**The Urban Search and Rescue (USAR) response model and co-ordination system nationally, regionally and internationally.**

Every country in the world will have a certain risk for building collapse man made or natural driven. The size of the risk and the ability of building a response capacity will determine the USAR capability of a country. Within the effected country response to a major disaster the model attached shows the sequencing of a typical and common approach to response within the affected area, region and country. With the risk of building collapse and the scale being a sliding one, for example a single building collapse due to gas explosion might evoke a local and regional response, depending on scale of incident. Adversely a large scale wide area building collapse event, such as an earthquake will still involve the local and regional responders but will also involve a national response and possibly beyond. Post mission reports after large scale incidents show that preparedness on cooperation and coordination can be effective if a Quality Assurance (QA) is part of the response system.

The model shows that the local USAR unit or First Response (FR) are the initial response to any event, this may include the local community, who most often undertake the initial rescues. The initial civil defence responders will be the immediate response beyond the community and they could come with or without USAR skills. The national emergency management structure could then build to provide a Light, Medium and Heavy national capability of USAR depending on the scale of the disaster and mobilise the level that is required. The requirements needed by the effected community at this stage would be the lead agency in the National Emergency Management system with regard to command and control and coordination of the incident, and the role of the Local Emergency Management Agency (LEMA). Quality assurance of this aspect of national response and coordination will be under the direction of the effected country and could use INSARAG guidelines as a standard and QA source material.

Disasters of a national scale could also warrant the need for countries to request mutual aid from neighbouring countries and this could also ask for Light, Medium and Heavy USAR response configuration. An example of this would be the South America system for mutual aid. With this scale of response the requirements from the responding countries should include:

* A pre-prepared mutual aid agreement;
* Working knowledge of the neighbouring countries emergency management protocols;
* Logistic planning to move USAR staff and equipment to the effected and requesting country for the duration of the deployment; and
* Bilateral training and exercising or practical experience of the process and procedures to assist with a mutual aid request.

The Quality Assurance process for this neighbouring country request/assistance could be similar to the national approach with teams understanding the NEMA and LEMA command and control system of the effected country and their role within the response. This may well be an already day to day common practice between countries and emergency organisations for smaller incidents.

In addition the use of INSARAG guidelines as a minimum standard for teams/countries to maintain assurance can also be adopted.

Unfortunately the scale of some disasters can require a request for international USAR assistance after national and neighbouring capacity have been deployed. International response of USAR assets should follow an international Light, Medium and Heavy request. In some situations the effected country may only request certain aspects of international USAR support. For example the receiving country may only request for Medium and Heavy or alternative, all Light teams due to the need and peculiarity of the disaster itself. This mobilisation and the decisions made by the effected country could now follow the international coordination system and INSARAG guidelines will be required to be followed with quality assurance mandated through these same INSARAG standards.

This document is designed to show the scale and build-up of a disaster and the relationship between the effected country, neighbouring country and international country response. The diagram demonstrates how USAR assistance can be scaled to provide the ultimate level of support to disaster effected communities in relation to quality assurance for coordination in an incident. It is outside of the scope of this paper to include the UNDAC and Humanitarian Cluster system, this document was solely describing the USAR response and its relationship to Light, Medium and Heavy. The role of INSARAG is to provide subsidiarity and assist with building (inter)national resilience at its lowest level and each stage of the model attached. This will enhance resilience and capacity building, identifying vulnerability and build resilience for response to building collapse. There is a wider piece of work ongoing to look at the disaster cycle and mitigate the effects of disaster before it occurs, prepare and plan for a disaster before it occurs and respond if and when it occurs, and then recover post disaster. This model and INSARAG will continue to follow this methodology of risk reduction.

