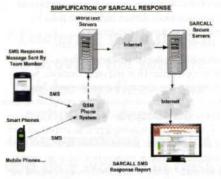
## Mountain and cave rescue teams use SARCALL for callouts

The problems and time delays of calling the right mountain or cave rescue team are rapidly diminishing as calling authorities (police, fire and rescue and ambulance services) in large parts of the UK now have access to SARCALL. This secure, web-based platform enables the police or other appropriate authority to quickly, easily and accurately select and call the most appropriate search and rescue (SAR) team to deal with the incident. This new platform brings numerous operational benefits to the police, the volunteer teams and most importantly, the casualty.

SARCALL is a web-based platform that has been developed from within the UK's mountain and cave rescue community in close cooperation with our colleagues in other emergency services.

The system has a number of elements, but initially grew as a web-based SMS (text) and e-mail platform, that the police, fire and rescue and ambulance services (calling authorities) and search and rescue teams use to call out their members.

SARCALL was first developed in North Wales by John Hulse, a team leader of Ogwen Mountain Rescue Team, and went live in August 2009 with the full support of the eight teams and North Wales Police. The need for a more robust, secure and auditable callout system was urgent as the old methods of using pager bureaux, direct phone calls to team leaders etc, were increasingly problematic.



The SARCALL system can be viewed as a 'Swiss army knife' of tools; you pick and use only the right tool for the right job. In summary, SARCALL offers:

- · Police, fire and rescue, and ambulance controls send SMS callout message to team leaders together with e-mail notification containing additional data about the incident
- · Team leaders can send the SMS notification of the incident to the team members together with an e-mail notification containing additional details of the incident
- · Team members can use the SMS response to declare their availability to the team leaders
- The live incident logger enables robust record keeping and collaborative working between teams and the police, fire and rescue, and ambulance services during an incident
- Full SMS, e-mail and usage audit trail
- Regional and national contact list, maintained by team administrators
- Up-to date team contacts and information database - controlled and managed by team administrators
- · Storage of current SAR documentation at team, regional and national levels

- · A searchable gazetteer of local place names that do not fall within the general scope of a GIS gazetteer (names of rock climbs/names of caves/names of swiftwater rapids etc)
- Zoomable and scrollable mapping based on OS showing team bases and operating boundaries, location-based push pins from gazetteer searches.

#### Rapid growth

From its roots in the North Wales region, the system has grown rapidly and is now in active use across about 40 mountain and cave rescue teams in the UK together with their calling authorities. In just two-and-a half years there have been more than 1400 police activations of the system and more than 3700 own-team activations. On 3 April 2012, the Lake District region, one of the busiest regions for mountain rescue call outs in the UK, went live. Cumbria Police have fully committed to using the system and training of force incident managers (FIMs), call handlers and dispatchers has been undertaken. Across the 10 mountain rescue teams, a mines rescue team and SARDA organisations that cover the Lake District area, this is seen to be a revolutionary way that teams will be activated and call outs managed and logged.

SARCALL is now also in use with Avon and Somerset Police, Gloucester Fire and Rescue Service, Dumfries and Galloway Police and Lancashire Constabulary. In due course it is envisaged several other calling authorities will adopt the system.

## "A new feature of SARCALL now allows team members to text their availability to a defined number."

## Strong operational focus

The workings of the system and especially the callout section are very intuitive for the user, this 'keep-it-simple' approach is one of the key principles that the SARCALL team works towards. As the development, sys-admin and support team members are all SAR volunteers in UK teams, the focus has been on ensuring that the platform reflects the needs and expectations of the various teams and our police, fire and rescue, and ambulance colleagues. This strong operational



focus helps bring new ideas and features into the system to address real rather than perceived needs.

### SARCALL in operation

The operation of the system is simple. From a 999 call being received by a police force communications centre (FCC) from a person in need of assistance, the FIM or dispatcher will log into SARCALL then select and callout the required team. The notification message is a short message sent as an SMS (text) to the appropriate team leader group, which typically arrives within 20 seconds of dispatch. Further information including critical data such as the caller details, the type and nature of the incident, the numbers of people involved, the weather conditions at the incident location etc, can be sent to the same mountain or cave rescue team leader group transmitted as an e-mail, accessed from control points and smart phones etc. All of the team leaders (typically two to six per team) will simultaneously receive this callout information.

Smart information sharing is one of the key benefits of the system and results in the FCC staff being freed of making lots of 'ring around' calls to find someone that can accept the callout. The team leaders will have established a protocol for who becomes the main point of focus for this job. The responsible team leader can now use the SARCALL system to activate the team members (typically 50 per team) by sending again one set of text messages. These text messages are sent by SMS, landline or pager to the team members, with the messages typically arriving within 20 seconds. Once again additional data, if appropriate, can be forwarded on to team members by e-mail.

## "The system has grown rapidly and is now in active use across about 40 mountain and cave rescue teams in the UK."

A new feature of SARCALL now allows team members to text their availability to a defined number. The availability is declared by using a simple key word and the number of minutes until they arrive at the stated RV point. This information is then collated and presented in a simple format and is available to the team leader as an SMS, via an e-mail and is also available on the team's SARCALL web pages.

For complicated and multi-team type of incidents, then the secure web-based incident logger tool comes into its own. The incident together with all the actions and decisions are logged and time-stamped allowing a clear audit trail of the job. Due to the SARCALL system being web-based, other authorised teams and support services can see and add to the log. This active collaboration helps to ensure that appropriate different teams and services 'see' the most current information about an incident.

## Gold, Silver and Bronze

The incident logger can be running in Gold, Silver and Bronze controls, it can be accessed and updated in the field from PDAs, smartphones etc. In addition, the logger will store a number of file types, so photographs, recorded voice communication files, GPS tracks, maps and briefing/debriefing notes all form part of the evidence trail.

The SARCALL system works with the UK SMS provider World-Text.com who provide a very robust and cost-effective service with discounted messages available to UK teams and emergency services for all SMS messages sent via the SARCALL system. However the SARCALL front-end including all its tools is provided FREE of charge to all the UK's mountain and cave rescue teams and police, fire and rescue, and ambulance services who work with the voluntary teams.

www.mountain.rescue.org.uk For more information please e-mail: sarcall\_admin@mountain.rescue.org.uk

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# App allows real-time tracking of personnel from a tablet computer



A new website from Chirange Technologies Limited (CTL), based in Manchester, has been designed to best display the new Chirange Commander, as well as a variety of upcoming technology focused towards the emergency services.

The Chirange Incident Commander, an Android tablet cloud-based application, has been specifically designed from the ground up for fire and rescue and police tactical units. The application provides real-time GPS tracking of personnel, allows incident commanders to view the big picture yet allows other commanders involved with the incident to view and share information. Additionally, commanders and headquarters can view any number of live incidents and view exactly what the situation is on the ground, all in real time.

Everything from location of fire appliances to coordinates of each specific incident team member is logged and a full audit trail is recorded of every movement and action for debriefing or later analysis.

#### Take more control

"The Chirange Incident Commander application for the Android tablet has been designed specifically to help protect firefighters in the field and to allow incident commanders better control over emergency situations, enabling them to make better decisions," remarks Paul Birchall, CEO of Chirange Technologies. "The ability to work with fire and rescue services throughout the development of the application has offered Chirange the opportunity to implement the exact requirements of fire commanders, building a solid application that moulds itself to work with their existing practises and procedures."

Fire and rescue services in both the UK and US

have been involved in the design and development input to the Chirange Incident Commander tablet application. Chirange is currently being trialled in the UK by Lancashire Fire and Rescue Service. Lancashire Station Manager Ian Potter remarks, "We've been working with Chirange to develop this product, which could contribute effectively to the way an incident is managed in future."

The application is gaining interest from other UK as well as US fire departments, several US police SWAT teams also set to start trialling Chirange.



## **Upcoming products**

Chirange is integrating the very latest geospatial tracking technology due to be launched in 2012, allowing firefighters to be accurately tracked in real time, inside buildings. Working with a US technology partner, CTL will be among the first in the UK to provide this leading technology to fire and rescue services, and specialist police units.

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