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## Military Scenario Development

### Tvorba vojenských scénářů

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**Abstract:** Military scenario development is the subject of this article which is going to bring some essential characteristics and propose a working option for elaborating a scenario. The final aim is to help military planners have a good working procedure when developing a scenario in order to create a document updated with warfare evolution and operational planning process ready to respond to all risks and threats. The scenario is a way used by military structures at all levels of military art (strategical, operational and tactical) to get in contact with a probable unknown situation, to assimilate it and to sort it out. The article focuses on the scenario development process and proposes stages and activities that should be followed by a joint operational group when tasked with preparing a scenario.

**Abstrakt:** Tento článek věnovaný tvorbě vojenských scénářů představuje některé základní charakteristiky a praktické návrhy možností vypracování scénářů. Konečným záměrem je dát vojenským plánovačům k dispozici vhodný pracovní postup při vytváření scénáře s cílem vytvořit dokument s aktualizovanými informacemi o vývoji konfliktu a proces operačního plánování, který je připraven reagovat na všechna rizika a hrozby. Scénář je způsob používaný vojenskými strukturami na všech úrovních (strategické, operační a taktické) k umožnění kontaktu s pravděpodobnou neznámou situací, asimilace a vyřešení. Článek se zaměřuje na proces tvorby scénářů a překládá fáze a činnosti, které by měly společné operační skupiny pověřené přípravou scénáře dodržovat.

**Keywords:** Scenario; Military Training; Scenario Procedures; Planning; Methodology.

**Klíčová slova:** Scénář; vojenský výcvik; postupy scénářů; plánování; metodika.

## 1. INTRODUCTION TO SCENARIOS

Scenarios are stories about how the future might look like. They are provocative and plausible stories about different ways in which relevant issues might evolve, such as missions, social unrest, weapon technologies, etc. Scenarios are neither predictions nor forecasts, they are designed to stretch thinking about the opportunities that the future might hold and to weigh possible threats carefully when making strategic decisions. The key focus of scenarios is uncertainty. Developing scenarios involves taking a wealth of information about the past and present, identifying patterns, and structuring coherent stories about the future.<sup>1</sup> The term scenario is used to refer to the setting of frame conditions or the description of the system to be modelled. Scenarios lie somewhere in between predictions and speculations when the degree of uncertainty and complexity is of an intermediate level.<sup>2</sup> In order to be effective, a scenario is recommended to be credible, real and easy understandable by the participants to show that the scenario is not about an abstract issue and it should be designed in a context linked to a real-life situation. They are designed to explore systematically, create and test possible or desirable future conditions.

Scenarios that look at future paths help decision makers manage risks and develop specific contingency plans. Describing how and why possible future situations might occur enables decision makers to reflect on how the structure, combat order and planning process can affect the operation and to plan accordingly. Scenarios are designed to bring up issues that otherwise would not be taken into account. They are most effective when dealing with big issues and strategic directions, rather than tactical decisions, and should not be used for short-term planning.<sup>3</sup> It is acknowledged that a scenario is efficient if it is designed for a time frame of 4 to 6 years. Scenario analysis can help establish indicators that create a framework to monitor the execution of a strategy.

It is recommended to use scenarios when envisaging to clear up an unclear solution, or working in a highly uncertain environment, there is support for the scenario thinking process and any change that the results could bring is considered, and necessary resources for a full development and implementation are provided. It is recommended not to use scenarios when the problem is not central to the organizational strategy or the problem and solution are clear enough, the outcome is largely predetermined due to internal or external forces, the leadership wants to maintain the status quo, there is too much urgency to step back for a reflective and creative conversation and desired

<sup>1</sup> Arden Brummell, Greg Mac Gillivray, "Introduction to scenarios", p. 2, <http://www.scenarios2strategy.com/pdf/Introduction%20to%20Scenarios%20and%20Scenario%20Planning.pdf> Accessed on 06.04.2017.

<sup>2</sup> [http://academlib.com/13648/political\\_science/scenario\\_theory](http://academlib.com/13648/political_science/scenario_theory) Accessed on 06.04.2017

<sup>3</sup> Jonathan N. Mack, "Scenario Analysis: Selected Tools and Techniques, Chapter 5", p. 62, Social Development Papers, Paper Number 36, 2001.

outcomes are poorly aligned with the dedicated resources.<sup>4</sup> Scenario thinking requires looking beyond immediate demands and an open view far enough into the future to see new possibilities, asking “What if?”.

## 2. MILITARY SCENARIO TYPOLOGY

For a long time, different specialists<sup>5</sup> tried to categorize scenarios following some criteria, however, as the implementation environment changed, scenarios criteria or categories became irrelevant. As an example, there is a model proposed by Philip van Notten,<sup>6</sup> who classified scenarios based on their scope (exploratory or for planning purpose), development design (intuitive or analytical), and content (simple or complex). There is another option to classify scenarios and I am referring especially to those from military field. The states generally periodically approve documents for military defence planning, referring to National Security Policy, White Book of Defence and Military Strategy. In fact, any military strategy contains references to the possible risks and threats, national military objectives, military capabilities and priorities to fulfil them, details about military structures, directions on how to configure, dimension, train and equip the army, and it sets up operational concepts to fulfil the objectives and missions of the army.<sup>7</sup> The White Book of Defence sets up specific missions for the army as well as the main capability development directions. Scenarios could reflect the following situations, which are not prescriptive or future proofed, generally referring to emerging or existing crisis, time-sensitive crisis, technological incidents, man-made or natural disasters, asymmetric threats, such as those arising from terrorism, proliferation of weapons of mass destruction, and use of chemical, biological, radiological and nuclear, and cyber attacks.

These elements form the basis for the development of a scenario categorized as a *strategic scenario*. The probable strategic scenario can take into consideration conventional military actions, special operations, operations other than war, humanitarian aid, etc. Starting from some phases of these strategic scenarios, with minor amendments, we can create the *exercise scenarios*, the second category. Scenarios from this category can be divided into *real* scenarios (for instance, when there is an intention to analyse a certain war mission and real forces and equipment are involved in a real simulation) or *fictional* ones (for instance, when a military action is envisaged to test a certain military capability). It is to be avoided, at least for the military field, to speak about simple or complex scenarios. Scenario has to contain all the necessary elements to fulfil the mis-

<sup>4</sup> Diana Scarce, Katherine Fulton, “What If? The Art of Scenario Thinking for Nonprofits”, p. 21, GBN Global Business Network, 2004.

<sup>5</sup> Ducot și Luben (1980), Duncan și Wack (1994), Postma (1995), Godet și Roubelat (1996), Heugens și Van Oosterhout (2001).

<sup>6</sup> Philip van Notten, “Scenario development: a typology of approaches”, Think Scenarios, Rethink Education, 2006.

<sup>7</sup> Defence Romanian Planning Law, 2013/2015.

sion and training to defend the state and it is not at all simple. Moreover, it is complex, and as long as there are certain operational procedures, these must be followed, while it is hard to identify the border between simple and complex.

### 3. SCENARIO DEVELOPMENT PROCESS

The way of developing a scenario involves many innovative suggestions and the variety in phase development and the structure of it depends on the training audience, objectives and the rank of the organizations. The scenario process of projection and making up is very laborious and requires extensive human, logistic and informational resources. If the scenarios are made up in a complete and efficient manner, the activities generated by the scenario proceedings fulfil the objectives established. The specialists in the area of scenario development created different models and algorithms for scenario generation. These contain a series of activities, recommended to be followed, in order to have a guarantee that in the end a good and high-quality scenario is obtained.

The stages that many planners take into account, with some variations, are proposed as follows:

- *Clarifying the focus of the scenarios* - The centre of gravity of the entire process of scenario development is to define the framework of the scenario and it is made up of two stages: (1) defining the framework of the scenario from the informational viewpoint; (2) defining the framework of the scenario from the conceptual viewpoint. During the first stage, the operational environment, the crisis situation and the threats must be evaluated and analysed. The second stage introduces the need to analyse the strategic relationship between the actors involved, thinking and selection of the way in which to develop the scenario.
- *Working group set up* - It is important to set a heterogeneous working group, with a good level of competence and different military background to cover all informational environments necessary for a comprehensive approach to the scenario.<sup>8</sup> The main activities of the working group are directed in two ways: (1) planning, organising and coordination of the activities, meeting mediation, assistance to follow the procedures for scenario development, writing reports and informing the participants about the intermediary results; (2) recording, centralised processing, intermediary result evaluation and preparing the final scenario documents. This working group can be made up from a script writer nucleus, expert group, consultant group and support group. The scenario working groups must face challenging and surprising events in the process of elaboration, because they have in mind the issues that are very familiar to them, meaning their own field of expertise or military profile they belong to. On the other hand, thinking out of the box begins with a revision of external changes that might, over time, profoundly affect the mission

<sup>8</sup> I. BALACEANU, L. DUTESCU, I. MARTIN, "Scenario projection and military action simulation", Manual, UNAp "Carol I", 2007, p. 40.

or the structure of the unit, a seemingly irrelevant technological development that could prove advantageous for service delivery, for example, or a geopolitical shift that could introduce unforeseen weapon development.

- *Documentation* - It is important to read a vast amount of literature and documents describing the possible future security environment and wider geopolitical context. The literature review involved is a way to identify those trends which would have potential implications for the nature of future conflicts. The literature review also considers the types of actors (such as states, non-state actors, private security and defence contractors, etc.) that might be expected to be active in the future security environment.
- *Setting up basic scenario elements* - These elements are regarded both for the conceptual aspect of the scenario and the operational issues. The conceptual aspect directs the process of scenario development and considers the issues, aim, objectives and type of scenario, techniques and procedures to be followed during the development process, dynamic activities and working group responsibilities and attributions. The operational aspects imply information concerning the time frame of the scenario, area of operations, missions, constraints and restraints from political, legal and military point of view, the framework established, new actors involved and their doctrinal concepts.<sup>9</sup>
- *The general framework* - The goal of this phase is to clarify the issue at stake and to use these issue as an orienting device throughout the scenario.<sup>10</sup> It should include a generic description of the crisis area, the major regional actors and the historical background of the situation, in which, later on, exercises will be executed. It contains a regional situation based on a set of country books including information on the history, people, government, economy, geography, communications, transportation, and, in particular, security and transnational issues. It should be regularly reviewed to ensure that it is aligned with the strategic interest of the planners. Where applicable, it should be developed with a view to support exercises over a time frame of several years and with due caution to political sensitivities and should cover, in particular, the following aspects (this list is neither prescriptive nor exhaustive): political and security situation; rule of law; humanitarian activities; state building; reconstruction and development aid activities; presence and activities of the international community; natural resources and environmental issues; support to civil authorities.
- *Storylines* are specific for scenarios and include detailed information on circumstances and events that lead to a specific crisis situation at the beginning. They synthesize and combine the driving forces that have been identified when creating the scenario. This is a narrowing phase and it is composed of the following elements: development of the situation, which is a narrative chronological summary of the main events leading to the beginning of the scenario; list of events, a tool for

<sup>9</sup> Dan Lucian PETRESCU, "Research Report nr. 1", Editura UNAp "Carol I", 2015, p. 91.

<sup>10</sup> Elizabeth Collins, "Scenario Thinking", on Prezi [https://prezi.com/kyzemrdhoe11/strategic-planning/?utm\\_source=twitter&utm\\_medium=landing](https://prezi.com/kyzemrdhoe11/strategic-planning/?utm_source=twitter&utm_medium=landing) Accessed on 18 March 2017.

the team conducting the exercise to control it, that constitutes the detailed script of the exercise play and includes the complete set of events (major occurrences or a sequence of related incidents developed to support the achievement of the exercise objectives), incidents (actions or situations that provide greater clarity to an event), and injections (the way of bringing an incident to the attention of the training audience for which it was created to be made using communication means and, where available, media formats). Each main event will have one or more incidents that are presented to the training audience by means of injections. In the process of developing events, a few questions should stay up front: If this scenario represents the future, what actions should we take today to prepare? Are there actions we could take to catalyse a desirable future or to mitigate a negative one? The answers to these questions are the scenario implications. Are any of the implications valid in all scenarios? The issue covered by these elements as well as its contents depend on the complexity of the scenario and the level of details required.

- *The enabling and supporting documents* are developed in line with the general framework and storylines to inform the conduct of the future exercise. The format and content of these documents should be prepared in order to imitate the operating environment as realistically as possible. These in themselves provide an excellent opportunity for in-house training and familiarization. They can include, inter alia: UNSC resolutions and/or other documents providing legal basis for the action; letters exchanged between the United Nations, EU, NATO and national or regional authorities; council decisions related to the scenario; political framework for crisis approach; crisis management concept; civilian and military strategic options; initiating military directive; civilian and military advice; intelligence reports or risk assessment; fact finding and exploratory mission reports; humanitarian reports; status of force and status of mission agreements (SOFA/SOMA); memorandum of understanding (MOU); technical agreements related to the scenario and force structure results.
- *The geo-data* is developed to illustrate the scenario in the format of maps and database. It should contain the static information/data about the region needed to support the conduct of the scenario. It may consist of whole or various mixes of real, synthetic and fictitious information/data. Information and data will be produced according to information standards and support the use of appropriate services and agencies that you work with. Costs associated with the production of geospatial information for the exercise scenarios as well as the production time impacts have to be taken into account from the very beginning of the exercise planning.
- *Evaluation* - It is a phase in which the working group makes sure that the scenario is aligned with the logistic and operational requirements based on the criteria established in previous phases. The established criteria should make sure that the scenario is realistic, objective, robust, complete, coherent, and feasible. In or-

der to help the training audience better understand the requirements, scenarios are checked for format, graphics, drawings, maps, and writing.<sup>11</sup>

#### 4. CONCLUSIONS AND RECOMMENDATIONS

Long term planning is a basic requirement for a modern and efficient military strategy. Using military scenarios as a contextual support for plan development brings a significant value of efficiency and viability alongside the possibility to attain good estimation to the question "What If?". The main aim is to identify and to apply all the necessary measures to maintain, for a long period of time, the correspondence between the characteristic of the military organisation and the actual and future operational environment. In order to succeed in such a challenging endeavor as a scenario development, it is necessary to assess carefully and decide whether there are sufficient time, resources and type of forces that are to be trained according to the most challenging potential evaluated risk. Initiators should make sure that the overall aims of the scenario and a large variety of the forces are involved, not only in the scenario maintenance, but also the forces to be trained. The establishment of confidence between the outside participants through transparency and open-discussions in order to have them deeply involved in supporting the scenario is another important task that must be solved. From the outset, testing priorities and limits of the scenario must be well set up and it must be ensured that the participants understand how the scenario would progress, as early as possible. By using all the available means to share and disseminate the inputs and results of the scenario, the development team can get the guarantee of a successful mission accomplishment.

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<sup>11</sup> Dan Lucian PETRESCU, "Research Report nr. 2", Editura UNAp "Carol I", 2016, p. 57.