the national Rescue Co-ordination Centre for the Irish Search & Rescue Region. MRCC Dublin is an integral part of the IRCG National Marine Operations Centre [NMOC] which, as well as providing maritime search and rescue response services, is also the Centre that co-ordinates the response to marine casualty incidents within the Irish EEZ, and provides a variety of other services.

In line with the EU model, NMOC Dublin is co-located with IRCG Headquarters and management staff in order to provide rapid additional resources in the event of a major emergency. At these times, other first responders such as Police, Fire and Ambulance, as well as external agencies such as Customs and Immigration, may be expected to attend the NMOC.

NMOC would retain operational co-ordination of a major emergency but, if the event has national significance, IRCG would provide support to the Government’s National Emergency Co-ordination Centre [NECC] (located nearby at the Dept. of Agriculture), which provides inter-departmental co-ordination.

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NMOC is equipped to provide up to 8 operational desks for handling all of the IRCG operational commitments from a single Centre. There will be a need soon to provide a 9th desk that will be able to fulfil the security commitments imposed through the VTMIS Directive.

MRSC Valentia and MRSC Malin Head are Divisional 24/7 Centres, co-ordinating SAR response in their areas of responsibility [AOR].

- MRCC Dublin is the contact point for routine operational matters in the area between Carlingford Lough and Ballycotton.
- MRSC Valentia is the contact point for routine operational matters in the area between Ballycotton and Clifden.
- MRSC Malin Head is the contact point for routine operational matters in the area between Clifden and Lough Foyle.

Each MRCC/MRSC maintains a ‘24/7/365’ listening watch on VHF Channel 16 and MF 2182 kHz. Each broadcasts Maritime Safety Information [MSI] on VHF and, in some cases, MF radio in accordance with published schedules. MSI includes UK Hydrographic Office navigational warnings, Irish Marine Notices, Gale Warnings, Shipping Forecasts, Local Inshore Forecasts, Strong Wind Warnings and Small Craft Warnings as issued by the Irish Meteorological Office. IRCG is also responsible for NAVTEX broadcasts.

The Centres are connected to their own communications network of 19 VHF sites, MF & HF and digital paging system. The MRCC/MRSC organisation is based upon a continuous communications watch on VHF, VHF-DSC, MF and MF-DSC, which provides radio coverage of Irish coastal and offshore waters out to 150+ nautical miles. This communications watch includes a distress watch on the international VHF & MF distress frequency. In addition to radio and satellite communications, MRCC/MRSCs keep a constant emergency telephone watch.

NMOC Dublin acts as a single point of contact for satellite derived alerts.

### 4.3.1.3 SAR Mission Co-ordination

The staff at the NMOC / MRSCs perform duties in the conduct of search and rescue incidents, and they have responsibility for maintaining the NMOC / MRSCs in a continuous state of preparedness.

The NMOC / MRSCs staff consists of personnel who are experienced and/or trained in SAR operations.

When a period of heavy activity is anticipated or during major SAR incidents, it will be possible in the near future (after rollout of ICS) for workload to be shared between Co-ordination Centres. Each Centre will be able to link landline or marine communications channels, as well as eventually to the Tetra network.

Each SAR operation is carried out under the co-ordination of a SAR Mission Co-ordinator [SMC] designated for the purpose by IRCG. The SMC is responsible for efficiently conducting an SAR incident using the assets available. The SMC is responsible for co-ordinating all stages of the SAR operation. Their responsibilities include the prompt dispatch of appropriate and adequate SAR assets, and the prosecution of SAR operations until rescue has been completed, or chance of success is no longer a reasonable possibility.

There may be a need to call in additional resources to NMOC / MRSC in order to effectively and efficiently manage an SAR incident. This may be through the use of the on-call Incident Management Team, as discussed below, or through retention or recall of watch-keeping staff, as considered above.
**Incident Manager / Management Team**

IRCG have established procedures for the deployment of an Incident Manager / Management Team, comprising the following members of staff, who operate an “on call” roster:

- Deputy Director.
- SAROPS / VS&T / POL/SALV Managers.
- Other On call staff (includes Divisional Controllers and Operations and Training Officers [OTO]).

Their responsibilities include

- To act as decision making authority in respect of places of refuge, casualty intervention and pollution response.
- To provide a response to marine casualty incidents and to monitor/intervene in marine salvage operations.
- To act as local Co-ordinator of SAR Ops.

It should be noted that the CUSMs have undergone SMC training and would, therefore, be able to make a positive contribution to the Incident Management Team. However, they are not currently covered contractually for on-call arrangements.

During the course of this Review, concern arose that there may be insufficient management resources available for this function in the event of a prolonged incident - e.g. the “Princess Eva” incident in Donegal Bay which lasted for several weeks - and for the need to establish a fully-functioning Integrated Incident Command Structure (sometimes referred to as “Unified Command”).

In either case, there is concern that there are not enough staff members on call with the appropriate knowledge and experience to deliver this capability effectively. This matter should be resolved immediately.

### 4.3.2 Watch-keeping arrangements at NMOC / MRSCs

**Working practices:** The primary roles at the NMOC / MRSCs are:

- To monitor radio channels for vessels in distress.
- To allocate appropriate SAR resources in the event of a distress or major marine incident.
- To co-ordinate SAR missions.

In order to maintain full service cover at each of the Centres, the following watch-keeping arrangements are in place:

- **NMOC Dublin:**
  - 0800 - 1600: 3 Watch officers
  - 1600 - 2200: 3 Watch officers
  - 2200 - 0800: 3 Watch officers

- **MRSC Valentia and Malin:**
  - 0900 - 2100: 3 Watch officers
  - 2100 - 0900: 2 Watch officers

At any one time, one of the Watch officers at each Centre is nominated as the Duty SMC.
The working practices require 18 full time staff watch-keepers at Dublin, and 14 each at Valentia and Malin, as shown below.

| Numbers required: | Given that IRCG has an obligation to deliver 24/7/365 safety radio watchkeeping and SAR service provision, it is possible to calculate the number of watch-keepers required as follows:

i. Assuming that each watch-keeper is entitled to the following -
   - Annual leave – 31 days; public holidays – 9 days; “privilege days” – 3 days;
   - sick leave – 7 days; in service training – 15 days: TOTAL “deductions” – 65 days
   - Thus he / she will work for 300 days pa (42.86 weeks pa).

ii. Assuming a 41-hour working week, productive working hours are calculated at 1757 hrs per annum.

iii. Given that there are 8760 hrs to be covered per annum:
   - People required = 8760 / 1757 = 5 persons required per post pa.

On the basis that there are three posts rostered 24/7, the numbers employed for current manning reflect a degree of additional cover at NMOC Dublin (+3) to provide immediate access to additional resources if required, and the flexibility to provide the “third man” at Valentia and Malin, which have 1 person less.

**Rosters:** It should be noted that the 8 hour watch-keeping arrangements at NMOC Dublin allow a greater interface between HQ management and the watch-keepers. The 8 hour shift also allows for greater flexibility of manpower in the event of a major incident placing demands for additional staff to be present at NMOC, either by means of early recall to duty or through remaining on duty at the end of the nominated shift.

12 hour watch-keeping is in place at MRSCs Valentia and Malin, in part, to satisfy the long distances travelled by many of the watch-keepers at these locations to or from their homes.

With 12 hour watch-keeping, there is particular concern that there may be increased tendencies towards fatigue amongst the watch-keepers, particularly at busy times, which may not be the case with 8 hour watch-keeping.

There is a complicated formula for the times and rates of payment at which watch-keepers may become eligible for overtime. With 12 hour watch-keeping, the higher rates for overtime payments are reached at an early stage, when retention or early recall to duty is necessary. 8 hour watch-keeping reduces the costs of overtime payments to some extent.

Given that the same human resource is needed to provide 24/7 cover, whether 12 hour or 8 hour shifts are worked, the advantages of the 8 hour shift (flexibility coming on / off watch, reduced fatigue, more interaction with management, lower cost of overtime), suggests that these should be considered for Malin and Valentia. Thus 8 hour watch-keeping at all Centres is the preferred option, however it has been suggested that there would be significant IR issues with any proposal to implement this.
4.3.3 Cost of SAR operations

A breakdown of costs for the three Centres is shown in Figure 4-1. As one would anticipate, Dublin is about €300,000 pa more expensive to operate than the other two Centres.

Figure 4-1: SAR Operations operating costs

![SAR Operations operating costs (‘000 €, 2010)](image)

The trend in operating costs over time is illustrated in Figure 4-2. Operating costs have been contained over the last three years.

Figure 4-2: SAR Operations operating cost trend

![SAR Operations operating costs trend 2006 - 2010 (‘000 €)](image)

4.3.4 Resilience of current NMOC / MRSC structure

There is a need to consider how the current IRCG co-ordination model may maintain “business as usual” [BAU] in the event of the loss of any one of its operating Centres (i.e. the robustness of IRCG’s resilience and redundancy arrangements). This includes the need to consider what investment may be needed at other Centres in the event of the catastrophic loss of Dublin NMOC in order to ensure that Ireland, as a State, maintains its international commitments.
Although this latter event may be considered unlikely, it is not beyond the realms of possibility and, in the event that it did happen, IRCG management consider that it would take in the order of 18 months to rebuild and re-equip Dublin NMOC. Accurate costs are not available for this, although a figure of €4m - €6m has been suggested.

The current arrangements provide for 8 working desks at NMOC - there is a need for a 9th desk to cover VTMIS and maritime security - and for 4 working desks at both Malin and Valentia MRSCs (a “split 8-desk” solution). The ongoing investment in communications and other systems will allow Malin and Valentia MRSCs to provide 50% of the nationwide coverage each in the event of the loss of NMOC Dublin, but only on a temporary basis.

To provide robust resilience, there would need to be the provision of suitable accommodation for the HQ function, both for management and for the administrative support functions, and for the provision of an alternative “mirror” NMOC with 9 desks.

4.3.5 Reduction in number of Centres / Alternative models

Background: This question has been addressed on several previous occasions. On each occasion, sound reasoning produced recommendations to reduce from the current 3 Centres to 2 Centres, closing either Malin or Valentia. These failed to be adopted due to political and / or social constraints.

An earlier internal review also considered the “West Coast Option” - that was to close both MRSCs Malin and Valentia and to find a suitable, single location on the west coast, potentially in the Limerick or Galway area and potentially co-located with Ireland’s Air Rescue Co-ordination Centre. For similar reasons, this option was also not adopted.

We are now considering the number of Centres required again. In addition to the overall objectives of this Review to consider VFM and the associated “3 E’s” - economy, efficiency and effectiveness - it is also essential consider the resilience of IRCG to continue to deliver its services and commitments in the event of a catastrophic loss of one Centre, as discussed above. This need for greater resilience is driven by the need for compliance with IRCG’s statutory obligations, but will also result in greater effectiveness in extremis. A true test of effectiveness for IRCG is whether it will cope when there is a major issue to deal with.

Both the Irish and UK Governments are currently considering the provision of Coast Guard and SAR services around their coastlines. Simply put, the UK is moving from a territorial model (based on geography), to a functional model (based on needs). Technology plays a key role in permitting this policy. Discussions with the UK’s MCA indicate that this is a critical change in philosophy that must be embraced in order to realise better economy and efficiency. Recent communications technology makes it possible to achieve this without loss of effectiveness of the SAR capability.

On completion of the current investment programme in upgrading the networking capabilities at all three Centres in Ireland, there will be much improved communications capabilities between the three Centres. NMOC Dublin will have the capability to assume nationwide control in the event of the loss of one of the MRSCs, assuming that an additional upgrade takes place to enable it to control both Malin’s and Valentia’s MF at the same time. In the event of the loss of NMOC Dublin, there is a geographic ‘split’ in the ability of MRSC Valentia and Malin to monitor all aerial sites - in effect they would each control their respective ‘half’ of the country. (This could be improved through adoption of a 2 Centre Model as discussed below.)

IRCG management is to be commended for its vision in progressively implementing this capability in recent years. It will therefore soon be feasible to adopt a functional approach to reduce costs, improve resilience, and not degrade the SAR capability.
Alternatives: Four alternative models for provision of Rescue Co-ordination Centres have been identified:

- 3 Centre model (the status quo);
- 2 Centre “mirror” model (A), based on NMOC Dublin and a “mirror” NMOC at either Malin or Valentia;
- 2 Centre “split-mirror” model (B), based on NMOC Dublin and EITHER MRSC Malin OR MRSC Valentia operating full time, with the other station as a “hot stand-by” (a complete and ready alternative at short notice); and
- 1 Centre model, based on NMOC Dublin and a hot stand-by Centre in close proximity to Dublin.

In all cases, there would need to be the capability to man up to 8 desks at all times, although this will increase to 9 desks. Under current watch-keeping arrangements, this 9th desk would be covered on an ad-hoc basis.

IRCG management have assessed the following manning for these options:

<table>
<thead>
<tr>
<th></th>
<th>NMOC DUBLIN</th>
<th>MRSC VALENTIA</th>
<th>MRSC MALIN</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT</td>
<td>3 x operational Centres</td>
<td>18</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>2 Centre “A”</td>
<td>NMOC + ‘mirror MOC’</td>
<td>27</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>2 Centre “B”</td>
<td>NMOC + MRSC M/V + stand by</td>
<td>27</td>
<td>14 + 4</td>
<td></td>
</tr>
<tr>
<td>1 Centre</td>
<td>NMOC + stand by</td>
<td>35</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

The numbers of watch-keepers above allows for full time coverage and minimises the need for overtime.

The following discusses the merits of each option.

Option 1: Status quo: There are a number of problems with this option:

- The requirement for a split NMOC function in the event of the loss of Dublin NMOC.
- Current watch-keeping arrangements at three Centres leads to duplication of effort, and requires a total of 46 watch-keepers. This is not the most cost-effective way to deliver this element of IRCG’s services.
- Critically, in practice the resources needed to man these Centres is not actually available – there are only about 37 staff. The capability is maintained only through significant overtime (about €240,000 in 2011), but more importantly this raises significant health and safety questions concerning fatigue of watch-keepers, and the potential consequences of overloading these.
- The geographical distribution of incidents is not evenly spread throughout the IRCG AOR. Thus Malin Head’s staff gain incident experience relatively slowly, and have less regular opportunity to exercise competencies because they have fewer incidents to manage.
**Option 2: 2 Centre Mirror Model (A):** This would utilise the existing 3 Centres for their hardware and communications capabilities.

NMOC Dublin would remain as a full-time station.

Either MRSC Malin or Valentia would continue to provide 24/7 radio watch-keeping and SAR co-ordination on the basis of their existing infrastructure, with the ability to transform to the “mirror MOC” in the event of the loss of NMOC Dublin. Watch-keeping would be provided on the basis of 3 x 8 hour watches at both stations.

The physical communication infrastructure located at both stations would still be required, regardless of the final choice for the location of the mirror MOC. We understand that the existing communications networks could withstand the workload, although there may need to be some minor modifications to the infrastructure to ensure continued resilience for the equipment at the “non-operational” site.

However, there is a need for capital investment at one of these stations in order to provide the additional desks required to fulfil the total functionality of the mirror MOC. The following considers the potential of Valentia and Malin Head to act as the mirror MOC.

**Potential for Valentia to act as mirror MOC:** There are two alternative suggestions for modification works at MRSC Valentia.

The first is for a complete shut-down of the station while extensive rebuilding works are undertaken - this would seriously impact on the resilience that it is intended to enhance, as there would, in effect, be no back-up in the event of failure or loss of NMOC Dublin during the building period, unless a temporary stand-by solution was available out of Blanchardstown or a similar site.

However, the second alternative suggests that the current building at Valentia could accommodate the necessary modifications with some structural modifications: these could be carried out while the existing station maintains its full functionality as at present or at least limit the period of total shut down (this requires investigation). The current Ops Room could be expanded by removal of the current DC’s Office: this could be accommodated elsewhere within the building or within the overall site complex. The Emergency Room could be constructed below the existing Ops Room. Limited refurbishment would undoubtedly represent a significant cost saving over a totally new build, which could be quantified by the OPW.

(Costs in the region of €500,000 have been suggested for the refurbishment costs - a significant saving over a total rebuild.)

**Potential for Malin Head to act as mirror MOC:** Different views have been offered on the practicality of i) extending Malin Head if it is chosen as the mirror site, and ii) the need to construct a new building in order to accommodate the additional desks and Emergency Room - in effect, the construction of a new MRSC in total. This latter work could be carried out while the existing station maintains its full functionality as at present.

It has been suggested that there is a green-field site available adjacent to the current MRSC footprint, although this is understood to be subject to ongoing negotiation with a local landowner. An alternative would be for the existing office out-buildings to be demolished and re-built.

Approximate OPW costs of a new build at either Valentia or Malin are considered to be in the region of €4 million and an 18 month build. Initial indications from OPW are that Valentia may be slightly more expensive (for a new build) given its restricted footprint and topography.
**Additional requirements at mirror MOC:** If the mirror MOC were activated in full as a result of the loss of NMOC Dublin, there would need to be additional provision of administrative and technical support office space for the duration of the rebuilding works at Dublin, regardless of the chosen location. This could be through the use of temporary facilities (Portakabin type). Costs have not been suggested for these additional requirements as they should be available at short notice if and when required.

There would also be the inevitable additional travel and accommodation costs for displaced HQ staff, who would be required to relocate for this period.

**Option 3: 2 Centre Split Mirror Model (B):** Similar to “2 Centre A”, watch-keeping would be provided on the basis of 3 x 8 hour watches at both operational stations, and all three stations would remain in use for their hardware and communications capabilities.

With this option, however, the non-operational MRSC would be kept live to retain a hot stand by capability (but not watch-manned). In the event of the loss of NMOC or the MRSC retained as operational, the stand-by could be activated reasonably rapidly to provide the cover required.

There would be a need for a continuing presence at that hot stand by location to carry out daily maintenance checks, and ensure that all equipment that needed to be rapidly reactivated was in full working order.

**Option 4: 1 Centre Model:** There is a possibility that the service could be reduced to a single national Centre with a “hot back-up” Centre in close proximity to that Centre (the “1+1 model”).

Given that the primary MRCC / NMOC in Dublin has received greater investment in equipment and facilities during the current upgrade programme, it would seem sensible to retain this location as the primary Centre. Dublin would also offer more potential back up from senior management who are based there.

A suitably local facility would be needed to provide continuous back-up, and almost immediate take-over in the event of a catastrophic failure of this Centre. Discussions with CIL indicate that the CIL buildings in Dun Laoghaire have suitable capacity for such a facility. This is in relatively close proximity to Leeson Lane, on the same side of the River Liffey, and road (and DART) access between the two Centres is good.

This option is complicated by questions over how CIL will be funded and governed in future, and it may be difficult to enter into substantive discussions with CIL until this is clarified. There may also be potential hidden costs in using a third party building which would have to be quantified. However it remains a potential option for the future and should considered appropriately.

**Other considerations:** Given that the Irish SRR is contiguous with and, in fact, surrounded by the UK SRR, it is feasible and desirable to consider cross-border arrangements and agreements.

Consultations with the UK’s MCA indicate that it would be prepared to consider how it and IRCG can work together to permit improved efficiency with mutual benefits, noting that there are “considerable opportunities for inter-operability”. However, there are also difficulties, notably regarding security issues associated with the VTMIS Directive and the sensitivity of national security information. This might be a stumbling block to total integration with MRCC Belfast - the UK Government might not wish another sovereign State to have unfettered access to all information.

What can be done, and what the benefits might be, needs discussion. For example, it may be possible to conclude cross-border agreements to link NMOC Dublin into MRCC Belfast for a short period during the re-alignment of IRCG’s services following the catastrophic loss of NMOC Dublin.
4.3.6 Conclusions

We recommend that the status quo (3 Centre model) is not retained, although we recognise that our recommendation presents a number of operational, technical, industrial relations and local community challenges. Retaining the status quo leaves health & safety issues unresolved, and would forego the opportunity to improve operational and cost-effectiveness. As will be explained later in this Review, the people saved by alternative options are much needed for redeployment to some of IRCG’s other duties.

It is important to note that in the opinion of many stakeholders consulted, and also in the opinion of IRCG senior management, there should be no degradation of the SAR capability if these recommendations are properly managed and resourced, and if existing staff are re-assigned. On the contrary, people distributed to fewer Centres would have more opportunity to exercise their competencies. There would be additional benefits to the service through improved working conditions and greater opportunities for all staff to be better engaged in CPD.

Our recommendation is to focus on the 2 Centre ‘Mirror’ Model (A) because:

- In comparison to 2 Centre Model (B), 2 Centre Model (A) delivers the same operational benefits, whilst offering greater efficiency.
- In comparison to the 1 Centre Model, 2 Centre Model (A) offers the surety that there will be two Centres actually working at all times, and avoiding having “all eggs in one basket”. This comes at an approachable cost.

Thus the 2 Centre ‘Mirror’ Model (A) provides a balance between efficient and effective use of resources. Cost may be cut further with the 1 Centre model, but only at the expense of potentially reduced effectiveness in extremis.

Basing the decision on which station to retain on grounds of cost, it appears that Valentia may be the most cost effective option, if modifications can be accomplished without closing the station, or by mitigating the effects of, or the length of, the time taken for these changes.

We further recommend that discussions between IRCG and UK MCA should be placed on a formal footing to consider the benefits of further cross-border cooperation.

4.4 Efficient and effective delivery of volunteer services for SAR

4.4.1 Volunteer Services and Training [VS&T] Branch

The purpose of this Branch is to manage, train and provide for the health and safety of a national 24/7 Coast Guard volunteer service on the coast and inland waterways of Ireland.

The volunteer service consists of approximately 900 uniformed Volunteers, divided into 49 Volunteer Coast Guard Units [CGUs] strategically located between Greenore, Co Louth and Greencastle, Co Donegal. All CGUs are classified as Shoreline Search Units, with several units in addition trained and equipped to operate as Cliff Rescue and/or Boat units, as follows:

- 23 x Search units
- 4 Search & Cliff units
- 7 Search & Boat Units
- 15 x Search, Boat & Cliff units
CGUs are equipped, and trained to provide the following services:

- **Shoreline Search & Monitoring**
  - Roles include:
  - Participation in searches for missing persons and body recovery.
  - Monitoring and checking reports of sightings of flares, distress signals and various reports made by general public to emergency services, as tasked by IRCG Rescue Coordination Centres [RCCs].
  - Rescue and first aid using ‘throw bags’, etc.

- **Cliff Rescue**
  - CGU teams are maintained and trained to provide specialist cliff rescue services, often operating in areas that are inaccessible by boat or helicopter.
  - Operational units are required to have a minimum of seven cliff technicians trained to defined standards.

- **Boat Operations**
  - Inshore Boat Response incorporating search, rescue and recovery.

Additional responsibilities include:

- **Conduct of Compliance Monitoring Patrols [CMP]**
  - Monitoring and checking of adherence to safety procedures and wearing of Lifejackets.
  - Shore and sea based safety patrols.

- **RCC Support**
  - Provision of emergency marine radio listening watches in the event of loss of service at any of the three RCCs.

- **Provision of Education & Safety awareness**
  - Community based awareness programmes.
  - School visits.

- **Provision of Community Support - during emergencies such as weather related**
  - Working with and supporting Gardai & Local Authorities during local emergencies such as flooding or hazardous weather conditions.
  - Provision of emergency transport to HSE for patients or HSE staff during poor weather conditions.

- **Attendance at Major Events**
  - In a monitoring, liaison, potential quick response role.
  - Typically employed in support of An Garda Siochana.
  - Liaison role includes monitoring and reporting to RCC in the event of a marine emergency.

Training and logistic support, which includes personal protective equipment [PPE], vehicles and equipment, is provided by VS&T Branch and IRCG stores at Blanchardstown.
4.4.2 Boat rescue and response services

To provide national lifeboat coverage, the RNLI provides a number of all-weather boats [AWB] and inshore rescue boats [IRB] around the coast based on their coastal risk reviews, sometimes at the request of the IRCG. DTTAS administers a grant of €150,000 annually towards the running of the RNLI.

IRCG rescue boats allocated to volunteer CGUs are provided either where there are insufficient RNLI IRB stations, to support cliff rescue units, or in order to provide Compliance Monitoring Patrols [CMP]. It is worth noting that these patrols are considered to have improved the wearing of lifejackets by recreational water users, in line with Irish legislation, from 30% to around 80% - 90% in recent years. This, in conjunction with RNLI and MSWG initiatives, is seen as a major contribution to the prevention of loss of life and to improved water safety around the coast.

Community Rescue Boat Initiative [CRBI] inshore rescue boats have been established at various locations around the coast, in areas where there is not an existing boat and/or where the local community has determined the need for additional rescue resources, perhaps in response to a local tragedy.

Although CRBI boats are community funded, IRCG makes a financial contribution to their operation, usually in the region of €5.5k per annum, which is normally put towards the costs of insurance. IRCG set minimum standards for the equipment, insurance, organisational management and training programmes for the CRBI units. The manager of VS&T Branch or his staff inspects CRBI units every 2 years in partnership with Irish Water Safety.

The VS&T Branch is managed by seven full time IRCG Officers, with administrative support provided by IRCG HQ.

The VS&T Manager has overall responsibility for the management of the volunteer CGUs and, in particular, for their operational readiness. He is currently assisted in this task by 2 x Operations and Training Officers [OTO] - there is a vacancy for a 3rd OTO which has not been filled - and by the 3 x Coast Guard Unit Sector Managers [CUSM].

(It should be noted that elements of the vacant OTO post is effectively carried out by the Clerical Officer (Tech) assigned to this Branch - a further reduction in administrative support.)

The CUSMs spend a significant amount of their time with the units within their geographic area of responsibility, and may attend Volunteers’ training exercises. Search units train at least once per month, boat and cliff rescue units train weekly - each training session lasting typically for 2 hours. Given that these units are made up of Volunteers who have a “day job”, this training is usually carried out in the evenings and at weekends.

The CUSMs spends a lot of time travelling between the units. One of them estimated that he spent at least 33% of his time on the road, and only 25% of his time with the CGUs. Another estimated that his normal working week was somewhere between 50 and 60 hours, just so that he can cover the distances between the units. Each of the CUSMs reported that they lacked administration support and assistance, particularly with regard to planning.

Volunteers are paid allowances for attendance at training sessions, and in the event of being deployed to an incident. Each Volunteer has to fill out an appropriate form for each event. This is then signed-off by the Officer-in-Charge [OIC] of the unit, before being passed to the CUSM, to the DC and then on to Dublin HQ.

Although the payments are very small, it is reported that the HQ administration staff handle in the region of 40,000 payments pa via this duplicative and legacy paper based system.
This is clearly inefficient and there is a need to introduce a more effective system, utilising off-the-shelf or customised software. The RNLI’s system may provide an example of the functionality required. This will improve efficiency of the administration function, reducing time spent on administering small value payments to Volunteers, and generating time to support VS&T staff on the road.

Operational readiness is determined by annual Operational Readiness Audits [ORA] - usually carried out by the CUSM - which ensures that the Unit is fit for purpose in its declared competency. This information is shared by both VS&T and SAROPS branches. In the event of an incident, the SAROPS SMC at the Coordination Centres will be aware of which CGUs are available to them for SAR missions.

**4.4.3 Coast Guard Units**

Figure 4-3 illustrates the number of callouts occurring in 2010 for each CGU (i.e. the number of times that the unit was tasked in response to a specific incident). There were 736 callouts in total in 2010. Figure 4-4 shows the number of lives saved / assisted by each CGU. The CGUs are organised in the figures as follows:

- Ardmore to Youghal: Search only (23 stations).
- Costelloe Bay / Inis Mor to Westport: Search and boat (7 stations).
- Ballybunion to Tramore: Search and cliff (4 stations).
- Achill to Toe Head: Search, cliff and boat (15 stations).

Assuming that 2010 is a representative year, the figures illustrate that only about one third of the CGUs are called out more than once per month on average. Stations with more resources tend to be busier than those that offer a search only response.

Total operating costs were €1.22 million in 2010. The operating costs by CGU are detailed in Figure 4-5. A wide range of costs is evident, with an understandable indication for units offering a boat response to be more expensive.

This analysis is brought together in Figure 4-6, which shows the cost per call out – the unit cost of responding. The cost per callout is typically between €1,000 and €2,000, although the cost at some stations is substantially higher.
Figure 4-3: CGUs number of callouts (2010)

Figure 4-4: CGUs number of lives saved / assisted (2010)
Figure 4-5: CGU operating costs

Figure 4-6: CGU cost per callout
The trend in operating costs for CGUs is shown in Figure 4-7, which shows that costs have risen substantially in the last five years, and doubled between 2006 and 2008. We understand that the rises to 2008 were due to “higher than usual spend mainly due to legal fees relating to Drogheda (€62k) and JSAR games held in Howth (€10k), also large payments for electricity, uniforms, Hep B injections, and equipment purchases.”

Figure 4-7: CGUs operating cost trend

![CGUs operating costs trend 2006 - 2010 ('000 €)](image)

The trend for capital costs for CGUs is shown in Figure 4-8. There appears to be an underlying need for expenditure on buildings, with costs in the region of perhaps €1m pa.

Figure 4-8: CGUs capital cost trend

![CGUs capital costs trend 2005 - 2010 ('000 €)](image)

CGUs with cliff and / or boat capabilities are generally more expensive than search only units, and therefore we make some specific comments on these.

**Cliff units**: Consideration should be given to a review of the Cliff Search function and the number of teams trained to perform this task. There was a perception that most cliff rescue incidents are for the recovery of bodies. Costs associated with the maintenance and training of cliff units are apparently proportionally higher than with other units.
The feasibility of the creation of one cliff unit per helicopter station / region has been considered in the past – in the event that they are required, the cliff team could be collected by the helicopter and rapidly transferred to the incident site. This was discounted after further discussion with IRCG management as it was felt that the tasking of the helicopter to provide the immediate SAR function might be compromised by such arrangements.

**Boat units:** Provision of response boats to some units is an acknowledgement that the nature of the coastline would make helicopter access to casualties extremely hazardous, and that it is a better option to rescue the casualty via a boat rather than from the cliff face. For some units however, it is suggested that the provision of boats is to allow the Volunteers to carry out compliance monitoring programmes afloat - but might this be done at cheaper cost from the slipways and other shore-based facilities?

There is also a need for IRCG to engage more pro-actively with the RNLI and with the CRBI units to impartially and dispassionately assess how collective services can be delivered in the most cost-effective and efficient manner. (It should be remembered that funding for CRBI is provided, in part, from IRCG funds through the VS&T programme.)

Fisher Associates consider that an overall national review of rescue boat services, involving all key stakeholders, should be undertaken. It seems probable that this would produce savings.

### 4.4.4 Reduction in / amalgamation of CGUs

**Background:** It is recognised that the coastline of the State is very varied and presents many challenges to those that use it, both commercially and for leisure. There is an obligation on the State to provide SAR services.

A comprehensive review of CGUs was undertaken in 2006. This concluded that the number of CGUs could be reduced to 37 “Ideal Coastal Units”. It did not actually say that the other 19 CGUs (at the time) should close, merely stating that these would “become out-stations of other more active stations”, and provide additional bases to launch rescue operations, although “over time there may be a requirement to close (some of these)”.

Since then, a number of amalgamations and closures have taken place. Fisher Associates understand that further closure of some CGUs would probably be very unpopular with Volunteers - they are fiercely (and justifiably) proud of the services that they provide to the State, and there are many community issues associated with their activities and locations.

**Potential for efficiencies / amalgamation:** The following criteria were considered “in the round” in reviewing the number of CGUs required, before coming to any conclusions and before making any recommendations:

1. The importance of retention of existing dispersal and distribution of the Volunteers, particularly in isolated rural areas - if a unit is suppressed in any way, what mechanisms need to be considered to ensure that the whole of a coastal area continues to have members in an amalgamated unit.
   a. It is important to retain well established links within IRCG and the volunteer community.
   b. It is important to consider the capacity to interact and support neighbouring CGU teams and other rescue services, particularly any neighbouring or local CRBI and RNLI units.
2. The presence of IRCG CGUs has a socio economic impact on a community, particularly with reference to the low cost community support provided by the secondary roles of the CGU - e.g. many CGUs provide support to the HSE for patient transfer in rural areas or the provision of essential transport links for care services in inclement weather (as was demonstrated in winter 2010 / 2011), and assistance to the Gardai.

3. Along the WNW seaboard (from the Shannon Estuary to Lough Foyle), CGUs are relatively thinly dispersed and thus present little or no opportunity for rationalisation. In fact, there are significant gaps in the coverage provided by CGUs in Donegal Bay (between the existing Killybegs and Killala CGUs), and in the Inner Galway Bay area, close to Galway City.

4. Recent investments in quality infrastructure. Recently constructed purpose-built CG Station Houses present an opportunity for local amalgamations, particularly where neighbouring units may be poorly equipped and these units are within a reasonable travel time. [“Category 1”]

5. Travel time in excess of about 35 minutes was regarded as an upper limit if amalgamations were to be considered. [“Category 2”]

6. It was also important to consider whether the amalgamation or removal of any CGU would adversely affect the balance of distribution of appropriate capabilities around the coast.

Having taken those factors into account, there was also a need to consider the activity levels of all CGUs, as given in the Figures previously. Recognising that a single year’s activities may not be representative, statistics were also provided for 2009 – 2011.

On that basis, the following stations were found to be the least active, with operating costs as shown:

<table>
<thead>
<tr>
<th>Station</th>
<th>Call outs</th>
<th>Operating costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>Carnsore Point</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Summercove</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Glandore</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Guileen</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Glenderry</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Waterville</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Seven Heads</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Helvick Head¹</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>MEAN callouts per unit per annum</td>
<td>3.1</td>
<td>MEAN annual operating costs</td>
</tr>
</tbody>
</table>

Note 1: Helvick Head CGU is currently non-operational.

Conclusions: There is a concern that very low levels of response activity in some units might result in higher risks to Volunteers with little regular incident experience (notwithstanding their training regimes). Recognising that an amalgamation of two or more units, rather than closure of one, offers better consideration of community perspectives, the stations identified above could be considered as listed below. The CGU retaining primacy is shown in CAPS.

1. **Carnsore Point** to be amalgamated with ROSSLARE [Cat. 1].
2. **Summercove** to be amalgamated with OYSTERHAVEN [Cat. 1]: this provides coverage for Kinsale Harbour and for Oysterhaven Bay.
3. **Glandore** to be amalgamated with TOE HEAD [Cat. 1] and its members trained in boat/cliff competencies.
4. **Guileen** could be amalgamated with BALLYCOTTON [Cat. 2]: and its members trained to support cliff rescue.
5. **Glenderry** could be amalgamated with BALLYBUNION and its members trained to support cliff rescue [Cat. 2].
6. **Waterville** could be amalgamated with KNIGHTSTOWN and its members trained to support cliff rescue [Cat. 2].
7. **Seven Heads** could be amalgamated with CASTLEFREKE [Cat. 2].
8. **Helvick Head** (currently non-operational) could be amalgamated with BONMAHON and its members trained to support cliff rescue. (Although Bonmahon does not have Cat. 1 status, this amalgamation is nonetheless considered appropriate.)

These amalgamations have the potential to improve the overall effectiveness of the CGU network by ensuring that all stations undertake a level of callouts that will build up more experience of responding to incidents.

These amalgamations will produce significant cost *avoidance* over the medium term, such as vehicles and new building or refurbishment, and will improve efficiencies and effectiveness. It is noted however that:

- The stations cost little to operate (about €50,000 pa, of which some will continue to be expended in terms of payments to Volunteers who will still undertake the combined workload).
- IRCG contend that there would be little impact on reducing costs of running VS&T, which is overstretched, but it will allow the people that they have to do their job better by covering fewer CGUs, better allocation of equipment, training and inspections and, in due course, will require fewer Volunteers.

In addition the Cliff teams at BUNBEG and KILLALA should be reclassified as Boat & Search teams, based on incident statistics for the last three years. It is not expected that there would be significant savings associated with these changes as their cliff equipment would be re-cycled but future costs would undoubtedly be reduced.

Fisher Associates recommend that the listed amalgamations be adopted. It is further recommended that IRCG should carry out a final team-by-team review to outline the method in which the amalgamations take place. IRCG should conduct the amalgamations in a manner such that the amalgamated team leaders would be facilitated in applying for a leadership role in the new combined team.

We also recommend that IRCG should adopt a policy of regular review of all CGU activities and statistics, to ensure that the provision of volunteer services around the coast remains the most effective, not only in terms of resources but also in terms of costs.

**4.4.5 Reduction in the duration of Volunteer searching after life has expired**

This is a very contentious and highly emotive subject.

It is current practice that CGUs may be tasked with searching the littoral area for up to 21 days after a person has been declared missing, and probably life extinct. This may not equate to 21 days continuous assignment of Volunteers. In all probability, full CGU deployment will occur for up to 3 or 4 days after the incident and then numbers will be scaled down, but increased at week-ends up to the 21st day.

It is difficult to estimate the costs of such prolonged incident responses. It may be necessary, for example, to contract external resources to provide underwater search capabilities in the event of a sunken vessel.
The latest figures that are available for such activities (2008) are given below:

Volunteers 21-Day Search Statistics (allowances only)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Total cost of 21 day search</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curraeoe</td>
<td>€2,322.13</td>
</tr>
<tr>
<td>Rosslare</td>
<td>€1,256.47</td>
</tr>
<tr>
<td>Carnsore Point</td>
<td>€3,147.10</td>
</tr>
<tr>
<td>Tramore</td>
<td>€4,089.13</td>
</tr>
</tbody>
</table>

Average cost of 21 day searches pa €11k approx.

It can be seen that these are not regular or frequent incidents, although there was a recent search at Union Hall, West Cork at the time of writing this report. The costs for this incident alone totalled about €27k, comprising Volunteers allowances (€22k) plus fuel (€5k).

4.4.6 Other cost saving and efficiency initiatives

1. Currently, the OIC and DOIC at all CGUs are paid small annual retainer allowance (€880 pa to the OIC and €440 pa to the DOIC) in recognition of the additional duties that they carry out. This is a taxable payment, and as noted previously, in the absence of case law or legal opinion, it may be held to be a form of contract of employment. With 49 units, this equates to payments of €64,680 pa.

   It is noted that there have been no changes to the scale of the allowances since 1998.

   Fisher Associates recommend that a review of payments to OIC / DOIC be considered, with a view to withdrawal of the retainer fees to be replaced by fixed allowances, on a cost neutral basis.

   a. If this is accepted, a date for the withdrawal of these payments will need to be agreed with the current post-holders.

   b. In compensation, they might receive fixed allowances e.g. for the use of home phone lines and payments for broadband internet connection.

   c. It is also suggested that the expense allowances for OIC and DOIC should be graded such that they are proportionate to their additional attendance and responsibilities.

2. The ratio of full-time staff to Volunteers at IRCG is extremely low (approx. 1:135) and this is considered to contribute to an almost excessive workload on the full-time VS&T staff (see earlier notes on the work levels of the CUSM for example.)

   By engaging Volunteers in wider roles that would otherwise be assigned to full time staff, Volunteers may contribute to improved inspection and training of CGUs, and provide for greater interaction between IRCG staff and Volunteers.

   a. There are numerous skills and competencies within the Volunteers that could be utilised to the benefit of IRCG as a whole. For example, some may be registered and qualified as first aid and medical trainers, or they may have superior boat handling / instruction qualifications over and above those needed for their role within their CGU.
b. The following training opportunities may be supported by ‘in-house capabilities:
   i. Basic medical training
   ii. Occupational first aid
   iii. Health and Safety training, in particular, Manual Handling
   iv. Communications training
   v. Boat and Search unit training and inspection
   vi. Cliff procedure training and equipment inspection
   vii. Incident Management support

Fisher Associates recommend that IRCG develop a programme to identify skills and competencies that may be available to the management team from within the volunteer cadre.

Those identified by this process may be further engaged by DTTAS HR Division through a mechanism similar to the Jobs Bridge Scheme or retained Fire Fighter scheme.

c. These Volunteers could be engaged on a part-time basis for particular activities, not necessarily providing support to their own units (in order to establish a degree of independence), and that the hours would be capped at an appropriate level. Volunteers would be compensated by payment of nominal fees and travelling expenses.

d. A sample cost from 2011 is for Health and Safety Officer Training - €11,545.50.

e. This would help to reduce the workload on VS&T staff, whilst enriching the role of Volunteers in the service.

4.5 Efficient and effective ship casualty and pollution preparedness and response

In compliance with the EC VTMIS Directive, IRCG is charged to provide a response to marine casualty incidents, and to monitor/intervene in marine salvage operations, including the authority to overrule other statutory authorities.

The following considers how IRCG can effectively and efficiently demonstrate and deliver its ship casualty and pollution preparedness and response, in the event of a major incident within the Irish Pollution Response Zone and EEZ.

4.5.1 Pollution and Salvage Branch [POL/SALV]

POL/SALV is the smallest of the operations sections within IRCG and has the following responsibilities:

• To develop and co-ordinate an effective regime in relation to preparedness and response to spills of oil and Hazardous and Noxious Substances [HNS] within the Irish Exclusive Economic Zone [EEZ] in line with the OPRC Conventions requirements.

• To provide effective response to marine casualty incidents.

• To prevent as far as possible loss of life and damage to the marine environment.

At present, the work of POL/SALV tends to focus on immediate operational matters. Casualty response capability is currently very limited and is very much dependant on the availability of current trained staff. The powers available to the UK SOSREP are given to the Director of IRCG.
IRCG provides and maintains the National stockpile of pollution equipment and supplies. The main stockpile is held in Blanchardstown with two satellite depots in Killybegs, Co. Donegal, and Castletownbere in Co. Cork. At present IRCG continues to maintain, and improve as necessary, spill response stockpiles.

IRCG does not have pollution responders - these responsibilities are delegated to the local authorities for shoreline response - but IRCG acts in an oversight role. In the event of a major incident, IRCG will need to co-ordinate response teams on board the casualty, on-scene (at sea) and on-shore.

IRCG have in place a contract with the UK-based Oil Spill Response Ltd for assistance in the event of a major marine pollution incident requiring [OPRC] Tier 2 or Tier 3 response. This contract provides access to technical assistance and to pollution response equipment and supplies that would not be available from the national stockpile (or in the event that the national stockpile may be exhausted).

The POL/SAL Manager has overall responsibility for the management of this Branch, with an establishment of one Manager, three Operations & Training Officers [OTO] and 1 x HEO. In reality, the POL/SAL Manager post is vacant and has been filled by 1 x OTO, and there are no OTOs. This leaves 3 x vacancies for OTOs, which obviously impacts on the operation of this Branch and the State’s ability to effectively prepare, prevent or respond to a shipping casualty.

It is noted that the effectiveness of POL/SALV has been further degraded in recent months as the acting manager has also been unavoidably fulfilling the role of DDC Dublin, as well as having close involvement in the refurbishment and upgrades at MRSCs Malin and Valentia. This latter involvement was a result of membership of the steering group at the start of the refurbishment / upgrade, but he was not released when transferred as Manager POL/SALV due to staff shortages.

4.5.2 Pollution response performance

Ireland has ratified the IMO MARPOL Convention and the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 [OPRC]. This latter convention requires the development and implementation of a National Contingency Plan [NCP] for pollution incidents and the responsibility for this plan is delegated to IRCG. At present, the NCP remains in DRAFT format due to the limited resources within POL/SAL.

Ireland is a signatory to the Bonn Agreement - this predates the OPRC Convention and the establishment of EMSA - but it provides for mutual aid between States in the event of major pollution incidents in the North Sea and approaches.

Directive 2002/59/EC, as amended by Directive 2009/17/EC, was transposed into National Law on 30th November 2010 through SI No. 573 of 2010 - the “EUROPEAN COMMUNITIES (VESSEL TRAFFIC MONITORING AND INFORMATION SYSTEMS) REGULATIONS 2010”.

These Regulations address one of IRCG’s core functions - i.e. the monitoring and assessment of risks from ships to the environment. The implementation of the Directive has fundamental implications for the organisation’s concept of operations, structure and systems at the NMOC and MRSCs, as well as for on-call staff. These include the need for drafting of appropriate SOPs, staff training, Manning levels and the interface with the SAR function.

These Regulations enhanced the former vessel traffic monitoring and information system [VTMIS] requirements with a view to:

- Better safety and efficiency of maritime traffic.
- Improved response of the authorities to incidents, accidents or potentially dangerous situations at sea, including safety provisions.
- Better prevention and detection of pollution by ships.
The Regulations designate the Director of IRCG as the authority with the powers to take independent decisions for the accommodation of ships in need of assistance. (This is similar to the powers vested in the UK’s SOSREP.)

There is concern amongst the IRCG management team that some aspects of the Regulations, and IRCG’s ability to comply with those Regulations, pose inherent implications for the State.

Senior managers in IRCG consider that IRCG’s preparedness and response capability is below that expected by international best practice. The current single-person structure of the POL/SALV Branch increases those risks as it is highly unlikely that IRCG would be able to effectively and efficiently respond to a major shipping casualty or pollution incident without recourse to significant external resources at very high cost.

There is further concern that this lack of preparedness and ability to respond may have significant financial implications for the State, in that contributions that may be expected from external funds may not be payable.

There are also significant risks to the environment of the State as a result of this inability to effectively respond, particularly in coastal areas, and this may also have significant social impacts as it may affect the livelihoods of the residents of the coastal areas affected.

As noted above, the National Contingency Plan currently exists in DRAFT format. The NCP will address the IRCG’s responsibilities with respect to Place of Refuge, Ship-to.Ship transfers and Hazardous and Noxious Substance controls required under VTMIS Regulations.

It is intended to publish the NCP in final format during 2012, following consultation with local authorities, Harbour Masters, the Environment Protection Agency and other Government Departments. It is expected that this consultation process will take at least 3 months.

Associated with the development and publication of the NCP, POL/SALV works with other Government agencies including the Environmental Protection Agency and the Dept. of the Environment and Natural Resources to ensure that local authority pollution response plans are in accordance with the stated requirements. This is a very large task and IRCG are assisted in this process by an external contractor (Braemar Howells).

4.5.3 Casualty response capability

In the event of a major casualty, it is probable that IRCG will also require engaging the services of an outside contractor to assist in this function, and there are arrangements in place with a London-based emergency marine management consultancy company for ship casualty response.

IRCG’s ability to respond effectively to a major shipping casualty will depend significantly upon the knowledge and expertise of the staff responding to that incident. That knowledge and expertise is currently lacking - in all probability, only the Deputy Director and the acting POL/SALV Manager have a reasonable knowledge and understanding of the measures that may need to be taken, and the implications of those measures on the shipping casualty.

As noted earlier in this Review, it is considered that the technical staff within the MSO have knowledge, skills and experience that could be of great benefit to IRCG in the event of a major incident. We have therefore recommended that some form of Memorandum of Understanding or Technical Protocol should be established between the two services, providing outline commitments from both parties with respect to the resources that may be needed.
4.5.4 Training, exercises and co-operation with external bodies

**Internal:** Given that IRCG’s capabilities to respond to a major shipping casualty or pollution incident are very limited, there is a need to address the shortcomings.

Internal training issues, in particular with regard to the need to provide greater knowledge and experience to NMOC / MRSC watch-keepers, have been identified earlier in the Review.

Similarly, the training needs of POL/SALV division staff with respect to Pollution Investigation have been discussed.

Fisher Associates recommend that the training needs identified by the ICAO audit should be implemented as the earliest opportunity.

**External:** IRCG also has a degree of responsibility for the delivery of external training - i.e. the local authority response teams will need to be trained in their duties for a variety of pollution incidents. This also applies to ports and harbours around the country.

**Exercises:** There is also a need to ensure that all plans - internal to IRCG and external, such as local authority response plans - are exercised to verify their validity and applicability.

Internally, these can be achieved through table-top exercises at the NMOC / MRSCs, utilising existing ICT capabilities, but there is a need to further develop those ICT capabilities, particularly with respect to pollution prediction for HNS and oil pollution incidents. This will need further resources to ensure that the potential scenarios are mapped, and that they can be translated into an ICT function.

Externally, there needs to be a programme of multi-agency exercises to test the validity and applicability of national and local response plans, where IRCG takes the lead role.

Currently, the major Emergency Regional Steering and Working Groups hold training and exercises without IRCG input or presence. This may mean that the Groups do not have full awareness of the likely outcome of maritime pollution incidents. It may also be the case that these Groups do not have a full understanding of the statutory basis of pollution response, and IRCG’s responsibilities in particular.

Fisher Associates recommend that POL/SALV Branch, in conjunction with other agencies, develops and resources an appropriate programme of multi-agency exercises to test the validity and applicability of national and local response plans for the next five years at an early opportunity.
4.5.5 Maintaining Business As Usual

In the event of a major shipping casualty or pollution incident, the demand for resources and response capabilities will almost certainly extend over a considerable period of time - e.g. the “Princess Eva” incident in Donegal Bay which spilt no oil but lasted for several months. At the same time, this incident must not detract from IRCG’s ability to maintain “business as usual” [BAU].

It is clear that IRCG, and in particular POL/SALV Branch as currently established, would be unable to achieve this, and the service would be operationally and functionally exhausted quite quickly. It is probable that IRCG would need to establish a ‘three-pronged’ approach - a fully-functioning Integrated Incident Command Structure [ICS] - which will require management and staff resources that cannot currently be satisfied.

The structure of that ICS is shown in the Figure 4.9 below. There are insufficient current resources within the POL/SALV Division to maintain BAU in the event that this is response is triggered.

Figure 4-9: Integrated Incident Command Structure
4.6 Restructuring of IRCG / overall resource implications

Although the preferred option for providing MNOC and MRSC capability achieves a reduction in watch-keeping staff, there is a wider need to consider the overall restructuring of IRCG to allow it to fulfil all of its statutory obligations. This restructuring would also take into account the particular need to make POL/SALV Branch fit for purpose, as well the need for the appointment / redeployment of management grade staff to deliver the Quality Assurance objectives outlined at Section 4.2.

We consider that this is fundamental to ensuring that IRCG can function as an economic, efficient and effective service.

Fisher Associates has therefore identified a future model, which meets the various concerns raised during this Review, whilst utilising the opportunity for greater economy and efficiency. These proposals are shown in the organograms on the following pages.

To adequately resource all IRCG’s obligations, there is a requirement for 83 FTE broken down as follows:

HQ → 20: the changes and actions to note include:

- the appointment of 2 x Inspectors - for Quality and Safety Assurance (reporting directly to the Director) and for Audit and Risk management;
- the appointment of 1 x HEO IT;
- the appointment into the 2 x vacant Electronics Engineer positions.

The appropriate grades for the Administration and Finance functions should be reviewed by IRCG.

NOTE: Currently the “operational” Engineering section has a complement of 3 (1 Electronics Officer, 1 Senior Engineering and Operations Officer, and 1 Engineering and Operations Officer) from the establishment of 6. The recent retirement of 1 x Electronics Officer leaves no engineering presence in the Valentia region.

This 50% reduction has occurred during a period when the scale and complexity of systems provided by the Engineering section has increased, and an inability to effectively handle system outages or failures in good time may leave IRCG in a vulnerable position such that it is unable to maintain its mandated responsibilities throughout the State and its Areas of Responsibility. Fisher Associates recommends that the Engineering appointments are treated with a degree of priority.

VS&T → 9: the changes are:

- The appointment of 3 x coastal Unit Inspectors.
- The deletion of 1 x OTO.

POL/SALV → 6: the changes are:

- The appointment of a full-time manager, 1 x OTO and 2 x Marine Response Inspectors [HEO grade].
- Delete 1 x OTO vacancy.
OPS → 48: the key changes to note include:

- Reduction in watch-keeping staff from 46 at 3 centres to 41 at 2 centres.
- Appointment of a Deputy Manager SAROPS – this is a non-cost option as this will be an equivalent to 1 x DC.
- Appointment of 2 x Station Controllers (“Senior Station Managers”) – this is a non-cost option as this will be an equivalent to 2 x DC.
- Appointment of 2 x Divisional Inspectors – this is a non-cost option as this will be an equivalent to 2 x DDC.

Fisher Associates recommend that these proposals are accepted in principle. In light of the various recommendations in this report, there will be a requirement for fine-tuning of the titles and positions in these organograms. These proposals, if implemented, support the overall multiple aims of improved resilience, economy, efficiency and effectiveness.
Volunteer and Operations Support → 9

Volunteer and Operations Support Manager
[x 1]

Deputy VS&T Manager [OTO]
[x 1]
SAR Resources & Standards

VS&T Safety Inspectors & Auditors
[x 2]

Coastal Unit Managers
[x 4]
East; West; South; Inland

Storekeeper [x 1]
Stores and Response equipment
IRCG Ship Casualty and Pollution Response Branch ➔ 6

Maritime Casualty and Assistance Manager
[1 x 1]

Maritime Response Officer [OTO]
[1 x 1]
Oil & HNS plan approvals and exercises

Maritime Response Officer [OTO]
[1 x 1]
Ship Casualty Response and Intervention

Maritime Response Inspector
[1 x 1]
Coast recovery, claims management,
Exercise planner, plan approval

Maritime Response Inspector
[1 x 1]
Response organisation,
Legislation, legal & liaison

Maritime Response Inspector
[1 x 1]
Environmental, VTMIS & Places of Refuge

Coast recovery, claims management,
SAROPS ➔ 48

Manager SAROPS
[x 1]

Deputy Manager SAROPS
[x 1]

Controller NMOC Dublin
[x 1]

Controller NMOC ‘B’
[x 1]

Divisional Inspector
[x 1]
Exercise planning, training & review

Divisional Inspector
[x 1]
Exercise planning, training & review

Station Manager NMOC
[x 1]

Watch-keeping Officers
[x 27]

Watch-keeping Officers
[x 14]
5 Recommendations and Conclusions

The following summarises the recommendations and conclusions that are identified throughout the Review, with reference to the section that these are derived from where appropriate.

3.2 Communications

IRCG should consider how communication with stakeholders can be improved to ensure that these perceive IRCG in a positive light with respect to its strategic direction and purpose, and how it works with other bodies.

Although it is accepted that IRCG is a front-line emergency service provider and must be managed with discipline, it appears that increased engagement between IRCG management and staff would be beneficial. The opinions and concerns of staff below senior management level could better canvassed and acted upon. Communication is not always easy – managers and watch-keepers on some roster patterns may not see each other for several weeks at a time. Modern ICT such as video conferencing, newsletters or online systems may be beneficial and prove to be cost effective.

It is recommended that IRCG should consider how it might improve liaison with other Government departments or agencies, and with other land-based, rescue service providers.

3.2 SOPs

Many of IRCG Standard Operating Procedures [SOPs] were originally written in 1993. Fisher Associates understand that there has been a programme of regular review of SOPs - unless there is a need for significant change, it is accepted that it may not be necessary to revise them.

Fisher Associates recommend that a formal, documented review of all SOPs should be carried out in the near future, and that a QMS document tracking and revision system is clearly identified with respect to all SOPs (and other important documentation).

3.2.3 Training and assessment of CGU boat crews

An independent assessment of CGU fast boat training was carried out in 2009, and a further internal review in 2010 with input from the Irish Sailing Association and Irish Water Safety. The findings contained recommendations on improvements to the training and assessment of boat crews. A further review is planned, and it is important for IRCG to quickly address all issues and to consider any findings to improve training and safety procedures in a timely fashion.

4.1 Relationship with other parts of Government

4.1.1 Corporate governance should demand additional KPIs of IRCG to permit the setting and monitoring of targets for improved economy and efficiency, and management should be empowered to deliver these.

4.1.2 IRCG must be fully staffed. Fisher Associates recommend restructuring of IRCG consistent with Section 4.6, with a requirement for 83 FTE.

4.1.3 Training:

a. The backlog of training, which has been caused in part by the inability to release staff during their normal working hours, needs to be addressed by ensuring that the correct complement is in place.

b. We recommend that the training initiatives identified in the IMO audit report are adopted at the earliest opportunity. If they are not addressed, it is likely that they will be the subject of more stringent comment and possible sanction by the IMO at the time of the next audit.

c. We recommend that the training needs identified by the ICAO audit should be implemented at the earliest opportunity.
4.1.4 More effective use of ICT

a. Development of ICT systems is required to support operational needs. This should facilitate improved VTMIS Directive compliance. For example, AIS systems can be programmed to generate automatic alarms to alert NMOC / MRSC staff. In the event of a ship proceeding along a Traffic Separation Scheme [TSS] in the wrong direction in contravention of the Collision Regulations [COLREGS], for example, or for unexpected or unexplained changes of direction or speed (perhaps an indication of a vessel in trouble), IRCG would be aware of these events at an early stage.

It has been suggested that “SafeSeasIreland” [SSI] may assist with IRCG’s operational ICT needs. We note that the current SSI system will not address all the needs of IRCG, for example the monitoring of fishing vessels and leisure craft. It seems possible that further development of SSI might contribute to these needs. Specialist advice is needed to assist with determining whether integration with SSI or some other alternative offers the most cost-efficient and effective solution to IRCG’s needs. This should consider the wider DTTAS context, and the wish to avoid developing overlapping systems.

b. We recommend that DTTAS should make appropriate resources available at an early stage to ensure that the HLPR is delivered within its stated objectives, allowing for the development and implementation of additional ICT systems and improved business processes. These should be implemented as soon as possible.

c. We further recommend that DTTAS make appropriate resources available at an early stage to ensure that potential HNS and oil pollution scenarios are identified through a similar process to the HLPR, and that this should lead to recommendations regarding appropriate ICT development and delivery.

d. There is a need for an internal ICT specialist. Fisher Associates recommend that DTTAS should consider as soon as possible how it might effectively engage more ICT specialists that can provide support to IRCG and other maritime functions within the Department.

4.1.5 There should be a dedicated point of contact within AGO. It is desirable that this contact should have maritime emergency experience to provide legal support to IRCG when this is needed, because the potential impact of such an issue might be extremely high.

4.1.6 There is also a need for a dedicated 24/7 point of contact within the Government’s or DTTAS’s media relations unit who has appropriate knowledge and experience of maritime matters, and who can travel with IRCG Incident Managers to major incidents.

4.1.7 Managers should have more control of the resources and factors that determine economy and efficiency, so that they can be held accountable for improving these. This may require change in the institutional structure of IRCG. We recommend that Government considers how improved accountability can be achieved, with or without such institutional changes.

4.1.8 IRCG management and DTTAS HR Division should resolve the issue of staff availability to manage incidents, review the on call structure, and add the necessary Officers to the system.

4.2 Quality assurance

4.2.1 There is a need to ensure that DTTAS / IRCG develop effective internal and external audit arrangements, such that there can be reassurance to the appropriate levels of management, that the service is delivering its commitments through efficient, effective and economic processes and procedures.
4.2.2 Risk and Safety Management

We recommend that IRCG, in conjunction with DTTAS and the AGO, review all the recommendations in the NSAI report and adopt OHSAS 18001 as early as possible. There is a need to ensure that many of those recommendations are adopted and implemented at an early date, if only to reduce the organisation’s potential exposure to inspection, investigation and/or prosecution by the Health and Safety Authority in the event of an accident or serious injury involving IRCG Volunteers. It may also be appropriate to consult with the AGO to ensure that any policies and procedures that may be adopted are in compliance with the appropriate Health and Safety legislation. This has resource implications.

We further recommend that, as a part of the restructuring of the organisation, a senior manager is appointed as Safety Systems Manager and is given the responsibility for safety oversight throughout IRCG. This should be at Assistant Principal Officer level as a minimum.

4.2.3 Quality and Environmental Management

Fisher Associates recommend that IRCG should consider the desirability and feasibility for the adoption of ISO 9000 - Quality Assurance Management - and ISO 14000 - Environmental Management. Adoption of these standards not only demonstrates a commitment to international best practice but will also focus on the effective and efficient delivery of IRCG services and commitments.

4.3 How many Centres?

4.3.2 Given that the same human resource is needed to provide 24/7 cover, whether 12 hour or 8 hour shifts are worked, the advantages of the 8 hour shift (flexibility coming on / off watch, reduced fatigue, more interaction with management, lower cost of overtime), suggests that these should be considered for Malin and Valentia.

4.3.5 We recommend that the status quo (3 Centre model) is not retained, although we recognise that this recommendation presents a number of operational, technical, industrial relations and local community challenges. Maintaining the status quo would leave concerns over health and safety of watch-keepers unresolved (related to undermanning), and forego the opportunity to improve operational and cost-effectiveness.

It is important to note that in the opinion of many stakeholders consulted, and also in the opinion of IRCG senior management (which has in the past devoted significant resources to preparing for a 2 Centre solution), and in our opinion, there will be no degradation of the SAR capability. On the contrary, watch-keepers distributed to fewer Centres would have more frequent need to exercise their competencies, and benefit from the faster accumulation of incident experience.

Our recommendation is to focus on the 2 Centre ‘Mirror’ Model (A), which is based on NMOC Dublin and a “mirror” NMOC at either Malin or Valentia. This option provides a balance between the most effective use of resources overall, whilst also freeing up posts for redeployment to deficient areas within IRCG.

Basing the decision on which Centre to retain on grounds of cost, Valentia appears to be the least cost option, if modifications can be accomplished without closing the station. Best value should be sought for works via a public tender.

We further recommend that discussions between IRCG and UK MCA should be placed on a formal footing to consider the benefits of further cross-border cooperation.
4.4 CG Volunteer Units

4.4.3 The current paper based system for payment of Volunteers should be replaced with an all-electronic online system, to be incorporated in the ICT development programme.

4.4.5 An overall national review of rescue boat services, involving all key stakeholders, should be undertaken. It seems probable that this would produce savings. A review of the number of cliff units should also be considered.

4.4.5 Reduction in / amalgamation of CGUs

Fisher Associates recommend that the amalgamations listed below be adopted. The CGU retaining primacy is shown in CAPS.

1. Carnsore Point to be amalgamated with ROSSLARE [Cat. 1].
2. Summercove to be amalgamated with OYSTERHAVEN [Cat. 1]: this provides coverage for Kinsale Harbour and for Oysterhaven Bay.
3. Glandore to be amalgamated with TOE HEAD [Cat. 1] and its members trained in boat/cliff competencies.
4. Guileen could be amalgamated with BALLYCOTTON [Cat. 2]: and its members trained to support cliff rescue.
5. Glenderry could be amalgamated with BALLYBUNION and its members trained to support cliff rescue [Cat. 2].
6. Waterville could be amalgamated with KNIGHTSTOWN and its members trained to support cliff rescue [Cat. 2].
7. Seven Heads could be amalgamated with CASTLEFREKE [Cat. 2].
8. Helvick Head (currently non-operational) could be amalgamated with BONMAHON and its members trained to support cliff rescue. (Although Bonmahon does not have Cat. 1 status, this amalgamation is nonetheless considered appropriate.)

These amalgamations have the potential to improve the overall effectiveness of the CGU network by ensuring that all stations undertake a level of callouts that will build up more experience of responding to incidents.

These amalgamations will produce significant cost avoidance over the medium term, and will improve efficiency and effectiveness.

4.4.7 Other cost saving and efficiency initiatives include:

a. Fisher Associates recommend that a review of payments to OIC / DOIC be considered, with a view to withdrawal of the retainer fees to be replaced by allowances, on a cost neutral basis.

b. We recommend that IRCG develop a programme to identify skills and competencies that may be available to the management team from within the volunteer cadre. DTTAS HR Division may further engage those identified by this process where this is practical.

4.5 Casualty and pollution preparedness and response

4.5.3 Technical staff within the MSO have knowledge, skills and experience that could be of great benefit to IRCG when dealing with a casualty or pollution incident, and there is a need for both to collaborate closely to mitigate the impact of the casualty and to effectively manage the emergency response. It is recommended that some form of Memorandum of Understanding or Technical Protocol should be established between IRCG and MSO, providing outline commitments from both parties with respect to the resources that may be needed.
4.5.4 Training and exercises
   
a. Fisher Associates recommend that the training needs identified by the ICAO audit should be implemented at the earliest opportunity.

b. We recommend that POL/SALV Branch, in conjunction with other agencies, develops and resources an appropriate programme of multi-agency exercises to test the validity and applicability of national and local response plans for the next five years at an early opportunity.

4.5.5 Business As Usual: Fisher Associates recommend that the restructuring and proper staffing of POL/SALV Branch, as proposed in this Report, should be implemented as early as possible.

4.6 Restructuring of IRCG

Fisher Associates recommend that the organisation charts for a restructured IRCG as laid out in Section 4.6 of this Review be adopted in principle.

Given the various recommendations in this Review, there will be a requirement for fine-tuning of the titles and positions in these organograms. These proposals, if implemented, support the overall aims of improved resilience, economy, efficiency and effectiveness.

Conclusion

There are good opportunities to improve economy and efficiency by rationalising from three to two Centres, and by amalgamating some CGUs. These steps offer three important related benefits:

• The Centres and CGUs will become more effective, because watch-keepers and Volunteers who are currently exposed to relatively low levels of incidents and callouts will have greater need to exercise their competencies.

• This will help to address concerns related to current undermanning of the three Centres, and consequential health and safety questions concerning fatigue of watch-keepers due to significant overtime worked, and the potential consequences of overloading these.

• Resources will be freed up overall to satisfy the urgent need to deal with deficiencies in meeting obligations with respect to pollution and salvage response, maintaining business as usual in the event of a major incident, and implementing better quality assurance.

There is an overall need to restructure IRCG to ensure that its obligations are met – and by extension those of the State of Ireland itself. We conclude that 83 posts are required within this new structure to meet the needs identified.

Significant investment in ICT business systems is required if IRCG is to meet its obligations against this complement.

Failure to rationalise the number of Centres, or to implement the required ICT projects, will result in the need for significantly more staff.