

Standard of operation for cave rescue in Hungary

In Hungary specialized cave rescue teams undertake the rescue role when explorers and researchers become stuck in caves. These organizations have adopted a unified procedure for undertaking cave rescues. During a cave rescue the interest of the casualty has priority and any other issues are dealt with as a secondary issue. Careful consideration must also be given to any circumstance which may endanger the health or safety of the rescuers.



Colonel Péter Jackovics

Colonel Péter Jackovics, civil protection counselor, Head of Department for Emergency Management, National Directorate General for Disaster Management (NDGDM), Ministry of the Interior, has two decades of professional experience in domestic and international disaster relief and assistance. He is the commander of HUNOR. He led the governmental rescue team in Sri Lanka, Indonesia, Haiti, Malta and Serbia. He is Hungary's UNDAC expert. As deputy head of the EU civil protection team, he directed the assistance granted by EU countries to Japan. Under his leadership, the basic professional requirements, the National Classification System for voluntary rescue organizations to be deployed in rescue operations have been elaborated in the six different branches of rescue. At present, he is a student of the Security Science Doctorate School of the Óbuda University. His area of research is the risk mitigation of special rescue operations during disaster assistance.

The chief rescuer and the head of every rescue action group have sole responsibility for measures to be implemented.

Others involved at the rescue, regardless of their rank or status in their own organization must follow or execute the instructions of the chief rescuer.

All participants involved in the rescue will only be nominated tasks which they are competent to fulfill.

The unified procedure is based on the Hungarian Cave Rescue Services' elaborated and approved policy.

The surface control party and all

independent mobile action groups involved in the rescue can be directed by cave tour leader or search master.

Those entitled to lead any of the rescue phases or to take over the leadership of the rescue, must possess the required skills:

- a) Until the arrival of additional helpers' (co-rescue), the cave guide involved in the accident (tour, search), in case if their incapability its appointed replacement, in their absence any other who is present and able to perform the task.
- b) In the case of additional ad hoc help arriving (expanded co-rescue) the most suitable: the most experienced, qualified person with suitable management ability, good physical and psychological condition, with exception of those participants involved in the accident.

▼ Hungary's governmental rescue team is on operation action at INSARAG Reclassification Drill. Hungarian National Organisation for Rescue Organisation took first reclassification under Heavy Urban Search and Rescue Standard in 2012. Col. Peter Jackovics is commander of HUNOR.



► Voluntary USAR team is demonstrating technical rope capability to construct a system that allows for the movement of a load with victim from a high point laterally to a safe point below.

c) When the cave rescue service gets arrives (rescue service rescue), it is compulsorily for the head of the rescue service to take control.

Anyone involved in the cave accident or those who are not capable, cannot be in charge of rescue.

In the case of a cave accident, the injured person should be put in safety place, provide urgent first aid applicable to the circumstances and abilities, following the condition survey and the status evaluation and proceed as follows:

- a) Alert the cave rescue service without delay in case of serious injury or if it is believed people are in danger. The rescue of the injured must be carried out by the cave rescue service action under the supervision of the medical team / doctor using the special rescue stretcher.
- b) If the severity of the injury can not be judged clearly, the condition of the injured person(s) must be presumed as serious;
 - i. In the case of a minor injury and if the condition of the injured is suitable, the delivery to the surface can be started in a co-rescue or rescue action.
 - ii. In parallel with the rescue it is obligatory to notify the Disaster Management Service and the National Ambulance Service.

Requirements of Cave Rescue Service

A cave rescue service (an organization which undertakes cave rescue) must be able to alert and have appropriate members of staff available to get in action as well as a competent rescue doctor and the necessary medical equipment.

The cave rescue service is obliged to make available on the internet continuously its operational area, up-dates on availability, alerting arrangements and list of members.

Every cave rescue service has to be



able to implement first phase activity, in any domestic cave, independently from the usual difficulties of the approaching route to the accident scene.

To determine the resources required for the rescue the available data has to be taken into consideration; seriousness of injury, place of accident and access difficulties.

Rescue of the injured person can only be started if all the necessary resources are available on site. The decision on the minimum number of members of a cave rescue service required has to be calculated with a maximum 90 minute assembly time, and 50% action-entry rate.

Degrees of cave rescue in Hungary:

- 1 (light): completing a complex rescue on easy terrain slightly or seriously injured person, includes first degree rescue service operation, obstacle-clearing of rescue route, rescue of injured person;
- 2 (medium heavy): completing a complex rescue of a very seriously injured person on easy terrain or a seriously injured on medium heavy terrain, includes first degree rescue service operation, providing necessary logistic background and resupply;

▼ Central voluntary rescue organisation is using rope technique. Annual exercise is holding on formal industrial area at Budapest in 2015 winter.



Images courtesy of NDOGOM



Image courtesy of HOGDM

◀ Rope rescuers in HUNOR were trained by expert from Hungarian Cave Rescue Organisation. Picture was taken at HUNOR INSARAG Reclassification Exercise at November 2012. UN Classifiers are watching the rope rescue operation.

- 3 (heavy): completing a complex rescue of an injured in any condition, includes first- and second degree rescue service operation;
- 4 (burden): completing a cave rescue of more than 24 hour duration on heavy terrain, includes third degree rescue service operation;
- 5 (extreme): completing a rescue of more than 24 hour duration, requires mobilization of extreme capacities (i.e. many people, international collaboration, specialist knowledge, special means, complex technical systems);

Required capacity for each degree of rescue:

1 (light)

- medical crew of minimum 4 people professional staff of which at least 2 paramedic, all have cave tour experience, possibly having cave tour course;
- practiced cave rescuer of minimum 6 people, of which at least 4 skilled cave tour leaders or search leaders with experience;
- less practiced cave rescuers of 6 people, of which at least 2 skilled cave tour leader or search leaders with experience;

2 (medium heavy)

- medical crew of minimum 4 people

professional staff of which at least 2 doctors all who have cave tour experience, possibly having cave tour course;

- practiced cave rescuer of minimum 12 people, of which at least 6 skilled cave tour leaders or search leaders with experience;
- less experienced cave rescuers of 6 people, of which at least 2 skilled cave tour leader or search leaders with experience;

3-5 (heavy)

- medical crew of minimum 6 people professional staff of which at least 3 doctors all have cave tour experience, possibly having cave tour course;
- practiced cave rescuer of minimum 30 people, of which at least 15 skilled cave tour leaders or search leaders with practice;
- at least 20 less practiced cave rescuers;

The Cave Rescue Service has to undertake a major training exercise every second year to deal with cases of 4-5 degree rescues;

Conditions of Cave Rescue Service regular membership, on probation:

- actively participates in a complex training exercise of at least medium or heavy cave rescue domestic exercise

- on at least medium terrain within 1 year, or maximum of 2 years;
- learns both theoretical and practical knowledge of cave rescue equal to domestic and international norms and pass the exam;
- Continuously practices cave touring or cave search and cave rescue;

A candidate is considered proficient in cave rescue when:

- Minimum three years continuous, certified, regular membership;
- Active participation at least six times in medium heavy, domestic, complex cave rescue exercises;
- Continuously experiencing cave expedition, cave rescue;

A cave or cave section can be classified as easy, medium difficult or difficult in relation to cave rescue difficulty rating, namely:

- easy: if there is no need of rope protection for a generally experienced caver to explore the route, takes no longer than three hours (calculated with continuously moving experienced team of five members)
- medium difficult: if the route contains not more than two climbing-rope sections in addition to the easy rating;
- difficult: all routes more complex than the previous ones;

The route should be upgraded by one grade if the exploration is effected by specific complicating factors such as:

- risk of landslip,
- flooding,
- significant stenosis,
- longer narrow sections,
- extreme climate conditions,
- equipment supply difficulties,
- significant access difficulties to the cave entrance

➔ For more information, go to www.okf.hu
www.caverescue.hu