



Rialtas na hÉireann
Government of Ireland

Ireland's National Search and Rescue Plan

First Annual Report July 2020



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Foreword by Minister of State Hildegarde Naughton

I am pleased to publish this first annual report on the [National Search and Rescue Plan](#) (NSP) submitted recently by the National SAR Committee (NSARC), chaired by Sir Alan Massey. The NSP was published in July 2019 following a major review of the Search and Rescue system in Ireland. This review was triggered in turn by various reports into search and rescue accidents and the governance and oversight lessons identified in them.

The NSP itself provided for a new National SAR Committee which for the first time brought all key stakeholders in maritime, land and aeronautical SAR together under an independent Chair to look at how the overall system is working and where it can be improved. Sir Alan Massey was appointed for an initial period, following his successful chairing of the SAR Framework Review, to ensure the new NSARC was embedded as intended in the Report of that Review Group.

The annual report addresses progress on the phased implementation of the NSP as well as the work of the National SAR Committee and other new structures created as part of the NSP including the SAR Consultative Committee, the SAR Regulatory Forum and the SAR Health and Safety Forum. It also provides an opportunity for three Strategic SAR Coordinators - those being the Irish Coast Guard (IRCG) for maritime, An Garda Síochána (AGS) for land and the Irish Aviation Authority (IAA) for aeronautical SAR - to set out their activities over the last year and any particular issues of note.

Progress on implementation has been good and one of the key innovations in the NSP - the new SAR Assurance mechanism - is on track for delivery by the end of 2020. The report also provides updates on other related matters including recommendations made in the AQE Report on Oversight of SAR Aviation Operations in Ireland (2019) and the MCIB Report into the Irish Coast Guard RIB accident at Kilkee (December 2018).

Given the additional challenges imposed this year by Covid-19, the report is a strong endorsement of the commitment and dedication of all those involved in Search and Rescue in Ireland - volunteers and staff. It is clear from the report that there is a genuine determination at all levels to ensure we learn the lessons from the past and to make sure that Ireland's SAR system is world class in all its aspects.



Finally, I would like to record a sincere thanks to Sir Alan Massey who is stepping down as Chair of the NSARC following almost two years of involvement in this project, from steering the SAR Framework Review through to chairing the first year of the NSARC. Alan's contribution to the reform agenda has been immense, fuelled by his own drive, deep knowledge of SAR internationally and a personal commitment to this process. He has left an important legacy in his brief but intense involvement with SAR in Ireland.

Annual Report on Ireland's National Search and Rescue plan, July 2020

1. Executive Summary

This first Annual Report, prescribed in the NSP (2019),¹ presents a detailed progress report on the implementation plan for the NSP; updates from the new SAR structures on their achievements to date and priorities ahead; and activity reports from the three Strategic SAR Coordinators, the Irish Coast Guard (IRCG), An Garda Síochána (AGS) and the Irish Aviation Authority (IAA). It also provides updates on issues covered in the SAR Review Report (2019)² including progress where relevant on recommendations made in the AQE Report on Oversight of SAR Aviation Operations in Ireland (2019)³ and the MCIB Report into the Irish Coast Guard RIB accident at Kilkee (December 2018).⁴

The SAR Review Report recommended a phased implementation of the NSP to enable a managed and integrated approach. This is overseen by a Steering Group at Assistant Secretary level along with the chairperson of National SAR Committee. Progress in delivering key aspects of the implementation plan has been good, with the majority of actions completed or in train as follows:

- Validation by AQE of the SAR Review Report and the National SAR Plan;
- Implementation structures, including the National SAR Committee, up and running;
- Clarity in relation to roles and responsibilities promulgated across the system and formal agreements being finalised with all key stakeholders;
- Mechanism formalised and tested for reviewing International SAR Agreements
- IRCG's Standard Operating Procedures (SOPs) undergoing a major review and refresh;
- Advanced development of Key Performance Indicators for the NSP;
- Development of a new SAR assets register underway;
- Work well advanced on the new SAR assurance mechanism;
- Work on track to roll out a new virtual Joint Rescue Coordination Centre;
- Enhanced training programme in place for IRCG personnel in SAR aviation operations.

The respective reports from the National SAR Committee, the SAR Consultative Committee, the SAR Regulatory Forum and the SAR Health and Safety Forum give a comprehensive summary of the depth and breadth of the work and analysis underway. A key learning across the board is the value in bringing the various disciplines and domains together to create a common understanding of the challenges facing each and identifying opportunities for cooperation and exchanging good practice.

The SAR Coordinator reports provide a snapshot of the SAR related activities in each domain and the inter-relationships across domains. The IRCG as the principal SAR responder amongst all three is also undergoing significant reform post the fatal accidents in Kilkee and Blacksod. There is an extensive report on this programme in Appendix E. Finally, the report points to future areas of work and priorities for the various Committees. In the appendices, the Report provides brief updates on some wider activities in follow-up to the aforementioned AQE and MCIB reports which impact to one degree or another on the NSP and the work of the National SAR Committee itself.

Given the additional challenges imposed this year by Covid-19, this sustained progress on many fronts represents a significant achievement across a diverse and widely dispersed range of SAR actors and contributors in Ireland.

2. Background - SAR Review Report and National SAR Plan

On foot of an Air Accident Investigation Unit interim report (No.2018-004) into the R116 accident at Blacksod in March 2017, the Minister for Transport, Tourism and Sport commissioned an independent review of oversight arrangements for SAR aviation operations in Ireland. Following publication of the AQE Report in September 2018, the Minister committed to implementing the 12 recommendations contained in the report. The Irish SAR Framework Review Group (SARFRG), under the chairmanship of Sir Alan Massey, commenced its work in November 2018 and completed its report in June 2019.

The key deliverable from this review was a new National SAR Plan (NSP). This NSP provides for a re-balancing of the previous maritime-centric SAR Framework to encompass both aeronautical and land SAR more comprehensively. It also sets out more explicit governance, assurance and oversight roles across the SAR system. It "resets" a more strategic focussed National SAR Committee with a leaner, more coherent set of sub-committees - including a SAR Consultative Committee, a SAR Regulators' Forum and a Health and Safety Forum. The NSP also sets out a clear description of the National SAR system including roles, inter-relationships and responsibilities from the strategic through tactical to the operational levels. As an appendix to the NSP, guidance is provided on the development of a common approach to managing SAR incidents across all three domains (including the transition from search and rescue to search and recovery). It was agreed that the NSP would be delivered on a phased basis over the following 18 months to enable a managed and integrated approach to the development of the new SAR structures, along with the coherent development of MoUs and SLAs between SAR stakeholders to underpin the new SAR assurance mechanism.

A second deliverable was an implementation plan for the recommended model for a Joint Rescue Coordination Centre (JRCC). This "virtual" JRCC is intended to capitalise on the strengths of the current model, minimising disruption and exploiting opportunities for enhanced technology, closer cooperation and revised operating procedures, notably to address vulnerabilities identified in the existing model and provide for stronger oversight arrangements. Other outputs from the review process were revised arrangements for overseeing the international SAR agreement between the IRCG and UK's Maritime and Coastguard Agency and the closing out of two recommendations arising from the Marine Casualty Investigation Board's report on the 2016 fatal IRCG boat accident in Kilkee, drawing on international peer support and advice.

In addition, the 2019 SAR Review Report described progress in other areas relevant to the AAIU interim report and AQE report including regulatory oversight for aviation SAR and also other "spin-off" benefits not specifically anticipated in the original terms of reference for the review, such as the development by the IRCG of their Safety Management Systems and IT systems to enhance their management of volunteers around the coast.

Finally, the report recommended the embedding of a wider oversight role within DTTAS to ensure the NSP is implemented in full. The NSP Steering Group, comprising representatives at Management Board level within DTTAS and Department of Justice was established for this purpose. The Chair of the NSARC - Sir Alan Massey - is also a member of the Group.

This current annual report is a new requirement placed on the National SAR Committee to report on its activities and issues arising. It is also intended to update progress on the implementation plan for the NSP itself. For completeness, other wider issues and updates, including the IAA's work on regulatory oversight of SAR and the IRCG's work specific to the MCIB recommendations are covered as Appendices.

footnotes:

¹ <https://www.gov.ie/en/publication/856af1-the-national-search-and-rescue-plan-2019/>

² <https://assets.gov.ie/19432/2f909f23e225419a8941145f769e7fab.PDF>

³ <https://www.gov.ie/ga/preasraitis/be50b6-minister-ross-publishes-aqe-report-on-oversight-of-search-and-rescue/>

⁴ <https://www.mcib.ie/reports.7.html?r=239>

3. Implementation of the National SAR Plan

The SAR Review Report included an implementation plan to deliver key elements of the new NSP on a phased basis to enable a managed and integrated approach (see Appendix A). It was acknowledged that implementation of new elements in the NSP - notably the new structures and the new SAR assurance mechanism - would require time to deliver effectively, particularly in terms of the consequential demands placed on SAR stakeholders. The report was clear that implementation was about getting things right in order to maintain positive momentum while firmly embedding the principles and processes of the NSP across the SAR system in a sustainable way. To this end, engagement with SAR stakeholders, both primary and supporting, has been vital to ensuring buy-in to the new NSP and particularly its more innovative elements. Implementation of the NSP is overseen by a Steering Group comprising Assistant Secretaries in Aviation and Maritime within DTTAS, an Assistant Secretary from the Department of Justice to cover the Land SAR element being implemented by AGS, and the chairperson of the NSARC.

The SAR Review Report and NSP were noted by Government and published in July 2019. Since then progress in delivering key aspects of the implementation plan has been good, with the majority of actions completed and the residue on track for delivery by the end of 2020. The sole exception is the publication of a comprehensive register of Irish SAR assets, due for activation in Q1 of 2021. Given the additional challenges imposed this year by Covid-19, this sustained progress on many fronts represents a significant achievement across a diverse and widely dispersed range of SAR actors and contributors in Ireland.

Key milestones met are as follows:

3.1. AQE validation of SAR Review Report and the National SAR Plan

Following conclusion of SAR Review Report, it was agreed that AQE (authors of the original review and its 12 recommendations) would be asked to review the follow-up actions taken since their report on SAR Aviation Oversight. AQE completed this review in August 2019 which was positive, while noting the some recommended actions had yet to be fully completed. Their report was conveyed to the AAIU in context of their ongoing accident investigation. In summary, they found that 8 of the 12 recommendations had been fully addressed, with the remaining 4 either "partly" or "initially" addressed and still in progress. Appendix A provides the latest update on the AQE recommendations.



3.2 NSP Implementation mechanisms

All the new structures outlined in the NSP have been established and are up and running.

- The new National SAR Committee under an independent Chairperson, Sir Alan Massey, met for the first time on 16th July 2019, agreed its terms of reference and work programme, and formally initiated the NSP implementation process. It has met 3 times since. More details on the specific work of each NSP structure are presented below.
- The new SAR Consultative Committee, under the initial Chairperson of the Director of the IRCG, met on 25th September 2019, agreed its terms of reference and work programme and has met twice since.
- The NSP Steering Group to monitor implementation of the NSP, comprising relevant Assistant Secretaries from DTTAS and Department of Justice and the Chair of the National SAR Committee, has met three times;
- The SAR Regulatory Forum has met twice under the initial Chair of the Safety Regulation Division of the IAA, with representation from the Marine Survey Office, the Road Safety Authority and the Road Safety Division in DTTAS.
- The Health and Safety Forum has also met twice and agreed its terms of reference and work programme. It is being chaired on a rotational basis, initially by the Head of Safety and Quality Compliance in the IRCG.

3.3 NSP roles and responsibilities

The second phase of implementation was to underpin the respective roles and responsibilities of the various entities within the SAR system - as described in the NSP - through a process of reviewing and refreshing existing Memoranda of Understanding and Service Level Agreements at all levels within the system. This work is now at an advanced stage, mostly notably in terms of agreements between the SAR coordinators (IRCG, AGS and IAA) and between IRCG

and its SAR assets. While the original deadline for this work has passed, the National SAR Committee is satisfied that the additional effort involved will ensure a more robust output and a stronger level of understanding of roles and responsibilities within the system. It is expected that MOUs between the SAR Coordinators will be signed off by end of August 2020. MOUs between IRCG and its SAR asset providers are at the final stage, with an MOU signed with RNLI and work ongoing to complete MOUs with the Community Inshore Rescue Boat SAR assets. Details of the contribution of the Defence Forces to the National SAR Plan through their MoU with the IRCG is set out in Appendix F.

3.4 International SAR Agreements

The SAR Review recommended regular review of international SAR agreements, notably the IRCG's MoU with the UK MCA. The commitment already included in that MoU to undertake periodic training and exercises has been strengthened, and a new mechanism agreed with the UK for regular review and mutual learning has been activated. Practical application of these principles is achieved via the mechanism of the Irish Sea Working Group.

The National SAR Plan requests the Director of the IRCG to provide regular reports to the National SAR Committee on these international agreements. The Irish Sea WG met in early March and a further meeting is scheduled for September 2020. There is a commitment in their work programme to conduct a Table Top Mass Rescue Operation in October 2020. A live exercise in this regard is planned for 2021.

3.5 Review of IRCG Standard Operating Procedures (SOPs)

Another significant commitment made in the implementation plan for the NSP was for the IRCG to review its SOPs following the international peer review of two key SOPs relevant to the MCIB Report on Kilkee.

This work has continued as follows:

- A governing procedure for document control is now published and applies to all Coast Guard SOPs and policy documents. This procedure is part of implementing the Safety Management System and particularly in standardising, managing and controlling SOPs across the Coast Guard. A compliance officer was added to the Coast Guard HQ staff to manage compliance with the new procedure;
- Ops notice 1 of 20 provides a summary of extant ops notices. It is repeated annually and updated whenever new notices are issued. In addition to providing a list of all current Ops notices, it includes a system of tracking all withdrawn or updated notices.
- Older notices, particularly those that precede 2015, are being reviewed and updated or withdrawn as necessary. This body of work will continue well into Q3 of 2020 with a targeted completion date by year end.
- In conjunction with CHCI (the company contracted to provide the Irish SAR helicopter service) a revised Heli Ops SOP has been agreed. The intent of the document "is to provide IRCG personnel with clarity on CHCI's procedures, practices and aircraft capability in relation to service delivery under the contract". In this context, while the IAA have no oversight responsibility in respect of the IRCG, nor visibility of its contractual arrangements with CHCI, the IAA were requested to make general observations on the document in an effort to strengthen and improve the overall SAR system. This is the first time

this advisory process has taken place. The Heli Ops SOP, now in its 6th iteration, was signed off by both parties – CHCI and IRCG – in April 2020.

- Within the operations branch, non-operational information pertaining to Rescue Co-ordination Centre and operations administration is promulgated through Administration and Information (A&I) notices. A similar document control procedure as used for Ops notices is applied to these notices. 24 Ops notices have issued to date in 2020. This list includes notices that were specific to Covid-19 and some pre-2015 revisions.

3.6 . NSP Key Performance Indicators

The Implementation Plan also committed the SAR coordinators and the NSARC to the development of a set of key performance indicators for the overall National SAR Plan. Following consultation with SAR coordinators and key SAR assets, a proposal in relation to KPIs was considered by the NSARC in January, and a follow-up paper considered in May 2020.

The NSP covers three widely differing SAR domains, for which it is difficult to identify any single, over-arching KPI that is relevant and meaningful for the overall system. In terms of data available to measure performance, it is also evident that there are very different approaches taken across the three domains currently which do not yet lend themselves to meaningful aggregation.

The key priority initially is to measure SAR response capability over time, and for this the NSARC needs baseline data which is broadly comparable across the three domains. For this reason, NSARC agreed that various categories of KPIs should be applied consistently for each domain, as follows:

1. Responsiveness indicators for each SAR coordinator to include a measure in relation to SAR resource availability and incident response time within the SRR.
2. Response capability of key SAR assets. Similar to 1 above at a more granular geographical level across the SRR, derived from data submitted by SAR asset providers.
3. Effectiveness of NSP structures and systems. This indicator should include measures such as engagement in new SAR structures; the level of integration across SAR domains as evidenced by adoption of SLA/MoUs; participation in joint exercises and training; regular cross-domain incident reviews; the level of adoption of SAR assurance mechanisms; and the outcomes of SAR system audits/assessments.

On this basis and as a first step, each SAR coordinator and the key SAR asset providers have been requested to provide baseline information on current measures in place to gauge response capability, along with associated statistical data for 2019. Once collated, this information will be further refined after the first year of NSP implementation to develop a more coherent data set to underpin the KPIs.

3.7 Register of declared SAR Assets

A gap identified in the original SAR Framework document was a SAR Assets Register. It is intended that the register would be available to all SAR coordinators and would be populated by the SAR asset providers themselves on a continual basis so as to remain a current, consistent and authoritative inventory for the efficient management of SAR operations.

Work is well underway in developing this register in terms of scope and access. The register will contain essential information on capability and availability, as well as other details required for efficient SAR operations and the SAR assurance mechanism. Online access for users will be through the SAR Consultative Committee's portal site, which will enable SAR asset providers to modify and update relevant details.

The register will be activated once SLAs with asset providers are in place, setting out commitments, roles and responsibilities: this is anticipated for Q1 2021. MOUs already include an appendix which sets out Search and Rescue Units (SRU) availability, KPIs and standards of service, and this information is directly transferable to the SAR Assets register.

3.8 SAR assurance mechanism

One of the key innovations in the new NSP is the SAR assurance mechanism. Adapted from the New Zealand SAR model of "system assurance", it places an onus on all participants to provide annual assurance statements across key areas of performance and safety/risk management. While this does not obviate or supplant any statutory or other formal requirements, it provides a mechanism for routinely assuring that a minimum set of requirements is in place in relation to safety management and oversight across the SAR system. A guiding principle is that it should be proportionate to the scale and complexity of the organisations involved.

The new SAR Regulators' Forum and Health and Safety Forum are key supports to this SAR assurance process. The former will review the SAR system assurance reports (via the NSARC), share regulatory best practice and inform further enhancements of this system. The aim of the Health and Safety Forum is to encourage a collaborative and cooperative approach among the primary SAR stakeholders and service providers to health and safety issues in the SAR sector. Its membership will include experts in health and safety management within the main SAR service providers.

The National SAR Committee has the role of monitoring and reviewing the adequacy of this enhanced mechanism for assurance, specifically ensuring that the following activities are carried out:

- Regular reviews and updates of SAR agreements internationally;
- Regular reviews of MoUs / SLAs between SAR system participants;
- Provision of submissions (as appropriate) to the ICAO / IMO Joint Working Group on SAR to share experience and lessons learned with other States for the continuous improvement of the worldwide SAR system;
- Regular analysis of SAR operational data to identify trends and areas for improvement, along with a commitment

to make this information available to the wider SAR system through the National SAR Committee; Annual reviews of the SAR system to identify any specific gaps in capability and /or areas for improvement against the minimum requirements set out in relevant international conventions and guidelines (including Annex H of the IAMSAR manual);

- Other initiatives to promote system assurance through consultation with the Regulatory Forum and the Health and Safety Working Group.

All three pillars of the new SAR Assurance mechanism are now in place and operational. The next phase of activation are the formal agreements between the providers of SRUs and the SAR coordinators – setting out their respective roles and responsibilities and verifying that all involved are signed up to the principles of continuous system improvement, risk assessment and safety management. The process of activating these is still in progress.

The main declared organisations providing SRUs are agreed on the concept itself, and practical implementation is ongoing. IRCG has reached agreement and sign-off with the RNLI, which represents the largest SAR asset provider outside the Coast Guard's own volunteer units, as well as with CHCI DAC as the SAR helicopter provider. Meetings have taken place with Community Rescue boats (11 units so far), and each unit has been inspected by a marine surveyor to assess where they are in regard to systems for safety management, continuous improvement and assurance reporting. Meetings are taking place with the Community Rescue Boat organisations, with support from Water Safety Ireland, to sign off on the MOUs where possible and, where there is non-compliance with the assurance declaration requirements, to have in place an agreed road map for compliance with the community rescue boat organisation.

Another key element of the annual SAR assurance system is compliance with Annex H of IAMSAR. This Annex provides a framework for national self-assessment of the search and rescue system, aimed at identifying any specific gaps in capability and /or areas for improvement against minimum requirements of relevant international conventions and guidelines. This self-assessment was conducted as part of the SAR Framework Review process in 2019 and a second was completed in June 2020. The 2020 self-assessment recorded a total conformance score of 88%. An action plan is under development to address and resolve highlighted shortfalls during 2020/21.

Activation of the overall assurance mechanism, whereby SAR asset providers submit an annual statement of assurance, is dependent on formal agreements (SLAs) being in place with the Search and Rescue Units as outlined above. While significant progress has been made, this final step is now expected to happen during Q4 2020, with the first series of annual SAR assurance declarations becoming available thereafter.

3.9 . Implementation of virtual JRCC

The SAR Review report agreed an implementation plan for the establishment of a virtual Joint Rescue Coordination Centre (JRCC). The agreed model, derived from IAMSAR guidance, capitalises on the strengths of the current ARCC/ARSC and MRCC/MRSC laydown, while minimising disruption and exploiting the potential of enhanced technology, closer cooperation and revised operating procedures. Physical co-location of the respective RCCs was judged unnecessary in achieving the desired cross-domain functionality, and the fundamental operating principles of the current system remain in place. Staffing and training regimes would, however, need to be reinforced.

This new, virtual JRCC model once fully implemented will enjoy improved, IT-enabled situational awareness across the aeronautical and maritime domains and will – in particular – provide for enhanced operational oversight and prioritisation by MRCC Dublin of SAR helicopter employment across Ireland. The SAR review report agreed a phased implementation of up to 18 months, subject to any as yet unquantifiable delays in technical infrastructure and recruitment. Progress on the project is good, with strong collaboration between all three Strategic SAR coordinators in the process. Completion is foreseen for the end of 2020.

3.10 . Aviation Training

Another output of the SAR Review was a commitment to enhance training and levels of competence for IRCG personnel in SAR aviation operations. In that regard, the Coast Guard has developed a two week SAR Aviation Tasking and Coordination (SATAc) course, delivered by an aviation 'Approved Training Organisation' (ATO). The ATO is under IAA oversight. The aim of the course is to ensure that all IRCG personnel involved in tasking SAR aviation resources are suitably qualified for the role. Four courses have been successfully run to date. Places on the courses are also available to Garda Air Support Unit, the Air Corps and the Aeronautical Rescue Co-ordination Centre. The next course will be conducted online.



4. Reports from each of the new NSP structures

4.1 National SAR Committee

The NSARC was set up under the NSP (noting that aspects of its work were previously undertaken by the Irish Aeronautical and Maritime Emergency Committee (IAMEAC)). The NSARC is a strategic level committee with oversight of the National SAR Plan as a whole and covers all three SAR domains: maritime, aeronautical and land-based. It meets quarterly and can be updated out-of-committee on issues and developments from time to time.

The NSARC gives strategic direction to the SAR system and has both a forward-looking remit to ensure investments in SAR are strategically sound, and a review remit to examine performance, disseminate best practice and learn from experience. In other words, it provides the critical function of oversight and assurance to Government and its stakeholders. It has a clear mandate to hold the SAR system as a whole to account, and reports directly to the Minister.

During the process of developing the National SAR Plan it was clear that excellent working relationships already existed between stakeholders at all levels in the system, and indeed these were strengthened by the process itself. However, these need to be underpinned by clear structures, processes and procedures in order to consolidate the system's resilience, and to help integrate all of Ireland's SAR system components and contributors. Furthermore - and this is clearly recognised in the Committee's Terms of Reference - the National SAR system must be independent from the other national emergency systems, whilst also dovetailing seamlessly with them.

In its first year of operation, NSARC has been engaged in bedding down work, such as confirming its membership and Terms of Reference, as well as overseeing the functioning of other SAR structures now in place. These structures have reported to each NSARC meeting. Work was undertaken to develop meaningful KPIs for the system, along with other tools such as the national SAR Assets Register. The contribution that SAR Beneficiaries can make to the SAR System has also been carefully considered.

The work programme for the Committee is effectively built around driving the implementation of the National SAR Plan, and ensuring progress is occurring on all

fronts, at pace. In addition to this, the Committee has agreed a list of specific focus topics for its deliberations, balanced across the 3 SAR domains.

Some key lessons from the Committee's first year are:

- First, Ireland already had a very well-established SAR system in being when the SAR review process started in 2018, and the fundamental integrity of this system must be protected even while seeking improvements in effectiveness, oversight and safety;
- Second, one of the SAR systems key strengths is its wide array of SAR providers and stakeholders, many of them volunteers. In recognition of this the Committee took account of every contributor within its remit, no matter how small, to ensure no SAR entity would be omitted or left behind in its planning;
- Third, transparent and honest collaboration leads to tangible achievement, as seen in the development of the NSP itself, and this needs to be fostered and developed.

The top three NSARC Committee priorities for the coming year are:

- First, to establish and monitor effective KPIs for the SAR system;
- Second, to ensure that SAR oversight and assurance mechanisms are in place, and functioning as intended;
- Finally, to help ensure forthcoming investments in SAR are coherent, sound and respond to the needs of the whole system.

4.2 SAR Consultative Committee

The National SAR Consultative Committee is an operational level consultation committee and reports into NSARC. The Committee met twice over the last year - 25th September 2019 and 25th March 2020. The Committee receives updates between meetings. It essentially brings together the three SAR domains at an operational level - including all SAR co-ordinators (i.e. IRCG, IAA and AGS), asset providers (e.g. RNLI, Mountain Rescue Ireland) and support services (e.g. Met Éireann, Emergency Call Answering Service) in order to strengthen relationships, linkages and habits of cooperation across the system. In time it will also give a voice to SAR Beneficiaries.

The Committee can and does feed intelligence and recommendations through to the strategic level and acts as an early warning source for SAR system weaknesses or issues arising. Over time it will serve as a forum to share initiatives, processes and knowledge (including co-ordination on exercises) as well as for airing concerns and seeking mutually workable solutions.

The Committee agreed its terms of reference and modus operandi during the first year of operation. It addressed a wide range of topics including:

- Collaboration on exercises
- The SAR Assets Register
- Key Performance Indicators
- The contribution of SAR Beneficiaries to SAR system performance assessment and improvement
- Service Level Agreements
- Search and Recovery

It was briefed on various new initiatives in the SAR space including:

- Water Safety Ireland's ring-buoy pilot programme
- MET Éireann weather alert app 'push' notifications
- Irish Coast Guard's E-system for managing and communicating with volunteers (ICE)
- Redesign of Safety of the Water website
- Redesign of Safety of the Water website

A secure online area is available to the Committee for collaboration and information sharing.

A key lesson from the Committee's work to date is that the system continues to perform well and relationships between stakeholders are strong; the Committee's strength will be to enable even closer collaboration and facilitate information sharing and joint exercising.

The top three Committee priorities for the coming year are to further develop:

- Incident Management (interagency), ensuring clarity and a common approach through facilitating close collaboration in exercising;
- Clarity of roles and responsibilities, guidance and decision-making in Search and Recovery operations involving the Land SAR Coordinator, along with the management of public and/or third party interventions;
- Proactive sharing of information, best practice and new initiatives to enhance both SAR delivery and incident prevention in Ireland.

4.3 . SAR Regulators' Forum

The SAR Regulators Forum was a new initiative created under the NSP based on a philosophy of continuous improvement. The primary purpose of the Forum is to facilitate the exchange of best practice and procedures across the three SAR domains and monitor broad trends in relation to the regulation of SAR internationally. The Forum will act in an advisory capacity to the National Search and Rescue Committee in respect of SAR regulation, in particular it will review SAR system assurance reports (via NSARC), share regulatory best practice and inform further enhancements of the oversight and assurance regime. It is chaired on a rotational basis, starting with the IAA (Safety Regulation Division), and its membership includes the Chair of the National SAR Committee, the Marine Survey Office, the Road Safety Authority and the secretariat is provided by the DTaS. It can invite other participants as necessary.

To date the Forum has met twice - 2 October 2019 and 7 May 2020 - and has agreed its terms of reference. Areas discussed at those meetings included an overview of the regulatory framework within each sector, and by way of comparison, an overview of IAA enforcement policy, powers, sanctions and penalties. Discussions have also considered the importance of occurrence reporting and "Just Culture".

Some key priorities for future work include:

- Lessons learned from Covid 19;
- Improving the interface with UN cross-domain bodies: for example aviators getting an understanding of the IMO approach to SAR, and mariners getting an understanding of the ICAO approach to SAR;
- Common interfaces among regulators within Irish transport sector;
- Common risk assessment methodologies - eg Bowtie, SHELL, FTA, FMEA;
- Efficacy of regulatory agencies - common difficulties;
- Potential issues for SAR arising from Brexit - including "regulatory divergence".

4.4 Health and Safety Forum

The Forum is chaired currently by the Irish Coast Guard and reports to NSARC. The purpose of the Forum is to facilitate structured discussion regarding health and safety management amongst Ireland's SAR stakeholders, identify opportunities for continuous improvement, and provide support to forum members in developing and/or implementing the system assurance measures stipulated in Sec. 1.9 of the NSP.

To achieve this purpose, the primary aim of the Forum is to encourage closer cooperation on health and safety issues affecting the search and rescue sector. Following the first meeting of the Forum on 6 November 2019, the Terms of Reference detailing its governance structure and participants were agreed, a focused work-plan and actions register established, and both published among relevant stakeholders.

Meeting again on 11 March 2020 and to progress the actions from its initial session, forum members agreed to advance the following priority actions through a series of participant-led workshops during the remainder of 2020:

- The research and development of a Dynamic Risk Assessment methodology applicable to Search and Rescue activities from an operational perspective; and
- The joint development of a reporting format to provide stakeholders' information pertaining to known incidents/near-misses, for publication (by Q4 2020) within each member's respective organization in support of Continuous Improvement.

Apart from maintaining a regular cadence of communication between Forum members and facilitating workshop events in support of its actions register, the next Forum meeting is scheduled for September 2020.

4.5 Annual SAR stakeholders Forum

The National SAR Stakeholders' Forum met first in May of 2019 during the finalisation of the National SAR Plan. This annual Forum aims to bring together the whole of the SAR community to learn of developments, share best practice and ensure that each level of the systems is aware of the personnel, assets and activities of each other level, as well as the "behind the scenes" but essential support services.

The 2020 Forum took place on 8th July by video conference. It was opened by Minister Hildegard Naughton who paid tribute to SAR providers and the many volunteers involved in the service. It was moderated by Alan Massey, chair of the National SAR Committee.

The Forum was well attended with approximately 70 participants comprising the strategic SAR co-ordinators and strategic SAR stakeholders from the National SAR Committee, the SAR providers and SAR support services as represented on the National SAR Consultative Committee and the members of the two new fora set up under the National SAR plan: the SAR Regulators' Forum and the Health and Safety Forum. Members of the Working Group to develop and implement a Virtual Joint Rescue Co-ordination Centre also attended.

Participants received presentations from New Zealand SAR on their assurance mechanism and from each of the Committees, Fora and Working Groups mentioned above. Each SAR Co-ordinator also presented on their work during the past year and their progress in implementing the NSP.

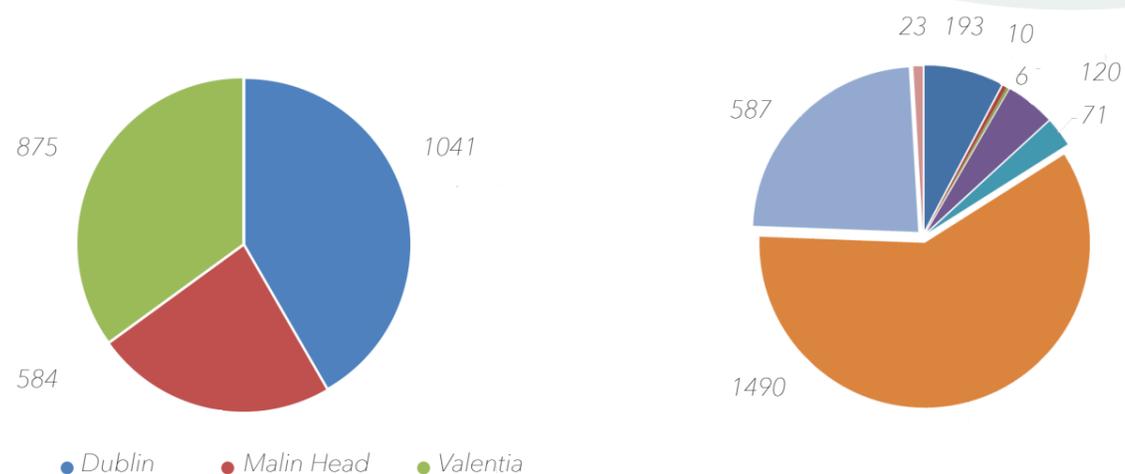
A key innovation of this year's Forum was attendance by a selection of SAR Beneficiaries (i.e. organisations representing activities/sports which occasionally may need SAR Services) who raised issues such as the readiness of their members to participate in exercises and the effect of social media on people's willingness to call in SAR services.



5. Reports from SAR Coordinators

5.1 IRCG - Maritime SAR Coordinator

SAR Activities in 2019 The Coast Guard's three Rescue Coordination Centres at Malin Head, Valentia Island, and Dublin operate on a 24/7 basis. In 2019, the three centres managed a total of 2500 incidents compared with 2647 for 2018 and 2503 incidents in 2017.



Incidents by RCC - 2019

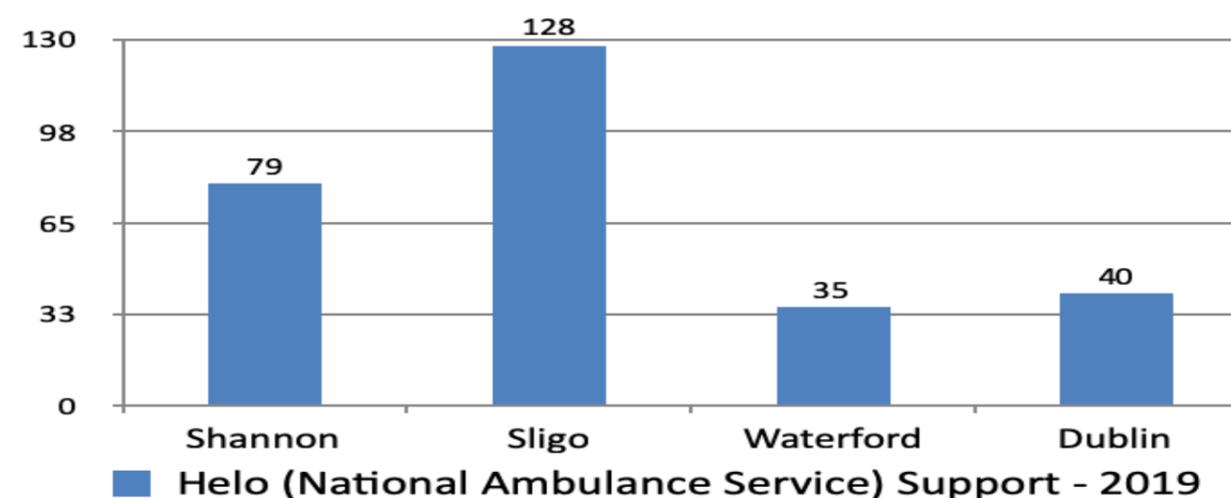
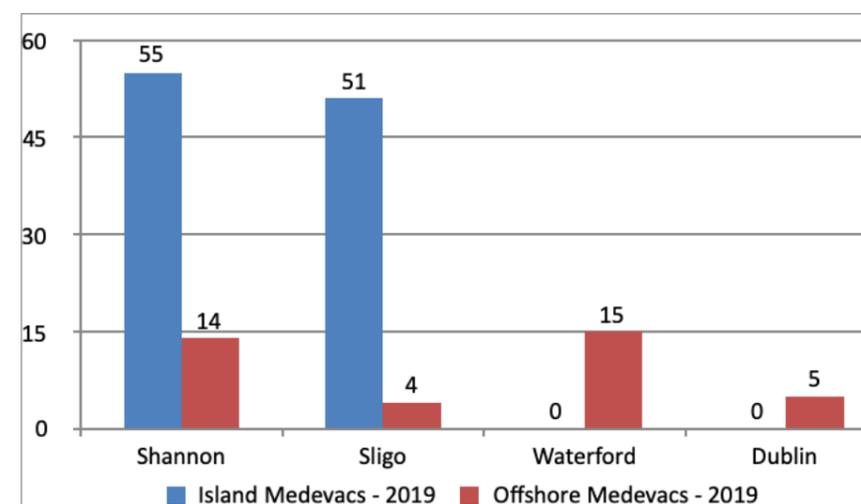
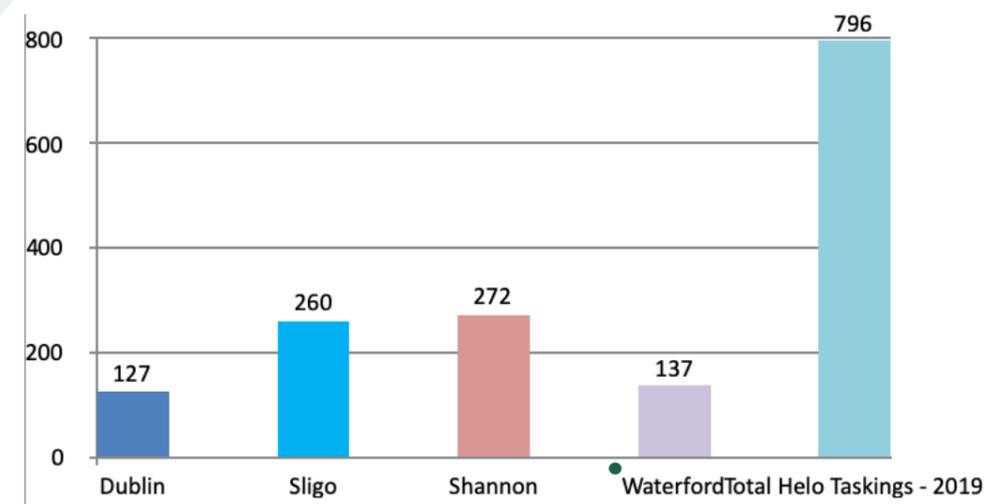
The Coast Guard attaches particular attention to what it categorises as Lives Saved i.e. assistance provided that has prevented loss of life, severe risk to life, or protracted hospitalisation. In 2019, the Coast Guard recorded 379 individuals categorised as Lives Saved and 3546 Persons Assisted.

MRCC Dublin also serves as the national single point of contact for processing of COSPAS-SARSAT 406 MHz Satellite Beacon Alerts generated by Irish registered distress beacons worldwide (EPIRBs (Emergency Position Indicating Radio Beacon; PLBs (Personal Locator Beacons) and ELTs (Emergency Locator Transmitters), including any beacon alerts from foreign flagged vessels or aircraft operating within the Irish SRR (Search & Rescue Region). The COSPAS-SARSAT satellite beacon alerting system is part of the Global Maritime Distress Safety System and has a major role to play in alerting SAR authorities of persons in distress.

In 2019 a total of 193 satellite beacon alerts were received by MRCC Dublin, with the majority proving to be false alerts due to accidental activation or expired equipment.

Coast Guard helicopter services are provided under contract by CHCI operating a fleet of Sikorsky S92 helicopters out of bases in Dublin, Shannon, Waterford and Sligo. Helicopter services are on 15 minutes' notice to launch by day and 45 minutes by night. By year end 2019, Coast Guard helicopters flew 796 missions. These missions also include inland searches for missing persons in support of An Garda Síochána and Mountain Rescue Teams.

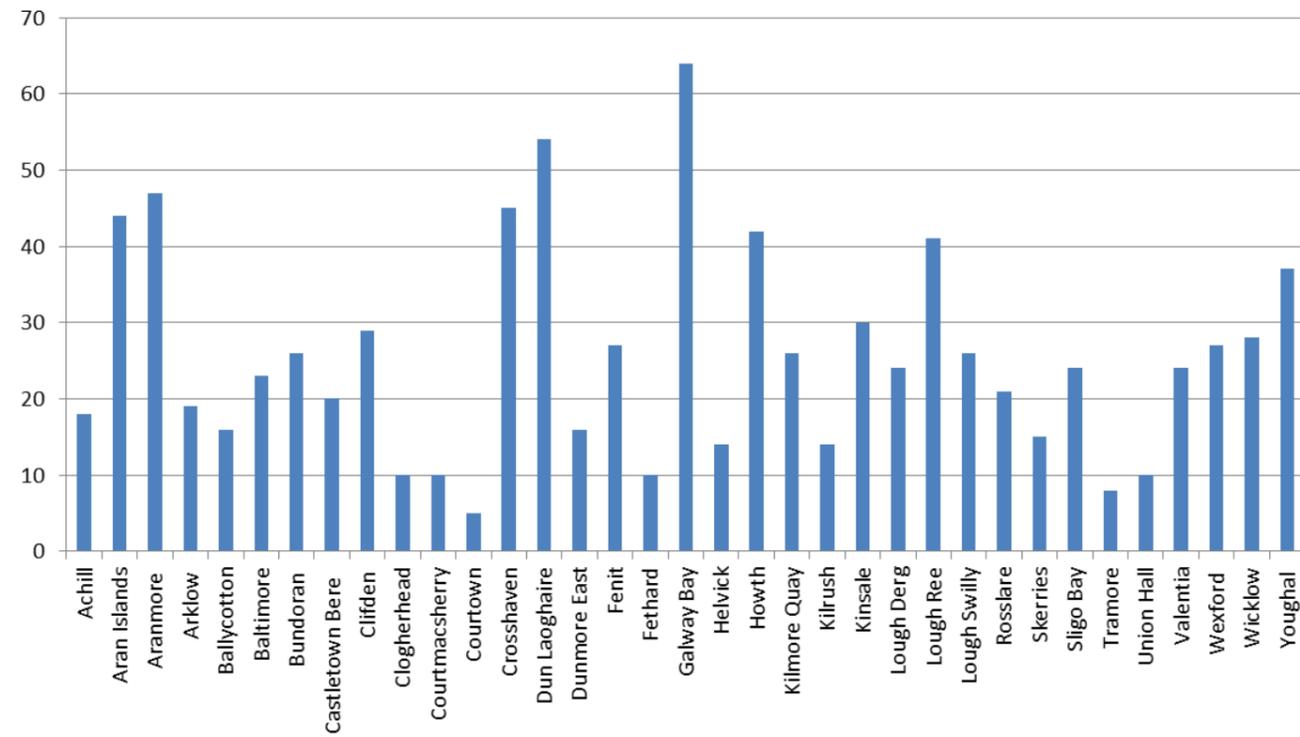
Number of SAR ops by Base



In addition to their primary role of delivering maritime search and rescue services, the Coast Guard provides a day and night support services to the offshore islands. In 2019, the Coast Guard flew a total of 130 emergency missions from the offshore islands to the mainland. Coast Guard helicopters also provide HEMS (Helicopter Emergency Medical Service) to the National Ambulance Service including inter-hospital transfers. The busiest inter-hospital transfer route is from Letterkenny to University Hospital Galway.

The RNLI is categorised as a declared resource to the Coast Guard, which means that each of its 35 individual lifeboat stations in Ireland can be directly requested to respond to individual incidents. In 2019, RNLI were requested to launch on over 829 occasions: an average of some 24 launches per station.

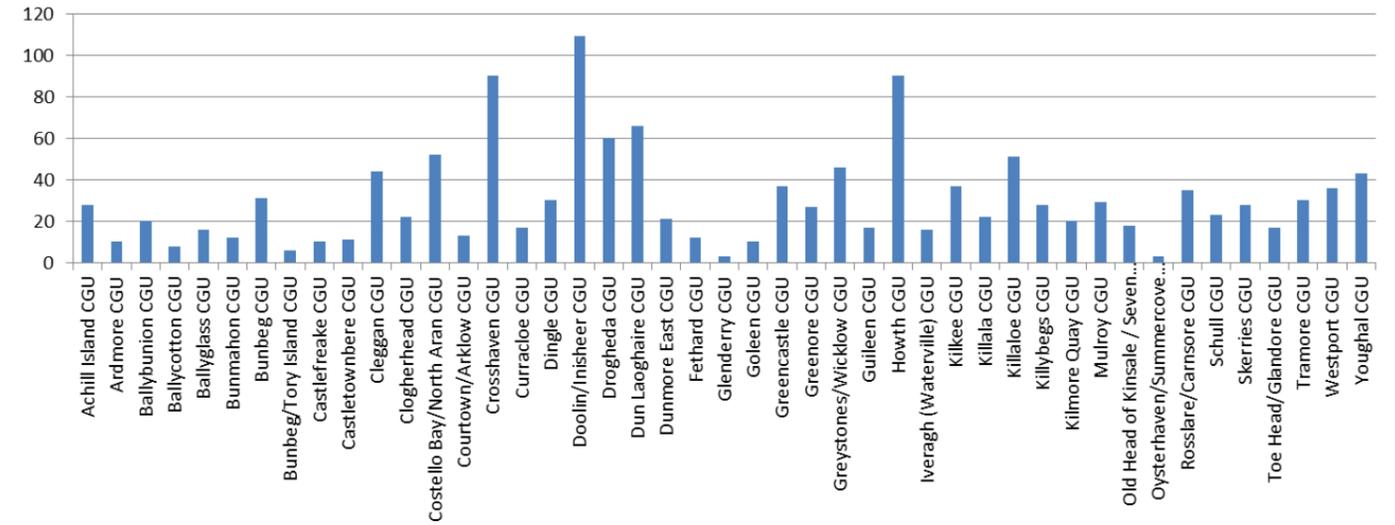
Chart listing RNLI stations and number of taskings by station 2019



■ RNLI tasking by station - 2019

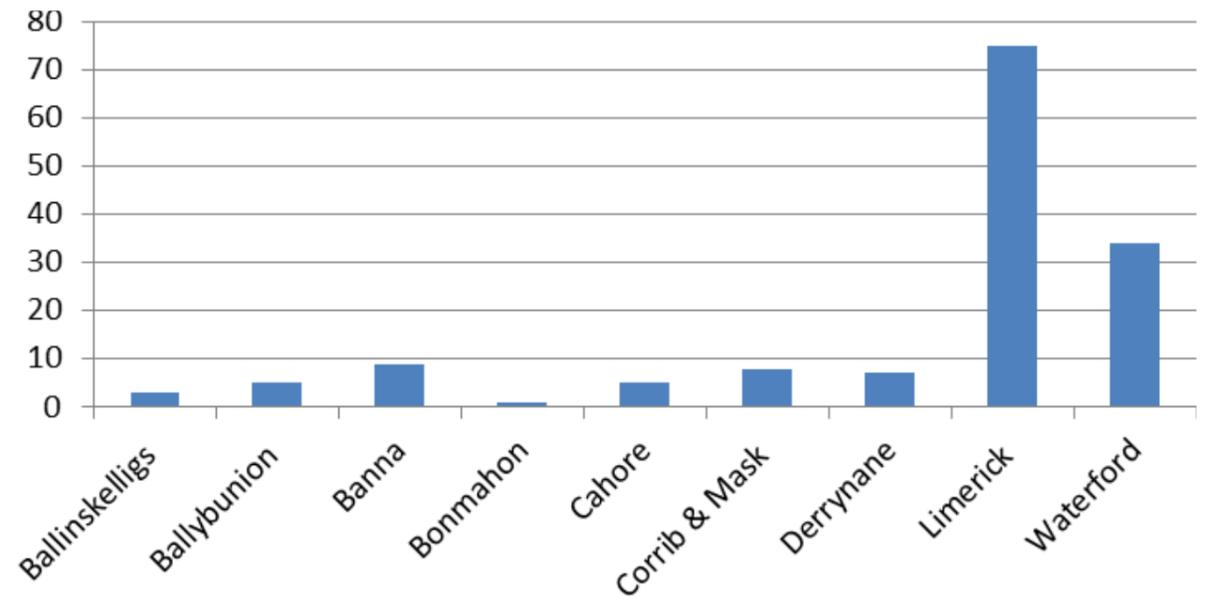
The nationwide network of Volunteer Coast Guard units is an integral part of the national search and rescue system. With a total membership of 940 volunteers, these units deliver rescue boat, cliff rescue and shoreline search services coupled with a capacity to support their communities during local emergencies, including extreme weather. Ireland's 45 Coast Guard units were tasked on a total of 1354 occasions throughout 2019: an average of 30 taskings per unit.

Chart listing CGU stations and number of taskings by station 2019



■ CGU Tasking - 2019

Chart listing Community Inshore Rescue Boats stations and number of taskings by station 2019



■ CIRB (Community Inshore Rescue Boats) -2019

IRCG's Programme for Organizational Reform
In response to the recommendations listed within Reports, No. MCIB/266 and the AQE - Review of the Oversight of Search and Rescue (SAR) Aviation Operations in Ireland (2018), the IRCG has embarked upon an extensive programme of reform. Doing so affords the IRCG the opportunity to demonstrate to all those who partake and/or avail of its services, that its operations and supporting activities are being managed in accordance with best practice and legislative requirements.

This reform programme consists of multiple complementary projects and work-streams running in-parallel and which include:

- The implementation of the National Search and Rescue Plan (NSP);
- A comprehensive review of the IRCG's organizational culture, governance and structures;
- The Coast Guard Unit Safety and Risk Work Plan;
- A review of risk management and the introduction of Quality Assurance controls;
- A project to overhaul the IRCG's Safety Management System and accreditation mechanism;
- Development and implementation of Ireland's National Oil Spill Contingency Plan.

Further details of this reform programme are set out in Appendix E below.

5.2 An Garda Síochána - Land SAR Coordinator

An Garda Síochána (AGS) is responsible for land-based Search and Rescue and the coordination of searches and investigations of missing persons. AGS has various specialised units at its disposal - including Garda Air Support Unit (consisting 1 fixed wing and 2 helicopters), the Garda Water Unit (in 2 bases - Santry and Athlone, with dive and marine capability, 2 patrol boats and 4 RIBs), a Dog Unit (with 23 dogs for general purpose, cadaver searches and tracking people). AGS is a principal response agency and a principal emergency service under the Major Emergency Management Framework.

In 2019, the Garda Air Support Unit (GASU) flew 1313 hours attending over 2160 incidents throughout the country. These figures do not reflect SAR missions specifically but 14 missing persons were located using the GASU in 2019. The Garda Dog Unit was involved in over 435 searches in 2019 although these range from searches for drugs to explosive substances to missing persons. The Garda Water Unit conducted missing person searches and recovered a total of 8 bodies.

Garda Regional Communications Centres have been established since the development of the National SAR Plan. Each Communications Centre is responsible for communicating with operational members and coordinating the response to incidents. There are four Regional Communications Centres operating in Dublin, Waterford, Cork and Galway. Each of the centres work on a 24hr basis. The availability of regional communications centres ensures that there is a standardised, efficient response to incidents. Garda Communications Centres regularly request the services of the Irish Coast Guard to assist in the search for missing persons. The support of the IRCG is invaluable during search operations and the ongoing work under the NSP will continue to improve the working relationships.

An Garda Síochána does not have winching capabilities and has limited marine recovery capabilities, therefore the use of resources of partner agencies is an important feature in the ability of the organisation to carry out recovery functions as outlined in the National SAR plan. The ability of An Garda Síochána to carry out the recovery function in a maritime setting as described currently in the NSP is an issue which will require further engagement and continued support from partner agencies and Government Departments.

Garda Divisional Search teams operate in lowland areas but are not equipped to deal with mountainous environments. The IRCG and volunteer groups regularly support the work of Garda Divisional Search Teams. Mountain Rescue Teams assist with land based searches, in upland areas with difficult terrain. The Mountain Rescue Teams work in a voluntary capacity and are tasked by An Garda Síochána. Garda Communications centres call out the mountain rescue resources using the SARcall system.

An increase in outdoor recreational activities and extreme sports generally will likely lead to the continued demand for SAR resources. The ongoing work through the National SAR Committee will continue to improve the relationships and understanding between partner agencies. Improved communication and integrated training and exercise programmes between SAR coordinators, response agencies, volunteers and representative groups will ensure an enhanced approach to SAR operations and ensure a coordinated approach to Search, Rescue and Recovery.

AGS is actively participating in all of the new National SAR Plan structures. As a result of engagement in the NSP process there have been a number of learnings which include improved organisational understanding, enhanced communications, better mutual understanding of practices and terminology across domains. The learnings ultimately ensure improved organisation of available resources and coordination of Search, Rescue, Recovery and Operations.

5.3 IAA - Aeronautical SAR Coordinator

The Aviation Rescue Coordination function for Ireland's SAR region is carried out from two locations. The main Aeronautical Rescue Coordination Centre (ARCC) is located in the Air Traffic Control Centre in Shannon with an Aeronautical Rescue Sub Centre (ARSC) located in the Dublin Air Traffic Control Centre.

This report covers the activities of the Aeronautical Rescue Coordination Centre and the Aeronautical Rescue Sub Centre for 2019.

Accidents: The ARCC recorded 7 aviation accidents in 2019.

MAYDAY calls (distress): ARCC recorded 5 MAYDAY calls from aircraft during 2019. These were for a mix of medical and technical reasons.

Emergencies: 7 emergencies were declared by aircraft due to aircraft technical reasons.

PAN PAN: The ARCC recorded 63 calls of this nature from aircraft. PAN PAN is an urgency call used by aircraft to declare that they have a situation that is urgent but not yet constituting distress. These calls were predominantly due to either medical reasons on board aircraft or aircraft technical reasons.

Also, during 2019 the ARCC were involved in coordinating 3 separate aviation-related search operations. These searches were initiated following reports from members of the public who reported observing what they believed to be aircraft accidents. The following resources were utilised for these search operations:

- An Garda Síochána
- Coast Guard helicopters
- Lifeboats (for one of the searches)

In all 3 cases the reports were false alarms and no crash had occurred. Procedures: The annual review of the ARCC procedures was carried out and the updated ARCC manual was published in January 2020. Training material: The training material for the course on the role of the ARCC was reviewed and updated.

6. Areas for future work

Over the next six months some further work will be required to deliver the outstanding milestones in the NSP implementation plan which will enable the activation by end 2020 of the new SAR assurance mechanism and the Virtual JRCC. Additional work is also required in relation to the development of the SAR assets register as envisaged.

The development of KPIs for the NSP is critical in driving continuous improvement in the right areas. It is intended that this work will be completed by end 2020 in order that these KPIs can be included as a reference point to measure the success of the NSP, including the metrics that inform the SAR related work of the SAR coordinators.

The SAR Consultative Committee identified its three priorities to further develop:

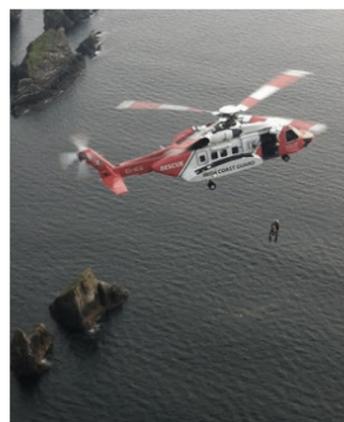
- Incident Management (interagency), ensuring clarity and a common approach through facilitating close collaboration in exercising;
- Clarity of roles and responsibilities, guidance and decision-making in Search and Recovery operations involving the Land SAR Coordinator, along with the management of public and/or third party interventions;
- Proactive sharing of information, best practice and new initiatives to enhance both SAR delivery and incident prevention in Ireland.

The SAR Regulatory Forum key priorities for future work as follows:

- Lessons learned from Covid 19;
- Improving the interface with UN cross-domain bodies: for example aviators getting an understanding of the IMO approach to SAR, and mariners getting an understanding of the ICAO approach to SAR;
- Common interfaces among regulators within Irish transport sector;
- Common risk assessment methodologies - eg Bowtie, SHELL, FTA, FMEA;
- Efficacy of regulatory agencies - common difficulties;
- Potential issues for SAR arising from Brexit - including "regulatory divergence".

The Health and Safety Forum identified priorities as follows:

- The research and development of a Dynamic Risk Assessment methodology applicable to Search and Rescue activities from an operational perspective; and
- The joint development of a reporting format to provide stakeholders' information pertaining to known incidents/near-misses, for publication (by Q4 2020) within each member's respective organization in support of Continuous Improvement.



Appendix A: Wider AQE recommendations - progress

The AQE Final Report 'Review of the Oversight of Search and Rescue (SAR) Aviation Operations in Ireland, published by the Minister in September 2018, contained 12 Recommendations with proposed associated timelines. The following is an update on the status of each recommendation:

AQE Recommendation	Status
DTTaS formally and clearly assign the IAA with responsibility for the legal and safety oversight of civil aviation Search and Rescue activities.	The Department continues to engage with IAA concerning potential requirement for primary legislation in this regard.
DTTaS to request the IAA to develop clear and unambiguous State SAR regulatory material that is appropriate to the scale and complexity of the National aviation system, and which is aligned with international best practice.	As part of the SAR Review process in 2019, the IAA developed 'Irish National SAR Rules'. This process included engagement with international SAR experts and consultation with stakeholders.
IAA to identify the resources required to develop and implement SAR regulatory material.	The 'Irish National SAR Rules' were developed as outlined above. The resources required for implementation to be determined.
The IAA must require CHC Ireland DAC to produce and regularly review the safety cases for each of the twenty seven alleviations and exemptions currently on the national SAR approval.	Closed
DTTaS to ensure that the roles and responsibilities are assigned appropriately.	Closed
DTTaS to arrange a review of Irish National Maritime SAR Framework to address: -The operationalisation of a joint maritime and aeronautical RCC (JRCC) in practice (including its roles and responsibilities, and the provisions for the training of staff. - The need to ensure that personnel involved in managing and tasking SAR aviation operations including the tasking of helicopter missions, are appropriately skilled, knowledgeable and qualified	Closed
IAA should be, as part of the overall review of the SAR Framework, clearly tasked to perform aviation safety oversight on RCCs.	Closed. The IAA conducts aviation safety oversight on RCCs designated in accordance with S.I. 171/1995 & S.I.172/1995

Appendix A: Wider AQE recommendations – progress

DTTaS to consider the potential merits of engaging with the EU/EASA and using their regulatory framework and rulemaking processes as an opportunity to develop Europe-wide guidance on creating an effective civil SAR Framework.	Closed. The Department has engaged at European Commission level and with EASA directly in relation to advancing SAR regulation at an EU level taking the lessons learnt from Ireland's experience. The development of Europe-wide guidance in relation to SAR is a long-term policy matter for the European Commission to consider in consultation with Member States that will take a number of years to develop. The Department will continue to explore this as a future option potentially for the regulation of SAR aviation.
DTTaS to consider the potential merits of engaging with the EU/EASA and using their regulatory framework and rulemaking processes as an opportunity to develop Europe-wide guidance on creating an effective civil SAR Framework.	Closed
DTTaS to perform a pre-audit ICAO Universal Safety Oversight Audit on aeronautical SAR.	Agreed. DTTaS exploring possibility of commencing pre- Audit in 2020
DTTAS to review the existing international agreements and ensure that the implementation (a.o. joint training requirements) is subject to adequate oversight.	Closed
DTTAS to ensure that the IAA is involved directly by the IRCG in the aviation regulatory aspects of the contract with the operator to ensure consistency in the application of relevant regulations and processes.	Closed

Appendix B: MCIB recommendations – IRCG work programme

In its report on the fatal accident in Kilkee on September 2016, the MCIB made various recommendations. Two to the Minister have been addressed as part the SAR Review Report. Separately, the IRCG has undertaken an extensive work programme to implement all other MCIB recommendations.

The NSP seeks to make the delineation between search and recovery and search and rescue missions more explicit for all concerned, thereby addressing a principal recommendation in the MCIB Report. This issue is further addressed and operationalised through the relevant IRCG SOP. IRCG has undertaken an extensive review of the relevant SOP in consultation with AGS and has revised it to include guidance on the risk assessment criteria to be applied and how the decision-making process is to be recorded. The new elements in this guidance and the relevant SOP need to be operationalized, and there have been a number of incidents over the last year where they have been tested. In line with the NSP Assurance mechanism, these incidents have been the subject of review by the IRCG and AGS. Any lessons learnt will be identified and addressed through the MoU arrangements between the IRCG and AGS.

A second key recommendation arising from the MCIB report is the implementation of a comprehensive Safety Management System to address the safety management issues identified in the report. As noted in the main body of the report and in Appendix E, this work is well underway.

Finally, it was recommended that all vessels operated by the IRCG should comply with the statutory requirements of the Merchant Shipping Acts (MSAs), including crew qualifications. Progress towards IRCG compliance with the requirements of MSAs has continued. An independent survey and gap analysis of IRCG boats against MSA requirements was completed 21st May 2019 to identify immediate areas to be addressed. Discussions with the Marine Survey Office, including preliminary surveys of IRCG boats, have been carried out to determine a route to bring rescue boats under the passenger boat licencing regime. Crew training courses have been updated to align with MSA requirements. This work is continuing towards crew certification in line with passenger boat licence requirements.

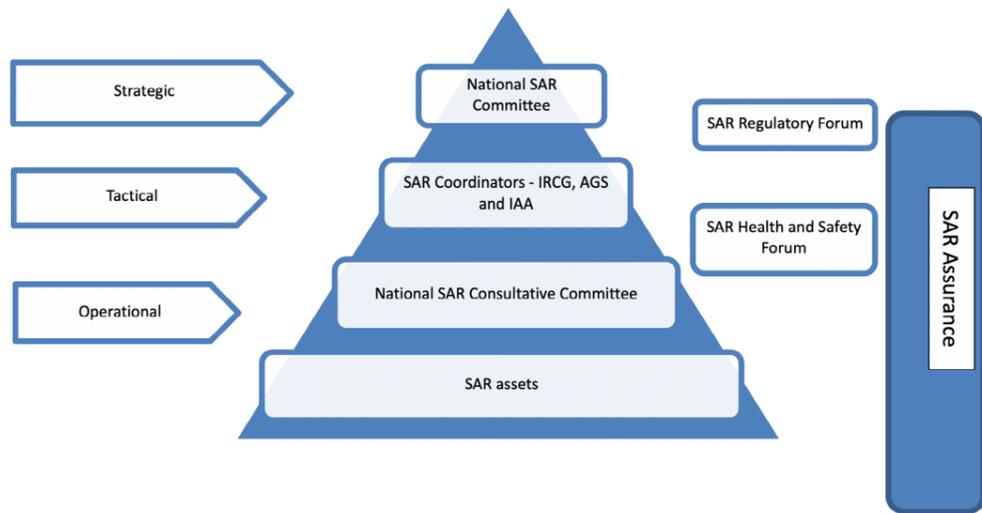
Appendix C: NSP Implementation Plan

Original deadline	Action	Progress
August 2019	<p>First meeting of National SAR Committee under new Chair and ToRs</p> <p>To agree work programme for implementation of the NSP</p> <p>To agree membership of the SAR Consultative Committee</p> <p>To set milestones for reporting on progress to Minister</p> <p>To consider KPIs for the NSP</p> <p>To consider roadmap for implementing SAR assurance mechanism</p> <p>To agree ToR and membership of Health and Safety Forum</p> <p>To consider scope of a national SAR assets register</p>	Completed
October 2019	<p>First meeting of SAR Consultative Committee</p> <p>To agree modus operandi to harness horizontal intelligence and data</p>	Completed
October 2019	<p>First meeting of the SAR Regulators Forum and Health and Safety Forum</p>	Completed
November 2019	<p>Review of MoUs between SAR Coordinators to align with NSP and plan in place to exercise across three domains.</p>	Partially completed
December 2019	<p>Agree NSP KPIs for next 3 years and an appropriate reporting mechanism</p>	Partially completed
March 2020	<p>Deadline for SLAs / MoUs in place with all SAR stakeholders as part of SAR Assurance mechanism</p>	Partially completed
	<p>Register of declared SAR assets in place</p>	Partially completed
	<p>Deadline for IRCG SOPs review against agreed template</p>	Partially completed

Appendix C: NSP Implementation Plan

	SAR assurance mechanism fully activated	Partially completed
June 2020	Second IAMSAR Annex H self-assessment undertaken	Completed
June 2020	First NSP implementation report to Minister	Completed
July 2020	Deadline for implementation of virtual JRCC and oversight mechanism	Completed
December 2020	Deadline for implementation of virtual JRCC and oversight mechanism	On target

Appendix D: NSP Diagram and Terms of Reference of new structures



National SAR Committee

1. Review the performance and adequacy of the National SAR Plan against key performance criteria and make recommendations to the Minister for Transport, Tourism and Sport on how the SAR Plan can be enhanced in line with emerging demands, technology and other factors;
2. Promote effective and efficient cooperation and coordination amongst the various Government Departments, emergency services and other organisations including military, voluntary and statutory bodies for the provision of an effective, efficient and safe SAR service, nationally and internationally;
3. Serve as a cooperative forum to exchange information and develop positions and policies of interest;
4. Ensure international cooperation agreements are fit for purpose based on periodic reviews;
5. Ensure adequate mechanisms are in place to provide sufficient assurance in relation to safety and regulatory compliance of the key elements of the SAR system as described in the National SAR Plan;
6. Ensure that an appropriately trained and resourced emergency management team, reflecting the Committee members mandates, can assemble as a crisis management committee as part of the incident management system (ICS) at the IRCG's marine emergency room during major emergencies to advise the Director and/or the Minister on the appropriate response;
7. Ensure SAR coordinators have SAR Readiness Plans in place and that these are exercised regularly, including for nationally significant SAR operations including Mass Rescue Operations;
8. Ensure compatibility between NSP and Major Emergency Management Framework (MEM) so that the NSP can be implemented independently or concurrently with MEM protocols during an incident of National significance (e.g. develop contingency

9. Report annually to the Minister for Transport, Tourism and Sport on its activities;
10. From time to time, the NSARC may establish inter-agency working groups for a specific purpose.

Membership

The members of the Committee are drawn from the primary SAR stakeholders (i.e. the IRCG, IAA and AGS), as well as representatives from supporting SAR stakeholders (e.g. SAR units and SAR service providers).

National SAR Consultative Committee

1. Aim to provide a national forum for Ireland's SAR Stakeholders operating at a tactical and operational level to promote cooperation, information exchange, best practice and continuous improvement;
2. Act as a consultative forum on initiatives and policies impacting on SAR and report views to on a regular basis NSARC;
3. Provide a platform to share initiatives, processes and knowledge to enhance the measurement, capacity, capability, preparedness, delivery and reduction of SAR in Ireland;
4. Create and strengthen relationships and linkages across participants within the Ireland's SAR system;
5. Work collectively and collaboratively in order to deliver objectives within the NSP;
6. Inform the National SAR Committee and Secretariat of issues which may impact on the delivery of SAR services, capability or preparedness;
7. Provide regular oral updates on activities to NSARC and vice versa, along with an annual written report

Membership

- SAR Coordinators - IRCG, AGS and ARCC
- SAR providers operating at a national level
- SAR support services
- SAR beneficiaries

National Search and Rescue Regulators' Forum

1. Provide a national forum for SAR regulators to promote cooperation, information exchange, best practice and continuous improvement in the regulation of SAR activities in the State;
2. Act in an advisory capacity to the National Search and Rescue Committee in respect of SAR regulation, in particular -
 - review the SAR system assurance reports,
 - share regulatory best practice,
 - inform further enhancements of the oversight and assurance regime;
3. Monitor trends in relation to the regulation of SAR internationally which may impact on SAR related activities in the State;
4. Report to the Minister as necessary in relation to regulatory compliance matters arising;

5. Advise the Minister on SAR regulatory matters when requested.

Membership

The membership of the National Search and Rescue Regulators' Forum shall be drawn from the key agencies and entities involved in regulating SAR activities at various levels in the State and shall include an appointed representative from the:

- Irish Aviation Authority
- Road Safety Authority
- Marine Survey Office
- Department of Transport, Tourism and Sport
- The Chair of the National Search and Rescue Committee

National Search and Rescue (SAR) Health and Safety Forum

1. The purpose of the Health and Safety (H&S) Forum is to facilitate structured discussion regarding health and safety management amongst Ireland's Search and Rescue (SAR) stakeholders, identify opportunities for Continuous Improvement, and provide support to members in developing/implementing the system assurance measures stipulated in Sec. 1.9 of the National Search and Rescue Plan.
2. The aim of the H&S Forum is to encourage a collaborative and cooperative approach amongst the state's primary Search and Rescue (SAR) stakeholders, and service providers to health and safety issues affecting the SAR sector.
3. The H&S Forum will also consider and make recommendations to the National Search and Rescue Committee (NSARC) and to SAR organizations on;
 - Methods/Tools for improving how health and safety is managed within the SAR sector, or within specific SAR organizations.

Appendix E: IRCG's Reform Programme

- Mechanisms for post-incident data analysis and/or 'lessons learned', and dissemination of that information to each forum member.
- Potential Health and Safety issues resulting from the introduction of any regulatory, legislative and/or procedural change.
- Actual Health and Safety issues resulting from risk assessment/organizational data on SAR activity.
- Joint training opportunities as they relate to Health and Safety.

Membership

Consists of persons with responsibility for Health and Safety from SAR Co-ordinators and Providers.

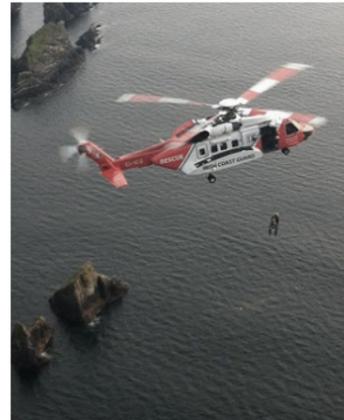
Working Group to Develop and Implement a Virtual Joint Rescue Co-ordination Centre

The deliberations of the WG shall be guided by:

- SAR Framework Review Report June 2019 and associated Human Factors report
- National SAR Plan and JRCC Subgroup Final Report
- MEM Framework and Protocols
Key outputs shall include:
 - MOU for operation of virtual JRCC
 - Concept of Ops and Procedures Manual
 - Aircraft Co-Ordinator (ACO) Procedures and Manual
 - Identify and develop Shared Logging requirements
 - Identify training and exercise requirements
 - Review asset co-ordination and communications arrangements

Membership

Personnel from the three SAR Co-ordinators and DTTAS.



IRCG's Programme for Organizational Reform

In response to the recommendations listed within Reports, No. MCIB/266 and the AQE - Review of the Oversight of Search and Rescue (SAR) Aviation Operations in Ireland (2018), the IRCG has embarked upon an extensive programme of reform. This reform programme consists of multiple complementary projects and workstreams running in-parallel and which include:

- The implementation of the National Search and Rescue Plan (NSP);
A comprehensive review of the IRCG's organizational culture, governance and structures;
- The Coast Guard Unit Safety and Risk Work Plan;
- A review of risk management and the introduction of Quality Assurance controls;
- A project to overhaul the IRCG's Safety Management System and accreditation mechanism;
- Development and implementation of Ireland's National Oil Spill Contingency Plan.

IAMSAR - Annual Review of SAR system effectiveness

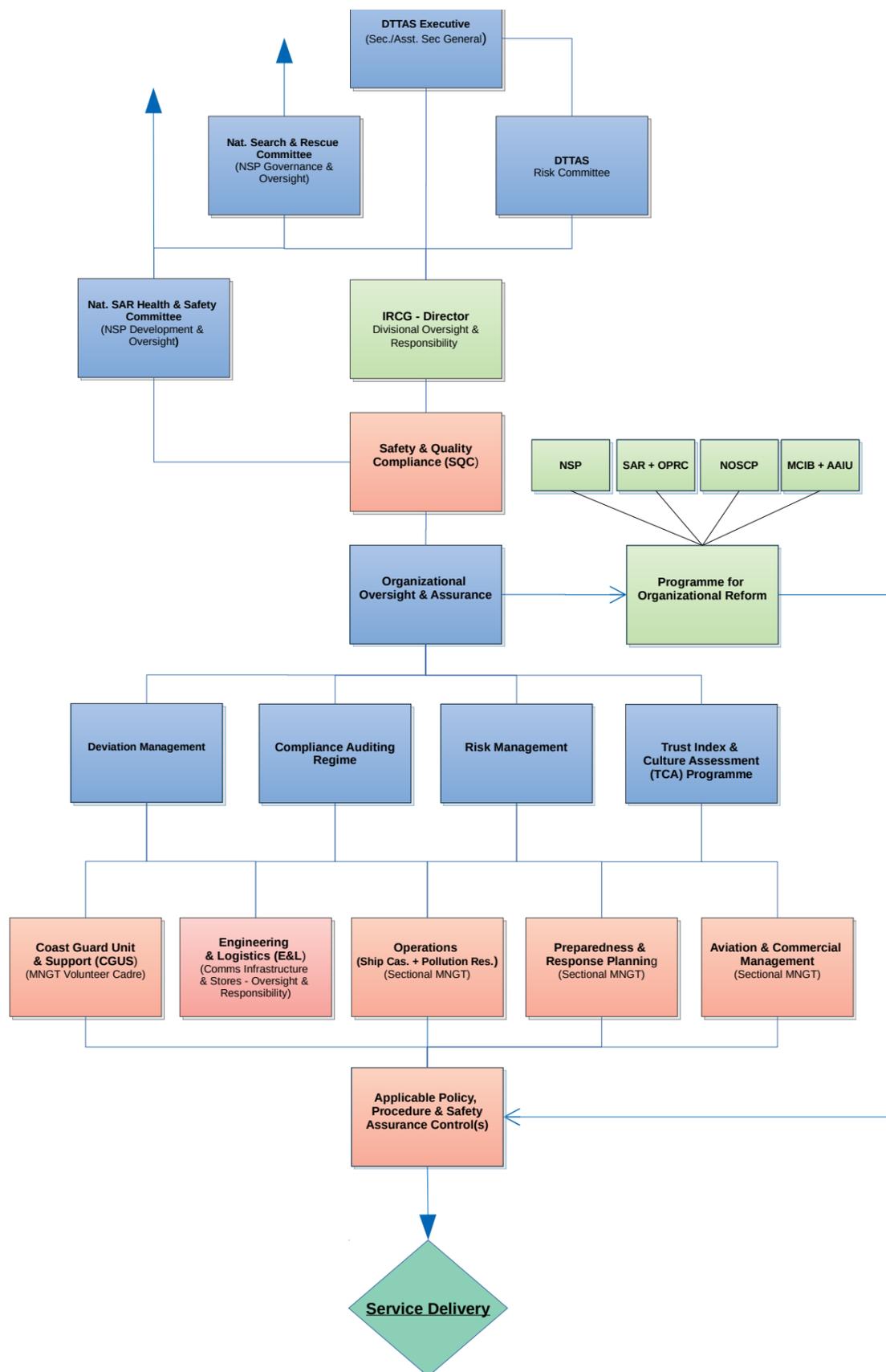
A second Self-Assessment of Ireland's national Search & Rescue capability was conducted in June 2020, in line with international (IAMSAR) standards and with significant stakeholder engagement. A total conformance score of 88% was achieved. Shortfalls identified from the self-assessment, which were primarily around the specific categories related to 'Training, Qualification, Certification and Exercises' and 'Improving Services' will be addressed in the course of 2020/21.

Implementing SAR Assurance, risk management and safety culture systems assurance

Prior to the introduction of an SLA/MoU template applicable to SAR stakeholders, IRCG first required the development and implementation of the following mechanisms to provide oversight and assurance of its operational provision, and further support the programme for organizational reform:

- Development of the IRCG's Oversight and Assurance structure as detailed in Form-SQC-031 (see below image) and consisting of Deviation Management, Compliance Auditing, Risk management and the IRCG's Continuous Improvement (CI) - Engagement Programme (TCA Campaign) modules.
 - Implementation of the IRCG's Risk Management procedure (SOP-SQC-002) to ensure consistency in the way hazards are identified and risk assessment is applied across each IRCG section, their respective operations and supporting activities. The procedure also ensures that Risk Assessments are periodically reviewed and their content revised as required, in support of efficiency of processes and Continuous Improvement.
 - Introduction of Deviation Management to the Irish Coast and the provision of structured tools to formally acknowledge an event occurrence, notify stakeholders, provide initial containment and investigate root cause within a defined period
 - Development of the IRCG's Operational Readiness Inspection (internal audit) regime to incorporate evidence-derived evaluation criteria, quantify the degree to which the organization is in conformance with internal requirements, and provide Continuous Improvement opportunities in support of the IRCG's programme for organizational reform.
- Under the Trust Index and Culture Assessment (TCA) programme, the IRCG successfully developed and implemented an engagement tool designed to solicit the personal perspectives of IRCG members in support of the programme for organizational reform.

Appendix E: IRCG's Reform Programme



In addition, the SAR Assurance Declaration (Form-SQC-101) has also been drafted and approved. Its purpose is to provide a standard template with which a SAR Services Provider can assure the IRCG annually that measures along the principles of continuous system improvement, risk assessment and safety management (collectively representing a SAR assurance system) exist within their organisation.

Review of IRCG SOPs

Revision of IRCG Standing Operating Procedures continues among relevant Area Owners, A key component of the SMS Revision and Accreditation (SRA) project, the governing procedure SOP-SQC-001 (IRCG Document Control), has now been drafted and applied to IRCG Controlled Documents so as to ensure that:

- IRCG Controlled Documents are appropriately approved prior to publication and distribution across the organisation.
- IRCG Controlled Documents are periodically reviewed, their content revised as required and again approved prior to any re-publication.
- Any necessary change to IRCG Controlled Documents is appropriately managed and identifiable.
- IRCG Controlled Documents are legible, of standard format and readily identifiable and accessible.
- The correct (most recent revision number) version of any IRCG Controlled Document is available at point of use.
- Documents of external origin and determined to be necessary for the planning and operation of IRCG Sections and/or Systems are identifiable, and their distribution controlled.
- The risk of using superseded documents operationally at point of use is minimized.

IRCG's Enterprise Resource Planning platform 'ICE' has also been developed to provide the organization with a central document repository, with an SQC Section resource assigned (following appointment in June 2020) to further develop the process and perform the required Compliance Measurement and Analysis Function.

Review of the IRCG's organizational culture, governance and structures

To accurately inform the projects and work-streams associated with this programme and for the first time in its history, the IRCG has partnered with the Great Place To Work (GPTW) Institute to jointly develop and launch an engagement strategy called the 'Trust Index & Culture Assessment' (TCA) campaign, applicable equally to all personnel and specifically designed to solicit their personal perspectives in support of the reform programme.

Organization's Overall Measurement:

Combing the feedback from both Volunteer and Full-Time Personnel, 67% of those surveyed expressed Medium to High Trust in the Organization. The campaign has also equipped IRCG managers with the information required to identify where specifically in their areas of responsibility IRCG members may be encountering significant issues with the wider organization. This includes directly asking team members 'why' and seeking opportunities to leverage learning from those sections and units in which the leadership, structures and systems of the organization are perceived to be delivering more effectively.

Further, and in recognition of the Irish Coast Guard's commitment to introduce change for the benefit of its members and for its continued services to the state, the IRCG were presented with the 'Spirit of Ireland' Award at the Great Place to Work Ireland 2020 Awards.

Implementing a Safety Management System - Review and Accreditation (SRA) project

This project was established within the IRCG's Safety and Quality Compliance (SQC) section to develop and implement an effective Safety Management System, applicable to the specific needs of the IRCG and in adherence with the mandatory requirements of ISO 45001:2018 - Occupational Health and Safety Management Systems.

Apart from the structural components already specified, other project deliverables now achieved include the development and implementation of the IRCG Safety Policy, the IRCG Mission Statement, the IRCG Values Statement (and communications campaign), the IRCG Risk Management procedure, the IRCG internal audit programme and the IRCG Oversight & Assurance structure.

Review of Financial Governance and Procurement

IRCG has also undertaken a major review of its financial governance and procurement procedures, in close collaboration with the Maritime Services Division of the Department. The objective here is to ensure IRCG delivers best possible value for the state's investment while ensuring compliance with public financial procedures.

Appendix F: Contribution of Defence Forces to National SAR Plan

One of the roles assigned to the Defence Forces, as set out in the White Paper on Defence 2015, is to contribute to national resilience through the provision of specified defence support for Civil Authorities such as the Coast Guard. This is known as ATCA (Aid to the Civil Authorities) support.

There is a Service Level Agreement in place between the Department of Defence and the Department of Transport, Tourism and Sport regarding the Search and Rescue ATCA support and other services provided by the Defence Forces to the Coast Guard. This support is wide ranging and examples include: assistance in boat safety audits and inspections; assistance in counter-pollution operations; provision of appropriate maritime surveillance data; and air support on an 'as available' basis. Of note also is that there is a Service Level Agreement for the provision of services between Civil Defence and the Coast Guard in relation to emergency incidents on the waters of Ireland.

Specific examples of support provided in 2019 are as follows: (next page)

Date in 2019	Detail
21 March	Maritime Defence and Security Operations patrol (CASA C-253) conducted involving an IRCG SAR demonstration. Tasked en route to a live SAR to provide top cover for IRCG R115.
22 March	IRCG request for Naval Service Diving Section assistance in relation to a missing person, Inish-eer, Aran Islands.
26 March	Maritime Defence and Security Operations patrol (CASA C-253) conducted with IRCG exercise.
07 April	IRCG request for Naval Service Diving Section assistance in relation to a missing person, Doolin, Co. Clare.
10 April	IRCG request for Naval Service Diving Section assistance in relation to a missing person, Ballycotton, Co. Cork.
10 April	Maritime Defence and Security Operations patrol (CASA C-253) conducted with IRCG exercise.
3 May	Maritime Defence and Security Operations patrol (CASA C-252) conducted with a request from IRCG to search for a specific vessel. Vessel located and all relevant information forwarded to IRCG.v
24 May	Maritime Defence and Security Operations patrol (CASA C-253) conducted and retasked to a missing fisherman who fell overboard in zone 10. Aircraft routed to scene and conducted search patterns for 6hrs.
25 May	IRCG request for Naval vessel (LE Orla) assistance in relation to divers in difficulty, Irish Sea.
6 June	Maritime Defence and Security Operations patrol (CASA C-252) conducted and aircraft requested by IRCG to assess an oil spill. Aircraft sighted pollution with report and photos sent to AC Operations for onwards transmission to IRCG.
08 August	IRCG request for Naval vessel (LE George Bernard Shaw) assistance in relation to a diver in difficulty, Courtmacsherry Bay, Cork.
23 October	Maritime Defence and Security Operations patrol (CASA C-252) conducted with 6 member of the IRCG onboard for liaison.



