

Gert Venghaus, Berlin, Germany

Head of the International Emergency Response Unit, Department Disaster Management, National Headquarters, German Red Cross, Berlin, Germany

Emergency Response Unit: Mass Water and Sanitation

In cooperation with seven national units from Europe and beyond, as well as with the assistance of the International Federation in Geneva, the German Red Cross began to develop the concept of „Emergency Response Units“ (ERU) in 1996 on the basis of many years of ample international experience. These ERUs are modular ready-for-use systems which can be adapted for specific emergency situations within 12 - 24 hours and sent to the respective country. The technical equipment is supplemented with a number of especially trained experts, varying according to the different modules, who act as foreign delegations. Generally a ERU mission lasts for 3 - 4 months maximum. The first emergency team, however, is usually replaced after 4 - 6 weeks because of the heavy workload characterising the beginning of a mission.

Within only one year the ERU concept brought forward several modules: „basic health care“ (for approx. 40,000 people), „field hospitals“ (covering all medical fields of a local hospital, for approx. 200,000 people), „Communication“, „Logistics“ and, last but not least, ERUs in the field of drinking water supply.

The ERU „Mass Water and Sanitation“ consists of several emergency modules that can be combined in different ways. These modules are, among other things, capable of producing 1 million litres of drinking water every day from superficial water resources by purifying, storing and distributing it according to WHO and SPHERE standards. The water purification uses various technologies, for example sedimentation or chlorination, under the constant monitoring of a water laboratory, osmosis (non-chemical treatment) or a special purifying process by means of large-scale water filters. The ERU also allows the daily storage of more than 80.000 litres of drinking water. In case that the local water network had been destroyed by the disaster, the ERU can furthermore build a provisional network to guarantee the distribution of water. The ERU also foresees the

possibility of renting local heavy goods vehicles and creating flexible water tanks, and thus transporting drinking water in remote and heavily accessible areas.

These ERUs are also concerned about the very important issue of mass-hygiene. The major role of the ERU in this context is to help preventing potential epidemics (such as diarrhoea caused by bad water quality), but it also encourages early vector control in order to prevent, for example, a malaria epidemic. In this context the activities of the ERUs also contain the conceptualisation of camps in view of hygiene, the correct location of latrines, the construction of new types of latrines and the necessary health information campaigns for the population.

One very important component of the ERU system regarding sustainability is the immediate training of local personnel, because in most of the cases all the equipment used is left to the local Red Cross or Red Crescent society after the mission. In this way the capacity of these societies can be enforced for catastrophes to come and make disaster preparedness more sustainable.