



Rialtas na hÉireann
Government of Ireland

Ireland's National Search & Rescue Plan

Annual Report 2020 - 2021



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National SAR Plan Annual Report 2021

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Acronyms used

AGS	An Garda Síochána
ANSP	Air Navigation Service Provider
ARCC	Aeronautical Rescue Co-ordination Centre
ARSC	Aeronautical Rescue Co-ordination Sub-Centre
ATC	Air Traffic Control
GASU	Garda Air Support unit
GIS	Geographical Information System
GWU	Garda Water Unit
IAA	Irish Aviation Authority
III Code	IMO Instruments Implementation Code
IRCG	Irish Coast Guard
KPI	Key Performance Indicator
MOU	Memorandum of Understanding
MRCC	Maritime Rescue Co-ordination Centre
MRI	Mountain Rescue Ireland
RPAS	Remotely Piloted Aircraft System
SAR	Search And Rescue
SARRF	SAR Regulators Forum
SLA	Service Level Agreement
SATAC	SAR Aviation Tasking and Co-ordination
UAV	Unmanned aerial vehicle
vJRCC	Virtual Joint Rescue Co-ordination Centre

Foreword by Minister of State Hildegarde Naughton

I am pleased to publish the second annual report on the National Search and Rescue Plan submitted by the National SAR Committee, chaired by Yvonne Shields O'Connor. In order to be more in line with the calendar year, this report covers the years 2020 and 2021.

It has been a challenging time for SAR services in Ireland in all domains. Yet across the board the services have shown great resilience in maintaining themselves at the ready, I highly commend their dedication and commitment.

The National SAR Plan has been in place for two years now and is proving to be a valuable resource is bringing clarity to the roles and responsibilities of the multiple actors in this area. Through the structures it set up it has provided a framework for co-operation between SAR co-ordinators, SAR providers and other services as well as a strategic space where analysis and planning can flourish with a view to continuing to provide a world class SAR service.

It remains to be seen if changes in usage patterns of our inland and marine amenities which have occurred due to the pandemic will continue once it has fully subsided. However I am confident the SAR system will react and adapt appropriately.

I would like to express my thanks to the members of the Committees and Fora whose work helps knit together a diverse and multi-faceted system so that it operates in a seamless manner when it counts.

It is important to pause and remember that on the ground our search and rescue system is driven by people, both salaried and volunteer and it is their dedication, professionalism, courage and perseverance that lie behind its success. It is fitting that my final word is one of thanks to all those involved in making our work and leisure environment safer for all of us.

National SAR Committee Chairperson's Summary

I was delighted to take over the chairpersonship of the National SAR Committee (NSARC) from Sir Alan Massey in October 2020.

The role of NSARC is to provide strategic co-ordination, guidance and leadership for Ireland's National SAR system. In doing so NSARC is overseeing the phased implementation of the National SAR Plan, monitoring its performance and adequacy on an ongoing basis and advising on areas for improvement.

In bringing together air, land and maritime SAR services, the National SAR Plan has many new dimensions. While these will require time to evolve and fully bed in, significant progress has been achieved since the adoption of the plan in 2019. It is a credit to all of those working across the SAR system that momentum has been maintained despite the additional complexities that have arisen as a result of the Covid 19 pandemic.

In the first annual report, a number of key milestones were identified as follows:

Implementation of a Virtual Joint Rescue Co-ordination Centre (vJRCC).

This is a key deliverable in terms of combining both aeronautical and maritime SAR co-ordination and management functions at tactical level. Significant progress has been made and the vJRCC is ready to be operationalised once the appropriate personnel have been recruited. In addition, joint oversight arrangements for the vJRCC will be agreed.

Establish and monitor effective Key Performance Indicators for the SAR system

A KPI Working Group was established under the auspices of the National SAR Consultative Committee. The Group reported to NSARC in October 2021 and its recommendations were accepted. Work will commence in 2022 on consulting on and implementing a SAR system KPI regime.

Ensure that an effective SAR oversight and assurance mechanisms is in place

There has been good progress on developing key elements of the new SAR Assurance Mechanism. The Regulators Forum gave an initial assessment of the planned approach and their recommendations will be incorporated into further developments in 2022 as detailed in the report below.

Help ensure forthcoming investments in SAR are coherent, sound and respond to the needs of the whole system

A Geographical Information System for mapping SAR assets is under development and will be a key tool in monitoring the effectiveness of existing and future investments.

NSARC has been kept informed of major investments in SAR such as the new IRCG aviation contract, which will be going out to tender shortly, and Department of Defence plans for aircraft purchases.

The National SAR Committee will continue to oversee the implementation of the National SAR plan in a strategic, structured and co-ordinated manner. Critically we will ensure that this work takes account of the wide range of inputs that are provided for via the various stakeholder mechanisms.

I would like to express my thanks to all of those involved in NSARC and the related committees. My thanks also to Minister Naughton for her support and I look forward to continued progress in 2022.

Yvonne Shields O'Connor

Implementation of the National SAR Plan

An overview of the key elements comprising the National SAR Plan is set out in the diagram below.

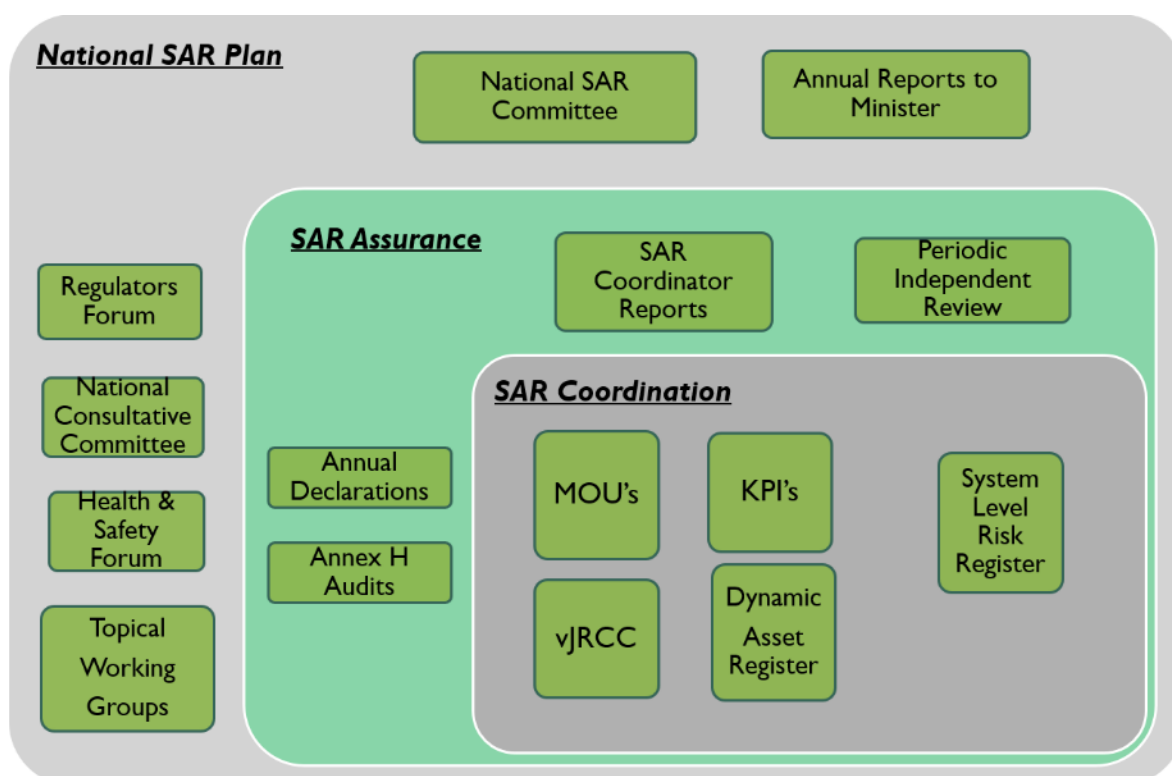
The focus is at three levels, SAR Co-ordination, SAR Assurance and National SAR Plan Oversight and Reporting.

In terms of oversight and reporting all of the Committees and Fora established under the National SAR Plan (as set out in the Appendix 2) have been meeting to schedule during the period. Reports from

Implementation outstanding since previous annual report is set out below.

SAR Co-ordination

Memoranda of Understanding Bilateral MOUs between the SAR domains of land, sea and air are a key element in setting out the formal relationships between SAR actors and establishing a framework for cooperation between the parties in carrying out activities related to SAR. They are also a key element of the SAR Assurance Mechanism. The Maritime – Aeronautical MOU is in place. Inland SAR is recognised as being organised in a



each of these Committees are included in National SAR Plan Oversight and Report section below. Despite not being possible to meet in person over the past couple of years, operating remotely they have worked through a substantial programme covering a wide range of topics. Progress on the SAR Co-ordination and SAR Assurance elements of the NSP

way which is significantly different to the other domains. AGS is currently considering its role and organisational arrangements for fulfilling a SAR role in the NSP, given its broader remit and the fact that SAR per se represents a very small element of that remit.

In addition to bilateral MOUs, service level agreements exist between SAR Coordinators and SAR providers. The majority of these are between the IRCG and those SAR providers it tasks. IRCG has developed an MOU similar to the SAR Coordinator MOUs, guided by IAMSAR Vol 1, appendix I - SAR Agreements, but focused on the services provided and KPIs by the SAR Units. Currently MOUs are signed between the RNLI and the eleven Community Inshore Rescue Boat Units.

Key Performance Indicators

A Key Performance Working Group reported their findings to NSARC at their October meeting. The SAR system was divided into System, Co-ordination and Asset levels and draft KPIs were presented for each under the heading of system responsiveness, system capability and system availability. The draft KPIs will be subject to stakeholder consultation and feedback prior to adoption. The group also presented a potential solution for mapping SAR resources and incidents dynamically in a Geographical Information System.

Virtual Joint Rescue Coordination Centre (vJRCC)

A key deliverable was an implementation plan for the recommended model for a Joint Rescue Coordination Centre (JRCC). A JRCC is a special type of Rescue Coordination Centre that is operated by personnel from the Maritime Rescue Coordination Centre and the Aeronautical Rescue Coordination Centre. 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.

Significant progress has been made on the implementation of the new joint model. The IRCG and IAA have agreed a Concept of Operations and Procedures Manual and this work has resulted in increased collaboration and professional interaction between IRCG and Aeronautical Rescue Coordination Centre. Formal establishment is subject to the filling of newly established positions in the IRCG Rescue Coordination Centre following a Public Appointments Service process.

The programme of work recognises that An Garda Síochána (AGS) will not have a specific role within the vJRCC. However the documentation makes provision for the requisite collaboration with AGS as a strategic stakeholder.

Standard Operating Procedures (SOPs)

A comprehensive review of all Operations notices was completed in 2020 with a particular focus on pre 2015 notices. All notices are now issued in a standard format supported by a previously established tracking and document control system.

SAR Assurance

SAR Stakeholders are expected to have in place a range of measures guided by the principles of continuous system improvement, risk assessment and safety management. Collectively these represent a SAR Assurance system.

Assurance Reports detailing assurance mechanisms have been received from the

Coast Guard and the IAA ANSP. The IAA has no tasking role in SAR and therefore has no SAR providers reporting to it. The Coast Guard has received annual SAR assurance declarations from all eleven Rescue Boat units and is working towards developing SLAs between Coast Guard Operations and Coast Guard Units setting out respective roles and responsibilities, services provided, availability and oversight arrangements. A Rescue Boat Code (a code of practice or standard for SAR Boats declared to the Irish Coast Guard) is under development and is expected to be completed in the coming months whence efforts at compliance can commence. The requirements of the Code will be split into construction and equipment, training of personnel and guidance on safety management systems. The legislative underpinning of the Code may take longer. The Coast Guard is engaging with the RNLI regarding an agreed template for a SAR assurance declaration on behalf of the RNLI.

SAR Assurance Reports as submitted were reviewed by the SAR Regulators Forum and comments were provided to NSARC.

III Code

The International Maritime Organization is a UN specialised agency and the setter of global standards for the safety and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective and universally adopted, implemented and evaluated. The International Maritime Organization Instruments Implementation Code, or III Code sets out the framework for this and compliance is evaluated by the IMO via the mandatory Member State Audit Scheme. The SAR Assurance Mechanism fits well into this framework

given Irish obligations under the Safety of Life at Sea convention (Regulation 7 – see Appendix 2). The implications of this for SAR Assurance will be considered in due course.

IAMSAR Annex H

Following consultation with the primary stakeholders on in Sept 2021, it has been requested and agreed to progress with the next Appendix H self-assessment in 2022. This timeline reflects the need to address the outstanding actions resulting from the previous exercise and to address additional audits undertaken in 2021 and also work arising from other mechanisms associated with the National SAR Plan.

International Agreements

The main international agreement is between the Coast Guard and the UK Maritime and Coastal Agency. It is implemented by the Irish Sea Working Group. The group met this year and conducted exercises.

National SAR Plan Oversight and Reporting

National SAR Committee

The National SAR Committee met three times each year as envisaged by the National SAR Plan, in February, May and October. The Committee was kept apprised of strategic developments across the SAR system, as well as receiving activity report from the SAR Co-ordinators. It considered several special topics over the course of the year namely International Cooperation on Maritime SAR with the UK MCA and Coast Guard; Managing change in the Coast Guard and the RNLI and the structure and SAR Assurance. The chairs of the SAR Health and Safety and SAR Regulators Fora

provided updates on their activities at each meeting.

National SAR Consultative Committee

The Committee met twice in 2020, in March and November and twice in 2021, in April and September, in keeping with the number of meetings envisaged by the NSP. In addition it established two subcommittees to advance work on system level KPIs and collaboration with SAR aviation service providers and stakeholders.

All meetings were held online due to the pandemic however the online meeting technology was used to maximise the value of participants' time.

The Consultative Committee was updated on progress implementing the National SAR Plan and issues of strategic importance such as the IRCG Aviation Contract. It was also updated on the work of the Marine Safety Communications Group which is behind the Safety on the Water campaign and on the work of the newly reconstituted Aviation Forum which brings together aviation service providers and relevant stakeholders. The Committee was also updated by SAR Co-ordinators on their past and future exercise programmes.

Topics considered during the Committee's meetings included

- Lessons learned from Covid
- The SAR stakeholders Forum
- Focus areas for new working groups
- The issue of members of the public not being able to identify their exact location when calling in an incident
- Managing good Samaritans at incident sites

- The challenges of SAR and offshore wind farms
- Wearing of personal floatation devices

SAR Regulators Forum

The SAR Regulators Forum (SARRF) is a new initiative created in 2019 under the NSP. Based on a philosophy of continuous improvement, the primary purpose of the SARRF is to facilitate the exchange of best practice and procedures across the three SAR domains and to monitor broad trends in relation to the regulation of SAR internationally. The SARRF acts in an advisory capacity to the NSARC in respect of SAR regulation, in particular in reviewing SAR system assurance reports (via NSARC), sharing regulatory best practice and informing further enhancements of the oversight and assurance regime. It is chaired on a rotational basis, starting with the IAA (Safety Regulation Division) in 2019 and is currently Chaired by the Marine Survey Office. Membership of SARRF includes the Chair of the National SAR Committee, the Marine Survey Office, Irish Aviation Authority, the Road Safety Authority, the Road Safety and Vehicle Standards Division (DoT) and the secretariat is provided by the Aviation Safety and Security Division (DoT). On agreement by the members of the Forum, other relevant regulators may be invited to join the Forum from time to time in order to monitor, review or advise on a particular issue.

The SARRF met six times since its establishment in 2019, with three meetings in 2021, April, June and September. The SARRF meets in a coordinated manner with the NSARC.

Key Forum priorities include looking at common interfaces among regulators within the Irish transport sector, common difficulties faced by Irish regulatory agencies, improving interface with UN cross-domain bodies and potential issues for SAR arising from Brexit (including “regulatory divergence”). The SARRF agreed that its focus in 2021 would be the SAR assurance mechanism and advising the NSARC on progressing the overall objectives of the assurance mechanism across all domains.

Health and Safety Forum

The NSAR Health and Safety Forum is a new body established under the 2019 National Search and Rescue Plan. To date the Forum has identified and worked on a number of inter-related key Safety topics:

- A) Encouraging discussion on the challenges encountered in delivering safety systems, particularly when operating in the volunteer domain. And to share any associated project progress and/or encountered issues during the next scheduled session.
- B) Establishment of a system to promulgate reports of any potential “Lessons Learned” from SAR operations, so as to alert SAR partners and allow them to institute appropriate preventative measures to prevent repetition. Member organisations are currently preparing initial case reports to seed and launch this new process, and in support of continuous system improvement
- C) The research and development of a Dynamic Risk Assessment (DRA) methodology applicable to SAR activities and from an operational perspective.
- D) SAR Assurance, all SAR response organisation declare the capabilities, extents and limits of the services which

they make available to the National SAR system and provide assurance that they have an appropriate safety and quality management system, with appropriate controls in place.

However, though it is practical and possible to categorise similar SAR cases by reference to the typical response needs, actual emergency incidents of the same broad category can differ considerably in complexity and risk, due to variances in the prevailing environmental conditions, geographic challenges, and many other situational variables. By their very nature emergency situations “emerge” and typically involve a high degree of uncertainty about the circumstances and immediacy of the life-threatening needs which are not known at the initiation of the SAR Case. Driven by a humanitarian motive to respond to the exact predicament of the casualties and by urgency of their need for assistance, there is often a need for the unit on scene to consider modifying a standard response method or to devise a novel intervention.

To reflect this broad variability and uncertainty, the core concept of the Dynamic Risk Management initiative is to ensure that hazard identification and risk management is not a static once-off drafting exercise, but lives as a real and dynamic processes, actively undertaken in every stage of every SAR operation. This requires hazard, risk and situational awareness, critical communication and rapid decision-making competencies within each involved SAR unit and, through the SAR Coordinators, with other units involved, to ensure the safest, most effective and timely outcome is

achieved for the casualties, as well as all for responders involved.

The SAR Health and Safety Forum has a pivotal role in facilitating assurance of the safety and quality of SAR response. The members realise that the scope of their remit is broad and needs to cover a diverse range of SAR specialist competencies across all SAR domains. Ideally, this demands high levels of direct and practical engagement between the Forum members and their organisations, which has been difficult to achieve during the period when Covid 19 restrictions applied. In the hope that 2022 will bring better opportunities for face-to-face interactions, visits and practical workshops, the forum will seek to move on to assisting member organisations in “Assuring Assurance”, by identifying the essential components of SAR Assurance, and sharing each other’s systems and practices, as well as considering best national and international SAR assurance practices and relevant practical R&D and academic works

SAR Stakeholder Communications

SAR Stakeholder Forum

The third SAR Stakeholder Forum took place online in July 2021. That forum included for the first time members of the fishers cohort of SAR Beneficiaries. Opened by Minister Hildegard Naughton the forum was attended by in excess of 75 SAR stakeholders including representatives from each of the SAR structures as set out in the NSP.

In addition to updates on the implementation of the NSP, participants were given two platforms to make their views known.

Firstly, following detailed breakdowns of two SAR incidents (one aeronautical and one maritime) a panel of SAR practitioners who had participated in the events fielded questions from participants and discussed their on the ground experience.

Secondly, following presentations on communications best practice from Mountain Rescue Ireland and the RNLI, participants were placed in small break-out groups using the online meeting technology and asked to discuss the theme of Communications across and within the SAR system. The views of participants were captured using other online tools and fed back live to the Forum.

The forum concluded in reflective mode with contributions from IRCG, IAA and AGS as well as the Chairs of the National SAR Health & Safety Forum, and the SAR Regulators’ Forum.

Activity Reports from SAR Domains

Aeronautical SAR

Context

Due to the pandemic there was a major downturn in activity in 2020. The image below shows activity on the last Sunday in March in 2019 and then in 2020. IAA Air Traffic Control operations experienced a 58% downturn.



Locally, staffing/COVID issues were managed tactically to ensure continued service/availability. The Aeronautical Rescue Control Centre (in Shannon) and its sub-centre in Dublin achieved 100% availability in 2020 and 2021.

Incidents

The ARCC responded to 1 aircraft accident in 2020. This response included AGS and MRCC who tasked a helicopter to the scene. An Air Ambulance was ultimately used to transfer one of the casualties.

Two MAYDAY events occurred in 2020. One involved a light aircraft (technical issue) and the other involved a passenger aircraft (passenger issue). Both resulted in aircraft diversion.

During 2020 there were 29 PAN PAN reports to the ARCC/SC. Examples were:

- Engine shutdown
- Lose container in hold
- Bird strike
- Engine failure
- Mechanical issues
- Smoke in the cockpit
- Medical issues

ARCC/SC were made aware of approx. 15 other events in 2020. These were not declared by flight crew as PAN/Emergency/MAYDAY. In the majority of these events the aircraft diverted. In one event the aircraft continued but ended up declaring an emergency at the destination airport. These other reports comprised:

- Unruly passenger
- Medical issue on board
- Fuel dumping
- Technical problem
- Smoke/haze in cockpit

In 2021 ARCC and ARSC dealt with:

- 2 Accidents (one on the ground between two aircraft)
- 2 forced landings,
- 6 MAYDAYs (one medical),
- 4 Emergencies,

- And 18 PAN PAN made up of technical and medical reasons

Other events not categorised above.

- 8 medical emergencies,
- 8 technical diversions,
- 2 unruly passengers,
- 2 fuel dumping,
- 3 technical issues,
- 1 search after report from member of the public.
- 1 example of ARCC coordination with the UK JRCC.

Other SAR Related activities

RPAS Trials

ARCC/ATC were involved in a UK coastguard trial. This involved the use of a remotely piloted drone. This trial took place in September 2020. The mission was a success. The RPAS was integrated with manned Air Traffic. Communications with the pilot were via a satellite link. This particular flight was part of a week-long series of trials.



SpaceX

ARCC worked with MRCC as part of a team for a SpaceX launch. The Irish SRR was identified as a possible area for ditching. A number of meetings were held with MRCC and US representatives for the launch.

Aireon Alert

IAA continues to provide the Aireon Alert service. This is provided from our base in Newmarket on Fergus County Clare. This service is used by ARCC's and customers

from around the world. The service has been used to find aircraft from America to Australia. The service received the CANSO Global Safety Achievement Award 2020.

Priorities

A key ongoing priority is the finalisation and exercising of the virtual JRCC.

Inland SAR

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

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. Issues around recovery are subject to ongoing engagement and continuing support from partner agencies and Government Departments.

The four Garda Communications Centres nationwide continue to liaise with agencies including the Irish Coast Guard to assist in searches for missing persons. The support of the Irish Coast Guard is invaluable during search operations.

Garda Divisional Search teams operate in lowland areas but are not equipped to deal with mountainous environments. The Irish Coast Guard and volunteer groups regularly support the work of Garda Divisional Search teams. Mountain Rescue Teams and Civil Defence assist with land based searches, with Mountain Rescue Teams assisting in particular in upland areas with difficult terrain.

Following a period of discussion with Mountain Rescue Ireland (MRI), the SARcall dashboard, which was rolled out to the 4 Garda Communications rooms in 2019, was extended to GASU. Personnel from MRI conducted virtual training with GASU in early 2021, to enable GASU personnel to effectively engage with the various Mountain Rescue teams whilst on call outs and offer whatever support can



be provided, in order to achieve best possible outcomes in as many instances as practicable. This initiative with MRI now also includes direct Tetra communication between the various Mountain Rescue Teams and GASU aircraft, Base & supervisors utilising the Mountain Rescue Event Channels following work involving GASU, MRI, Garda Telecommunications & Tetra Ireland.

Briefings for MRI teams on GASU capabilities are being planned for delivery in 2022.

The Garda Air Support Unit is currently evaluating the suitability of a number of different Drone/UAV platforms for operational deployment on behalf of the Garda Organisation, under the direction of Deputy Commissioner, Policing & Security, and have assisted in numerous Searches for missing persons over the last number of months. Part of the evaluation process has involved engagement with other SAR stakeholders, 3rd Level Institutions, the Irish Aviation Authority & other statutory agencies in Ireland and internationally.

Increasing societal participation in outdoor recreational activities is leading to continued demand for SAR resources and coordination. The work of the National SAR Committee is continuing to improve the relationships and understanding between partner agencies. Integrated training and exercise programmes will continue to ensure a coordinated approach to Search, Rescue and Recovery nationwide.

2020 Activity

The 3 Garda Air Support Unit (GASU) aircraft flew 1,212 hours, attending 2,329 individual incidents throughout the country.

Included in these figures are 100 individual searches for individuals, 28 of which resulted in GASU being directly involved in the location of persons being reported as missing persons. 3 GASU personnel undertook the 2-week SATAC (Search and Rescue Tasking & Co-ordination) training course, hosted by the Irish Coast Guard from their Leeson Street Headquarters & delivered by aviation consultants, ASG.

In 2020 the Garda Water Unit searched for and recovered the remains of eleven missing persons.

Members of GASU & GWU participated in the National Search & Rescue Consultative Committee (NSARCC).

2021 Activity

The aircraft of the Garda Air Support Unit (GASU) flew 1,080 hours, attending 1,843 individual incidents throughout the country. Included in these figures are 100 separate searches for individuals, 14 of which resulted in GASU being directly involved in the location of persons being reported as missing persons. Many of these missing persons calls were at night and crews responded to these using best available technology, including Night Vision and Infra-Red/Thermal.

Throughout the Pandemic, GASU maintained its quick response time from receipt of call to deployment.

During 2021, 1 GASU member and 1 Garda Communications Centre member undertook the 2-week SATaC (Search and Rescue Tasking & Co-ordination) online training course, hosted by the Irish Coast Guard from their Leeson Street Headquarters and delivered by aviation consultants, ASG. This training is continuing in person in 2022, with one GASU member participating on this first course of 2022.

Garda Water Unit recovered the remains of fourteen reported missing persons in 2021.

Members of GASU & GWU continued to participate in the National Search and Rescue Consultative Committee.

Irish Cave Rescue Organisation

The Irish Cave Rescue Organisation (ICRO) is an all-Ireland rescue organisation. It is made up of about 70 core team volunteers spread across the country. There are two

rescue bases; one in Fermanagh and one in Clare. The group is a member of the British Cave Rescue Council and is recognised at both a national and international level.

Members of the team must already be experienced cavers who will then undergo additional training in rescue techniques including underground casualty care, rescue rigging, communications and incident management.

The organisation organises regular practices which simulate a full search and rescue callout. In order to ensure a co-ordinated approach, these often include members of the statutory services and other voluntary organisations.

ICRO is committed to working with the local community and provides first aid support at local events.

In 2021, ICRO responded to 2 cave callouts, and held 7 training events.

Mountain Rescue Ireland

Mountain Rescue Ireland is an organisation comprising 11 mountain rescue teams, made up exclusively of 400 trained volunteers covering the island of Ireland. MRI is a member of the International Commission for Alpine Rescue.

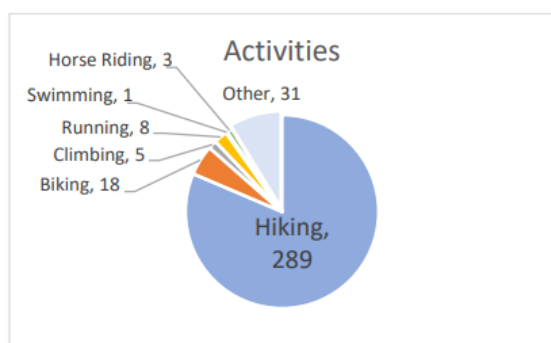
Covid had an undoubted impact on call out patterns with 2020 showing a higher call out rate for areas near to large population centres and 2021 seeing the highest ever number of incidents.

Further information is available in [MRI Annual Reports](#).

Total number of incidents

2019	2020	2021
345	330	408

Incidents by Activity 2021



Maritime SAR

Context

The Maritime SAR domain covers SAR events occurring in the Irish Search and Rescue Region at sea and on the coast. The key challenge during Covid was to ensure the 24/7 delivery of Coast Guard SAR services, as coordinated by Marine Rescue Coordination Centre Dublin and Marine Rescue Sub Centres at Valentia and Malin. Responses were delivered primarily by Coast Guard's own Search and Rescue Units i.e. the Coast Guard Units, Coast Guard Helicopter service and voluntarily declared resources of the RNLI and Community Inshore Rescue services. Covid precautions were stepped up at the Rescue Coordination centres, helicopter bases and at Coast Guard Units and RNLI bases. Services were maintained in most areas with a few outages and units going offline due to impact of Covid. Training and exercise were impacted due to restrictions at the different levels. Some impacts were mitigated by online training.

Incidents

In 2021 the Coast Guard responded to 2,976 incidents. This indicates an increase in the number of incidents when compared to 2020 which was 2,669 incidents for the whole year.

Covid 19 had an impact on the incidents with the beginning of 2021 being noticeably quiet and as the Covid restriction levels eased there was a substantial increase in the number of incidents. Activity over February, March and April was the lowest recorded for each of those months over recent years but noticeably picked up in May with August and September proving to be exceptionally busy.

The Coast Guard attaches particular attention to what it categorises as Lives Saved i.e. assistance provided that prevented loss of life, severe risk to life, or protracted hospitalisation. In 2021 the Coast Guard responded to 2,976 incidents resulting in 478 lives saved. There were 68 drownings (10 maritime, 58 lakes/ rivers which includes 3 drownings in Northern Ireland).

Drownings in the maritime domain were mostly recreational swimmers or persons entering the water in urban settings.

Coast Guard carried out 60 medivacs from vessels and 188 medivacs from the islands in 2021.

In 2021, Coast Guard assisted An Garda Síochána on 608 occasions in open country searches and water rescue inland and assisted the National Ambulance Service in providing Helicopter Emergency Medical Service on 92 occasions, including four emergency transfers to the UK.

Assistance provided to ARCC in 2021 included responses to a light aircraft crash at Carnsore Point (Multi agency response including two Coast Guard Helicopters) and rescue of 7 fisherman by the Waterford helicopter during one incident off the southwest coast.

Coast Guard Helicopter Services

Coast Guard Helicopter services, provided under contract by CHC Ireland, operate day and night services out of bases at Sligo, Shannon, Dublin and Waterford. In 2021 Coast Guard Helicopters flew 904 missions which is an increase on the total number of missions flown in 2020 of 790 missions. In addition to Search and Rescue services these missions include emergency medical support to the island communities and provides Helicopter Emergency Medical Service (HEMS) support and inter hospital transfers services to the National Ambulance Service including emergency paediatric transfers to UK.



Coast Guard Units

Coast Guard Units provide a combination of Rescue Boat, Cliff rescue, Shoreline search capabilities, and emergency community support in conjunction with the other emergency services. The 44 units were tasked to a total of 1,617 missions in 2021. Services included Covid-19 related transport support to HSE.



Further development in the use of Unmanned Aircraft drone systems (UAVs) to aid search role is proceeding as follows with 8 units currently operational in 2021. By mid-2022 Coast Guard anticipates that it will have 15 units with UAV search capability up and running.

RNLI

During 2021 the Coast Guard developed MOUs as per the National SAR Plan with the RNLI and Community Rescue Boats. The Memorandum of Understanding sets out respective roles and responsibilities, voluntary services provided, availability, KPIs and oversight arrangements.

The RNLI is categorised as a voluntarily declared resource to the Coast Guard, which means that each individual station can be directly requested to respond to incidents. RNLI has 35 stations in Ireland with inshore and all weather boats. RNLI lifeboats were tasked to 1015 missions while Community Rescue Boats responded to 163 missions in 2021.



Training and Exercises

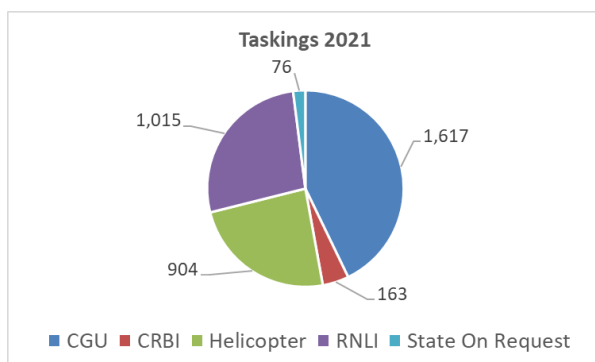
The Aviation Training programme for Rescue Coordination and On call Staff (SATAc Course) continued during 2021 with the course moving online as required, the course was made available to ARCC staff and AGS (as noted above). Similarly Search and Rescue Mission Coordinator Training continued with three courses held in 2021.

During 2021 the Coast Guard conducted two major emergency exercises, code named 'Blue Mist' in April off the Dublin coast and 'Blue Kingdom' in September off the Kerry Coast. Both exercises required a multi-agency response led by the Coast Guard in conjunction with other Principal

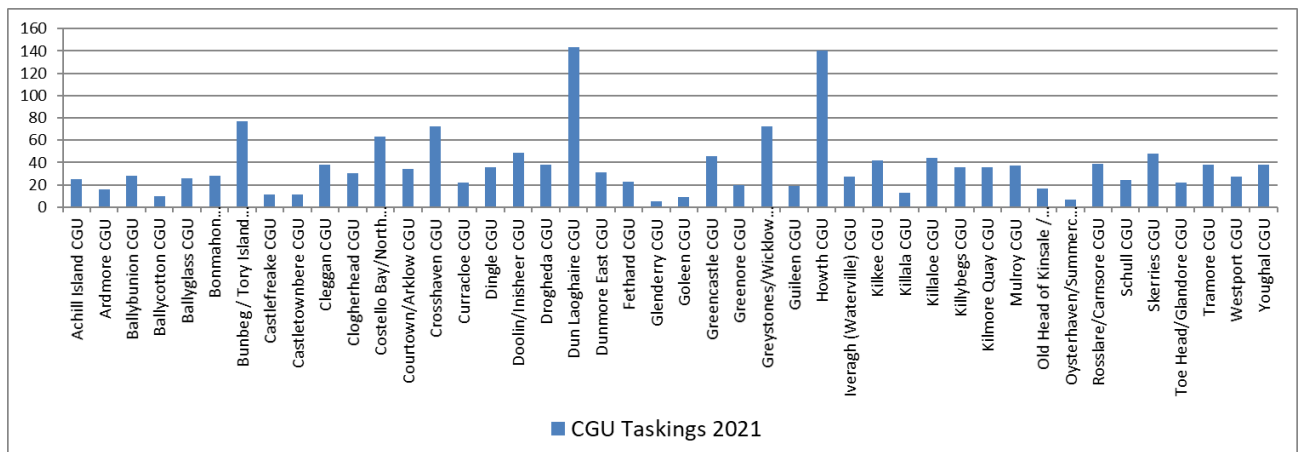
Emergency Services and supporting organisations. These exercises enhanced the rollout of the Coast Guards Incident Command System (ICS) and required the activation of the Coast Guard 'Maritime Response Team' and formed part of the yearly Operational Exercise Programme.

Coast Guard Statistics

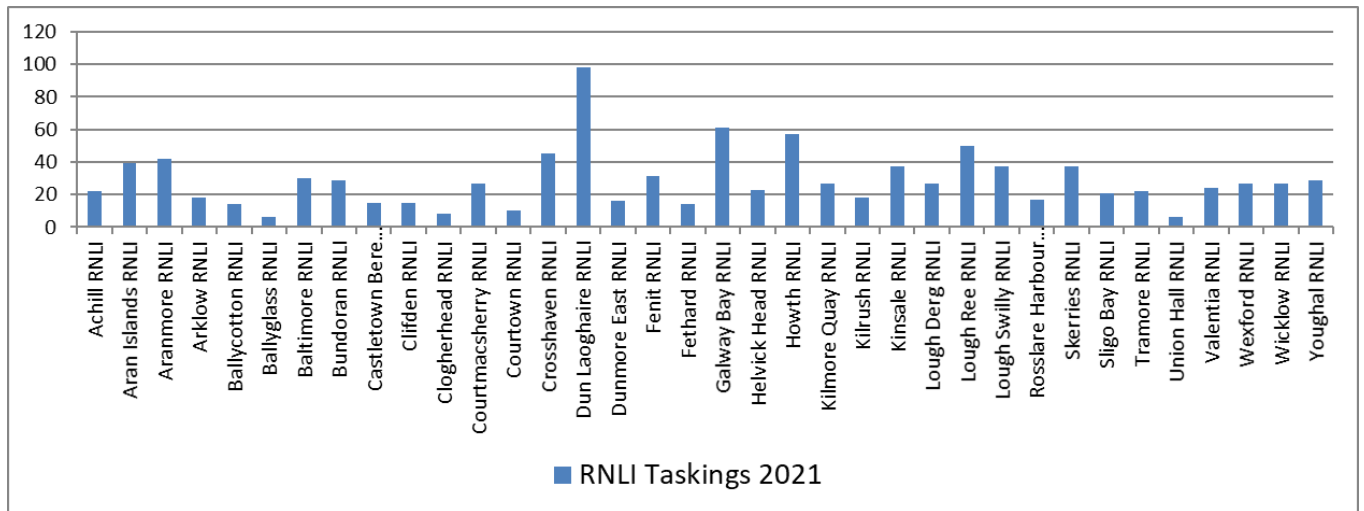
Taskings by Agency 2021



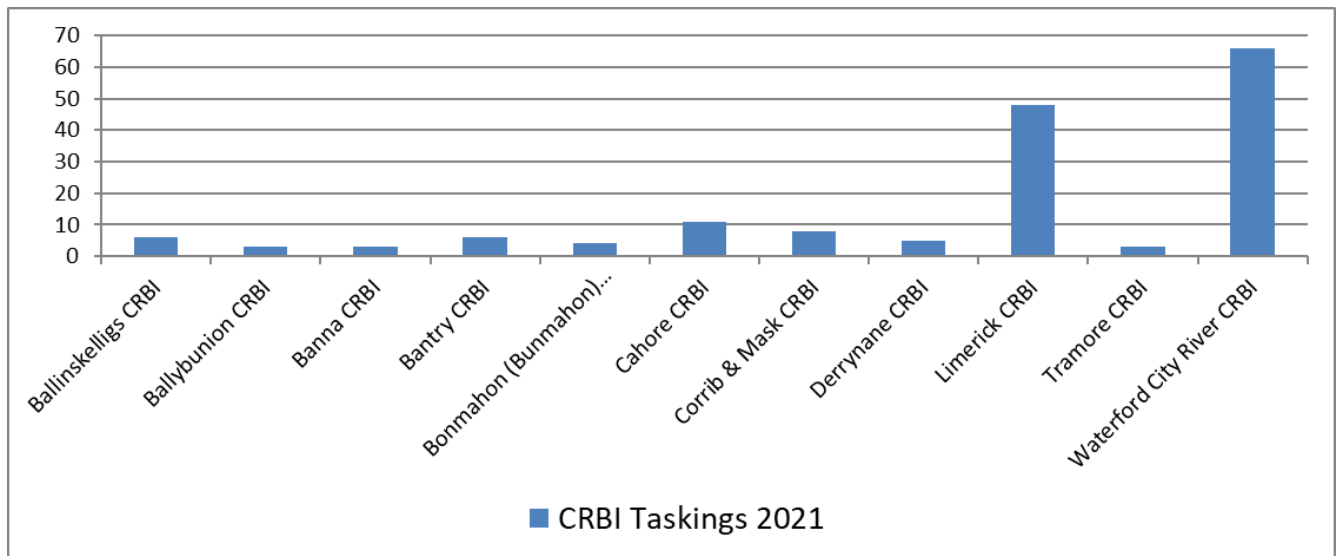
CGUs tasking by Unit 2021



RNLI tasking by unit 2021



Community Inshore Rescue tasking by Unit 2021



New initiatives and areas for future work

SAR is an evolving field of activity, new technologies, such as drones, can both create opportunities and also bring challenges. In the coming year the National SAR Committee and the SAR Coordinators will explore ways to advance a research and innovation agenda.

National SAR Plan Priorities for 2022 include:

- Complete remaining MOUs
- Consult with stakeholders on draft KPIs and once adopted implement

these at system and operational levels

- Progress the standing up of the vJRCC
- Further develop the SAR Assurance Mechanism
- Complete the 2022 Annex H Self-Assessment
- Identify and deliver relevant Health and Safety Standards
- Agree Search and Recovery protocols
- Advance towards a dynamic SAR Asset Register via a GIS
- Commence work to establish a System Level Risk Register

Appendix 1 – Defence Forces SAR and Pollution Response Support Operations

Date	Details
2020	
06 January 2020	CASA Re-tasked for SAR off Kilmore Quay for missing fisherman.
21 January 2020	IRCG request Naval Service to assist in SAR for missing Irish FV
27 January 2020	CASA Maritime Defence and Security Operations Patrol. Re-Tasked for SAR Top cover for R118 from Sligo
04 March 2020	LE JAMES JOYCE responds to engine room fire onboard IR FV
20 April 2020	IRCG Request NS Investigation of Oil Slick in Bantry Bay
02 June 2020	IRCG Request NSDS Support in Lough Mask
29 July 2020	MayDay Relay for yacht off Roches Point
03 August 2020	IRCG Request Naval vessel to assist Aqua Transporter off Slyne Head, LE NIAMH conducted TOW of vessel out of immediate danger.
03 August 2020	LE GEORGE BERNARD SHAW locate identified and marked NAV HAZ SW coast, All info passed to Valentia MRCC.
12 August 2020	IRCG MARPOL Request approx. 67NM west of Mizen Head
13 August 2020	CASA requested to aid Coast Guard searching for two missing boarders. Boarders found, request cancelled.
14 August 2020	IRCG ATCA Request for NS Vessel as OSC for SAR in Galway Bay
19 August 2020	NS Response to Pan Pan at Calf Island
27 August 2020	LE NIAMH respond to 2 persons entering water off Kerry Head
03 September 2020	IRCG Request ATCA Assistance to investigate Oil Slick 160NM SSW of Mizen Head
03 September 2020	NS Assist Sailing Vessel outside Dun Laoghaire Harbour
17 September 2020	IRCG Request assistance to investigate Oil Slick approx. 80nm South of Mine Head
28 September 2020	IRCG MARPOL Request at 50°30'05.001N 012°36'57.000W.
29 September 2020	Pan Pan response by LE GEORGE BERNARD SHAW in Ringabella & Fountainstown
06 October 2020	CASA assisted in Search for missing crewman from on-board passenger ferry in the Irish Sea. Expanding Square and Ladder search performed.
06 October 2020	IRCG Request NS assistance in Dublin for Missing person from Irish Ferries MV W. B. YEATS.
09 October 2020	LE CIARA Recovery of T4 on MDSO 14NM East of Lambay Island
12 October 2020	IRCG MARPOL Request 51°39'15N 008°23'24W.
10 November 2020	IRCG MARPOL Request 51°06'13N 009°52'04W.
2021	
19 January 2021	L.É. GEORGE BERNARD SHAW responded to PAN PAN for missing kayaker near Carlingford. Stood down by Carlingford CG, kayaker found safe and ashore.

19 January 2021	L.É. GEORGE BERNARD SHAW received a request from MRCC Dublin to assist a 21ft pleasure craft that had lost power near Lambay Island. Stood down by MRCC Dublin as Howth Life Boat on Scene
11 February 2021	IRCG request NS assistance from L.É. JAMES JOYCE due to defective Marine VHF Transmitter in Bantry, Co. Cork.
26 March 2021	L.É. GEORGE BERNARD SHAW requested by MRCC Valentia to assist with the stricken FV ELLIE ADHAMH approx. 70NM West of Castletownbere.
10 April 2021	L.É. GB SHAW responded to a PAN-PAN from a yacht in distress in Dungarvan Bay. (Coast Guard ref UIIN0562/21) 31 foot Sailing Yacht Chloe. (Co. Waterford)
02 May 21	L.É RÓISÍN responds to IRCG ATCA Marpol request i.r.t an Oil Spill reported on EMSA.
14 May 2021	L.É. GEORGE BERNARD SHAW responded to ongoing SAR. FV "HORIZON" had caught fire, 4 POB had abandoned ship into liferaft and recovered by MV "PATHFINDER". L.É. GEORGE BERNARD SHAW remained on scene while fire was extinguished, carried out a damage assessment and observed the vessel sinking.
01 June 2021	L.É GB SHAW responds to Cork CG radio PAN PAN i.r.t sighting reports of two (2) red flares ivo Whitegate Oil Refinery, Co. Cork.
10 August 2021	IRCG ATCA request for NSDS support i.r.t Search and Recovery in Doolin, Co. Clare.
17 August 2021	L.É SAMUEL BECKETT responded to IRCG request for assistance to provide Comms relay for MEDEVAC that R117 was conducting 180nm SW Fastnet light. Casualty was on board UK registered Bulk carrier.
20 September 2021	CASA Maritime Defence and Security Operations Patrol including IRCG MARPOL Request at 51°26'12N 009°12'04W.
21 September 2021	CASA Maritime Defence and Security Operations Patrol including IRCG MARPOL Request at 51°26'12N 009°12'04W.
05 October 2021	CASA Maritime Defence and Security Operations Patrol. CASA re-tasked to west of Donegal following reported EPIRB activation by Malin Coast Guard.
31 October 2021	MRCC Valentia request L.É. RÓISÍN respond to a Mayday Relay from a stricken fishing vessel ARMAVEN TRES approx 40nm West of Valentia.
02 December 2021	CASA Maritime Defence and Security Operations Patrol. Re-Tasked for SAR Top cover for R115 from Kerry. Casualty airlifted by R115 south-west of Kerry.

Appendix 2– NSP Structures

Terms of Reference and Membership of NSP 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 plans for use of SAR resources during disasters);
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

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 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.
 - 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.

Appendix 3 – SOLAS Chapter V, Regulation 7

SOLAS Chapter V - Regulation 7 - Search and rescue services

1. Each Contracting Government undertakes to ensure that necessary arrangements are made for distress communication and co-ordination in their area of responsibility and for the rescue of persons in distress at sea around its coasts. These arrangements shall include the establishment, operation and maintenance of such search and rescue facilities as are deemed practicable and necessary, having regard to the density of the seagoing traffic and the navigational dangers and shall, so far as possible, provide adequate means of locating and rescuing such persons.
2. Each Contracting Government undertakes to make available information to the Organization concerning its existing search and rescue facilities and the plans for changes therein, if any.
3. Passenger ships to which chapter I applies, shall have on board a plan for co-operation with appropriate search and rescue services in event of an emergency. The plan shall be developed in co-operation between the ship, the company, as defined in regulation IX/1 and the search and rescue services. The plan shall include provisions for periodic exercises to be undertaken to test its effectiveness. The plan shall be developed based on the guidelines developed by the Organization

