SERVICE LEVEL AGREEMENT FOR THE PROVISION OF A HELICOPTER EMERGENCY MEDICAL SERVICE

BETWEEN

THE DEPARTMENT OF TRANSPORT, TOURISM & SPORT (IRISH COAST GUARD)





AND

THE DEPARTMENT OF HEALTH (HEALTH SERVICE EXECUTIVE NATIONAL AMBULANCE SERVICE)







Aeromedical SLA between the Departments of Health & Transport

Amendments Record Sheet

This is a controlled document. Amendments will be issued by signed agreement between Department of Health and the Department of Transport, Tourism & Sport. The master copy in the event of a dispute will be that copy held by the Director of the Irish Coast Guard.

Date	Section	Summary of Changes	

SLA Distribution List:

- 1. Assistant Secretary, Department of Health
- 2. Director, National Ambulance Service
- 3. Medical Director, National Ambulance Service
- 4. Control & Performance Manager, National Ambulance Service
- 5. Aeromedical Liaison Officer, National Ambulance Service
- 6. Area Operations Managers, National Ambulance Service
- 7. Assistant Secretary, Maritime, Department of Transport, Tourism & Sport
- 8. Assistant Secretary, Aviation, Department of Transport, Tourism & Sport
- 9. Director, Irish Coast Guard
- 10. Deputy Director, (Ops) Irish Coast Guard
- 11. IRCG SAR Operations Manager
- 12. Controller National Maritime Operations Centre (NMOC)
- 13. Controller Marine Rescue Sub Centre (MRSC) Malin Head
- 14. Controller Marine Rescue Sub Centre (MRSC) Valentia
- 15. Coast Guard Operations file at Dublin, Malin and Valentia Centres
- 16. MD Coast Guard Helicopter Contractor
- 17. Chief Pilot each Coast Guard heli base at Dublin, Waterford, Shannon and Sligo
- 18. Coast Guard Auditor of Aviation Services

AN AGREEMENT BETWEEN THE DEPARTMENT OF TRANSPORT, TOURISM & SPORT AND THE DEPARTMENT OF HEALTH AND CHILDREN FOR THE PROVISION OF A HELICOPTER EMERGENCY MEDICAL SERVICE, BY THE IRISH COAST GUARD, TO THE HEALTH SERVICE EXECUTIVE, NATIONAL AMBULANCE SERVICE.

1. Whereas:-

- i. The Irish Coast Guard (IRCG) is an internal Division of the Irish Maritime Administration of the Department of Transport, Tourism & Sport. The Minister for Transport, Tourism & Sport has overall responsibility for the roles assigned to it by Government policy and legislation.
- ii. The Department of Health is responsible for policy formation in respect of prehospital emergency care.
- iii. The Health Service Executive (HSE) has statutory responsibility for the provision of ambulance services throughout the state.
- iv. There are Agreements in place between the Department of Defence and the Department of Health for the provision of an Air Ambulance Service by the Air Corps for emergency inter-hospital transfer and for a pilot dedicated emergency aeromedical support service for the National Ambulance Service (NAS).
- v. The Irish Aviation Authority (IAA) is responsible for civil aviation safety and operational standards.
- vi. The Director, Irish Coast Guard has overall responsibility for Irish Coast Guard aviation safety and operational standards.
- vii. Parties to this SLA have done so on a bona fide basis acting towards a common goal, in the spirit of understanding where both Authorities are endeavouring to carry out an important duty to improve the care, transport and outcome of patients and recognise that the SLA does not represent a binding legal document.

Now it is hereby agreed between the parties to this agreement as follows:

2. Scope of Agreement

2.1 This Service Level Agreement (SLA) has been jointly prepared by the Department of Transport, Tourism & Sport and the Department of Health in

- consultation with the Health Service Executive, National Ambulance Service and the Irish Coast Guard, who are all signatories to the Agreement.
- 2.2 The SLA defines the totality of the relationships between the parties in respect of the provision of Helicopter Emergency Medical Service (HEMS) and defines the conditions and parameters within which the HEMS Service will operate.

3. Scope of Helicopter Emergency Medical Service (HEMS)

- 3.1 The HEMS is an emergency service for the essential rapid transfer of patients between hospitals; the recovery to hospital of patients classed as Life or Death and the recovery of patients in remote access locations. These services are listed at paragraph 3.3.
- 3.2 The HEMS provided by the Irish Coast Guard to the NAS includes the following:
 - A. Air Transport of patients from offshore islands to mainland hospitals
 - B. Recovery of patients from mountainous and other remote access locations; where recovery by vehicle is not reasonable
 - C. Recovery of patients deemed 'Life at Risk' scenario where the patient is not in a place of safety e.g. local resources do not match a patients clinical needs
 - D. Transportation of MART teams to Offshore or Inland Waterways Emergencies in accordance with Annex A of this SLA
 - E. Transportation of Medical / Ambulance personnel, including NAS Incident Response Teams to Major Emergencies or incidents, where the specialist skills of the IRT personnel or the helicopters underslung capacity are required
 - F. Air Transport of Neonates requiring immediate medical intervention in Ireland
 - G. Inter-Hospital Transfer of patients with serious injury and illness between hospitals within IAA guidelines and certification
 - H. Air Transport of patients requiring emergency organ transplant in the UK as a final resort. In the event the Irish Air Corps are not being available, the NACC may utilise a Private Air Ambulance Provider. Primary first option for

all Inter-Hospital Transfers will be the Irish Air Corps. The flight time of both the Waterford and Dublin IRCG helicopters to London is 2 hours.

4. The Responsibilities of the Department of Health and the Department of Transport, Tourism & Sport

The Departments will establish a Steering Group to monitor the operation of the SLA. The Steering Group, chaired by NAS, shall meet twice yearly or more frequently as required to review the operation and amend, if necessary, the provisions of this agreement. This meeting may be held before or after the National Aeromedical Coordination Group meetings. The Steering Group shall include representation from each of the bodies that are signatories to this agreement. The Coast Guard Director will represent the Department of Transport, Tourism & Sport and may be accompanied by their helicopter contract officials and consultant as required. The IRCG Operations Manager and the NAS Aeromedical Liaison Officer will act as day-to-day operational liaison (single point of contact).

5. Responsibilities of Irish Coast Guard

- 5.1 The prime function of the Coast Guard helicopter SAR service is the rescue of survivors from vessels in distress, persons on the water, coastline, inland waterways and remote areas of Ireland. The Service also performs a wide variety of functions to assists other State agency and emergency services, the monitoring of ship sourced pollution and services to the shipping industry
- 5.2 The Irish Coast Guard will provide aircraft and crews **as available** for the specific services to be delivered as a secondary role.
- 5.3 The availability of services will be dependent upon the primary role mission requirements of the Coast Guard in the exercise of its remit and in addition the following:
 - A. Mission compliance with Coast Guards AOC and IAA approval
 - B. Availability of aircraft
 - C. Suitability of environmental conditions

- 5.4 The Irish Coast Guard will assess suitable hospital landing sites (HLS) in accordance with specifications for same. The IRCG will carry out a certification programme for identified landing sites in the West of Ireland response area. The one-off costs per site (approximately €550 per site) as per the IAA requirements will be borne by the HSE if identified as a NAS need. Should a HLS be required by a hospital the cost of that survey will be borne by the hospital concerned.
- 5.5 These HLS locations will be identified by the HSE as part of their consideration of the spatial distribution of helicopter pick up points. HSE will be provided with a list from the IRCG/CHCI Helicopter Landing Site Register. This list will be updated as required and as additional facilities become available and will be available on the HSE's Health Atlas.
- 5.6 The Irish Coast Guard will advise, as required, on the location, dimensions and standards in respect of hospital helicopter landing sites and helipads, including issues of maintenance and fire safety as they become available.
- 5.7 The HSE will advise the IRCG of any new equipment necessary for the transportation of patients in Coast Guard aircraft.
- 5.8 The Irish Coast Guard and its contractor will assess any new HEMS equipment as suitable for transportation in service aircraft in conjunction with the Aero-Medical Liaison Officer (e.g. stretchers, incubators etc). Future patient transportation teams will need to engage with IRCG in respect of equipment testing and fitting to aircraft. Cost will be borne by the organisation requiring the carriage of the new equipment. HSE Transport Teams are responsible for future costs incurred in the testing and fitting of medical equipment, as requested by these teams.
- 5.9 The Irish Coast Guard maintains a record of all Aeromedical Assistance (Service) requests and their response to each request and can forward this to the National Aeromedical Coordination Centre (NACC) on completion of each operation (Mission Situation Report) and as a monthly and yearly statistics

- 5.10 The Coast Guard will require its helicopter contractor to be registered with PHECC as a recognised provider of the Clinical Practice Guidelines (CPG) training and commit to ensuring that each Paramedic and EMT on its staff achieves CPG standards on a yearly basis.
- 5.11 The Irish Coast Guard Contractor is required to appoint a Medical Director to oversee the clinical practice of aircrew involved in treating casualties, and a Lead Paramedic with a trainer qualification to ensure on-the-job supervision of clinical practice and in-service training.

6. Responsibilities of the Health Service Executive (HSE)

- 6.1 The NAS will advise the health service in relation to the use, activation and operation of the service provided by the Irish Coast Guard under the terms of the agreement.
- 6.2 The HSE will consult with the Irish Coast Guard and the IAA in relation to the location, dimensions and standard of helicopter landing sites and helipads located or to be located at public hospitals and will advise of any planned construction which may affect the operational use of such sites and helipads. Liaison point within the HSE, will be via NAS Aeromedical Liaison Officer
- 6.3 The HSE will maintain such sites in accordance with Irish Coast Guard requirements and will observe such fire precautions and security requirements as may be advised by the Irish Coast Guard and its Contractor and required by the Irish Aviation Authority
- 6.4 The NACC will be responsible for all HSE mobilisation requests for HEMS, including inter-hospital transfers, from the Irish Coast Guard. The NACC will contact the NMOC and request assistance for a HEMS Mission. The IRCG map identifying the inland geographical boundaries for tasking from each helicopter Base and the helicopters' speed of reaction are at paragraph 7.2 and Annex B. Direct link calls can then be made through the appropriate Coordination Centre between NACC and the helicopters paramedics.

- 6.5 The HSE will provide medical staff, appropriate to the patient's condition, when deemed necessary, to accompany patient during transport. It is the responsibility of the requesting hospital to ensure the appropriate level of medical care is provided during an inter-hospital transfer.
- 6.6 HSE or medical staff who may in the course of their duties be required to fly to fly on a regular basis in a Coast Guard helicopter will complete any relevant health and safety training required and requested by the Coast Guard helicopter contractors, and will adhere to any safety requests made by the Irish Coast Guard or its Contractor (including the pilot in command of a helicopter) during the course of a mission or exercise.
- 6.7 Should an Advanced Paramedic member of the NAS be carried on any mission the aircraft will endeavour to return the AP to the original pick up point subject to the operational exigencies of the helicopter service.

7. Activation of Service

7.1 The NACC will be responsible for all mobilisation requests for HEMS Assistance, including inter-hospital transfers, from the Irish Coast Guard. The NACC will contact the relevant regional MRCC and request assistance for HEMS Mission. All requests for the HEMS Assistance should be forwarded to Coast Guards' National Maritime Operations Centre via the National Aeromedical Coordination Centre:

NMOC Dublin

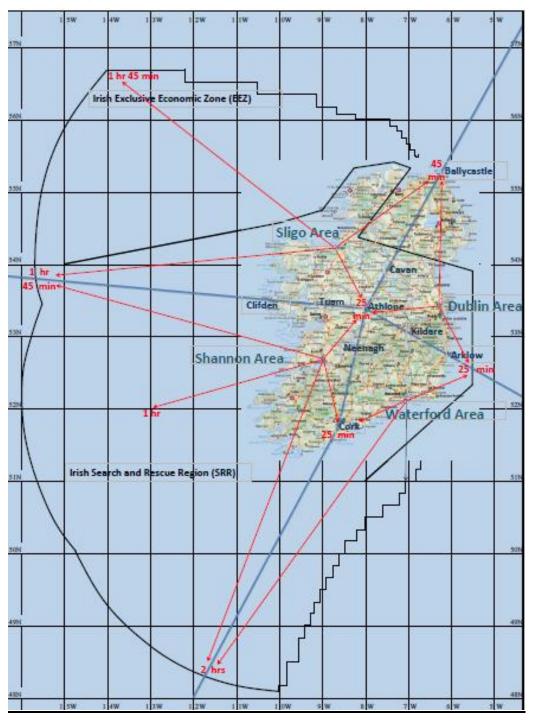
01 6620922

Should a hospital contact the IRCG directly with regard to the provision of an aeromedical service they should immediately be referred to the NACC who will process this request. This should not delay the IRCG in standing up the necessary helicopter(s) and resources in anticipation of the NACC request.

7.2 The Coast Guard Operations Centre will task the most appropriate helicopter base:

In general the Waterford and Dublin Bases will be prioritised as HEMS and inter-hospital transfer aircraft in order to maintain Atlantic readiness on the North, West and South West approaches by the Shannon and Sligo bases.

The normal areas of responsibility of each Coast Guard SAR Base with regard to inland and coastal missions are shown by the blue dashed lined on the following map. The red timelines are the still-air flying times, applicable once the helicopter has been alerted and launched:



- 7.3 The list of relevant equipment carried by the Irish Coast Guard on their helicopters will be provided to the HSE.
- 7.4 While having regard to the emergency nature of the service the National Aero-Medical Coordination Centre in submitting a request, will ensure that they provide as much notice as possible, in order to:
 - A. Allow time for mission planning and timely reaction to requests
 - B. Allow for re-scheduling of other missions <u>if possible</u> or if deemed operationally appropriate, in order to facilitate the request
 - C. In order for the National Aeromedical Coordination Centre to assess any time limitations to the transport of a patient
- 7.5 National Aero-Medical Coordination Centre will also ensure that they provide as much information as possible in relation to the current condition of the patient and the proposed equipment requirements.
- 7.6 Once requested for an inter-hospital transfer, including transplant patients, the National Aeromedical Coordination Centre will provide a copy of the Air Ambulance Request Form to the NMOC.

8. Response Times

- 8.1 The decision to accept a request and the assignment of a particular aircraft and the reassignment of a tasked aircraft and the tasking of the flight crew is solely a matter for the Irish Coast Guard.
- 8.2 Requests for the organ transplant flight, where the NACC Dispatcher has advised the Coast Guard SAR Mission Controller (SMC) that the request is a Priority One mission, where an immediate response is required, will be classed as Priority One missions. Priority One Missions require the IRCG SMC to inform the NACC within 15 minutes, that their aircraft will be able to lift off within 1 hour of request from NACC. The term, Priority One is used for transplant patient mission only. In all other missions NACC will provide the MRCC with mission timings, relevant to the particular mission request.

- 8.3 Following on from confirmation that a **Priority One** mission request has been received the Coast Guard SAR Mission Controller (SMC) will advise as to whether the Irish Coast Guard can respond to the request as soon as the appropriate initial mission assessment is made: this can be expected to take approximately 15 minutes. In the event of marginal environmental conditions, the SMC will advise the requester accordingly within the 15 minute timeframe and will provide regular updates thereafter. If at any point the environmental conditions indicate so, he may refuse the request.
- 8.4 It should be noted that IRCG helicopter crews go to 45 minutes' notice between 2100 and 0730 and therefore this may add some initial delay due to the mission planning process particularly in inclement weather or when flying into difficult terrain. The helicopter crews are on 24 hour rotation on the expectation that the predicted small number of missions will be achievable within the fatigue limits of a 24-hour shift. NACC should therefore not request a night tasking unless it is a clear life or death decision and a helicopter is the only reasonable means.
- 8.5 Should a confirmed tasking be unavailable within the 15 minutes' notice, for whatever reason, the SMC will advise the NACC of the situation and provide a time estimate of when clarification may be available. This will be communicated within the 15 minutes from receipt of the Priority One call.
- 8.6 The flight time of both the Waterford and Dublin IRCG helicopters to London is 2 hours.

9. Flight Safety & Health and Safety Issues

- 9.1 The Director, Irish Coast Guard will endeavour, as far as practicable within the limitations of current aircraft available and best flying practice, to ensure that civilians travelling in Irish Coast Guard aircraft are accorded the highest possible standards of safety during flight.
- 9.2 The Pilot in Command (PIC) is in absolute command of the aircraft, its crew and passengers and is responsible for the in-flight safety and comfort of the medical team. As such the medical team must obey all instructions issued by the flight crew particularly in the unlikely event of a forced landing where it may be necessary to evacuate the aircraft immediately. If an aircraft is priority re-tasked

mid-mission it may be necessary to deposit the medical party at an interim landing site. In the event of the aircraft receiving a priority mission and medical staff are required to leave the aircraft, the IRCG will inform NACC of such incident and location of medical crew

- 9.3 The PIC's primary responsibility is the safe operation of the aircraft. The medical team must not distract the flight crew at critical stages of flight particularly take-off, approach and landing.
- 9.4 Great care must be taken when moving and handling patients and equipment in/out of aircraft and proper manual handling techniques must be employed in this regard. The flight crews are responsible for directing and assisting in the lifting and loading/unloading of the patient and equipment but the safety of the patient and any HSE equipment remains the HSE's responsibility. Accompanying medical personnel will assist and observe the instructions of the Irish Coast Guard crew as required.
- 9.5 If a HSE team accompanies the patient it is their responsibility to ensure that sufficient Oxygen and other essentials required for the duration of the flight is on board the aircraft. This should be confirmed to the aircraft commander before leaving the requesting hospital.
- 9.6 New equipment required to be carried on board IRCG helicopters must first be cleared and approved by the IRCG Contractor.

10. Costs

- 10.1 The Irish Coast Guard is responsible for the cost of operating and maintaining its helicopters.
- 10.2 The Irish Coast Guard will continue to invoice the HSE for flights deemed to be NACC services. Any airport charges and non-medical miscellaneous expenses will be for the IRCG's expense. Table 1 below outlines the current costs for recovery (there is a CPI type index inflation/deflation each July).

Charge	Cost per Hour (exclusive of VAT)	
Flying charge	€1691 ex VAT	

Fuel Charge		S92A burns 759 litres per hour x cost per		
		litre (ex VAT) (Note 1)		
	Miscellaneous Medical Equipment	At Cost		
	Replacement (e.g. oxygen)			

Note 1: Average fuel cost per litre is currently €0.95 - market price which fluctuates

Note 2: Time will be rounded to the nearest quarter of an hour which equates to €422.75 ex VAT per 15 minutes flying time.

Note 3: Times are from rotors on to rotors off.

Note 4: The contractor (CHCI)'s current month's hours are visible on his computer-based performance reporting system ("iSAR"), which produces monthly reports for billing and analysis purposes. Therefore the HEMS hours reported above are defined according to IAA criteria and will form the evidence under which invoices will be issued as required.

Hourly Flying Charge: €1,691 per flying hour. Fuel: €721 per hour (759 litres per hour @ €0.95 per litre). NB fuel is charged as a pass-through cost and will vary monthly according to world prices.

Total direct operating cost: €2,412 per hour ex-VAT.

<u>July – December 2014: after mid-year contractual uplift:</u>

Total predicted direct operating cost: €2,533 per hour ex-VAT.

- 10.3 SAR Missions which are primary Coast Guard missions will not attract charges whether the tasking is routed through the NACC or not. IRCG helicopter SAR missions cover the transportation of patients from off-shore islands to mainland hospitals, the transportation of MARTS and HSE Medical / Ambulance teams to Major Emergencies, or the recovery of patients from the coast and from mountainous and other remote access locations where recovery by vehicle is not reasonable.
- 10.4 For clarity the missions that are cost recoverable are those planned missions where a casualty was in a known location on the Irish mainland, and in a position where he could have been reached, recovered and transported safely by a land ambulance, even if that would have caused a worse medical outcome by being slower. Intra hospital transfers and organ transplant transfers are always cost recoverable.

- 10.5 These non-SAR missions will be termed as "helicopter ambulance" missions i.e. the mission could have been done by a land ambulance but the helicopter's speed offers a better medical outcome. All 'helicopter ambulance' missions are cost recoverable (subject to 10.5) and must be routed via the NACC.
- 10.6 On transplant flights to the UK, the recovery of patients deemed 'Life-at-Risk' where the patient is not in a place of safety and needs urgent extraction and emergency inter hospital transfers where the patient needs a time bound lifesaving intervention standard costs (para 10.2) are chargeable.
- 10.7 As the IRCG recognises the additional value being provided by this secondary function and the overall improvement in medical standards available within the IRCG core services and agrees that 12 helicopter ambulance missions (regardless of duration) HEMS will be provided to the HSE free of charge during each month. Thereafter standard flying charges apply (para 10.2). All Island missions will remain at the IRCG expense.
- 10.8 The Irish Coast Guard reserves the right to review costs should HSE operational tasking place additional contract costs on the Irish Coast Guard and in line with inflation indices. In particular if the number of monthly missions rise significantly there are consequential maintenance and LIMSAR burdens that will arise that would require further negotiation.
- 10.9 All cost recovery for those flights as identified above, will be coordinated within the Health Service by the NAS Head of Business Support who will arrange for appropriate reimbursement to the Department of Transport Tourism & Sport.
- 10.10The HSE is responsible for the provision, maintenance and operation of landing sites and helipads at public hospitals and for any costs for medical personnel carried in addition to the paramedic aircrew.
- 10.11The HSE will reimburse the Department of Transport, Tourism and Sport in respect of any additional costs incurred by that Department in relation to the costs of any HEMS equipment or kit or additional service enhancement which is procured or provided at their request. This does not include any medical equipment already carried, or tendered for in respect of the recently awarded

2012 Search and Rescue contract, by the Department of Transport, Tourism & Sport.

11. Management and Review of the Service Level Agreement

- 11.1 The Steering Group may, if necessary, establish a Sub-Group comprising of service providers, to review in greater detail any operational aspect of this agreement.
- 11.2 This SLA may not be amended without the agreement of the parties hereto. To this end, the parties to the SLA will endeavour to reach consensus in relation to such amendments as may be required from time to time. However where such consensus and subsequent agreement is not achievable, the view of the Minister for Transport, Tourism & Sport shall prevail in respect of the responsibilities and obligations of the Department of Transport, Tourism & Sport and the Irish Coast Guard, and the views of the Minister for Health shall prevail in respect of the responsibilities and obligations of the Department of Health and the HSE.

12. Indemnities & Liabilities

- 12.1 Subject only to the limitations of liability set out below in Clause 13, the HSE shall indemnify, defend and hold the Department of Transport, Tourism & Sport and its and their affiliates and its and their directors, officers, employees, servants and agents (including agency personnel) harmless from and against all claims, losses, damages, costs (including legal costs) expenses and liabilities in respect of:
 - loss of or damage to property, equipment and materials of any person, and/or
 - injury including death or disease to any person; of whatsoever nature and howsoever caused, arising out of or in connection with this SLA.
- 12.2 The Department of Transport, Tourism & Sport shall not be liable to the HSE, its servants or agents, for any loss or damage, to the property of the HSE, its affiliates, servants or agents, by reason of, or on account of, or in any of the circumstances set out in this Agreement, unless due to the wilful misconduct or

Gross Negligence of the Department of Transport, Tourism & Sport, its affiliates, servants or agents.

- 12.3 For the purposes of this SLA, "Gross Negligence" means any act or omission performed without intent to cause injury or damage to life, property or the environment or to give rise to other emergency situations but which involves such recklessness or a significant falling short of the standard of care which a reasonable person would have exercised such as to give rise to a significant risk that injury or damage to life, property or the environment or the occurrence of other emergency situations would be likely to follow such act or omission.
- 12.4 The HSE shall not be liable to the Department of Transport, Tourism & Sport, or any of their respective servants or agents, for any loss or damage, to the property of the Department of Transport, Tourism & Sport, its affiliates, servants or agents, by reason of, or on account of, or in any of the circumstances set out in this Agreement, unless due to the wilful misconduct or Gross Negligence of the HSE, its affiliates, servants or agents.

SIGNED:

Director of the Irish Coast Gu	uard		
		}	
day of	2014	}	
Director,			
National Ambulance Service			
for the Health Service Execut	tive on	}	
day of	2014	}	

Annexes to this SLA

A: Marine Ambulance Response Team

B: Speed of Reaction & Coverage radius with the S92

C: S92 Aircraft details

Marine Ambulance Response Team

Section 1

Introduction & Purpose

- 1.1 The memorandum of understanding sets out the terms and conditions under which the Health Services Executive National Ambulance Service and the Irish Coast Guard will provide mutual assistance for the deployment of the Health Service Executive National Ambulance Service's Marine Response Teams, hereafter called "Marine Ambulance Response Teams (MART's)" for certain land and sea major emergencies. The HSE Maritime Response Teams will become a declared resource¹ to the Irish Coast Guard.
- 1.2 The Health Service Executive National Ambulance Service is the statutory ambulance service provider for the Irish State and provides primary pre-hospital emergency medical care and patient transport services for the entire population.
- 1.3 The Irish Coast Guard (IRCG), an internal division of the Department of Transport, discharges the State's responsibility for Maritime Search and Rescue (SAR). Its resources include four medium lift SAR helicopters based at Dublin, Shannon, Sligo and Waterford Airports and one medium lift SAR helicopter in reserve to cover most maintenance periods. These SAR helicopters have a 15-minute airborne time between 0730 and 2100 and a 45-minute airborne time between 2100 and 0730 daily.
- 1.4 The Health Service Executive National Ambulance Service formed an Incident Response Team in 2004 with the aim of equipping a small team of experienced Advanced Paramedics, Paramedics and Ambulance Officers with additional skills to enable them to provide a response to special service incidents. Existing teams from all over the country will be added to the Response Team in the East as we progress forward.

¹ Ireland benefits from an effective and comprehensive maritime Search and Rescue (SAR) Service, provided by a co-ordinated framework of different providers including other Principal Response Agencies and Services including Government Departments and a wide range of other rescue organisations both inland and at the coast.

- 1.5 The Marine Ambulance Response Team have received additional training in Major Incident Medical Management and Support (MIMMS), Chemical Decontamination, Rope Access (Reach & Treat), Helicopter Operations, Prolonged entrapment casualties, Restricted Breathing Apparatus training and the Irish Coast Guard's training DVD, working with helicopters.
- 1.6 Training is continuous within the team. The Team is exercised on various topics on an ongoing basis. Training is expected to continue and all aspects of the team's capabilities will be revisited each year. The HSE National Ambulance Service is responsible for the Health and Safety of their personnel.
- 1.7 The purpose of the team is to provide experienced, well-equipped, self-sufficient pre-hospital care providers to a range of Major Emergencies or other incidents if requested.
- 1.8 The MART has not been designed to replace any of the other agencies providing Search and Rescue services in these areas, but rather to enhance patient care to those needing assistance. Most agencies already providing services, i.e. RNLI, Mountain Rescue, Cave Rescue, Irish Coast Guard Cliff and Coastal Rescue, Marine Fire Response Team, etc. who are primarily focused on the rescue of the casualty. The Health Service Executive National Ambulance Service MART(s) can provide focused patient care in a wide variety of situations.
- 1.9 The Memorandum of Understanding will be reviewed on a yearly basis from the date of signature or at any time if requested by one of the services. Both services undertake to share their 'lessons learnt' from marine incident reviews involving MART's.

Section 2

Services to be delivered

- 2.1 In order to enhance the care provided to any casualties at sea, the littoral area, inland waterways or on land, in the event of a mass casualty incident or an incident requiring specialised care, the MART(s) will undertake to provide, when requested, a team to be transported by Irish Coast Guard SAR helicopter to the location of the incident. The location of incidents may involve transport into difficult and hazardous environments.
- 2.2 The members of the team will be experienced Advanced Paramedics and/or Paramedics and will be self-sufficient with regards to medical equipment and patient packaging devices.
- 2.3 All Maritime Response Team members will have undergone the required training and will have access to all of the required personal protective equipment.
- 2.4 At present, pagers will activate the Maritime Response Team, comprising of six members, and the team will activate within 30 minutes day or night. The National Aeromedical Coordination Centre will contact NMOC, Dublin in the event of the non-availability of the team.
- 2.5 Team members may be drawn from all over the country, but the Marine Response Teams will be initially located at Dublin.
- 2.6 The Clinical Indemnity Scheme for clinical indemnity and the State Claims Agency for public liability will cover all MART Team members.
- 2.7 The team(s) will be demand lead and may or may not be in a position to respond in certain circumstances.
- 2.8 We are also aware that the Irish Coast Guard is demand driven and may not be able to deliver a service in certain circumstances.

2.9 If the Irish Coast Guard are unable to provide transport of the team, a reason will be given and an estimated time of availability given to the National Aeromedical Coordination Centre. Similarly if a MART were unavailable when requested similar procedures would apply.

Section 3

Training

- 3.1 Initial training will take place with the Irish Coast Guard, with regard to large helicopter operations, the helicopter safety issues, embarking and disembarking the aircraft, winching on and winching off static and moving vessels.
- 3.2 Team members will undergo helicopter underwater escape training. [HUET] and basic Sea Survival skills course
- 3.3 In order to ensure proficiency there will be six monthly exercises to ensure familiarity with the equipment and procedures.
- 3.4 All instructions given by the pilot will be followed at all times by Maritime Response Team members.

Section 4

Activation Process

- 4.1 If an incident occurs on land where the Irish Air Corps is unable to provide helicopter transport, and urgent transport of the Maritime Response Teams or the HSE NAS Incident Response Team is required, the National Aeromedical Coordination Centre may make a request for IRCG SAR helicopter transport to National Marine Operations Centre, Dublin on the H24 number 01 662 0922 and will provide details of the incident and location. National Marine Operations Centre, Dublin will co-ordinate all necessary arrangements regarding SAR helicopter involvement.
- 4.2 In the event of an incident occurring at sea, where a number of casualties require care or where the resources on board are unable to cope with the

severity or number of injured, National Maritime Operations Centre, Dublin will contact the National Aeromedical Coordination Centre:

Please state:

- Your designation (i.e. National Maritime Operations Centre, Dublin)
- Ask for activation of HSE Maritime Ambulance Response Team
- Provide a brief outline/location of incident.
- 4.3 The NAS Control Supervisor on duty will notify Team Duty Officer of the request.
- 4.4 On receipt of the call from the National Aeromedical Coordination Centre, one of the team duty officers will make immediate contact with NMOC and get an update on the situation.
- 4.5 The Response Team will assemble at the designated RV point and all team marine appropriate equipment will be dispatched.
- 4.6 The National Aeromedical Coordination Centre and National Maritime Operations Centre Dublin will conduct communication checks on a weekly basis.

Section 5

Costings

- 5.1 All staff and related costs associated with the activation of the Maritime Response Teams / Incident Response Team will be borne by the Health Service Executive National Ambulance Service. This will be limited to the costs of the team and will not include any cost incurred by the Irish Coast Guard or any of its agents.
- 5.2 It is understood that the Irish Coast Guard will not levy any cost to the Health Service Executive National Ambulance Service for training or transport of the Maritime Ambulance Response Team.

IRCG S92 Helicopter Speed of Reaction

Five S92s to support four bases:

Shannon tasked through NMOC Dublin
 Sligo tasked through NMOC Dublin
 Dublin tasked through NMOC Dublin
 Waterford tasked through NMOC Dublin

All on call 24/7/365

Airborne target times - within

- 15 minutes from 0730 to 2100
- 45 minutes from 2100 to 0730

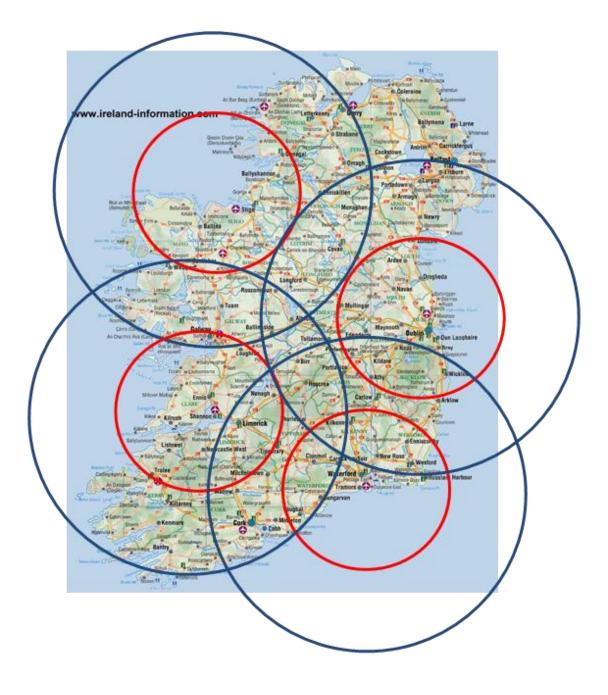
Day Response Target Times (Map below).

Red rings: Distance covered in 30 min of alert by day, allowing:

- 15min to launch
- 15min cruise at 140 knots

Blue rings: distance covered in 45 min of alert by day, allowing:

- 15min to launch
- 30min cruise at 140 knots



IRCG S92 Helicopter Details



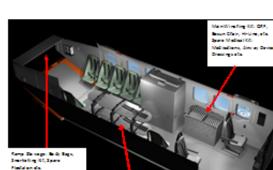
Sikorsky S92 overview



- Mission Speed:140 knots (260 kph)
- Max range: Dublin to Madrid, or Shannon to Milan
- Radius of action:
 - 200 km with 2 hrs 30 min search time on scene
 - 400 km with one hour search time on scene
- Cabin payload: 5,000 lb over 140 km range
- Crew of four 2x pilots, one winchman/paramedic, one winch-operator (paramedic or EMT)
- Equipped to fly at night and in almost all weathers



S92 SAR equipment



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Cabin:

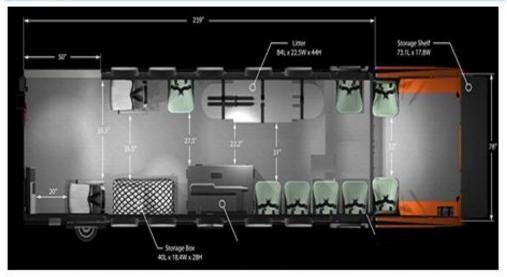
- Single stretcher on rack, vacuum mattress, spinal board, neck collars
- 3 x C/D oxygen, 1 x D size entonox
- Laerdal suction unit
- Propag patient monitor
- Two defibrillators
- Other paramedic-approved medications and equipment
- Lighting above stretcher and general illumination
- Environmental control
- (Neonate incubator)

Search: GPS, radar, infra-red, video, radio homing, search lights
 Rescue: Twin rescue hoists (each lifts 600 lb on a 295 ft cable)

Comms: Tetra, satellite phone, UHF, VHF, HF



S92 working space



Cabin height: 6 ft Cabin width: 6 ft 6 ins Cabin length: 20 ft

Definitions

- "AWSAR" (All-Weather Search and Rescue) means a helicopter that it is fully serviceable and equipped and is manned by a full and correctly constituted crew
- "LIMSAR" (Limited Search and Rescue) means a helicopter that it is fully serviceable and equipped except that it lacks a serviceable autohover, FLIR, radar, or rescue hoist, or is not manned by a full and correctly constituted crew
- "NOSAR" means a total loss of service from a base due to unserviceable aircraft or other cause
- "IFR" means Instrument Flight Rules, which apply when helicopters fly in cloud by reference to flight instruments
- "VFR" means Visual Flight Rules, which apply when helicopters fly clear of cloud by reference to the visual clues
- "STANDBY". When there is a probable requirement for an aircraft, the duty crew is to be given the maximum notice commensurate with the information available by use of the instruction "STANDBY". This does not change the readiness; it simply gives crew more time to prepare
- "ALERT" (applicable only at night) reduces readiness from 45 minutes to 15 minutes "SCRAMBLE" is the executive order to launch
- "STAND-DOWN" is the order to return to base when en route to an incident, and/or to revert to the normal state of readiness (I5 or 45 minutes)
- IRCG NMOC means Irish Coast Guard National Marine Operations Centre (Dublin)
 IRCG MRSC means Irish Coast Guard Marine Rescue Sub-Centre (Valentia and Malin Head)
- "ASHICE Message" means Age, Sex, History, Injuries/illness, Condition, and ETA at hospital