THE COMPLEX VIEW FOR STUDY DISCIPLINE CRISIS MANAGEMENT

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Abstract  
Many Slovak and Czech Universities offer crisis management studies in some of the crisis management fields. Most of them reduce this study on the civil protection of inhabitants. Crisis management has its applications in natural environment, industry, business and public administration. And this is where the universities should play their role with their crisis management study complex offer. Outcomes, approaches and possible structure of this type of study will be discussed in this paper and should lead to the beginning of a discussion on this topic. Proposal for a complex study program “Crisis Management” is based on experience in teaching at the Faculty of Security Engineering, University of Žilina and the information on study programs at other faculties and universities in the Czech Republic, Slovakia, Serbia, Poland, Croatia and some other countries. It does not give the final solution, but it should generate discussion on the issue of crisis management education, the study specializations and structure of subjects.

Keywords: Study program, crisis management, risk, crisis situations, crisis planning

1 INTRODUCTION  
Nowadays is possible characterize as the information age. At present, more and more information sources are available for modern society. Information provided to us, often purposely, is mostly of a negative character. Inhabitants and society acquire a feeling that they
live in constant danger of their life and property. Paradoxically, this reality created a favorable situation for higher education institutions providing education in general and specific security. In the Czech Republic and the Slovak Republic several universities and faculties have reacted to this situation and now they offer interesting study programs oriented especially on the protection of inhabitants, rescue and security services, fire engineering, industrial safety and others. At present, none of these schools have any problems with applicants for study, but none of them provides education which would be focused on the complex study of crisis management. This reality was primarily influenced by education and profiling of teaching staff of the university at the time when the study programs were prepared. They were especially lecturers and professors of former military schools who were the most closely associated with these issues.

2 CRISIS MANAGEMENT AS STUDY DISCIPLINE

At our Faculty of Security Engineering, we have experienced from 1996. Based on the experience gained within teaching in the study program “Crisis Management”, in solving research projects and finished last accreditation at the Faculty of Security Engineering, University of Žilina and information from other domestic and foreign universities, the approach to crisis management as study discipline can be formed from two views.

From a closer view, we can formulate study program “Crisis Management” as specialized preparation of specialists for single elements and institutions of the security system of the country or other legal entities, e.g. business sphere. Here could be included e. g. study programs Civil Protection, Protection of Inhabitants, Protection from Emergencies. This type of education is typical for the first degree of university study.

From a broader view, we can understand study program “Crisis Management” as the complex discipline acting in a wide range of activities and society life, which uses a number of common theoretical and practical tools, including scientific methods. In thus formulated study program we can develop risk analysis, prevention of emergencies, training of forces, resources and means, response to emergencies and crisis events, recovery in study specializations (focuses, tendencies) aimed at:

- natural environment, including negative accompanying incidents (hydrological phenomena, meteorological phenomena, epiphytic and epizootic phenomena, etc.),
- industry, particularly in relation to major industrial and nuclear accidents,
- business and risks associated with the business,
- state, state administration, and public administration in preventing and responding to major emergencies, accidents, and crisis events. (Filip, 2016)

From the logical point of view, we can identify in crisis management sequence of typical interlocking activities, which should be reflected also in the structure of subjects of the crisis management study program. To this sequence, we can include especially these activities:

- identification of risks,
- analysis and assessment of risks and risk factors,
- preventive measures to reduce risks and critical values of risk factors, prevention of emergencies and crisis events,
- monitoring of risk factors,
- preparation of forces, sources, and capabilities to respond to emergencies and crisis events and dealing with their consequences,
- response to emergencies and crisis events,
- dealing with impacts of emergencies and crisis events on man and society,
- evaluation of the prepared measures effectiveness and efficiency,
- changes in the system and preparation of crisis management activities. (Horak 2004)

Proposal of study specializations (focuses, tendencies ...) of study program “Crisis Management” with a link to the typical crisis management activities is shown in Fig. 1. The proposal does not take into account the different levels of study degrees (bachelor, master, doctoral degree). Regarding the specific study program, a division of study for bachelor and master degree, we do not consider as a lucky solution.
3 AN EXAMPLE OF THE STRUCTURE OF THE CRISIS MANAGEMENT COURSE

Within the complex understanding of study program "Crisis Management" it is possible, regardless of the degree of study, to create several groups of subjects:

1. profile subjects,
2. mathematical subjects (including informatics and physics)
3. managerial subjects,
4. humanities,
5. economic subjects,
6. technical subjects,
7. other subjects according to study specializations.

The structure of profile subjects should follow the typical crisis management activities shown in Fig. 1 and create a theoretical and practical knowledge base to realize them. Proposal of the structure of profile subjects is shown in Fig. 2. Modifications of the subjects according to study specializations are necessary, or according to the graduates’

![Diagram]

Fig. 1 Proposal of study specializations of study programme "Crisis Management"
assertion. A typical example is the risk analysis and the subject “Crisis Planning” where are different procedures in the processes of defense planning, civil emergency planning, and emergency planning. Concerning the cross-border effects of emergencies and crisis events, it is necessary to include in education also courses related to the international crisis management acting in terms of its institutions and relations with organizations of national crisis management. All mentioned subjects are necessary to be considered as compulsory.

The structure of mathematical subjects results from interlocking of mathematical disciplines, physics, and informatics. Proposal of mathematical subjects’ structure is shown in Fig. 3. Their teaching must be based on the application of mathematical, statistical and other methods in the various activities of crisis management. At present, it is very difficult to find teachers who would be able to teach thus framed subjects. Subject “Operational Analysis” is a typical engineering study degree subject and subject “Simulation Technologies” is typical for doctoral degree study. All mentioned subjects are necessary to be considered compulsory with respect to their logical continuity.

Another important group consists of managerial subjects. Their structure also results from the logical follow-up, and it is possible to establish compulsory subjects and optional subjects in connection with study specialization (marked with *). The proposal of the subjects’ structure is shown in Fig. 4.
Humanities and technical subjects present the last two groups of subjects. Humanities have a specific position in the subjects’ structure with regard to the difficult social and psychological environment that arises from the occurrence of emergency events and their impacts on affected population and crisis managers themselves. In regard to these circumstances, it is necessary to teach humanities in application to mentioned specific environment. Technical subjects have also specific position. In individual subjects, it is necessary to select and learn such topics that can contribute to prompt and proper crisis manager decision-making. They include e.g. topics in the field of resistance of ground and traffic buildings, transport processes, technology, communications, energy, food resources, population survival, disaster medicine, chemistry and others. (Ivancik 2011)

In addition to the mentioned subjects, it is possible to consider the education of other subjects according to study specialization. It concerns these subjects e.g.: Insurance, Forensic Engineering, Marketing, Security Services, Meteorology, Hydrology, Emergency Survival and others. (Luskova 2006)

4 CONCLUSIONS

Proposals for a new structure of study program "Crisis Management" are based on experience in teaching at the Faculty of Security Engineering, University of Žilina and the information on study programs at other faculties and universities in the Czech Republic and Slovakia, Serbia, Poland, Croatia and other countries. Most of them focus on some aspects of the crisis management field, mostly on the civil protection. Proposal for a complex study program "Crisis Management" does not demand final solution, but it should generate discussion on the issue of crisis management education, the study specializations and structure of subjects. It may not be the only view of the preparation of crisis management experts. The structure of study program, according to the elements of the state security system or employment of graduates in various central bodies of state administration, is also offered. (Safarik, 2015) (Simak 2009)

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