

TECHNOLOGIES FOR STRATEGIC COMMUNICATIONS MODELING

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Abstract. The research analyzes the realization problem and fundamentals of the strategic communications functioning system in terms of a modern information society. The research systematizes the experience of the North Atlantic Alliance in the field of introduction of advanced technologies of strategic communications from the military and security perspective. The research reveals the essence and specific nature of strategic communications modeling as the newest tool of strategic management. The research proves the interrelation of the globalization and technologization processes with the transformation of information and communication technologies. The emphasis is put on the multidimensionality of understanding of the research issues, which is due to the complexity of formalization of the strategic communications tool.

Three technologies of strategic communications modeling are offered: «Conceptual», «Design» and «Crisis». A comparative review of these technologies is carried out in accordance with the essential indicators existing in NATO standards (STANAG). The emphasis is made on the key components on which effective strategic communications modeling depends.

The approximate algorithm for modeling strategic communications is defined, with the help of which it is possible not only to minimize the consequences of information manipulation and abuse but also, remaining within democratic practices, influence information, and communication reality, presenting it in a positive light, form (change) public opinion, information retrievals and trends, etc.

Keywords: communication, strategic communications, model, modeling, modeling technologies, NATO

Relevance of the study

Information is one of the key resources in today's world. The access to information is an important benefit of civilization and is thoroughly regulated by the state. At the same time, the active development of information and communication technologies, deepening globalization processes, changing ideological paradigms, intensifying confrontational processes between centers of

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power, along with simmering armed conflicts and interstate contradictions all over the world, significantly increase the level of manipulation and information abuse. In one form or another, the manipulative component of the communication process is an integral part of modern media discourse.

Under these conditions, the need to ensure the information security of a person / social group / organization / state becomes particularly relevant. A system of strategic management is a comprehensive mechanism to reach the required level of information security.

Modern tendencies as for complexity of socio-economic relations lead to the need to improve systems and models of strategic management as a necessary condition for the society development. Defining the concept of strategic management involves the management system formation of a certain (strategic) type with the goal setting as an initial stage of strategic actions. Therefore, strategic management is a process by which managers exercise long-term command and control of the organization, determine specific objectives, develop strategies to achieve these objectives, taking into account all relevant (most significant) external and internal conditions, and, also, ensure the implementation of relevant, formulated plans that are constantly developed and changed [1]. In modern conditions of the information society, the key direction of strategic management is the contemporary information and communication tool — strategic communications (hereinafter — StratCom). Effective use of this tool is possible if there is a technology development for StratCom modeling, which are scarcely studied now.

The aim of this paper is to analyze the specifics and main trends of technologies for StratCom modeling as one of the key directions of strategic management, integrate the experience of NATO strategic communications system functioning, define algorithms for strategic communications modeling and their comparative characteristics.

Study results and discussion

In the modern sense, the term «strategic communications» was first used by large multinational companies in order to formulate approaches for their image promotion (goods/services) to the public (consumers). Then for the first time, the basic StratCom principles were formulated:

- systemacity, systematicity and consistency;
- multi-channel nature;
- compliance of messages and statements with the real state of affairs;
- taking into account the specifics of the audience;
- providing feedback, etc. [2].

In the public sector, StratCom was first used by the US Department of Defense after the failure of the information component during the warfighting in Afghanistan in 2001. At that time, StratCom has become the tool for coordinating activities in the information space.

Today, the North Atlantic Treaty Organization (NATO) is a key international actor in the implementation of advanced strategic communications technologies in the military security perspective. In an interview with Ukrinform, Barbora Maronkova, Director of the NATO Information and Documentation

Center in Ukraine, explained, “Strategic communications sound difficult, but in fact, it is very simple. It’s all about coordinating positions and the ability to speak ‘with one voice’” [3]. The current scheme of the strategic communications implementation in NATO is shown in Figure 1.

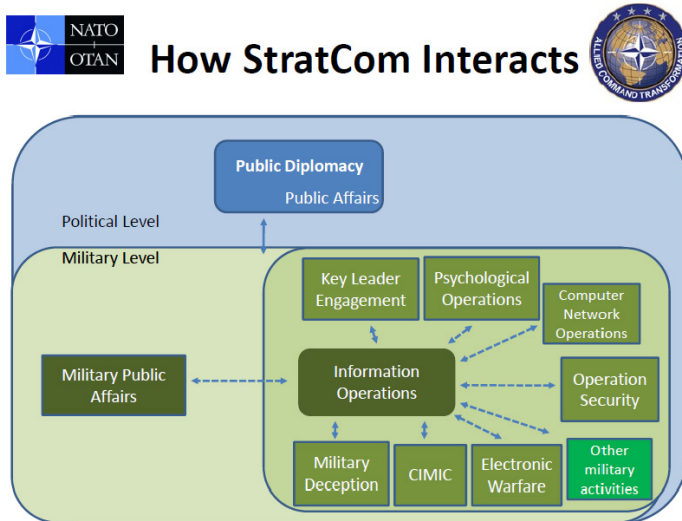


Figure 1. How StratCom interacts in NATO (URL: <https://publicintelligence.net/wp-content/uploads/2012/11/nato-stratcom.png>)

During various NATO activities, Allies representatives emphasized the following basic provisions:

1. StratCom should not be considered as:
 - dogma that must be perceived and fulfilled word by word;
 - technology that conceals or obscures the truth;
 - method of destructive influence upon people;
2. The constant StratCom principles of are:
 - managed leadership; responsibility; dialogics; unity of efforts;
 - responsibility; experience; comprehensiveness; effectiveness;
 - continuity; proactivity; certainty; delegation of authorities; creativity;
3. The formula for StratCom can be described as follows:
 - «What we can say and what we not»;
 - «StratCom = What we can and cannot do»;
 - «Place and time of our activity» [4, p. 7].

NATO representatives call the key components of the StratCom implementation process:

- understanding by the authorities of society, its informing and involvement to promote interests and objectives through the influence on perceptions, guidelines, beliefs, behavior;
- coordination of actions, images, statements in support of policy and planning in order to achieve comprehensive strategic goals;

- recognition that all operations and activities are important components of the communication process, since everything that the communication center says and does or unable to inform and fulfill has predictable and unpredictable consequences for target and non-target audiences;
- recognition that StratCom is not additional actions, but an integral part of the planning and implementation of all operations and activities [5].

Thus, in the public sector, the definition of «strategic communications» is defined as a set of activities implemented, as a rule, by the Ministry of Defense and other authorized government agencies in order to have a dialogical and informational impact on a specific audience. The main difference between strategic communications and the traditional unilateral influence on the audience, which is used in public diplomacy, is that the new way of working with this audience involves a dialogic form of interaction, namely bilateral information sharing [6, p. 247].

The Glossary «Basic Definitions and Terms of Strategic Communications: Standards based on NATO Documents» provides the following definitions and terms of «Strategic Communications»:

1. The coordinated and appropriate use of NATO information activities and capabilities — public diplomacy, public affairs (PA), military public affairs, information operations in order to achieve NATO goals.
2. In the NATO military context, the integration of communication capabilities and information staff function with other military activities, in order to understand and shape the information environment, in support of NATO strategic aims and objectives. [4, p. 150].

Georgii Pocheptsov emphasizes the possibility of communicative mechanisms to transform the information space so that as a result other spaces will be transformed: social, economic, political, military and diplomatic ones [7, p. 55]. Since, the effectiveness of the state information policy implementation and providing the national security of the state directly depends on the degree of the organization of the StratCom modeling process. Not only military actors but also actors from other spheres of life are involved in the StratCom implementation.

One highlights the main stages of the StratCom implementation process, given by Kapshtyk O.V:

- 1) specifying political goals;
- 2) the target audience recognition;
- 3) determining the desired behavioral effect of affected objects;
- 4) determining ideological attitudes;
- 5) formulation of the basic purposes for the prepared messages and the planned actions;
- 6) coordination of information influence, concerted and political actions;
- 7) synchronization actions of information mediums on time;
- 8) planning priority measures and countermeasures;
- 9) assessment [8, p. 153].

Taking into account the specific tool of StratCom, one notes that in order to increase the efficiency of the StratCom implementation process, it is necessary to detail the StratCom modeling technologies.

Determining the conceptual apparatus, one notes that technology in Anglo-Saxon terminology means «applied knowledge». In the modern interpretation, technology is a set of scientific and engineering knowledge embodied in the methods and means of work, sets of logistics factors of production, types of their combination to produce a particular product or service. The following requirements are put forward to modern technology:

- high degree of the division process at the stage (phase);
- systemic completeness (integrity) of the process, which should include the whole set of elements that ensure the appropriate completion of human actions in the goal achieving;
- regularity of the process and the unambiguity of its phases, which allow the use of average values characterizing these phases, and hence their standardization and unification;
- technology is an integral part of the process — a set of actions that are performed over time;
- technological process is carried out in artificial systems designed to meet certain needs [9].

As for the definition of «model», this is defined as the simplified similarity of the system, which reflects its essential properties and correlations. Model building is the most important part of the research. Modeling is the process of building a model, the main problem of which is usually to find a compromise between a simple system description and detail degree for him. Modeling is a scientific method of studying a real system (object, process) replacing it with a system, namely a model (which reflects the essential properties of the real system) and determining the characteristics of the model in order to obtain new scientific knowledge of the object being modeled [10].

Systems modeling technology includes a sequence of the following actions:

- 1) setting a goal for modeling;
- 2) analysis of the modeling object and selection of its known properties;
- 3) analysis of the selected properties from the point of view of the purpose of modeling, definition of essential features;
- 4) formalization of the initial problem;
- 5) establishment of a mathematical model;
- 6) model solution;
- 7) analysis of the given model for consistency of the modeling purpose;
- 8) examination of the model adequacy;
- 9) solution implementation [10].

It is worthwhile to distribute activities of the StratCom modeling into the following timespans:

- long-term perspective (12 years);
- medium-term perspective (6 years);
- short-term perspective (2 years) [11, p. 234].

The following units can be related to the StratCom model building technologies:

- 1) conceptually-oriented — associated with obtaining results that describe such categories as «vision», «mission», «objectives»;

- 2) problem-oriented — priority problems are solved in order to implement the strategy. These strategies undergo solution.
- 3) design-oriented — action planning is carried out to implement strategic objectives and solve problems [12, p. 14].

Each StratCom model is based on the systematic use of instrumental methods that solve individual tasks of dynamic planning and decision-making.

Based on the foregoing, one outlines the main StratCom modeling technologies (Fig. 2) and compares their characteristics (Table 1).

№ 1 «Conceptual» StratCom modeling technology. This technology is applied when the situation is most favorable for information campaigns: the main purpose of the StratCom is to form (adjust) public opinion in the audience, which value orientations fully or mainly meet our needs.

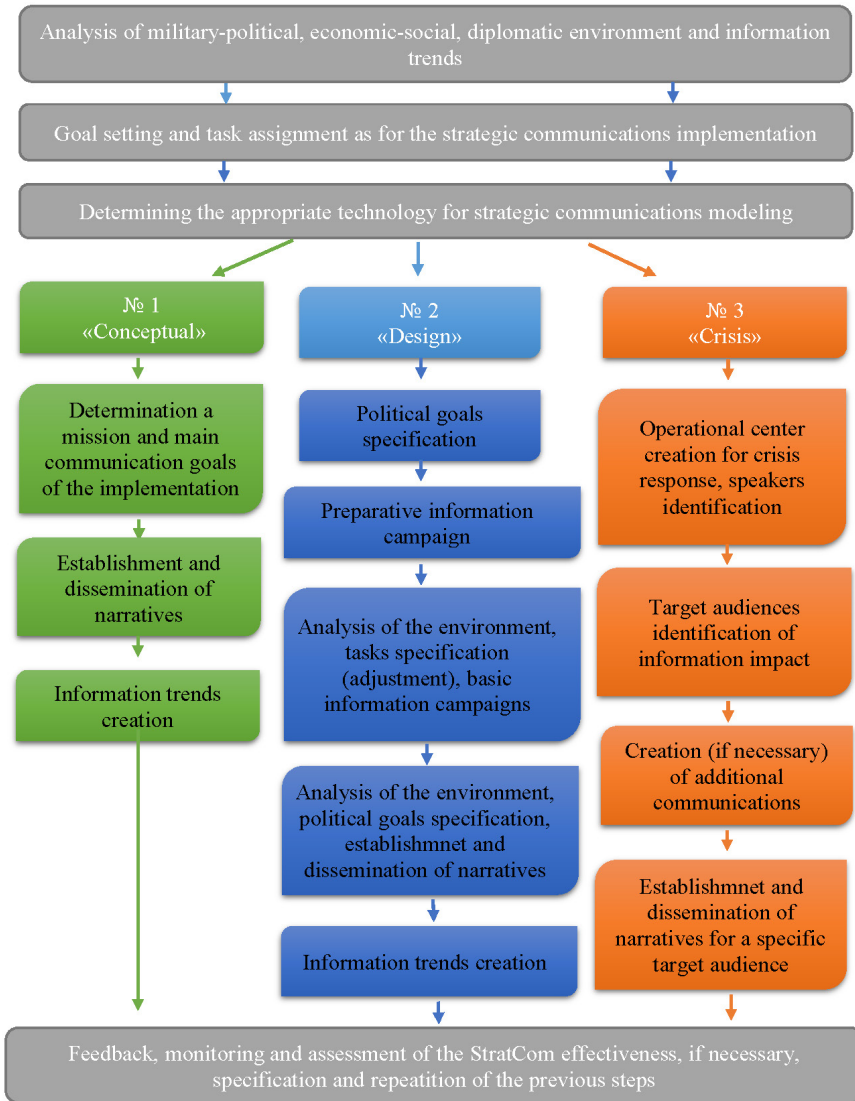
№ 2 «Design» Stratcom modeling technology. This technology is applied in the case when the formation (adjustment) of public opinion takes place in the most unfavorable environment. The value orientations of the audience only partially meet or do not fully meet our needs. The StratCom implementation in this case is based on the formula: unacceptable — radical — acceptable — reasonable — popular — current norm. The implementation of this technology requires significant resource allocation.

№ 3 «Crisis» StratCom modeling technology. This technology is applied in a crisis situation. In this case, the StratCom actors should prepare the regulatory framework in advance and platforms on the basis of which the operational center will be created and (if necessary) additional means of communication. This unit should provide round-the-clock monitoring and control of the crisis situation, coordination of actors' information efforts, information coverage through pre-defined anti-crisis expert speakers (if necessary), establishment of narratives and on their basis the development and implementation of operational messages to interpret events in accordance with our needs.

Summing up the research, it is important to note that in the modern world, StratCom plays the role of the so-called «the information space arbiter». Constructing complex narratives of information reality, creating on their basis information retrievals and trends, the StratCom actors in one form or another influence the formation of public opinion while lobbying the interests of civil society and the state.

Effective StratCom modeling depends on the following key components:

- trained personnel with specified roles, missions and tasks able to make flexible decisions in crisis situations;
- comprehensive vision of current social problems and ways to solve them;
- clear coordination of actions in the information space;
- formalized narratives with concise and clear messages;
- trust of the objects of information influence to the StratCom actors
- necessary resources and logistics base (depending on the scope of tasks);
- theoretically reasonable and practically outlined mechanisms of interaction of the StratCom actors
- understanding of the importance of each component of the communication process;
- constant monitoring of the information space and providing feedback.



*The defined algorithm is indicative, since StratCom modeling problem is considered in terms of «ideal» variables. In practice, the set of tasks facing the StratCom modeling actors may not be so obvious (difficulty in target audiences identification, their trust level, ambiguity in assessment the StratCom effectiveness, providing feedback, etc.).

Table 1. Technologies comparison for strategic communications modeling

№	Substantive indicators (consistent with NATO standards [13])	StratCom modeling technologies		
		№ 1 «Conceptual»	№ 2 «Design»	№ 3 «Crisis»
1	Audience outreach	Maximum	Maximum	Target
2	Expending resources	Moderate	Maximum	Depending on crisis scale
3	Number of narratives	1-3	More than 3	1
4	Number of communication channel	Maximum	Maximum	Maximum
5	Time frames	From 2 months to 2 years	From 2 to 12 years	Up to 2 months
6	Communication platforms	If necessary	N/A	Mandatory
7	Information and Psychological communication	If necessary	Mandatory	N/A
8	Publics Affairs	Mandatory	Mandatory	Mandatory
9	Public diplomacy and military activities in support of public diplomacy	Mandatory	Mandatory	If necessary
10	Media Liaison	Mandatory	Mandatory	Mandatory
11	Information activities of International Military Cooperation	Mandatory	Mandatory	Mandatory
12	Civil Military Cooperation (CIMIC)	If necessary	Mandatory	Mandatory
13	Actions in cyberspace including social networks	Mandatory	Mandatory	Mandatory
14	Key leaders engagement in information activities	If necessary	If necessary	If necessary
15	Internal communication (work with personnel/internal public relations)	Mandatory	Mandatory	Mandatory

Література

- [1] Шершньова З. Є. 2004. Стратегічне управління. URL: <https://buklib.net/books/24968>.
- [2] Strategic communications: a tribute to fashion or a requirement of the present? 2017. *Center for the Study of Contemporary Conflict*. URL: <https://defence-ua.com/index.php/statti/3036-stratehichni-komunikatsiyi-danyna-modi-chy-vymoha-suchasnosti>.
- [3] Барбора Маронкова. Ми багато навчилися в Україні у боротьбі з російськими міфами. *Українформ*. URL: <https://www.ukrinform.ua/rubric-politics/2556092-barbora-maronkova-direktor-centru-informacii-tadokumentacii-nato-v-ukraini.html>.
- [4] Базові поняття стратегічних комунікацій: стандарти на основі документів НАТО (*англійсько-український та українсько-англійський словник*). URL: http://stratcom.nuou.org.ua/wp-content/uploads/2019/11/nuou_ebook-14.pdf.
- [5] Tatham S, Le Page R. 2014. NATO Strategic Communication: More to be Done? URL: https://www.naa.mil.lv/sites/naa/files/document/1_DSPP%20PP%201%20-%20NATO%20StratCom.pdf.
- [6] Даник Ю. Г., Биченок М. М., Кацалап В. О. 2019. Інформаційна безпека держави у воєнній сфері : навч. посібник. Київ : НУОУ ім. І. Черняхівського, 301 с.
- [7] Почепцов Г. Г. 2008. Стратегічні комунікації: стратегічні комунікації в політиці, бізнесі та державному управлінні. Київ : Альтерпрес, 216 с.
- [8] Капштик О. В. 2019. Державні механізми стратегічних комунікацій у секторі безпеки і оборони України: дис. канд. н. держ. упр. Хмельницький, 197 с.
- [9] Томашевський О. М., Цегелик Г. Г., Вітер М. Б., Дубук В. І. 2012. Інформаційні технології та моделювання бізнес-процесів : навч. посіб. Київ : ЦУЛ. URL: https://pidruchniki.com/19530403/informatika/tehnologiya_ponyattya_osnovni_vlastivosti_protsezi_informatsiya_dani_znannya_obyekti.
- [10] Технології моделювання. *Лекції.Ком*. URL: <https://lektii.com/1-53301.html>.
- [11] Гарькавий Є. М. 2019. Організація планування стратегічних комунікацій у силах оборони України. *Virtus: Scientific Journal*. June. № 35. С. 234–237, URL: <http://virtus.conference-ukraine.com.ua/Journal35.pdf>
- [12] Берданова О., Вакуленко, В., Тергичка, В. 2008. Стратегічне планування : навч. посіб. Львів : ЗУКЦ, 138 с.
- [13] Ліпкан В. А. 2015. Роль стратегічних комунікацій в протидії гібридній війні проти України. URL: <http://goal-int.org/rol-strategichnix-komunikacij-v-protidii-gibridnij-vijni-proti-Ukraini>.

References

- [1] Shershnova Z. Ye. 2004. Stratehichne upravlinnia. URL: <https://buklib.net/books/24968>.
- [2] Strategic communications: a tribute to fashion or a requirement of the

- present? 2017. Center for the Study of Contemporary Conflict. URL: <https://defence-ua.com/index.php/statti/3036-stratehichni-komunikatsiyi-danyyna-modi-chy-vymoha-suchasnosti>.
- [3] Barbora Maronkova. My bahato navchylsia v Ukrainy u borotbi z rosiiskymy mifamy. Ukrinform. URL: <https://www.ukrinform.ua/rubric-politics/2556092-barbora-maronkova-direktor-centru-informacii-tadokumentacii-nato-v-ukraini.html>.
- [4] Bazovi poniattia stratehichnykh komunikatsii: standarty na osnovi dokumentiv NATO (anhliisko-ukrainskyi ta ukrainsko-anhliiskyi slovnyk). URL: http://stratcom.nuou.org.ua/wp-content/uploads/2019/11/nuou_ebook-14.pdf.
- [4] Tatham S, Le Page R. 2014. NATO Strategic Communication: More to be Done?, URL: https://www.naa.mil.lv/sites/naa/files/document/1_DS_PC%20PP%201%20-%20NATO%20StratCom.pdf.
- [5] Danyk Yu. H., Bychenok M. M., Katsalap V. O. 2019. Informatsiina bezpeka derzhavy u voienii sferi : navch. posibnyk. Kyiv. : NUOU im. I. Cherniakhovskoho, 301 p.
- [6] Pocheptsov H. H. 2008. Stratehichni komunikatsii: stratehichni komunikatsii v politytsi, biznesi ta derzhavnomu upravlinni. Kyiv : Alterpres, 216 p.
- [7] Kapshtyk O. V. 2019. Derzhavni mekhanizmy stratehichnykh komunikatsii u sektori bezpeky i oborony Ukrainy: dys. kand. n. derzh. upr. Khmelnytskyi, 197 p.
- [8] Tomashevskiy O. M., Tsehelyk H. H., Viter M. B., Dubuk V. I. 2012. Informatsiini tekhnolohii ta modeliuвання biznes-protseviv: navch. posib. Kyiv: TsUL. URL: https://pidruchniki.com/19530403/informatika/tehnologiya_ponyattya_osnovni_vlastivosti_protsevi_informatsiya_dani_znanny_a_obyekti.
- [9] Tekhnolohii modeliuвання. Lektsyy.Kom. URL: <https://lektsii.com/1-53301.html>.
- [10] Harkavyi Ye. M. 2019. Orhanizatsiia planuvannya statehichnykh komunikatsii u sylakh oborony Ukrainy. Virtus: Scientific Journal. June. 2019. 35, 234–237. URL: <http://virtus.conference-ukraine.com.ua/Journal35.pdf>.
- [11] Berdanova O., Vakulenko V., Tertychka V. 2008. Stratehichne planuvannya : navch. posib. Lviv : ZUKTs, 138 p.
- [12] Lipkan V. A. 2015. Rol stratehichnykh komunikatsii v protydii hibrydnoi viini proty Ukrainy. URL: <http://goal-int.org/rol-strategichnix-komunikacij-v-protidii-gibridnij-vijni-proti-Ukraini>.