

Potential use of scenario based method for planning of emergency material reserves

Crises are tied up with an element of unpredictability and crisis management have a number of tools to prepare for the unexpected.

One of the measures how to mitigate negative impact of a crisis is to prepare in advance stockpiles of material, equipment and consumables of which shortages or disruptions in supply can be arguably foreseen in certain crises.

Material reserves can be divided in few key categories. The first one would include such kind of materials which are critical for surviving of population and functioning of the economy. Sudden interruption of supply of these commodities would cause significant harm and damage. Second category would include commodities and products which are immediately needed in typically natural or man-made disasters to accommodate basic needs of affected people. Third category would often include materials and commodities necessary for mobilization of armed forces.

Determining WHAT and HOW MUCH should be stockpiled in reserve is a critical task since only certain amount of public expenditures can be devoted to this purpose.

Systematic, analytically sound, traceable and transparent method would therefore be of a value for practitioners/governments in order to be able to demonstrate and justify proper use of public resources. However, certain countries, e.g. in Central and Eastern Europe are lacking such approach.

This paper looks at scenario based approach used in NATO Defence Planning Process as a basis for a proposed method offering such a systematic and traceable approach for determining composition and volumes of (strategic, emergency) material reserves.

First, the planning scenarios have to respond to national threat/hazard assessments and security strategies to tackle them. The representative set of scenarios should include the most demanding as well as the most likely and the most frequent scenarios, both in terms of scope (what can happen) and scale (the extent of the problem) of a crisis.

Second, all of the planning scenarios have to be reasonably realistic; the scope and scale of a crisis in each scenario need to be based on crises already experienced in a given country, or also elsewhere in a given region. It is also prudent to continuously analyse trends in security threats in order to be able to identify new potential features of future crises for managing of which having material reserves would be meaningful.

Third, certain variables have to be established for each scenario, primarily those quantifying the impact of a crisis, e.g.: Number of affected people to be dealt with, duration of crisis, ability of key producers (industry, agriculture etc.) to restore their operations just to name the main ones.

Fourth, affordability should be also taken into account. The list of items of material reserves has to allow a prioritization which should be able to respond to different political choices. This prioritization should be linked to particular scenarios. Choosing certain scenarios as the most relevant ones will determine which items of material reserves will become priority.

The outlined scenario based method for planning of material reserves for crisis management represents a conceptual framework which needs to be populated by relevant data and expert assessment of a number of actors having either leading or contributing responsibilities within civil preparedness, security and defence sectors. Eventually, setting the overall ambition, priorities and necessary resources is a matter of political decision-making. Scenario based method is just a transparent analytical tool helping to grasp such a complex issue as planning of state material reserves is.