A framework for an effective evaluation of crisis management exercises

Summary

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“Collecting and analysing evaluations of crisis management exercises starting from 2006 with the purpose of searching for the evaluation criteria used and examining whether a framework for a (more) effective evaluation of crisis management exercises can be discovered”. That was, in short, the assignment from the scientific research and documentation centre of the Dutch Ministry of Justice and Safety to the Radboud University/ITS. The main findings of the research are listed below, as well as the final framework and a practical recommendation for the application of the framework.

Main findings

A representative sample was selected of the total 418 evaluations of national and regional/local crisis management exercises that were collected. This selection (over 70 evaluations of crisis management exercises) was first analysed on the basis of applied evaluation criteria. It emerged that evaluation criteria mainly depended on the purpose of the crisis management exercise. The crisis management exercise as a tool is mainly used for three purposes which determine the following distribution of evaluation criteria:

- **Testing**
  Here the crisis management exercise mainly functions as a test to see whether (parts of) the crisis structure works as intended. Evaluation criteria are the ‘critical processes’: reporting and alarming, scaling, managing information, and leading and coordinating.

- **Developing**
  Here the crisis management exercise functions as a step forward in the larger programme of educating, training and exercising. Evaluation criteria are (again) the critical processes; the ability of important officials or the ability of a team as a whole.

- **Exploring**
  Here the crisis management exercise functions as a first examination of a crisis type or crisis partner(s). Evaluation criteria are diverse but are mainly related to the content (crisis specific) or more general (cooperation, communication, etc.).

The critical processes are most often expressed as evaluation criteria. In addition, they are the focus of crisis management exercises that mainly function as a test to see whether (parts of) the crisis structure works as intended.

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1. For the selection the geographical spread, chronological distribution and the spread in internally and externally performed evaluations has been taken into account, as well as of course the ‘richness’ of the research material.
2. All crisis management exercises were conducted by (elements of) the national crisis management structure or the regional crisis management structure.
Another finding of the study is that the evaluation criteria applied to the critical processes – often called "process criteria" – are: the criteria that focus on the correct course of action. This is in contrast to criteria that indicate what the desired output of the critical process should be – criteria called "output criteria".

The framework to be developed will thus build on the most widely-applied evaluation criteria, as demonstrated by the critical processes. In addition, it will supplement the oft-applied process criteria by providing output criteria.

The framework

Before describing the framework, we will first discuss the aforementioned critical processes. The critical processes at the regional/local level (safety region and member municipalities) are laid down in the Besluit Veiligheidsregio’s (Safety Region Decree) and actually originate from the Basic Requirements of the National Council for Crisis Management (2006). There is no comparable legal basis for the critical processes at the national level (ministries). The processes for the national and regional/local level are largely the same; the slight difference lies in the precise organizational structure and the outcomes to be achieved. The framework, therefore, is based on the same set of critical processes.

The framework that will be described consists of two parts:

- First, the underlying critical processes and their intended outputs. This will be addressed first.
- Second, the critical processes and their intended outputs are placed in a flowchart, outlining the process sequence and the ultimate intended outcome.

These two parts make up the framework for the final and more uniform evaluation of crisis management exercises, called the evaluation framework.

The two components are briefly explained below.

Part 1. The underlying critical processes

There is a clear correlation between the critical processes, which we will outline. The aim of the first critical process – 'reporting & alerting' – is to prepare the components of the crisis structure and provide initial, critical decision-making information. The 'scaling up' process then aims to deploy available units to the designated place. The following process – 'information management' – provides the resources (decision-making information) for the most essential process of crisis management: 'leadership and coordination'. Leadership and coordination should eventually lead to a coordinated approach to disaster and/or crisis management through the adoption of appropriate and timely interventions. The outputs of the separate processes ultimately determines the output of the crisis structure as a whole: alerting and scaling up results in deployable units; information management results in decision-making information on the basis of which the process of leadership and coordination determines measures to be taken. In other words, the alerting and scaling up process leads to the deployability of the crisis management structure, the information management process leads to manageability and finally, the leadership and coordination process leads to the durability of the crisis management structure. These evaluation criteria and associated outputs are outlined in the diagram.
Part 2. The critical processes in a flowchart

By placing the critical processes in a flowchart, it becomes clear how the processes and their associated outputs correlate. A brief description of the flowchart is as follows: input for the processes of reporting, alerting and scaling up is provided by the available (and prepared) units of the crisis structure, resulting in deployable units. This output then forms the input for the information management and leadership and coordination processes, resulting in decision-making information and final measures. This output must eventually result (outcome) in limiting or preventing (the effects of) the crisis.

By adding the concepts of efficiency and effectiveness to the flowchart, the final evaluation framework is then established. The relationship between the input and output in the flowchart determines the ultimate efficiency, and the relationship between the output and outcome determines the ultimate effectiveness of the measures that are taken. The corresponding output criteria of the framework (deployable units, decision-making information and measures) have been worked out in an annex for the national and regional crisis management structure, as well as an evaluation form for the practical application of the evaluation framework. The evaluation framework thus looks as follows (for the sake of completeness, the following starting point is taken: prepared, available units):

The evaluation would, in any case, concern the efficiency and effectiveness of the measures taken.

Accountability and practical tips

This evaluation framework complements the mostly process-oriented evaluation criteria found in the examination of applied evaluation criteria in crisis management exercises. At the same time, we note that it is not easy to numerate ('count') the proposed evaluation criteria, apart from the employability of the evaluation criterion (rise times and composition of deployable units). Manageability and durability are simply more difficult to capture in quantifiable variables. This gives rise to a quote from sociologist Cameron (1963): "Not everything that can be counted counts, and not everything that counts can be counted". Our proposed evaluation criteria (except for employability) may be included in the second category: they are definitely important (they count), but they are difficult to count. With regard to this last point, we conclude with a practical suggestion. Our proposed evaluation framework requires something extra of those who exercise (parts of) the crisis management structure preparations and evaluations. In addition to the 'normal' preparation for the review of an exercise (including determining purpose, aim, audience and method of evaluation), the evaluation framework requires additional preparation for the scenario. On the basis of the scenario, consideration about the expected outputs and outcomes of the crisis structure will have to take place beforehand. In other words, what are the expected measures and corresponding decision-making information in this particular scenario and what is the intended effect? These expected measures and decision-making information then form the starting point of the evaluation: What effect are we aiming for? Have we taken the correct measures? And did we have the correct decision-making information? Depending on the purpose of the exercise (testing, practice exercises, targeting), the questions form the starting point for reflection and learning (practice exercises and targeting) and the basis for

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a determination on the delivered output (testing). Part of the report on the evaluation framework is devoted to their practical application so as to support practitioners in a more results-oriented evaluation method. This evaluation framework, with a focus on measures to be taken and the corresponding decision-making information (on the basis of scenarios based on national risk assessments or regional risk profiles), can lead to a more results-oriented evaluation of crisis management exercises. The evaluation framework can be a step forward in the professionalization of the national and regional/local crisis structure which must be the safety net for when things go wrong. Thus, the evaluation framework is a tool for a more uniform and effective method of evaluating crisis management exercises.