



SARCALL the Irish Journey

or a successful lockdown project

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Two part presentation

- What is the Sarcall system
- What strategies were used for operating and managing the rollout in Ireland



What is Sarcall?

- Sarcall is a web-based system that provides each individual team member and the teams with the following abilities.
 - Messaging
 - Team Member Availability Responses
 - Incident Logs
 - Partner Contact Lists
 - Inter-Team Messaging
 - Maps
 - PhoneFind
 - Document Resource
- The platform runs on high reliability, secure resilient servers that are diversly located



System History

- System developed by John Hulse and colleagues in the UK in 2008.
- Based on SMS technology initially.
- Irish teams first started using it in 2014.
 - DWMRT, PSNI, Mournes & NW.
- Went live with the Garda/ NAS tasking agencies in 2020.
- All Irish MR teams are on the system, and they can choose at what level they use it.



What does Sarcall do for us?

- The Calling Authorities (Primary Response Agencies) – Garda / NAS can task teams directly from the system.
- The Incident Log feature allows interaction between the CA and the Team.
- The log can be used as a record of the incident.

Contact List



Provided For
An Garda Siochana

- Documents
- Area Map
- SAR Contacts
- List Of Incident Logs
- Incident Logger

Map

**Incident
Logger**

Search and Rescue Teams Available To An Garda Siochana

Select The Search And Rescue Team

Time : 11:38:56hrs on 14/6/2020

Contact Supt. Mick Flynn for information about this page

**Callout
Button**



Team Details Page	Operational / Geographic Scope	Keywords	Callout Team
Eastern Region Mountain Rescue	Search & Rescue in the Dublin & Wicklow Mountains. Areas Bray Head, Glencree, Glencullen, Glendalough, Glenmalur, Glenmacnass Waterfall, Lugnaquilla Mountain, Powerscourt Waterfall, Pollanass Waterfall, Sally Gap, Three Rock Mountain Also Cooley Mountains in Co Louth. Joint call of Glen of Imaal and the Dublin-Wicklow MRTs.	Walker overdue 1 day at Glendalough	<input type="button" value="Callout Team"/>
South Eastern Mountain Rescue Association (SEMRA)	Mountain ranges including, but not limited to: Galtees, Comeraghs, Knockmealdowns, Blackstairs, Slievenamon and any remote areas in counties Waterford, Tipperary, Carlow, Wexford and Kilkenny	Mountains in Waterford, Tipperary, Carlow, Wexford	<input type="button" value="Callout Team"/>
Mayo Mountain Rescue Team	Mountain ranges including but not limited to: Croagh Patrick (the Reek), Mweelrea, the Sheeffry Hills, Killary Harbour/Fjord, Maumtrasna, Devils Mother, Nephin, Achill, Bangor Trail, Slievemore, Croaghaun, Ben Gorm, Glennamong,	Teevenacroaghy, Murrisk, Doo Lough, Aasleagh Falls	<input type="button" value="Callout Team"/>
Galway Mountain Rescue Team	Hills and mountains of Counties Galway and Clare. Galway includes Diamond Hill (Connemara National Park), Twelve Bens, Maamturks, Leenane Hill, Errisbeg and Cashel Hill (all in Connemara) and the Slieve Aughtys between Gort, Loughrea and Portumna, Derroua Mountain Bike Trail, Western Way, Galway Wind Park. Clare includes the Burren (including Mullaghmore, Burren National Park, Abbey Hill, Black Head), the Slieve Aughtys on the Clare-Galway border and the Slieve Bernaghs near Killaloe	Hills and mountains of Counties Galway and Clare.	<input type="button" value="Callout Team"/>
SARDA Ireland	SARDA Ireland deploy search dogs to assist in the search and rescue of missing persons on the mountainous and lowland areas throughout Ireland. We work routinely with Garda and Mountain Rescue Teams.	Search, Mountain Rescue, Lowland Rescue, Dogs, Sea	<input type="button" value="Callout Team"/>
Donegal Mountain Rescue Team	County Donegal, Bluestacks, Glenveigh, Poison Glen, Innishowen, Derryveagh Mountains, Slieve League, Glenties, Ardara, Buncrana, Donegal Town, Letterkenny, Ballybofey		<input type="button" value="Callout Team"/>
Sligo Leitrim Mountain Rescue Team	Sligo and Leitrim County		<input type="button" value="Callout Team"/>
Kerry Mountain Rescue Team	Kerry & West Cork	Carrauntoohil	<input type="button" value="Callout Team"/>

**Team
Summary**

Keywords



20:14 19%

sarcall.mountain.rescue.org.uk

SAR CALL
Provided For
Garda Aero Support Unit

Documents
Area Map
SAR Contacts
Incident Logger

Search And Rescue Teams Available To Garda Aero Support Unit

Select The Search / Mountain Rescue Team

Time : 20:14:22hrs on 18/3/2021

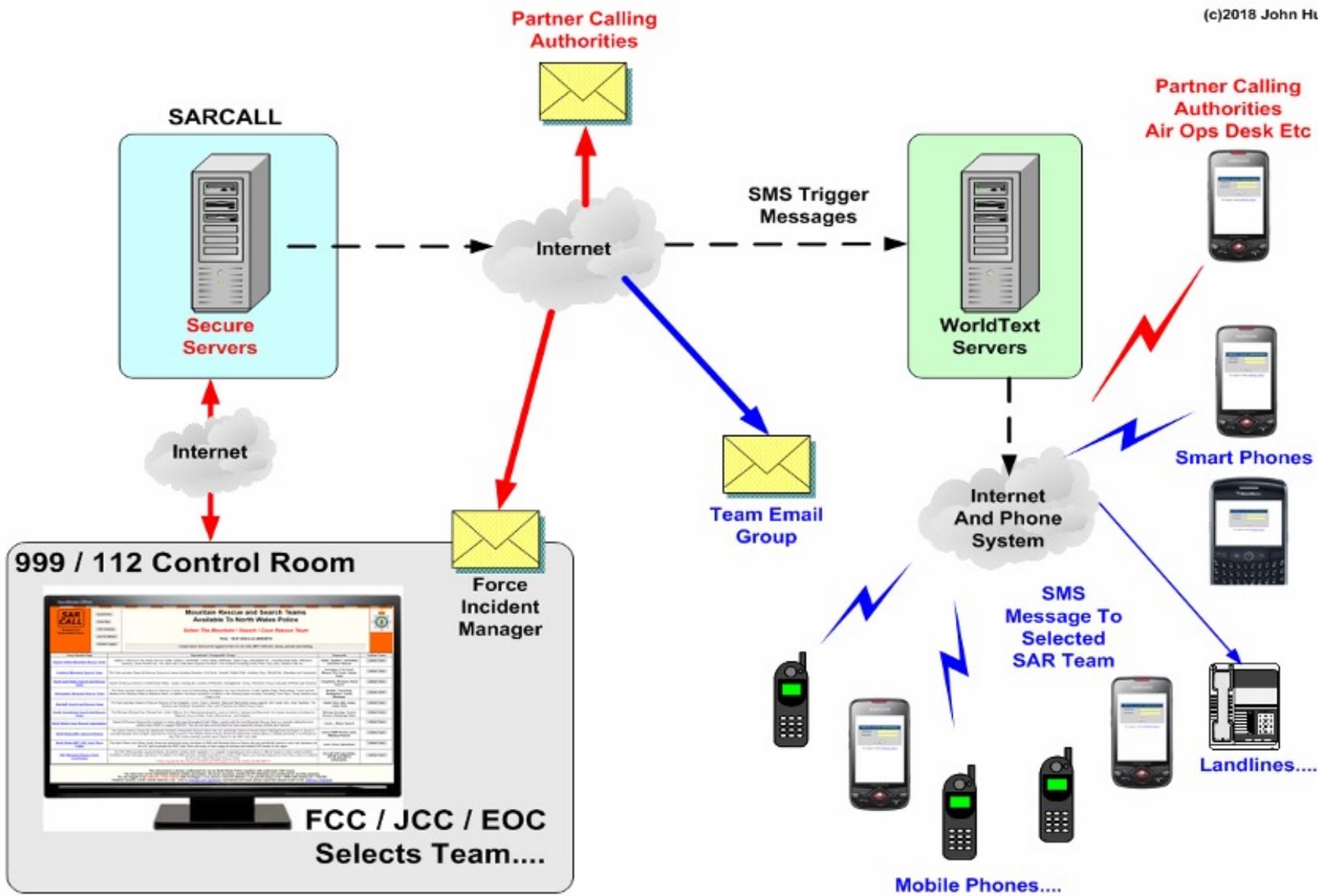
Team Details Page	Operational / Geographic Scope	Callout Status (24hrs)
Eastern Region Mountain Rescue	Search & Rescue in the Dublin & Wicklow Mountains. Areas Bray Head, Glencree, Glencullen, Glendalough, Glenmalur, Glenmacnass Waterfall, Lugnaquilla Mountain, Powerscourt Waterfall, Pollanass Waterfall, Sally Gap, Three Rock Mountain Also Cooley Mountains in Co Louth. Joint call of Glen of Imaal and the Dublin-Wicklow MRTs.	No
South Eastern Mountain Rescue Association (SEMRA)	Mountain areas and all remote lands in Waterford, Tipperary, Carlow, Wexford, Kilkenny and Laois	No
Sligo Leitrim Mountain Rescue Team	Sligo and Leitrim County - Knocknarea, Ben Bulbin, Union Wood, Ox Mountains, Gleniff, Truskmore, Kings Mountain	No
Donegal Mountain Rescue Team	County Donegal, Bluestacks, Glenveigh, Poison Glen, Innishowen, Derryveagh Mountains, Slieve League, Glenties, Ardara, Buncrana, Donegal Town, Letterkenny, Ballybofey	No
SARDA Ireland	SARDA Ireland deploy search dogs to assist in the search and rescue of missing persons on the mountainous and lowland areas throughout Ireland. We work routinely with Garda and Mountain Rescue Teams.	No
Mayo Mountain Rescue Team	Mountain ranges including but not limited to: Croagh Patrick (the Reek), Mweelrea, the Sheeffry Hills, Killary Harbour/Fjord, Maumtrasna, Devils Mother, Nephin, Achil, Bangor Trail, Slievemore, Croaghau, Ben Gorm, Glennamong,	No
Galway Mountain Rescue Team	Hills and mountains of Counties Galway and Clare. Galway includes Diamond Hill (Connemara National Park), Twelve Bens, Maamturks, Leenane Hill, Errisbeg and Cashel Hill (all in Connemara) and the Slieve Aughtys between Gort, Loughrea and Portumna, Derroura Mountain Bike Trail, Western Way, Galway Wind Park. Clare includes the Burren (including Mullaghmore, Burren National Park, Abbey Hill, Black Head), the Slieve Aughtys on the Clare-Galway border and the Slieve Bernagh near Killaloe	No
Kerry Mountain Rescue Team	Kerry & West Cork	No

This information is strictly confidential for use by Garda Aero Support Unit together with authorised SAR Teams.
The data must not be distributed without written permission. All server accesses, emails and IP addresses are monitored for security purposes.
You are logged in as **Donal McNamara (RA)** with Privileges = 3 on Server 1 (Live) from IP Address 95.44.117.205 on port 443 using CA ID = GARDA_ASU with session ID = 2713599
Platform Version 3.11.105 ©2021 SARCALL Ltd. Click to [manage your password](#). If



The Callout Message To The SAR Team..

(c)2018 John Hulse





SARCALL Incident Logger Features

- Shared log interaction by Teams and Primary Response Agencies
- Timestamps key operational flow and decisions
- Store files, images, documents, maps etc.
- Remote log updates by SMS are supported
- Access controlled by User credentials (roles-based)
- Soft redaction policy to help manage sensitive data
- Improves tactical situational awareness even during routine ops, not just major incidents.

SAR CALL

Log Auto-Started On SAR Team Callout.

View Log Data For This Incident

Page Refresh = Fast Medium Freeze

Log Sorted By = **Ascending**

Highlight Text = ~

Save / Highlight

Log	Date	Time	Log Item Type	Log Summary (200 char. max)	Log Detail	File Present	Created By	Organisation
1	24/05/2014	19:04:44	Message From NWP	SMS Message To Ogwen Valley Mountain Rescue Organisation	39 YEAR OLD MALE HAS TUMBLED OVER INJURING HIS HEAD, Near tryfan + Location: UNNAMED ROAD CAPEL CURIG BETWS-Y-COED .: @MOUNTAIN RANGE (TRYFAN) EID: 6815641 TYPE CODE: PSW CALLER NAME: NWS CALLER ADDR: TIME: 19:02:18 Comments: REPORTS OF A 39 YEAR OLD MALE WHOS TUMBLED OVER AND HAS HEAD INJURIES INFTS NUM [REDACTED] AMBULANCE ARE ON THE WAY TO THE AREA NWS REF NU [REDACTED] WILL CONTACT MRT	-	North Wales Police	NWP
2	24/05/2014	19:06:33	Message	SMS To Team Leader Group	Message Sent = OVMRO TL Dave W picking up on this one, Pauline and Andy on their way to base 19:06hrs 24-05-14 < Sent by D [REDACTED] > +	-	Dave Worrall	
3	24/05/2014	19:09:47	Info / Update - Police	Checking telephone number	Details being checked by NWP	-	Dave Worrall	
4	24/05/2014	19:15:07	Status - Personnel	Base is open	Pauline and Andy at base	-	OVMRO _ Base	
5	24/05/2014	19:18:01	Status - Personnel	AI R en route to Oggi Base		-	Alistair Read	
6	24/05/2014	19:24:00	Status - Field	Update with ambulance control	Ambulance is in layby opposite Tryfan. Pauline is going to RV with them to see if the cas can be seen. The informant stated the cas fell 15m and	-	OVMRO _ Base	

Police Entry and Callout SMS to Team

SMS To Team Leader Group "Picking Up" Incident

TL and Base Entries

- Log is auto-created when Garda / Ambulance send callout message
- Team Leaders log into SARCALL to read Garda / Ambulance info
- Actions and decisions are entered by any User and time-stamped

What a member sees

SEMRA [Full Team] GKEL accepting call from AGS for 15 year old injured walker in Ballyhouras. Please standby. Send availability and ETA to SARCALL. Thank you. [Sent by Georgina Kelly at 14:51hrs on 05-09-22]

SEMRA [Full Team] Members planning on attending base opening event on 24 Sep, please indicate availability and time to SARCALL by 10 pm today. Official opening is from 15:00 to 18:30. Thank you. [Sent by Georgina Kelly at 18:30hrs on 09-09-22]

SEMRA TLs Call Aero medical desk [021-4640054](tel:021-4640054) Ref. T1234567 Testing that desk phone number correctly configured. No action required 17:15hrs 29/07/20 L @



Team Level Log Information Redaction

Casualty Phil Jones with fractured ankle contact on mobile 07762123456

View Incident log page segment in plaintext mode.



User In Contributing Team

***** ***** with *****
ankle contact on mobile
***** *****456

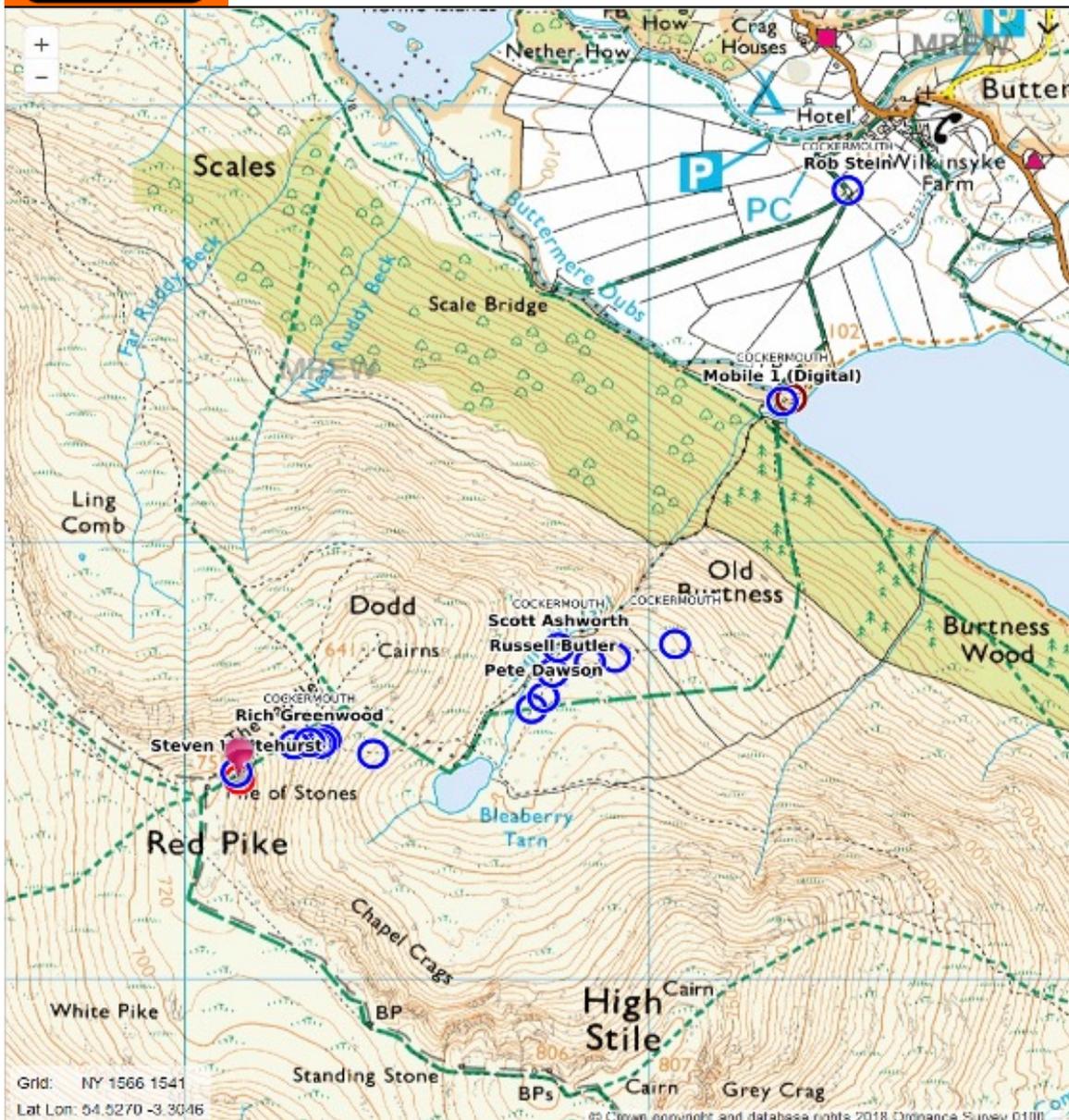
View Incident log page segment in redacted mode.



User In A Non-Contributing Team



Real-Time Display Of Team Locations On Map



Home

Hide Team Areas
 Team Boundaries Only
 Shade Team Areas
 MRMap Positions

Grid NY380200 Add

Lat 54.417 Lon -3.431 Add

E 301230 N 524321 Add

Clear Markers Search Gazetteer Place Name Search

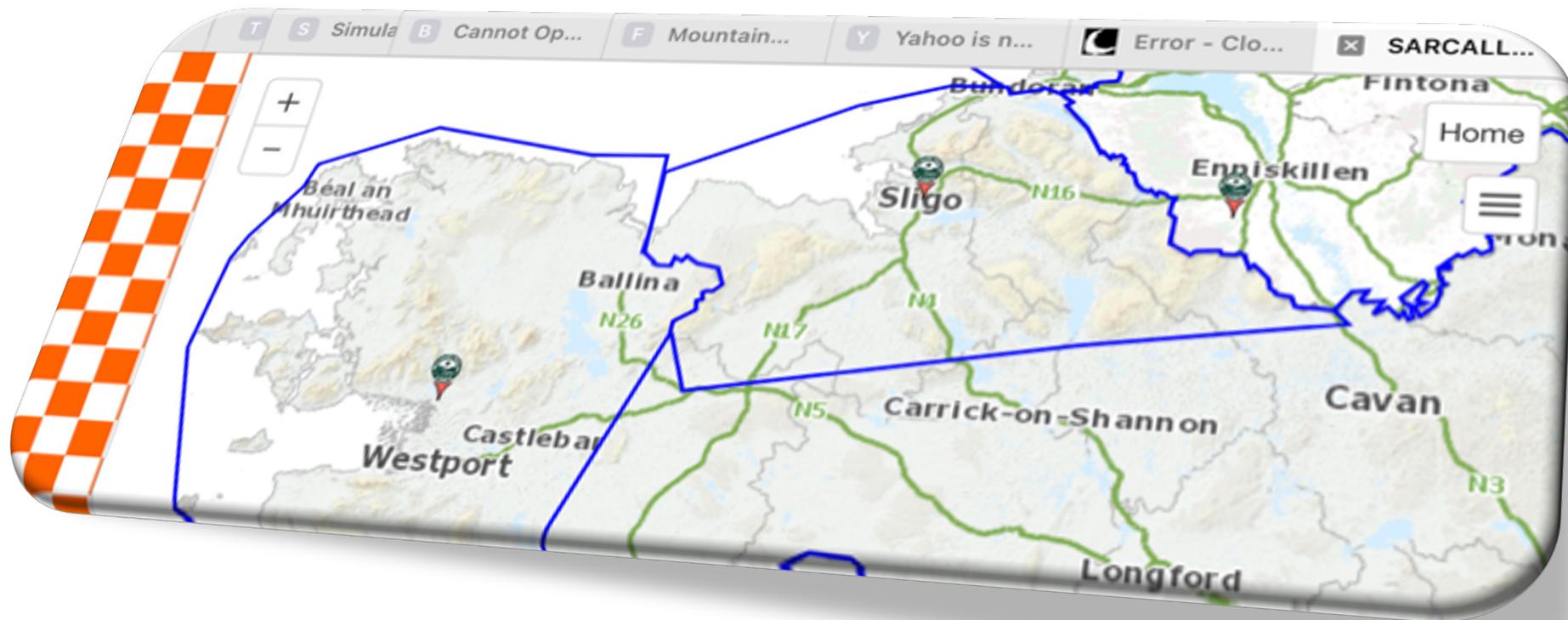
Place	Type	Notes	Team
1. Lake District Mountain Rescue Search Dogs provide cover for the full region. 2. COMRU provides underground and mine rescue for the full region. Call the local MRT first			
= Team Base			

This information is strictly confidential for use by Cockerthwaite Mountain Rescue Team together with agreed Calling Authorities.
The data must not be distributed without written permission. All server accesses and IP addresses are monitored for security purposes.
You are logged in as SARCALL Prime Admin from IP Address 86.165.162.87.
SARCALL Platform V 3.10.06 © 2018 John Hulce and Mapping Platform by Jan Lynch

- Team Member, Asset and PhoneFind positions displayed as MRMAP
- Smartphone + Tablet “friendly”
- Supports down to 1:10K Street Map scale & Ariel OSI mapping

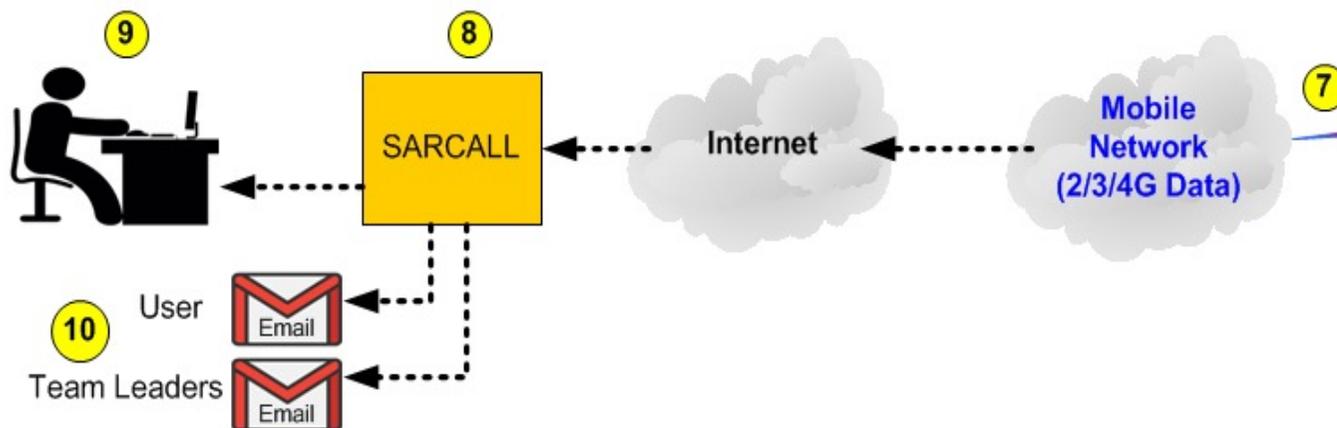


Team boundaries





PhoneFind– Location From Ta



- When Recipient clicks through the link and the position is received on the phone, the result is sent to SARCALL
- User views log and checks email for the PhoneFind report
- All authorised Partners can “see” the location in the log



What3Words (W3W) Integration Into The Mapping Page

Grid: SH 6381 5723
Lat Lon: 53.0949 -4.0353
© Crown copyright and database rights 2019 Ordnanc...

Home

- Hide Team Areas
- Team Boundaries Only
- Shade Team Areas
- MRMap Positions

Grid SH790460 Add

Lat 54.417 Lon -3.431 Add

E 301230 N 524321 Add

What 3 Words ruffle.remission.flow Add

Clear Markers Search Gazetteer Place Name Search

Place	Type	Notes	Team
<p>1. Call North Wales Cave Rescue (NWCRO) for all mine and cave incidents in region.</p> <p>2. Search Dogs (SARDA) cover all NWP region.</p> <p>3. HM Coast Guard have responsibility for sea-cliffs, shorelines and tidal inlets.</p> <p> = Team Base</p>			
<p>This information is strictly confidential for use by Ogwen Valley Mountain Rescue Team together with agreed Calling Authorities.</p> <p>The data must not be distributed without written permission. All server accesses and</p>			

What3Words (W3W) Integration In The Incident Log

Time : 10:53:11hrs on 12/9/2019

Page Refresh = Fast Medium Freeze Log Sorted By = **Descending**

ax)	Log Detail	File
	<p>Location is said to be at OUTER.SPRING.REGAL [decoded in SARCALL as NY066129 with nearest location of Cleator Moor, Cumbria.] or given as ///dimension.fuels.knots [decoded in SARCALL as NY301096 with nearest location of Ambleside, Cumbria.] but unsure that it may be climbing.trek.interviews [WARNING - SARCALL decoded W3W wordset is outside the UK area.] or climbing.track.intervue [WARNING - no matching W3W wordset or location found by SARCALL.] due to poor line.</p>	-

- Auto-decodes the W3W content to OS Grid and nearest town.
- Warnings displayed for locations that cannot be found or are outside UK and Rol

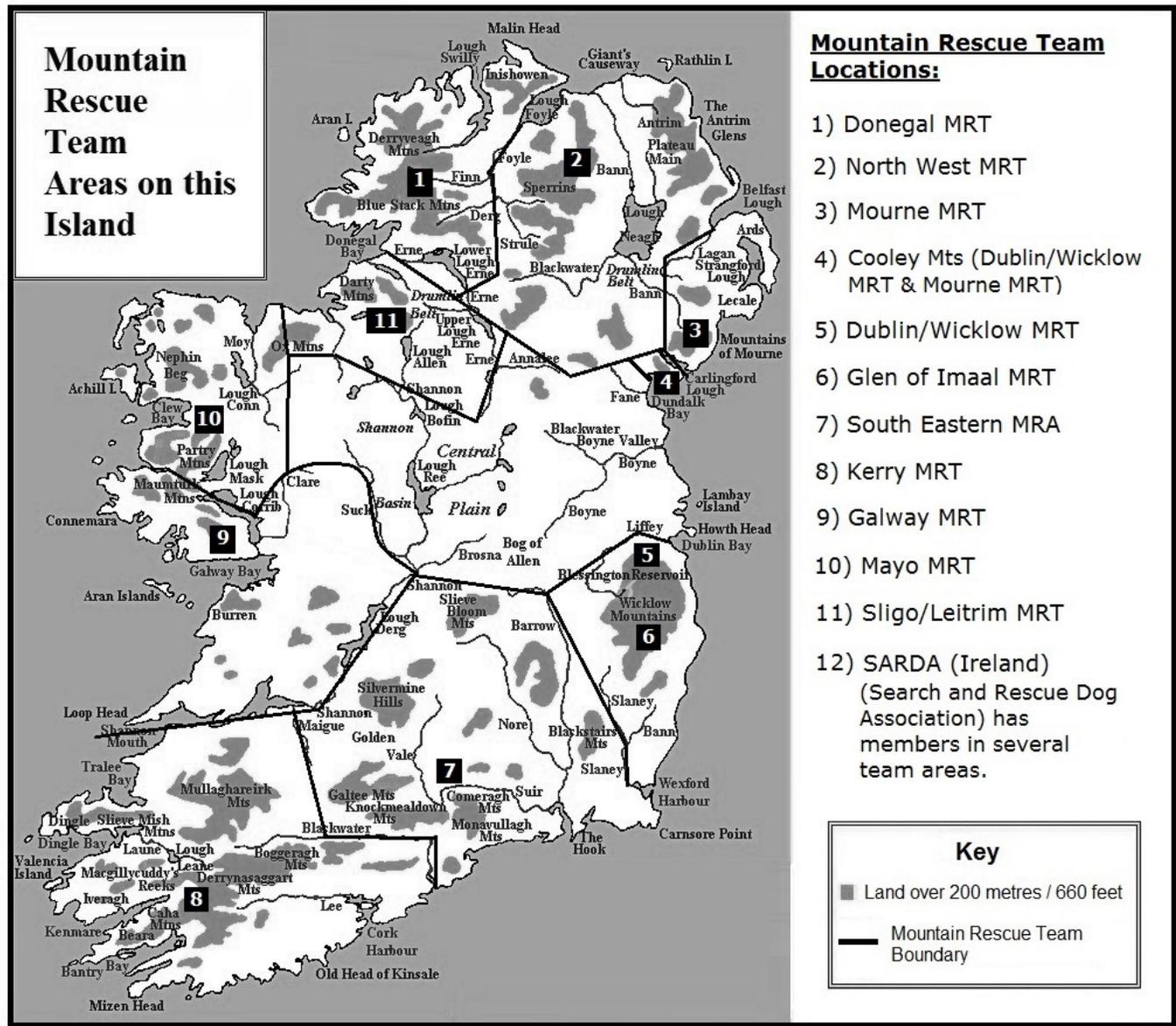
What strategies were used for
operating and managing the rollout
in Ireland

**SAR
CALL**





**Mountain
Rescue
Team
Areas on this
Island**



**Mountain Rescue Team
Locations:**

- 1) Donegal MRT
- 2) North West MRT
- 3) Mourne MRT
- 4) Cooley Mts (Dublin/Wicklow MRT & Mourne MRT)
- 5) Dublin/Wicklow MRT
- 6) Glen of Imaal MRT
- 7) South Eastern MRA
- 8) Kerry MRT
- 9) Galway MRT
- 10) Mayo MRT
- 11) Sligo/Leitrim MRT
- 12) SARDA (Ireland)
(Search and Rescue Dog Association) has members in several team areas.

Key

- Land over 200 metres / 660 feet
- Mountain Rescue Team Boundary

**SAR
CALL**

2020 ANNUAL STATISTICS

250 DAY TIME
345
 95 NIGHT TIME

TOTAL INCIDENTS



65 LOST
 59 MISSING
 132 MINOR INJURIES
 50 SERIOUS INJURIES

25 TOTAL NO. FATALITIES
 127 SEARCHES
 15 FOREIGN TOURISTS
 8 OTHER*



*Mountain rescue teams are tasked to a variety of incidents arising from their wilderness & mountainous capabilities.



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Saving Lives
 in the
 Mountains

Registered Charity Number: 20026370. CHY (Revenue) Number: 10412

24 7 365



How was this implemented

➤ Why was change required?



Is the time right for change?

- 95% of Irish users had smart phones at that stage, including Team members
- All missing people rang for help
- Teams already using Sarloc
- Reduce potential for wandering calls
- Existing React 'notification' system was reducing functionality

All parties need to be onboard



How was this implemented

- Looks like all went live in a year.
But what did it take to achieve that?



Teams required at all levels

- At developer level - Regional Admins
- Two positions at MRI Exec & TL support
- On line weekly Team Admin meeting –
main working group

Who was in each team

- 1 to 2 member per Team. Resilience
- Approx. Deputy TL level / influencer in the team
- Tech or project management background
- Formed early, evolved
- Now have entry training and meeting norms

Timelines

- 12 teams operational in N Wales in 2009
- Irish teams became aware through conferences
- MRI appointed an MRI Development Officer – Soft skills approach 2015
- Sarcall appointed a Regional Admin – Tech side 2015
- SARCALL starts in DW and SEMRA
- Three pilot counties suggested
- OSI Mapping Service level agreements put in place

Timelines continued

- Pause for new ECAS and new AGS C+C centres until early 2019 – Regional Control centres.
- All Irish Teams on system by MRI AGM, Donegal in March 2019.
- Went live in all 4 new C+C centres April 2020.
- Went live with NAS C+C 17th September, 2020.
- Training and meetings done on line.
- REACT closed down in September 2020.
- Continued liaison with AGS and NAS nationally and among the teams.



Team benefits

- One coordinated system.
- Part of the states initial response
- Survived Covid-19
- Survived HSE Cyber attack in 2021



Where are we now

- Project phase over
- Normal running
 - Transitioned to a Licence model
 - GASU asked to come on board with 'view' access in 2021
 - Integrated the PhoneFind with the Ireland65 datum in 2022



Lessons Learnt

Good old fashioned project management skills with modern tools work in a pandemic, when everyone has a **common goal**.

sarcall.admin@mountainrescue.ie



Overall System Use

SARCALL live in

- 17 Police Forces,
- 6 major Ambulance Services,
- 4 Helimed organisations,
- 6 x HM Coastguard Helicopter Bases,
- 90+ SAR/MR Teams,
- RAF Mountain Rescue Teams