

Juan Carlos CASTILLA BAREA

PhD student in International Security at the IUGM-UNED ESDC PhD Fellow

E-mail: jcastilla3@alumno.uned.es

Little Red Riding Hood asks about defence planning. Some answers and the NATO case

Abstract

The research questions guiding this article are about what is the basic problem faced by «defence planning» and its context, as well as the relationship with public policies, what are the main planning types and how is it carried out in NATO.

Literature in Spanish about public policy is vast, but scarce when it comes to analyse defence policy and defence planning from a public policy lens. A qualitative explanatory approach sets the route of this study, which starts with «defence planning» as a process of the defence public policy, incardinated with the National Security Strategy, in which internal and external requirements are considered. Coherence must be ensured from top to bottom and vice versa. Formulation and implementation parts of the «defence policy» converge in «defence planning».

Among the findings, the author emphasizes the importance of establishing a clear political defence planning «level of ambition» for the military instrument, the possible impact of hypothesis-based planning scenarios, to which to respond, to face the future threats, risks and challenges.

The article synthesizes a taxonomy of four main types of defence planning: «mobilization», «threat based», «portfolio», and «capability based», and introduces the «NATO Defence Planning Process» (NDPP), as an example of the «portfolio» type, and based on the «NATO War-fighting Capstone Concept» (NWCC), it offers some guidelines on the configuration of future planning scenarios.

In a broader context, this approach to defence planning from the perspective of public policy can be applicable to other international organizations or democratic nations.

Keywords

Defence Policy, National Security Strategy, Defence Planning, NDPP, Defence Planning models, mobilization, threat-based, portfolio, capabilities-based, planning scenarios, NWCC.

Cite this article:

Castilla Barea, J.C. (2021). Little Red Riding Hood asks about defence planning. Some answers and the NATO case. *Spanish Institute for Strategic Studies Journal*, issue 18, pp. 599-630.

«Unfortunately, it is these gentle wolves who are the most dangerous ones of all!»¹

Introduction

Little Red Riding Hood: But do you know where the wolf will be tomorrow? Where will he hide, and how will he lie, waiting for me next month? In the forest, by the lake, or by the sea? What costume will the wolf wear? How will he surprise us? How will the hunters think on that? Uhm,... what worries me the most is: How long and sharp will his fangs be in a few years' time? Will the hunter be ready? How long will their rusty shotguns work for?

This article is mainly related to the theoretical framework of a doctoral thesis, focusing on 'defence policy' and 'defence planning'. The reader is expected to understand the basic problem facing defence planning, to identify its political and strategic context, to understand the impact that can be derived from the definition of scenario-based scenarios. In addition, a simplified taxonomy of types of defence planning is provided, which can be used for case studies of such processes, in individual countries or in international organisations. This applies to the NATO case.

«Defense planning» is a cogwheel in a gear driven by strategic-political issues and others more directly related to planning itself.

The former encompasses: How is the world changing? What are the military implications of these changes? What role do we aspire to play in the world, and what are our defence objectives?

In between these two levels, the question arises: What do we want to be able to do militarily?

Other basic planning questions include: What capabilities, whether civilian or military, should we have? For when? How to obtain them, and in how much time? Who is in charge of getting them?²

It is argued that 'defence planning' is a process of public defence policy, to be coherently embedded in the «National Security Strategy» (NSS), and that it is primarily concerned with future risk. This risk is illustrated by planning scenarios, to which a methodical process is used to respond, ensuring that the political level's ambitions for the military instrument are realised. Although numerous approaches can be applied

¹ Perrault, C. (1657). *Petit Chaperon Rouge*. En *Histoires, ou Contes du temps passé, avec des moralitez*. Paris. 47–56, p. 56.

² Mauro, F. (2009). *EU Defence: The White Book Implementation Process*. *EU Policy Department for External Relations*. 121.

in the art of planning,³ it is also possible to handle a simpler taxonomy of four basic types according to certain characteristics, which does not exclude compatibility with the above-mentioned approaches.

The first part introduces the context of the process, what is meant by NSS, by 'defence policy', and by 'defence planning'.

This is followed by a discussion of the characteristics of planning scenarios, and how they influence possible outcomes. The types of logical reasoning applied to infer capability requirements from scenarios are identified. And, it provides a taxonomy of four basic types of defence planning: 'mobilisation', 'threat-based', 'portfolio', and 'capabilities-based'.

The third part describes the NATO Defence Planning Process (NDPP), a portfolio case, and elaborates on possible future scenarios based on the NATO Warfighting Capstone Concept (NWCC).

Context: from strategy to defence planning. The coherence of the method

History is a weak determinant of the planning context. One has to keep a squint look back in time a *squinting eye* on time, neither forgetting,⁴ nor abusing⁵ the past, but focusing primarily on the future.

Nations define their security strategies and try to implement them coherently, with objectivity and subjectivity, with art and science.

Making more or less explicit about the threats, risks or challenges of different scenarios is not only a matter of knowledge and certainty, but also an eminently political decision.

The actors involved in 'defence policy' formulate it, plan its implementation, and implement different plans and programmes, constrained by the budget.⁶ Implementation is subject to a limited rationality,⁷ and the dialectics of public policy: «between

3 «Top-down, bottom-up, scenario, threat, mission, mission, hedging, technology and fiscal». Lloyd, R.M. *et al.* (1990). *Fundamentals of Force Planning. Vol 1. Concepts.* Naval War College Press Newport, RI, 453, p. 326. Bartlett, H. and Somes, T. (1995). *The Art of Strategy and Force Planning.* Naval War College Review, 48.2, 9.

4 Gray, C.S. (2014). *Strategy and defence planning: meeting the challenge of uncertainty.* Oxford University Press. 225, p. 14.

5 Howard. M. (1962). *The Uses and Abuses of Military History.* Journal of the Royal United Services Institution. Vol 107, Issue 165, , pp. 4-10.

6 Decandido, C.L. (1996). *Evolution of Department of Defense Planning, Programming, and Budgeting System: From SECDEF McNamara to VCJCS Owens.* US Army War College. 30.

7 Simon, H.A. (1997). *Models of Bounded Rationality.* Cambridge: MIT Press. 475.

reason and compromise, calculation and consensus, which are inherent to policy-making in pluralistic and competitive societies».⁸

One of the processes belonging to the field of ‘defence policy’ is known as ‘defence planning’. From this process, the planning assumptions and the results obtained must be reviewed from time to time in order to improve a process which, like defence policy, is a public policy process.⁹

The ‘National Security Strategy’ integrates the ‘Defence Policy’

The breadth of the concept of ‘national security’ implies a coordinated development of multiple public policies: ‘defence policy’, foreign policy, domestic policy, public health, and economic policy, among others. All are active at home and abroad, and both influence these policies.

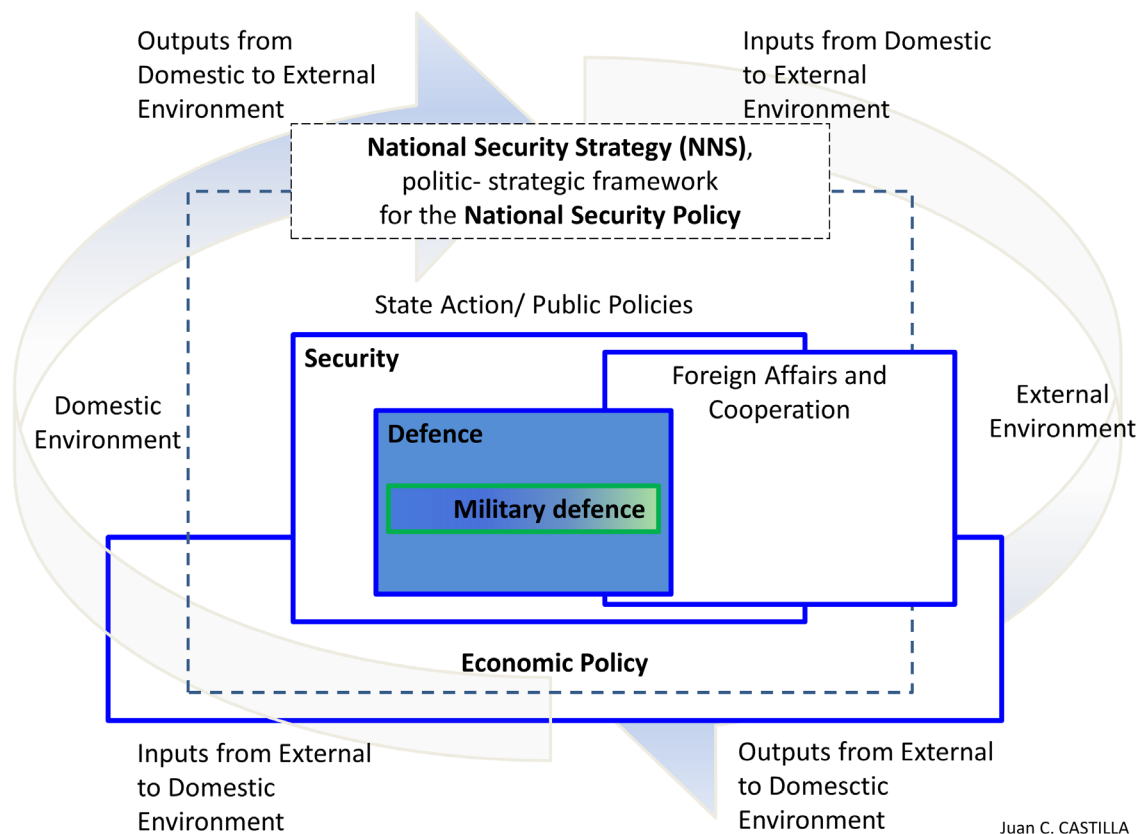


Figure 1. The concepts of Security and Defence are intertwined

8 Aguilar Villanueva, L.F. (1992). La hechura de las políticas. Mexico. P. 10. Aguilar Villanueva, L.F. (1992). El estudio de las políticas públicas. México.

9 Anderson, J.E. (2011). Public Policymaking : An Introduction. Texas A&M University, 7th ed. Boston, Suzanne Jeans. 342.

Gray¹⁰ postulates that security strategies allow for dealing with uncertainty about future risks and threats, and that there is an interrelationship between policy, strategy and defence planning. Policy, in a broad sense, gives context to the security strategy by setting its objectives. The NSS and in particular ‘defence policy’ give context to ‘defence planning’.

The NSS considers the geopolitical environment, the external and the internal ones, and contextualises ‘defence policy’. Geopolitics is about geography and power. The military is one of the elements of power. The NSS seeks to preserve interests (realism) and promote values (idealism) in a VUCA (volatile, uncertain, complex and ambiguous) environment.¹¹ The aim is not only to be reactive, but to act¹² on the causes of security problems,¹³ to prevent unintended consequences.

In 1989, Kent¹⁴ conceived the NSS as:

«National security strategy is the art and science of employing this nation’s political, economic, and military power to achieve our stated national security objectives in peace and war (3). The perceived goals, intents, and behaviour of potential adversaries and the capability of these adversaries to carry out their strategies that threaten our national security drive our national security strategy.»

In a coherent framework, the NSS should influence both the formulation and implementation of ‘defence policy’, and can therefore impact on future ‘defence planning’ cycles, which determine the military capabilities and forces needed.

‘Defence planning’ is about realising part of the strategy, responding to political demands, and doing so according to a method. According to Gray,¹⁵ good planning presupposes quality policy, and politicians who bring meaning to defence planning and programming, consistent with strategic objectives.

‘Defence policy’ as public policy

‘Public policy’ refers to the actions of the state to solve societal problems, and the way in which government is exercised. Those related to security and defence protect

10 Gray, C.S. *Op. cit.*, pp. 4-5.

11 Yarger, H.R. (2020). The Strategic Appraisal: The Key to Effective Strategy. En *Volume I: Theory of War and Strategy*. US Army War College. 53-66, pp. 59-61.

12 Liotta, P.H. and Lloyd, R.M. (2005). From Here to There. The Strategy and Force Planning Framework. *Naval War College Review*. Vol 58,2, 122-37.

13 Arteaga Martín, F. and Fojón Lagoa, J.E. (2007). El planeamiento de la política de defensa y seguridad en España. *IUGM*. 463, p. 29.

14 «(3) The author believes that this classical definition should also include intellectual power – the power to outthink the enemy». Kent, G.A. (1989). A Framework for Defense Planning. RAND Corporation. Santa Monica, CA. 71, p. 4.

15 Gray, C.S. *Op. cit.*, p. 2.

goods of public interest,¹⁶ such as the freedom of citizens, their well-being, and national sovereignty. 'Defence policy' is one of the protective public policies, which together with others, seek to provide security. Security is a 'pure public good',¹⁷ from which all citizens benefit *equally, without exclusion or rivalry*.

The success of these protective policies depends on the state's capacity to act on risks, managing their potential impacts, or neutralising the capacity of threats. Such protection can be very ambitious when political, economic and military factors come together.¹⁸

Dunn offers a methodological model for analysing public policy, focusing on the definition of the problem related to the public good.¹⁹ There are four stages of a public policy: the inclusion of the problem in the political agenda, the formulation of the policy, its implementation, and the review of results.²⁰

A complete separation between the actors who design public policy and those who implement it can be fatal, whether in health,²¹ or defence. In the latter case, this desirable confluence may fuel friction between politicians and the military. Olmeda means that what is relevant is the effectiveness of these relationships,²² i.e. that the goodness of such a confluence in defence planning should be evaluated according to the results.

Public policies are influenced by pressure groups, each with their own 'special interest',²³ vying for resources. These actors influence from within and outside the country in question. The policy process involves relations between actors within the affected organisation, and with other governmental and international elements. Thus, for example, in the Spanish case of 'defence policy', the Ministry of Defence interacts, *inter alia*, with the Ministry of Foreign Affairs, NATO and the EU.

16 Gómez Arias, R.D. (2012). Management of Public Policies: Operational Aspects. *Rev. Fac. Nac. Salud Pública*. 223–36.

17 Samuelson, P.A. (1954). The Pure Theory of Public Expenditure. *The Review of Economics and Statistics*. 36.4, 387.

18 Gómez Arias (2012). *Op. cit.*, pp. 227-28.

19 Dunn, W.N. (2017). *Public Policy Analysis: An Integrated Approach*. Routledge.

20 Hogwood, B.W. and Gunn, L. (1984). Policy Analysis for the Real World. *Oxford University Press*. Pp. 19–23.

21 Pressnan J.L. and W.A. (1984). Implementation: How Great Expectations in Washington Are Dashed in Oakland. *University of California Press*. 281.

22 Olmeda, J.A. (2013). Escape from Huntington's Labyrinth. Civil-Military Relations and Comparative Politics. En Bruneau, T.C. *The Routledge Handbook of Civil–Military Relations*. Routledge. 61–76 (p. 66).

23 Olson, M. (1971). The Logic of Collective Action: Public Goods and the Theory of Groups. *Harvard University Press*. 186.

Often the bureaucratic processes related to ‘defence policy’ are «obscure and distorted by particular interests of military services, civilian bureaucracies, defence industry and individual politicians»²⁴. From a national point of view, an organisation such as NATO can also be seen as an external influence with its own dynamics and interest. Internal and external influences can cause inconsistencies between what is stipulated in national strategic-political documents, and the decisions taken in ‘defence planning’, materialised in plans and programmes.

Assessing the coherence and effectiveness of investment in ‘defence policy’, and in particular ‘defence planning’, is essential to determine the accountability of the government in the development of its public policy.

In conclusion, public policy such as defence policy involves a process in which policy is formulated –weighing what is rationally desirable (ends), possible (means) and right (art) in pursuit of the common good–, implemented (administration of the policy itself), and its results reviewed. There are internal and external influences on the process that can distort it.

What do we mean by ‘defence policy’?

Battaglino’s definition of ‘defence policy’ brings the concept closer to that of protection against the existential threat of the state: «a set of actions taken by a state to ensure its survival in the face of risks and threats».²⁵

Tagarev provides a more military definition. He points out that this policy must respond to two fundamentally different tasks. The first is *how to use available means* (use of force) to achieve objectives (e.g. in the case of military aggression). The second is *to define the means by which the nation can effectively defend itself against future threats, risks and challenges*.²⁶

Specifying the ambition of defence policy, i.e. defining the ‘*Level of Ambition*’ (LoA), is a key aspect of its formulation. Proper planning can only start from a LoA established by the political authorities, sufficiently clear to be translated into concrete results. The LoA answers what the political authority wants the military instrument to be able to do, what kinds of efforts, autonomously or with allies, where and with what reaction time, and this is key to determining future capabilities and force structure.

24 Frühling, S. (2014). *Defence Planning and Uncertainty. Preparing for the next Asia-Pacific War*. Routledge. 239, p. 11.

25 Battaglino, J. (2010). La Política Militar de Alfonsín: la implementación del control civil en un contexto desfavorable. *Discutir Alfonsín*, 161–84.

26 Tagarev, T. (2006). The Art of Shaping Defense Policy: Scope, Component, Relationships (but No Algorithms). *The Quarterly Journal*, Spring-Summer. 15–36, p. 17.

Force design must not only be effective, but also sustainable. The capabilities to be achieved must be the balanced product of the employment concept, the structure of the organisation and its corresponding funding.^{27 28} Both Gray²⁹ and Arteaga³⁰ refer to the necessary coherence and balance between what political power asks of the military instrument, and the amount of resources devoted to that effort, and of both elements with the security strategy.

Whether in countries or in international organisations, the inherent difficulty of the military aspect of security can mean that the ambition of ‘defence policy’ is not entirely clear, and may be limited to crisis management alone, without explicitly contemplating high-intensity war scenarios. Disparate examples can be seen in relation to NATO and the EU.

In the Alliance, the ‘defence planning process’ includes the political definition of a LoA, making explicit the types of efforts to be undertaken, including high-intensity combat for collective defence, and defining threats such as Russia’s, or risks such as those posed by China.

The 2016 European Union (EU) Global Strategy for the European Union’s Foreign and Security Policy (CFSP) stipulates the need for ‘strategic autonomy’. However, there are those who point out that its real ambition does not include, in the short term, operating autonomously in very demanding war scenarios; it is still mainly limited to crisis management³¹.

Policy must define the threats (capability and intent of the potential adversary), risks (probability and consequences) or challenges that the military instrument must be able to meet. Statements must be clear enough to translate political ambition into ‘defence planning’ decisions. These decisions take shape first on the basis of political judgement, and are then complemented by military judgement. The relevant information has to be collected and interpreted³² logically inferring the capability requirements, and finally determining the most appropriate force structure.

In short, the domestic and the external are inputs into national ‘defence policy’ processes. Among the tasks of this policy is to define a LoA to initiate an implementation

27 Colom Piella, G. (2011). El proceso de transformación militar en España (2004-2011). *UNISCI*. 117-31.

28 EMAD (2018). PDC-01(A) *Doctrina para el empleo de las Fuerzas Armadas*. 178, pp. 52-53.

29 Gray, C.S. *Op. cit.*

30 Arteaga Martín, F. (2013). La defensa que viene. Criterios para la reestructuración de la defensa en España. *Real Instituto Elcano*. 32.

31 Brattberg, E. and Valášek, T. (2019). EU Defense Cooperation: Progress Amid Transatlantic Concerns. *Carnegie*. 36, p. 11. the disruptive impact of the Brexit negotiations and the election of U.S. President Donald Trump, demands for deeper European Union (EU

32 Frühling, S. (2014). *Op. cit.*, p. 12.

method to respond to the problem posed as a strategic risk. This methodical materialisation brings us closer to the concept of ‘defence planning’, which implements part of the aforementioned policy, and which starts from the sufficient definition of the political ambition to infer the requirements of the capabilities to be obtained, and to decide on the design of the force structure.

What do we mean by ‘Defence Planning Process’?

Gray conceives of ‘defence planning’ as the intentional and continuous preparation for the defence of a policy in the short, medium and long term. It straddles the line between the formulation and implementation of ‘defence policy’. Policy is, and should be, decisive in establishing the process that shapes such preparation³³. Gray’s approach to ‘*Defence Planning*’ is very broad. Kent³⁴ sharpens the focus by referring to the ‘defence planning’ framework as follows:

«Guided by top-level Government decisions and advice as to national security strategy and fiscal constraints, the Department of Defence (DoD) components have the task and responsibility of organizing, equipping, training, upgrading, and supporting the military forces under their command to provide operational capabilities that will support the selected national military strategies. In planning the structure of these forces, the DoD components should clearly link programs for the acquisition of systems and equipment to increase security strategy».

‘Defence planning’ is basically the second of the fundamental tasks of ‘defence policy’ as Tagarev conceives it: defining the means by which the nation can effectively defend itself against future threats and challenges. This approach basically coincides with what is understood in the Spanish joint doctrine,³⁵ what is related to the definition of capabilities and also to force design is a matter of the ‘defence planning process’.

The process is inevitably conditioned by budgetary constraints, a key factor in the viability of the various capability acquisition programmes that enable the armed forces to conduct ‘military defence’, as part of ‘national defence’, which in turn is embedded in ‘national security’.³⁶

Gray refers to integrity ad intra to mean that the national budget must meet all the country’s domestic needs, and integrity ad extra to mean that investment must be able

33 Gray, C.S. (2014). *Op. cit.*

34 Kent, G.A. (1989). *Op. cit.*, p. 3.

35 EMAD (2018). *Op. cit.*, p. 52. Tagarev’s second task would involve ‘force planning’ (within military planning), and other non-strictly military planning (for the Spanish case) such as resource planning (financial, material and human).

36 Martín Ballesteros, M.A. (2016). En busca de una estrategia de seguridad nacional. *Ministry of Defence*. 323.

to respond to external needs.³⁷ To estimate how much deterrence is necessary and sufficient, one has to start from planning assumptions, and regularly confirm that these assumptions remain valid for the future.

In the introduction, Little Red Riding Hood referred to the hunter's 'rusty shotgun'. In 2018, the Spanish CHOD in Congress described an «undesirable state of non-operationality of its materials».³⁸ The Spanish Ministry of Defence is currently working to modernise its armed forces in a scenario of economic crisis³⁹. Estimating how much military power is enough to deter, depending on whom, is key. Knowing how much to invest is equally relevant, and prioritising which capabilities is even more important. The question of «how much to spend to do what» matters not only for 'defence planning', but also for other public policies.

Spending more does not mean better capabilities.⁴⁰ It is necessary to define the essential ones in a context characterised by technological advances, it is key to achieve them with economic efficiency and in the shortest possible time. The necessary adaptation may involve organisational evolution, affect the way organisations make decisions, and reduce inefficient bureaucracies in processes. Pragmatism can sometimes clash with tradition and cause unwanted friction in the face of necessary change.

'Future risk' is the main concern of 'defence planning'. The starting point is a situation of current 'operational risk', which is probabilistically considered in the event of using current forces in operations against a specific threat in the short term. This risk must be acceptable in terms of strategic, human, material and financial costs. On the basis of the short-term 'operational risk', and the scenarios proposed for the medium and long term, it is a question of identifying the 'future risk'.

The «what we want to be able to do militarily» is partly answered in the political-strategic sphere with 'strategic concepts'; in the military sphere, it is also answered with 'operational concepts'. The development of new 'operational concepts' can guide investment in new capabilities. From these concepts, fundamental operational tasks are defined, what Tagarev defines as the «*mission essential task list*»,⁴¹ and from these tasks the new operational 'requirements' for new or existing capabilities are derived. Such concepts require experimentation before deciding on

37 Gray (2014). *Op. cit.*, p. 22.

38 Diario de sesiones del Congreso de Diputados. Comisión de Defensa de 16 de abril de 2018. Comparecencia del JEMAD GE Alejandro. [Accessed on 12 January 2021]. Available at: http://www.congreso.es/public_oficiales/L12/CONG/DS/CO/DSCD-12-CO-482.PDF

39 Colom Piella, G. (2021). From Transformation to Adaptation: Analysing the Spanish Military Change (2004–2020). *Defence Studies*. 20.

40 Frank, L. (2020). New Times for Military Professionalism: Rethinking Core Competencies and Dynamic Capabilities. En *Rethinking Military Professionalism for the Changing Armed Forces*. Springer. Pp. 63-82.

41 Tagarev, T. (2006). *Op. cit.*, p. 28.

their implications for obtaining capabilities. Innovation and experimentation are necessary to deter or defeat potential military challenges⁴² in the future operating environment.

The traditional domains of land, sea and air operations are now joined by cyberspace, outer space and even the cognitive domain. In February 2014, the hybrid became topical with the deployment of Russian soldiers without insignia in Crimea.⁴³ The grey zone⁴⁴ can also refer to an ambiguous framework between cooperation and competition at the political-strategic level; in the military, grey characterises operations in a hybrid environment⁴⁵ of blurred boundaries, where conventional coercive instruments operate overtly alongside covert ones.

Spain was hit by cyber attacks in March and June 2021. The first against the State Public Employment Service, the second against the Ministry of Labour and Social Economy. There are actors capable of affecting our security, and they can act in the continuum of peace, crisis or war. The action of criminal groups in possible collusion with certain states⁴⁶ makes attribution difficult.

New risks and threats can influence decisions on the critical capabilities in which to invest. Defining the requirements for the capabilities that will be critical is very important, but these capabilities also need to be quantified and organised into a suitable long-term force structure. The size and design of the forces also depend on the type of strategy chosen.⁴⁷ At the political level, different design options can be considered for the overall design of a sustainable force, with different weights of its specific components (traditional land, sea or air, or others).

Kugler explains that as US forces grew during the Cold War, all services benefited to a similar degree. Then, when it came to downsizing, all services contracted similarly. Whether this linearity will make sense in the future is uncertain; new strategic conditions and defence transformation could lead to a new mix of service

42 US Department of Defence (2003). Transformation Planning Guidance. *Homeland Security Digital Library*. 34, p. 9

43 Galeotti, M (2015). Hybrid War and Little Green Men: How It Works, and How It Doesn't. *E-International Relations*, 5.

44 EMAD (2018). *Op. cit.*, pp. 89-90.

45 Jordan, J. Una reinterpretación de la crisis del islote Perejil desde la perspectiva de la amenaza híbrida. *Revista General de Marina*. 218, num 274 Junio, pp. 941-952.

46 'Ryuk apareció en agosto de 2018 y lo maneja un grupo ruso llamado Grim Spider, según la consultora CrowdStrike'. [Accessed on 12 June 2021]. Available at: <https://elpais.com/tecnologia/2021-03-09/el-virus-de-secuestro-informatico-ryuk-principal-sospechoso-del-ciberataque-contra-el-sepe.html> y <https://elpais.com/economia/2021-06-09/el-ministerio-de-trabajo-y-economia-social-sufre-un-ciberataque.html>

47 Posen, B.R. and Ross, A.L. (1996). Competing Visions for U.S. Grand Strategy, International Security. *Naval War College Press*. Vol 21.3, 49, p. xxi.

force ratios. It is not only the internal structure of each service (army, navy or air force) that needs to be discussed, but also how in the future these structures can be merged to maximise joint operational capacity.⁴⁸ also taking into account civilian capabilities.

In cyberspace, the British example deserves mention. Its National Cyber Security Centre, created in 2016, has been staffed by civilian and military personnel since peacetime⁴⁹. In Spain, the military organisation⁵⁰ envisages the 'Joint Cyberspace Command' (MCCE in Spanish), to plan, direct, and control the actions. This new body in the operational structure does not imply a new service in the organisational structure composed of land, sea and air force. The services develop specific cyber capabilities in line with the requirements set by the MCCE.⁵¹ In outer space, France and Spain have entrusted such operations to their Air Forces.⁵²

Whatever the decisions, it is key to ensure coherence. The top-down coherence of planning requires that it is correctly embedded in its context. In particular, with the objectives set out in the NSS for the military instrument, and with the objectives and courses of action to be detailed in the Military Strategy. The means available in the medium and long term must be congruent with the strategic concepts of the political level and the operational concepts resulting from military innovation. There will be top-down coherence to the extent that capabilities are sufficient to be able to realise the LoA set by the political authorities.

Bottom-up coherence of planning refers to the possibility of incorporating technological and market opportunities into capability acquisition, with sufficient flexibility and agility, provided that they fit into the operational concepts and strategic logic of «means, ways, ends». In both consistent approaches, the budget constraint has to be considered.⁵³

Every object of public planning requires a method. In the 20th and 21st centuries, several basic types of 'defence planning' can be identified, distinguished according to the level of knowledge about threats and risks, the scenarios that are used to infer requirements for capabilities, and the types of logical inferences that are applied. This is elaborated on below.

48 Kugler, R.L. (2006). Policy Analysis In National Security Affairs: New Methods for a New Era. *National Defense University, Center for Technology and National Security Policy*. Pp. 275-276.

49 [Accessed on 20 July 2021]. Available at: <https://www.ncsc.gov.uk/>

50 Organisation of the Armed Forces (2020). Order DEF/710/2020, *BOE* no. 204 of 28 July 2020.

51 [Accessed on 20 July 2021]. Available at: <https://emad.defensa.gob.es/unidades/mcce/>

52 Aznar Fernández-Montesinos, F. (2021). El espacio exterior, una nueva dimensión de la seguridad. *IEEE*. 10, pp. 174-187, p.13.

53 Garbers, F., *et al.* (2020). Performance Management in Defence Organisations. *NATO STO*. 186.

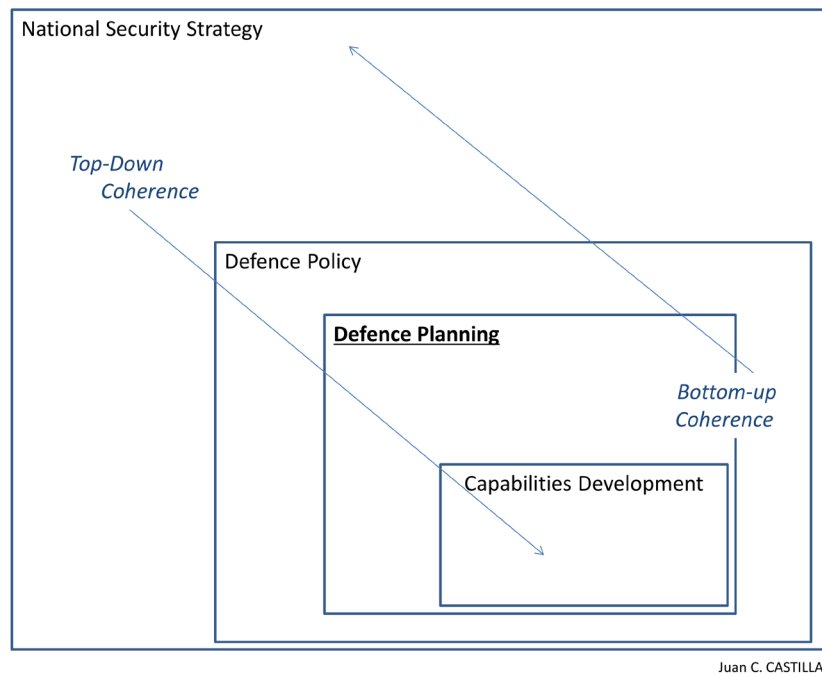


Figure 2. The context of defence planning. Source: Juan C. Castilla

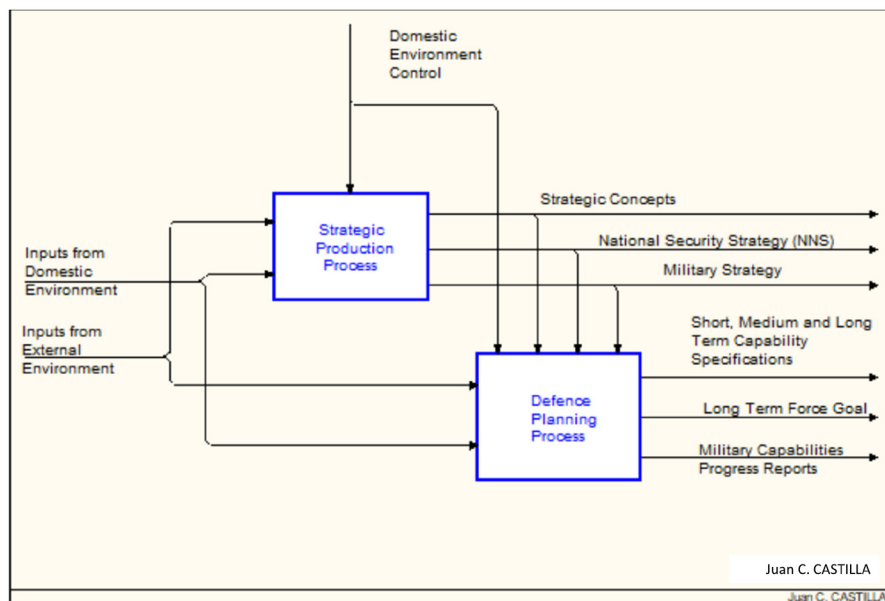


Figure 3. Interaction between strategy production and defence planning processes

On basic scenarios and types of defence planning

Geography⁵⁴ and realism are two of the key factors to consider in defining hypothetical conflict scenarios, from which to define the necessary capabilities, but they are not the only ones.

⁵⁴ Kaplan, R.D. (2018). La venganza de la geografía: cómo los mapas condicionan el destino de las naciones. Barcelona, RBA.

The evaluation of the results of the process may reveal, a posteriori, the falsity of certain assumptions and lead to corrective actions. *Assumption-based planning* (ABP) is more easily applied to identify threats and vulnerabilities than to identify opportunities. In a way it serves to try to avoid 'black swan' surprises. When 'the impossible' is ruled out at the outset,⁵⁵ the result can be disastrous.⁵⁶

On the characteristics of the scenarios and their possible impact.

The planning scenarios are considered for the short, medium and long term. Depending on the space-time, the certainty of inferring requirements for the necessary capabilities varies.

It is not the same to pose a confrontation today, between the US and Russia or China, and take decisions, as it is to approach the problem in ten or twenty years' time, and decide on the necessary force structure.

Larson⁵⁷ studied the scenarios used in the US between 1945 and 2016. This author assesses the potential impact of planning decisions based on two variables: the time horizon of scenarios, and knowledge about the threat. Thus, for scenarios with a time horizon of 5 to 7 years, the implications for planning are moderate, and may affect approximately 10 to 20 percent of the force structure. As more future scenarios are used, a greater proportion of the force structure may be affected.

There is a correlation between time and knowledge of the threat. The longer the time horizon of the scenarios, the less planning tends to be based on concrete knowledge of the threat (less 'threat-based'), the more speculative it necessarily becomes, and the more generically it tends to refer to possible capabilities (more 'capability-based'). Force structure decisions based on obtaining generic capabilities may have more impact on force structure than decisions based on concrete knowledge of the threat.

It is difficult to envisage a process that is purely capability-based, with very short-term scenarios, and focused solely on securing sufficient means to ensure that existing operational plans can be realised today. This would make it difficult to aspire to future-ready armed forces. Ideally, policy instructions should guide the design of scenarios, both in terms of threats and space-time.

55 Dewar, J.A., *et al.* (1993). *Assumption-Based Planning. A Planning Tool for Very Uncertain Times. Rand Corporation*, 88. Dewar, J.A. (2002). *Assumption-Based Planning: A Tool for Reducing Avoidable Surprises. RAND Studies in Policy Analysis. Cambridge University Press*. 238.

56 Millet, A.R. and Murray, W. (2007). *Military Innovation In The Interwar Period. Cambridge University Press*. 435.

57 Larson, E.V. (2019). *Force Planning Scenarios, 1945–2016. Rand Corporation*. 326.

Regardless of how a planning process labels itself ('threat based' or 'capability based', etc.), the specification of scenarios is important as an indicator of what planning is really intended to achieve.

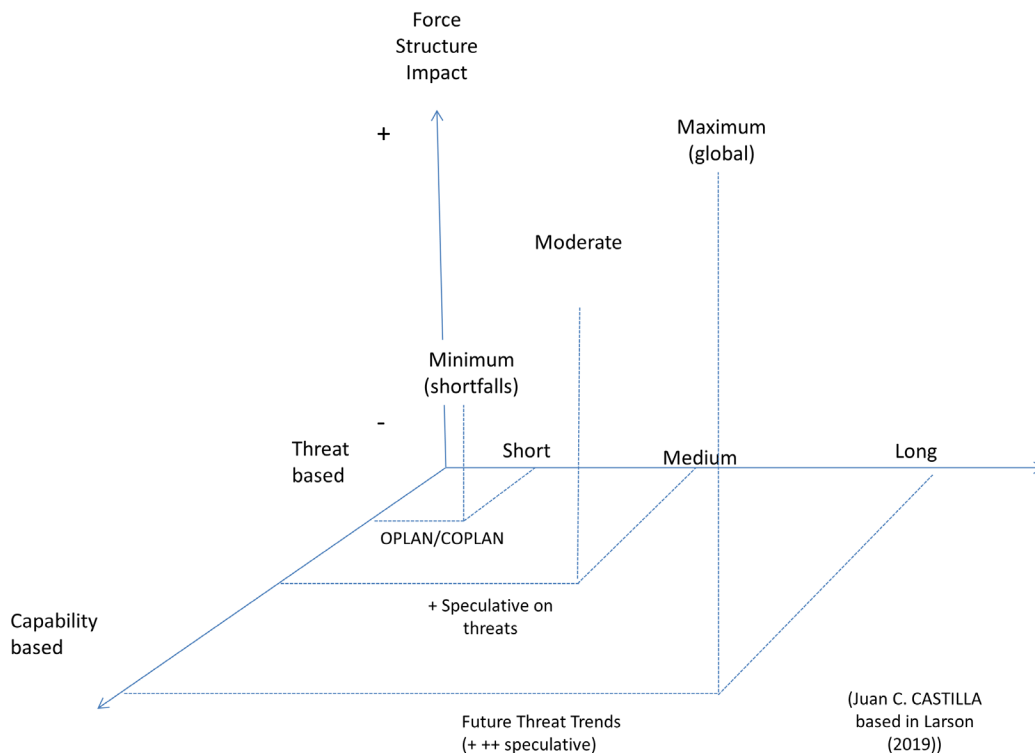


Figure 4. Planning scenarios and impact on force structure

On the types of logical reasoning for inferring capabilities

Depending on the basic type of planning, a certain way of drawing inferences from scenarios predominates, with deduction and abduction being the most commonly used, although in some cases induction is also used.⁵⁸

Logical inferences relate the provoked events or cases, the rules that act on the occurrence of the cases, and the observed or foreseeable outcomes. The greater the certainty about risks and threats, the more possible inference becomes. The greater the uncertainty, the more abduction should be applied. In line with Cruces,⁵⁹ below these forms of inference are summarised.

Deduction offers valid or invalid conclusions, it offers certainty, it starts from certain premises without significant doubts about their validity. From general truths or rules particular truths are deduced. The conclusion is valid depending on whether its prem-

⁵⁸ Frühling, S. (2014). *Op. cit.*, pp. 27-29.

⁵⁹ [Accessed on 20 July 2021]. Available at: http://kali.azc.uam.mx/clc/o3_docencia/licenciatura/log_simb/Ra_LoSim_D_I_A.pdf

ises are valid or not. One can reason in this way when one knows one's adversary well, when one knows his political formulation, his doctrine, his means and procedures, etc.

Induction does not provide a valid or invalid conclusion, only estimates in accordance with the degree of plausibility or probability attached to the premises. With induction, general truths or rules are inferred with a certain probability from particular truths or cases and results. However, it at least provides a basis for what can be concluded, depending on the likelihood of the premises.

Abduction starts by describing the results caused by an act, followed by the establishment of premises that seem correct with a certain probability, and concludes by providing an explanatory hypothesis about the rule of action, the possible reasons or motives for the act. Sometimes referred to as conjecture, abduction offers an explanation for what at first glance seems most likely. In 'defence planning', this type of reasoning can be used when there is no detailed information about the future adversary.

One of the distinguishing characteristics of the basic types of planning is the mode of inferential logic that prevails.

On the four basic types of 'defence planning'

The distinguishing features of the basic planning frameworks include:

- a) The explicit or non-explicit declaration of an adversary as a threat.
- b) Risk assessment and evaluation. The level of knowledge about threats (capabilities and intentions), the level of certainty about risks (the objective assessment of the probability of events, the impact of their consequences, and their subjective evaluation), and knowledge about the variety and possible concurrence of major contingencies are important.
- c) The type of inference reasoning that is mainly used to establish capability requirements and decide on force structure.
- d) The use of scenario-based planning scenarios: number and variety of types, importance of geography and time horizon.⁶⁰

Based on planning practice in the 20th and 21st centuries,⁶¹ four basic types can be distinguished:

- e) '*Mobilization Planning*' in the face of a possible future threat.
- f) The so-called 'net assessment planning' or 'threat based planning'.
- g) 'Portfolio Planning', applicable for cases of concurrence of several known risks.

⁶⁰ Larson, E.V. (2019). *Op. cit.*

⁶¹ Bartlett, H. and Somes, T. (1995). *Op. cit.*

- h) ‘Capability-based planning’ or ‘task-based planning’ is applicable to an environment where the unknown about the potential adversary and its behaviour is paramount, and uncertainty about the future capabilities of potential threats or risks is at its highest.

The most opposed to each other are ‘threat based’, in which deductive reasoning prevails⁶² and ‘capability based’, in which abduction is mainly applied.

TABLE I. THE FOUR BASIC TYPES OF ‘DEFENCE PLANNING’

	<i>Mobilization Planning</i>	<i>Threat Based/ Net Assessment</i>	<i>Portfolio Planning</i>	<i>Capability Based Planning/ Task-Based Planning</i>
Explicit declared threat (adversary)	There is no identified risk at present, but one or more known future adversaries are assumed.	The adversary (1) is usually declared; although the approach is possible without doing so. (2)	There are several risks or threats.	No explicit threats are stated, and they may not be sufficiently known.
Risk assessment and evaluation a. Level of knowledge on probability and impact. b. Simultaneity or not of threats and risks	The probability of the current risk is not significant. A long reaction time is assumed for the use of force (months or years). Details on capabilities and operational concepts of the potential future adversary are unknown. Foresight should analyse possible trends that may increase the impact of the risk of future confrontation. Prudence dictates that minimal measures be taken in case the threat comes as a surprise in the short term. The amount of force required is a big unknown, because it depends on the development of the potential opponent.	Risk events are inferred from the intention of the threat (assumed or known), a highly probable risk is assumed, and the certainty of the impact depends on the control that can be made over the escalation.	It has to be considered that several risks may or may not materialise simultaneously. Risk prioritisation can be politically sensitive, especially if the force needed is identified as requiring more resources than anticipated. The level of combat readiness is demanding, with short reaction times.	It is difficult to know specifics about present risks and threats, but there is speculation about future ones.
Predominant type of inferences (Deduction, induction, abduction)	<i>Abduction</i> predominates, as there is no detailed information about the future adversary.	<i>Deduction</i> , based on detailed information about the opponent, predominates.	The risks are sufficiently well known to <i>derive</i> requirements as is done in <i>Threat Based Planning</i> for each specific risk, but the final decision on the overall capabilities and force design is mainly a product of <i>inductive</i> reasoning. <i>Abductive</i> reasoning takes on more weight the greater the indeterminacy of the risk, and the longer the time horizon considered.	<i>Abduction</i> predominates.
Planning scenarios a. Number and variety of scenario types (small/large) b. Geographically linked or generic. c. Time horizon (short, medium, long term)	Simultaneous scenarios can be envisaged, as many as the number of possible adversaries are assumed. (1) Scenarios include a specific geography, from which specific requirements are derived (obstacles, force or fire projection, logistical efforts, etc.). They are preferably located in the long term, although the medium or short term cannot be ruled out.	Planning scenarios are narrowed down according to the assumed threat scenarios and are often closely linked to geography. Short-term predominates.	The number and variety of scenario types is greater than in ‘threat-based’, depending on the number and specific risks identified, and their prioritisation. More generic scenarios for standard operations or contingencies are also included. Some scenarios are linked to geography, others are not, and both are based on concrete planning assumptions. They are envisaged in the short to medium term.	The characteristics of the planning scenarios are mainly related to the operational concepts to be developed, and depending on these also their possible geography. The longer the time horizon in the scenarios, the greater the probability of affecting the force structure. First and foremost, there is a tendency to maintain the flexibility of the force structure.
Comments.	1. Predominant in the inter-war period, the US assumed scenarios and drew up war plans against the red enemy (UK), the orange enemy (Japan), etc. 2. It allows the development of options for the development of capabilities and force design, with a first phase of short-term investment in R&D&I, and a second, later phase in which the quantities of materials to be obtained are determined.	1. Typical Cold War. 2. See, for example, the Australian case of 1987 ⁶³ .		

62 On hypothetical deductive thinking, see Habernas, J. (1992). *Conocimiento e interés*. Universitat de Valencia. (Original from 1968). On the application of deductive thinking to strategy, see Frischknecht, F., Lanzarini, M.S.T. and Alonso, R.J. (1994). *Lógica, teoría y práctica de la estrategia. Escuela de Guerra Naval*. Buenos Aires.

63 Frühling, S. (2014). *Op. cit.*, pp. 52-60.

The third part of this article deals with the particular case of planning in NATO. The international arena affects national defence planning. For Spain, for example, what is agreed in the Alliance in terms of defence policy and defence planning is relevant. Obviously, EU decisions also matter.⁶⁴ In addition, planning in NATO provides a good example of the context and the importance of a coherent method, types and scenarios of planning.

On the ‘NATO Defence Planning Process (NDPP)’

In NATO, the ‘Strategic Concepts’ decided at the political level, ‘Military Strategy’ and ‘defence planning’ are coherently integrated. Such planning must respect the sovereignty of countries. This drive for coherence and integration of planning at the national level is also identified in other international organisations, such as the EU, in relation to its Common Foreign and Security Policy (CFSP) and Common Security and Defence Policy (CSDP), and the development of initiatives related to capability planning.

The ‘NATO Defence Planning Process (NDPP)’ deals with non-nuclear capabilities, although it does consider dual-use capabilities such as certain *dual-capable aircraft* (DCA).⁶⁵

The NDPP formulates what needs to be in place to respond to planning scenarios related to concrete operational plans, as well as other purely hypothetical scenarios. It reviews the capabilities and forces available today, and seeks to improve them in the future, with an eye to the short, medium and long term.

The US greatly influences the internal dynamics of NATO defence policy, the development of strategic and operational concepts, and the NDPP. The five-step process aims to verify that national inventories contain the conventional capabilities the Alliance needs now and in the future.

Step 1 is the establishment of the ‘Political Guidance’ (PG) including the ‘level of ambition’. Step 2 is the determination of the ‘Minimum Capability Requirements’ (MCR). Step 3 consists of distributing and assigning ‘Capability Targets’. Step 4 is an ongoing activity consisting of facilitating implementation, obtaining capabilities by ensuring standards, e.g. those related to interoperability. Step 5 is the review of results, including country reports. While the first three steps are repeated every four years, step 5 occurs every two years.

.....

64 Domecq, J. (2018). Coherence and Focus on Capability Priorities: Why EDA’s Role in CARD, PESCO and EDF Matters. *Real Instituto Elcano*. 6. Fiott, D., et al. (2020). *The CSDP in 2020*. EU ISS. 157. Mauro, F. (2018). *Op. cit.*

65 Heinrich, B. and Mölling, C. (2020). Germany’s Role in NATO’s Nuclear Sharing. *DGAP Policy Brief*. num. 4, 8.

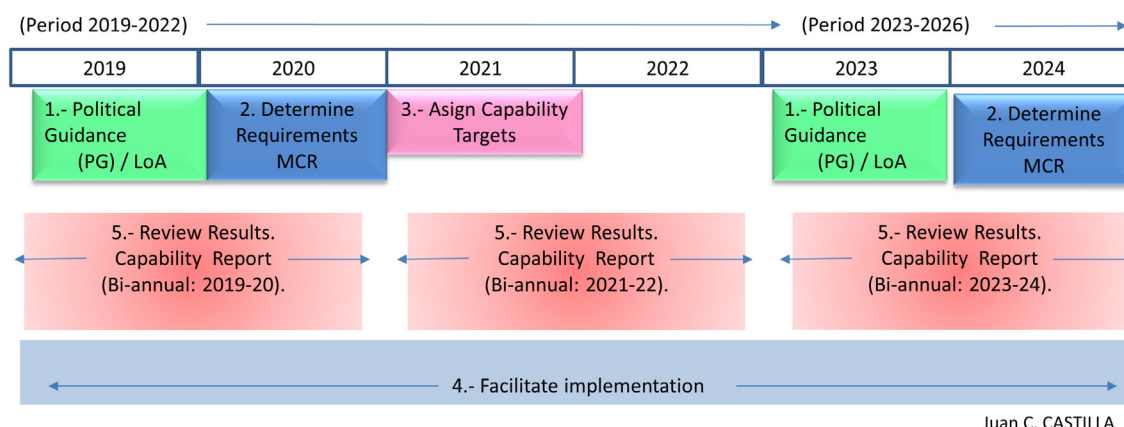


Figure 5. NDPP over time

In relation to planning, the ‘Strategic Concept’ is to NATO what the NSS is to a country. The resulting capabilities and forces must be sufficient to fulfil the three core tasks of the 2010 ‘Strategic Concept’: collective security, crisis management and cooperative security.

Allied political authorities agree on the permanent tasks that the military instrument should be able to perform, and the LoA, which expresses the nature, scale, and number of joint operations of varying size that NATO should be able to undertake. It is articulated in number and model of ‘Major Joint Operation Plus’ (MJO+), ‘Major Joint Operations’ (MJO), and ‘Small Joint Operations’ (SJO). These operation types may be carried out simultaneously or alternatively, for specified periods of time, and in certain geographical and environmental permissiveness circumstances. Basically, the current LoA implies being able to ensure collective defence (MJO+), or simultaneously develop 2 MJOs and 6 SMOs⁶⁶.

It is premature to speculate on how the follow-up work to the *NATO 2030* document,⁶⁷ and in particular the new Strategic Concept to be agreed in 2022 in Madrid,⁶⁸ will influence possible changes to the 2023 PG and LoA, but the initial intention is a political and military reinforcement, improving military capabilities and the resilience of societies.⁶⁹

Based on guidance from the political authorities, the Strategic Commands, Allied Command Operations (ACO) and Allied Command Transformation (ACT) use different planning scenarios to infer the MCR, which is sufficient to be able to comply with the PG.

66 García Arnáiz, F.J. (2017). La estructura de mando de la Alianza Atlántica. In *NATO: presente y futuro*. Ministry of Defence. Pp. 51-82, p. 58.

67 NATO (2020). *NATO 2030: United for a New Era*.

68 [Accessed on 29 July 2021]. Available at: <https://elpais.com/espana/2021-06-13/la-nueva-estrategia-de-la-otan-se-aprobara-en-la-cumbre-de-madrid-2022.html>

69 Fernández-Palacios, M. (embajador) (2021). Una nueva Alianza para unos nuevos tiempos. *Revista Española de Defensa*. Jul-Ago, 12-13.

Once the required capabilities have been defined, the ‘Capability Targets’ (CTs) are distributed among the allies, with a view to fair burden sharing. Some CTs are procured through allied pooled funding; the rest (the vast majority) is borne by the countries. CTs are allocated, negotiated and accepted, for each country to incorporate into its national planning. In the process, allied authorities report back to nations, and there is continuous interaction between political and military authorities, between Brussels and capitals.

Every four years, the conventional capacities and forces to be obtained in the national inventories are defined for a time horizon that is conceived as short (0-6 years), medium (7 to 19 years) and long term (from 20 years onwards).^{70 71} Progress is monitored every two years.

NATO expects allies to live up to their commitments under the NDPP. However, each nation sovereignly defines its capability development needs and priorities according to its own strategic choices, policies and operational concepts, which the Alliance ideally seeks to homogenise or make compatible. The design of a country’s force structure needs to be domestically appropriate, while trying to respond to allied requirements in a timely manner. Countries retain sovereignty in how they formulate their planning and implement it over time, but the coherence of their decisions is subject to allied assessment.

On the type of ‘defence planning’ in NATO

During the Cold War, ‘threat-based’ planning predominated. In the 1990s, planning began to shift from being based solely on the Russian threat to a more generic, capabilities-based approach.

In the early 20th century, with the specification of the ‘New Defence Planning Procedures’ (SG(2004)0828) a significant revision of the process was completed. The ‘capability-based planning’ approach placed greater emphasis on identifying military requirements based on agreed intelligence assessments (MC 161),⁷² operational analysis, and taking into account the provisions of the ‘Political Guidance’. Despite this primary focus, a small amount of ‘threat-based planning’ was allowed, to validate the results of the requirements identification derived from the LoA.

⁷⁰ Schmaglowski, D. (2018). The NATO Defence Planning Process (NDPP): An Overview. [Accessed on 21 July 2021]. Available at: https://www.dsp.dla.mil/Portals/26/Documents/Publications/Conferences/2018/2018%20International%20Standardization%20Workshop/20181030--Item3-NDPPOverview-IntlStdznWorkshop_Schmaglowski.pdf?ver=2018-11-06-151624-033

⁷¹ Wojciech, L. (2018). New Cycle of the NATO Defence Planning Process (NDPP). *Polish Institute of International Affairs*, num. 168, 2.

⁷² Fleischer, P. (2015). NATO Defence Planning Process. Implications for Defence Posture. *Securitología*, pp. 103-14.

Prior to the Wales Summit in 2014, two key issues for allied planning were identified: lengthening the time horizon, and the need to link with ongoing EU planning initiatives.⁷³

The current NDPP specification dates from 2016. PO(2016)0655 consolidated the primacy and ownership of the political authorities over the generality of the process. The aim was to adapt it even more to the requirements of the environment, following the events in Ukraine.⁷⁴

PO(2016)0655 classifies the process as ‘*threat/risk informed, capability-based*’. That is, it is informed by threats and risks, but based on capabilities. This approach is very flexible, it does not require an explicit declaration of a potential opponent as a threat, which does not exclude that a ‘threat-based planning’ approach can be adopted in the inference of capability requirements, if there is sufficient knowledge of the threats or risks.⁷⁵

The PG specifies aspects of the different planning scenarios to be considered in order to infer minimum capability requirements. On the other hand, some publications provide insight into the Alliance’s understanding of the future operating environment, the importance given to geography, and guidelines for planning scenarios.

‘Two key concepts inform the new military strategy: theatre-wide approach and horizontal escalation, with both largely tying into NATO’s overarching strategy of deterrence by punishment. The theatre-wide approach is NATO’s military answer to the complexity of NATO geography: it is to say that NATO will not divide its planning and forces regionally but instead insists on having an integrated and seamless approach to defence and deterrence in the Euro-Atlantic area. NATO initially responded to Russia by drawing up Graduated Response Plans (GRP) that were geographically compartmentalized, covering segments of NATO’s frontier from the North Atlantic through Central Europe to the eastern Mediterranean.’⁷⁶

In the second step of the NDPP, military authorities check that the set of ‘Minimum Capability Requirements’ (MCR) is sufficient for a set of generic scenarios (‘stress-testing’) on which abduction is applied, and they cross-check that the MCR is also sufficient for the execution of existing operational plans, the advanced plans, in any of their categories (‘Standing Defence Plan’, ‘Contingency Plan’, ‘Generic Con-

73 Mattelaer, A. (2014). Preparing NATO for the Next Defence-Planning Cycle. *RUSI Journal*. 159.3, 30–35 .

74 Fleischer, P. *Op cit.*, p. III.

75 Frühling, S. (2014). *Op. cit.*, p. 32.

76 Rynning, S. (2021). Deterrence Rediscovered: NATO and Russia. En *Deterrence in the 21st Century—Insights from Theory and Practice*. *Netherlands Annual Review of Military Studies*. Pp. 30-43.

tingency Plan', 'Graduated Response Plan').⁷⁷ In some of these scenarios, it can be anticipated that geography is a key factor to the extent that it is considered in such plans, e.g. in 'Graduated Response Plans' (GRP),^{78 79} where checking the adequacy of the MCR involves deductive reasoning.

From the above, it is concluded that the way requirements are inferred is informed by varying degrees of knowledge of threats, risks and challenges, and that the 2016 NDPP specification corresponds to the basic type of portfolio planning.

On the one hand, those involved in the process use scenarios to verify that capabilities are sufficient at present. But on the other hand, they also need to project into the future, to mitigate risks. Present and future scenarios are used to infer requirements **for the** development of military capabilities and, possibly, to consider options for designing one's own force structure. What are the future scenarios for NATO?

On possible future planning scenarios

The future can only be hypothesised. In considering scenarios for the NDPP, what is published on the development of the 'NATO Warfighting Capstone Concept (NWC-C)'⁸⁰ could be relevant. The NWCC is one of the concepts derived from the 'NATO Military Strategy' approved in 2019.⁸¹

Geography will continue to matter, although activity in some domains, such as cyber and outer space, transcends it.

Combinations of different levels of activity in the operational domains will be considered, depending on the intensity of the scenario (low, medium or high), with fuzzy boundaries⁸² between cooperation and competition. These scenarios will correspond to 'shaping', 'contesting' and 'warfighting' contexts, depending on the form and intensity of the opponent's actions in the different domains of operations. This will also require overcoming the opponent intellectually, with creativity and innovative leader-

77 UK MoD (2019). *Allied Joint Doctrine for the Planning of Operations (UK Joint Doctrine)*, Allied Joint Publication. 5(A), 200, pp. 1-5;1-7.

78 Hodges, B. and Bugajski, J. (2020). One Flank, One Threat - A Strategy for NATO's Eastern Flank. *Center for European Policy Analysis*, 90, pp. 40;46;60.

79 «NATO puts defence plan for Poland, Baltics into action, officials say». [Accessed on 10 March 2021]. Available at: <https://www.reuters.com/article/us-nato-baltics-turkey-idUSKBN24320B>

80 Sweijs, T., et al. (2020). The NATO Warfighting Capstone Concept: Key Insights from the Global Expert Symposium Summer 2020. *The Hague Centre for Strategic Studies*. 12.

81 Rynning, S. (2021). *Op. cit.*, pp. 40-41.

82 On the operating environment of 'fuzzy boundaries', see EMAD (2017). *Concepto de empleo de las Fuerzas Armadas (Cambio 1)*, p. ii.

ship, in order to have the right skills in the future and to overcome the opponent, for example, also in the cognitive sphere.

In low-intensity ('shape') scenarios, war in the traditional sense would be less likely than cognitive warfare. It is possible to envisage scenarios in which it is merely a matter of shaping the environment in a way that is favourable to one's own interests, in collaboration with other actors. For example, with defence diplomacy activities in areas of mutual interest, and without significant interference from third parties, who are sought to be excluded from possible competition.

In the second category of scenarios ('contest'), it would not be easy to attribute actions in a Manichean way to competitors; while they oppose each other in certain domains of operations, they may collaborate in others. Such a scenario could be characterised by intense competitive activity in some of the domains while it remains low in others.

The third type of operational context ('warfighting') may correspond to war scenarios in the traditional sense, registering activity in some or all domains of operations, in a cross-cutting manner causing combat casualties, in a «future war that does not yet exist» mode. Among the keys to the necessary adaptation is «the imperative to seamlessly integrate the military, but also other non-military instruments in the pursuit of influence».⁸³

In conclusion, the political use of the military instrument is and will be even more varied. The military can be used variably in multiple new domains, depending on operational contexts, in an operational environment of blurred boundaries between cooperation and competition. This can certainly be relevant for Military Strategy, but perhaps also for National Security Strategy (NSS), affecting 'defence policy' and 'defence planning', as it brings us closer to strategic thinking about in which contexts it will be necessary to operate, for what ('ends'), how ('ways') and with what means ('means'), and to the possible emergence of new operational concepts.

Conclusions

The main purpose of this article was to identify the basic problem facing 'defence planning', to understand its political and strategic context, and to do so from a public policy perspective. In addition, it was intended to provide a basic taxonomy of types of planning, and to identify the most relevant aspects of the planning process in NATO, including some relevant strategic concepts, which will guide future planning scenarios.

The basic problem facing 'defence planning' is to anticipate and procure the capabilities and force structure necessary to provide security, a 'pure public interest' to

83 Swijs, T. (2020). *Op. cit.*, p. 12.

protect, in the face of future threats, risks and challenges. It is a process that fits into the political and strategic context.

‘Defence policy’ is one of the protective public policies that seek to provide security. Different actors, civilian and military, are involved in the formulation of ‘defence policy’ and its implementation.

‘Defence planning’ is conceived as one of the tasks of ‘defence policy’, which in turn plays a role in accordance with what is specified in the ‘National Security Strategy (NSS)’, the next higher political-strategic contextual element.

A sound planning process must deliver the results desired by policy-makers, and must be coherently integrated with the products resulting from strategy development (NSS, Military Strategy, strategic concepts). The NSS also affects other public policies, and takes into account internal and external environmental conditions.

‘Defence planning’ addresses the future risk identified in different scenarios through a methodical process, which should ensure that the political ‘level of ambition’ (LoA) is met. Such planning seeks to define the means by which the state can effectively defend itself against the threats and challenges of the future operating environment.

In this planning, the formulation and implementation of part of ‘defence policy’ come together. The political definition of the LoA needs to be sufficiently clear so that it can be translated into core capability requirements for optimal force design. A total separation between the actors involved (civilian and military) in formulation and those who implement it is not desirable.

One of the challenges of this planning is to define the optimal military force organisation for the future. The starting point is to analyse a current structure and to work towards a long-term force goal, maintaining the effectiveness of a structure over time, which at the same time has to be sustainable, according to forecasts of the availability of financial resources.

Key to the planning method is coherence, from top to bottom and vice versa. A correct ‘top-down’ integration must be achieved with what the NSS establishes as objectives for the military instrument, and with the objectives and forms of action that are detailed for this instrument in the Military Strategy and in the strategic concepts. This process must also allow for the flexible incorporation of technological innovations and market opportunities, respecting ‘bottom-up’ coherence from operational to strategic concepts.

The planning process formulates the necessary means to respond to planning scenarios, real or hypothetical, near or distant in time. It reviews current capabilities, and tries to decide in advance how to improve the military instrument of the future.

Scenarios are considered for the short, medium and long term. Planning that only considers scenarios that may occur today can hardly aspire to have an armed forces prepared for the future.

The impact of decisions made on force structure varies according to the characteristics of the planning scenarios, according to the concreteness and knowledge of the threats, and according to the space-time considered.

The specification of scenarios is important as an indicator of what planning is intended to achieve. The further out in time such scenarios are envisaged, and the less is known about the characteristics of the threat, the greater the impact on force structure and force design decisions, and therefore the greater the prudence required.

Depending on the time space of scenarios and knowledge about threats, the certainty provided by different ways of thinking, through which requirements for the necessary capabilities and forces are inferred, varies. The most commonly used forms of inferential logic are deduction and abduction, although in some cases induction is also used.

Four basic types of defence planning are identified which are differentiated according to certain characteristics: a) whether or not there is an explicit declaration of an adversary as a threat; the level of knowledge about them (capabilities and intentions) and the level of certainty about the risks (probability and impact); b) variety and possible concurrence of contingencies considered as risks or threats; c) predominant type of logical inferences; d) use made of scenario-based planning scenarios (number and variety of types, the importance of geography and time horizon). They are as follows:

- ‘Mobilisation planning’ in anticipation of a possible future threat.
- ‘Threat-based planning’ (or ‘net assessment planning’), in which deduction takes precedence.
- ‘Portfolio planning’, applicable for cases of concurrence of several known risks.
- ‘Capability-based planning’ (or ‘task-based planning’) applies to an environment in which the unknown is more important than the possible adversary and its behaviour, and uncertainty is at its highest about the possible threats or risks. Abduction takes precedence.

As an example of the above, the ‘NATO Defence Planning Process’ (NDPP) is identified as part of the Allied ‘defence policy’ and has the Strategic Concept as its overarching reference. The aim is to ensure the coherence of the process with its context.

It is essentially a methodical process, structured in five steps, cyclically renewed every four years, by which allies decide on the conventional capabilities and forces needed in national inventories in the short, medium and long term. It includes analysis of progress on results every two years, including country reports.

Although the NDPP imposes requirements on national planning for conventional capabilities, countries retain sovereignty in deciding how to formulate their planning and implement it over time.

Allied political and military authorities interact, with the former clearly predominating. These establish a political ‘level of ambition’ in a sufficiently clear manner for military authorities to translate it into military capabilities and forces.

The NDPP is specified as a ‘threat/risk informed, capability-based’ process; it is a case of ‘portfolio’ planning.

NATO 2030 envisages strengthening and adapting the military instrument to respond to future threats and risks. The military should be able to be used in a more varied way, and with greater integration with civilian capabilities to strengthen countries’ resilience.

According to the ‘NATO Warfighting Capstone Concept’ (NWCC), derived from the Military Strategy, combinations of different levels of activity will be considered in multiple domains of operations (some newly conceived), according to low, medium or high intensity scenarios, with blurred boundaries between cooperation and competition. These will be scenarios in ‘shaping’, ‘contesting’ and ‘warfighting’ contexts depending on the form and intensity of the opponent’s actions in the different domains of operations. From these contexts and scenarios, different capability development requirements will be inferred.

Corolario: Who in the past may have been your mortal enemy, today may be your cooperative partner in some matters, even if their interests and values may compete with yours in other areas. In the future, as long as interests and values coincide, cooperation can continue; as long as they differ, competition will flourish. Cooperation and competition can occur simultaneously in different domains, a balanced posture of deterrence and defence is essential to manage risks so that they do not turn into threats and conflicts.

Bibliography

- Aguilar Villanueva, L.F. (1992). *El estudio de las políticas públicas. Antología de Política Pública*.
- (1992). La hechura de las políticas. Colección Antologías de Política Pública. Segunda Antología. Mexico. <https://doi.org/10.2307/j.ctvnp0jsn.3>
- Anderson, J.E. (2011). *Public Policymaking: An Introduction*, Texas A&M University, 7th ed. Boston, Suzanne Jeans.
- Arteaga Martín, F. (2013). La defensa que viene. Criterios para la reestructuración de la defensa en España - Elcano. *Real Instituto Elcano*, p. 32. [Accessed 13 May 2020]. Available at: http://www.realinstitutoelcano.org/wps/portal/rielcano_es/contenido?WCM_GLOBAL_CONTEXT=/elcano/elcano_es/zonas_es/elcano-policy-paper-la-defensa-que-viene
- Arteaga Martín, F. and Fojón Lagoa, J.E. (2007). *El planeamiento de la política de defensa y seguridad en España*, IUGM. Madrid. [Accessed 11 May 2020]. Available at: www.iugm.es
- Aznar Fernández-Montesinos, F. (2021). El espacio exterior, una nueva dimensión de la seguridad. *IEEE*, 10/2021, 174–87.

- Bartlett, H. and Somes, T. (1995). The Art of Strategy and Force Planning. *Naval War College Review*, 48.2, 9.
- Battaglino, J. (2010). La política militar de Alfonsín: la implementación del control civil en un contexto desfavorable. *Discutir Alfonsín*, 161–84.
- Brattberg, E. and Valášek, T. (2019). *EU Defense Cooperation: Progress Amid Transatlantic Concerns*, Carnegie.
- Bruneau, T.C. (2013). *The Routledge Handbook of Civil-Military Relations*. London, Routledge.
- Colom Piella, G. (2011). El proceso de transformación militar en España (2004-2011). *UNISCI*, 117–31. [Accessed 22 September 2020]. Available at: www.nato.int/docu/stanag
- (2020). From Transformation to Adaptation: Analysing the Spanish Military Change (2004–2020). *Defence Studies*. Routledge, 30 November, p. 20. Available at: <https://doi.org/10.1080/14702436.2020.1851604>
- Congreso (2018). *Diario de sesiones del Congreso de Diputados Comisión de Defensa de 16 de abril de 2018. Comparecencia Del JEMAD GE Alejandro*. Available at: http://www.congreso.es/public_oficiales/L12/CONG/DS/CO/DSCD-12-CO-482.PDF
- Dewar, J.A. (2002). *Assumption-Based Planning: A Tool for Reducing Avoidable Surprises*, *RAND Studies in Policy Analysis*. Cambridge, Cambridge University Press. Available at: <https://doi.org/DOI:10.1017/CBO9780511606472>
- Dewar, J.A., et al. (1993). *Assumption-Based Planning. A Planning Tool for Very Uncertain Times*. Rand Corporation.
- Domecq, J. (2018). Coherence and Focus on Capability Priorities: Why EDA's Role in CARD, PESCO and EDF Matters. *Real Instituto Elcano*, p. 6. [Accessed 21 June 2020]. Available at: http://www.realinstitutoelcano.org/wps/portal/rielcano_es/contenido?WCM_GLOBAL_CONTEXT=/elcano/elcano_es/zonas_es/europa/ari54-2018-domecq-coherence-focus-capability-priorities-why-eda-role-card-pesco-edf-matters
- Dunn, W.N. (2017). *Public Policy Analysis: An Integrated Approach*. Routledge. [Accessed 3 December 2020]. Available at: <https://ilib.eu/book/4974869/6175bc>
- EMAD (2017). *Concepto de empleo de las Fuerzas Armadas (Cambio 1)*.
- (2018). PDC-01(A) Doctrina para el empleo de las Fuerzas Armadas. Publicaciones del Ministerio de Defensa.
- Fernández-Palacios, M. (2021). Una nueva Alianza para unos nuevos tiempos. *Revista Española de Defensa*, Jul-Ago, 12–13.
- Fiott, D., et al. (2020). *The CSDP in 2020*. Bruselas, EU ISS. Available at: <https://doi.org/10.2815/76429>

- Fleischer, P. (2015). NATO Defence Planning Process. Implications for Defence Posture. *Securitología*, pp. 103-114. [Accessed 17 May 2020]. Available at: <https://www.ceeol.com/search/article-detail?id=561946>
- Frank, L. (2020). New Times for Military Professionalism: Rethinking Core Competencies and Dynamic Capabilities. In *Rethinking Military Professionalism for the Changing Armed Forces*, pp. 63-82. Available at: https://doi.org/10.1007/978-3-030-45570-5_5
- Frischknecht, F., et al. (1994). *Lógica, teoría y práctica de la estrategia. Escuela de Guerra Naval*. Buenos Aires.
- Frühling, S. (2014). *Defence Planning and Uncertainty. Preparing for the next Asia-Pacific War*. Routledge.
- (2007). *Managing Strategic Risk : Four Ideal Defence Planning Concepts in Theory and Practice*. Australian National University. Australian Defence University.
- Galeotti, M. (2015). Hybrid War and Little Green Men: How It Works, and How It Doesn't. *E-International Relations*, p. 5. [Accessed 13 June 2021]. Available at: <https://www.e-ir.info/2015/04/16/hybrid-war-and-little-green-men-how-it-works-and-how-it-doesnt/>
- Garbers, F., et al. (2020). *Performance Management in Defence Organisations*. NATO STO, CCCXXIII. Available at: www.sto.nato.int
- Gómez Arias, R.D. (2012). Management of Public Policies: Operational Aspects. *Rev. Fac. Nac. Salud Pública*, 223-36. [Accessed 18 November 2020]. Available at: https://www.researchgate.net/publication/260772477_Management_of_public_policies_operational_aspects
- Gray, C.S. (2014). *Strategy and Defence Planning : Meeting the Challenge of Uncertainty*. Oxford University Press.
- Grenda, B. (2018). Increasing Operational Capabilities of Nato in the Face of Modern Challenges and Threats. *Security and Defence Quarterly*, 20.3, 3-17. Available at: <https://doi.org/10.5604/01.3001.0012.5150>
- Habermas, J. (1992). *Conocimiento e Interés*.
- Heinrich, B. and Mölling, C. (2020). Germany's Role in NATO's Nuclear Sharing. *DGAP POLICY BRIEF*, 4, 8. [Accessed 12 June 2021]. Available at: <https://dgap.org/en/research/publications/germanys-role-natos-nuclear-sharing>
- Hodges, B. and Bugajski, J. (2020). *One Flank , One Threat - A Strategy for NATO's Eastern Flank*, Center for European Policy Analysis. Available at: <https://www.cepa.org/oneflank-onethreat-onepresence>
- Hogwood, B.W. and Lewis, A.G. (1984). *Policy Analysis for the Real World*. Oxford, Oxford University Press.

- Howard, M. (1962). The Uses and Abuses of Military History. *Journal of the Royal United Services Institution*, 107.165, 4–10.
- Huntington, S.P. (1961). The Common Defense: Strategic Programs in National Politics. *Columbia University Press*. Available at: <https://doi.org/10.7312/hunt93234>
- Jordán, J. (2018). Una reinterpretación de la crisis del islote Perejil desde la perspectiva de la amenaza híbrida. *Revista General de Marina*, 274. Junio 2018, 941–52.
- Kaplan, R.D. (2018). *La venganza de la geografía: cómo los mapas condicionan el destino de las naciones*. Barcelona, RBA.
- Kent, G.A. (1989). *A Framework for Defense Planning, RAND's National Defense Research Institute*. RAND Corporation PP - Santa Monica, CA. Available at: <https://www.rand.org/pubs/reports/R3721.html>
- Larson, E.V. (2019). *Force Planning Scenarios, 1945–2016, Rand Corporation*. Santa Monica CA, Library of Congress Catalogue. Available at: https://www.rand.org/pubs/research_reports/RR217321.html
- Lindley-French, J. (2018). Adapting NATO to an Unpredictable and Fast-Changing World. *Romanian Military Thinking*, 1–2, 226–31.
- Lloyd, R.M., et al. (1990). Fundamentals of Force Planning. Vol 1. Concepts. *Naval War College Press Newport, RI*, II.008, 453.
- Lorenz, W. (2018). New Cycle of the NATO Defence Planning Process (NDPP). *Polish Institute of International Affairs*, 168, 2.
- Mattelaer, A. (2014). Preparing NATO for the Next Defence-Planning Cycle. *RUSI Journal*, 159.3, 30–35. Available at: <https://doi.org/10.1080/03071847.2014.927995>
- Mauro, F. (2019). *EU Defence: The White Book Implementation Process*. EU Policy Department for External Relations. [Accessed: 17 May 2020]. Available at: <http://www.europarl.europa.eu/thinktank/en/home.html>
- (2018). *EU Defence: The White Book Implementation Process*. EU Policy Department for External Relations. Available at: <https://doi.org/10.2861/146500>
- Millet, A.R. and Murray, W. (2007). *Military Innovation in the Interwar Period*. Cambridge, UK, Cambridge University Press.
- NATO (2020). *NATO 2030: United for a New Era*.
- Olmeda, J.A. (2013). Escape from Huntington's Labyrinth. Civil-Military Relations and Comparative Politics. In *The Routledge Handbook of Civil–Military Relations*, pp. 61–76
- Olson, M. (1971). *The Logic of Collective Action: Public Goods and the Theory of Groups*, *Harvard University Press*. Harvard University Press. [Accessed: 3 December 2020]. Available at: <https://ilib.eu/book/821981/b35771>

- Perrault, C. (1657). Petit Chaperon Rouge. In *Histoires, Ou Contes Du Temps Passé, Avec Des Moralitez*. Paris, BNF/ Bibliothèque nationale de France. Pp. 47-56. Available at: gallica.bnf.fr
- Pressman, J.L. and Wildavsky, A. (1984). *Implementation : How Great Expectations in Washington Are Dashed in Oakland*, University of California Press. Berkeley, Calif., University of California Press.
- Rynning, S. (2021). Deterrence Rediscovered: NATO and Russia. In *Deterrence in the 21st Century—Insights from Theory and Practice Century*. Pp. 30-43.
- Samuelson, P.A. (1954). The Pure Theory of Public Expenditure. *The Review of Economics and Statistics*, 36.4, 387. Available at: <https://doi.org/10.2307/1925895>
- Schmaglowski, D. (2018). «The NATO Defence Planning Process (NDPP): An Overview. Available at: [https://www.dsp.dla.mil/Portals/26/Documents/Publications/Conferences/2018/2018 International Standardization Workshop/20181030--Item3-NDPPOverview-IntlStdznWorkshop_Schmaglowski.pdf?ver=2018-11-06-151624-033](https://www.dsp.dla.mil/Portals/26/Documents/Publications/Conferences/2018/2018%20International%20Standardization%20Workshop/20181030--Item3-NDPPOverview-IntlStdznWorkshop_Schmaglowski.pdf?ver=2018-11-06-151624-033)
- Simon, H.A. (1997). *Models of Bounded Rationality*. Volume 3. Cambridge, MIT Press.
- Sweijts, T., et al. (2020). *The NATO Warfighting Capstone Concept: Key Insights from the Global Expert Symposium Summer 2020*. The Hague Centre for Strategic Studies.
- Tagarev, T. (2006). The Art of Shaping Defense Policy: Scope, Componente, Relationships (but No Algorithms). *The Quarterly Journal*, Spring-Summer, 15-36. Available at: https://www.files.ethz.ch/isn/24407/QJ_v51_2006.pdf
- UK MoD (2019). *Allied Joint Doctrine for the Planning of Operations (UK Joint Doctrine)*. Allied Joint Publication, 5(A). Available at: <https://www.gov.uk/government/publications/allied-joint-publication-ajp-05a-allied-joint-doctrine-for-the-planning-of-operations>
- Yarger, H.R. (2020). The Strategic Appraisal: The Key to Effective Strategy. In *Volume I: Theory of War and Strategy*. Bartholomees J. Boone, Strategic Studies Institute, US Army War College. Pp. 53-66. Available at: https://dde.carlisle.army.mil/LLL/DSC/readings/L10_yarger.pdf

Article received: 8 September 2021.

Article accepted: 6 October 2021.
