

EFFORT-ORIENTED EMERGENCY PLANNING AS A USEFUL TOOL FOR RELIEF UNITS DURING A NATURAL HAZARD EVENT

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EMERGENCY PLANNING WITHIN THE INTEGRATED RISK MANAGEMENT

Emergency management is a key issue in integrated risk management. Emergency planning addresses to the steps of preparation and intervention. Ensuring the efficiency of rescue activities within the first hours and days of an emergency is one of the main benefits of such a planning. Furthermore, it helps to minimize inconsistencies and the problem of interfaces during that time period. Thus, having access to an antecedent implemented and effort-oriented emergency planning can be a decisive element for the successful management of an extreme event. Moreover, in times of increasing societal requirements for safety and a decreasing acceptance of damage, the scarcity of public finances compels the hazard managers to implement low-cost measures, having a remarkable stake in damage mitigation. Emergency planning is such a measure.

WHAT IS EMERGENCY PLANNING

There is no general definition of what emergency planning is and what aspects it should consider. Consequently, there exist no technical or formal standards of emergency planning. The authors suggest that at least the following general issues should be considered:

- Issue of time window: an emergency plan is a tool for the first hours and perhaps days of an event. As soon as an operational headquarter is installed and the emergency is more or less under control, all further the operations should be based on actual needs rather than pre-event planning assumptions.

From this it follows that an emergency plan should address at least the following issues:

- Issue of alerting (alerting of the relief units and the population, key criteria for starting an alert, etc.)
- Issue of the intervention itself (places of intervention, interventions hotspots and key sites, useful interventions paths and measures, necessary evacuations, emergency accommodations for evacuated people, traffic diversion, etc.)
- Issue of organization (organization of the relief units, command structures, assignment of rights and duties, location of the operational headquarter, organization of the operational area, communication between different relief units, etc.)
- Issue of communication to the public and the media (media information, information of the public, information policy, etc.)

This information is usually already known to the competent authorities and the relief units, but it is not provided in a coherent and concentrated manner. A useful emergency planning therefore merges the necessary information within a sole dossier in a structured manner. Hence, it can be used as a “best-practice”-guideline.

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FIELD OF APPLICATION OF EMERGENCY PLANNING

Emergency planning is already well known in different fields belonging typically to the fire brigades' range of operation. For example, the law in Switzerland requires mandatory emergency plan for hazardous facilities. In the field of natural hazards, emergency plans are already often used for single objects, mainly to show useful protective measures against flood events. In recent years, a growing demand for natural hazard emergency plans on the level of communities (village, region or canton) could be observed in Switzerland.

EXAMPLES FROM SWITZERLAND 2005 - 2007

Following the major precipitation events in August 2005 that induced many follow-up events like torrential floods, rockfall, landslides and debris avalanches, several emergency plans in the field of natural hazards were developed in Switzerland within the last years. A well-known example is the emergency plan "Engelberger Aa" in the canton of Nidwalden. An unfamiliar example is the municipality based emergency plan "Natural hazard" of Weggis, acting as a pilot scheme in the canton of Lucerne.

In Grisons, a mountainous canton of Switzerland, intervention plans are studied within a pilot scheme in the municipality of Klosters. These interventions plans are similar to an emergency plan, but obviously not the same. They mainly focus on intervention measures, and therefore suffering a lack of information about the issues of alerting, organization and communication.

MAJOR FINDINGS OF CURRENT SWISS EMERGENCY PLANS

The first experiences made with the two mentioned emergency plans are generally positive. Mainly, the structured layout of the content was judged to be valuable. Furthermore, there was a lot of constructive feedback about the process of developing the emergency plan. Particularly, the fact of bringing together the relevant and competent players and commit them to a shared philosophy of emergency management was mentioned as valuable. And finally, in the events of August 2007, the emergency plans proved their usefulness in Nidwalden and Weggis.

On the other hand, there were also some reservations about the value of an emergency plan and general problems. First, unlike to the development of emergency plans for hazardous facilities in Switzerland, there exists no structured process (e.g. a guideline) of elaborating an emergency plan in the field of natural hazards. Hence, one natural hazard emergency plan can be very different from another, limiting their comparability and interoperability. Second, developing an emergency plan means to deal with different ideas of what it is or has to be. Currently, it is not possible to provide a sound definition of emergency planning for natural hazards. As a starting point, it could be very helpful to compile a guideline for emergency planning for different fields of emergencies. Such a guideline should not define, what the planning process has to look like, but what issues should be considered as important. The canton of Nidwalden is currently gathering the necessary information for such a guideline. And also the canton of Berne is currently aiming at providing such a guideline for the attention of its municipalities.

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