



## The Brigade Deep Battle

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**Deep operations** are operations conducted against forces or resources not engaged in close operations. They expand the battle area in time and space, help to shape the close battle, make it difficult for the enemy to concentrate combat power without loss, and diminish the coherence and tempo of his operations. Deep operations are those operations conducted at long range and over a protracted timescale, against enemy forces or resources not currently engaged in close operations. They may be decisive operations, but in general, they will be shaping.

Deep, close and rear operations will occur simultaneously and should be complementary to one another and the overall plan.

Deep operations are normally conducted at Division level and above for this level of formation has the resources to conduct close and deep operations simultaneously. Deep operations may be a specific line of operation within a campaign.

NATO ATP-3.2.1 Allied Land Tactics



Editor's note: This article is an adaptation of the article "De Brigade Diepe Operaties" by the same author that was published in Militaire Spectator, Vol. 187, 2018-2.

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operations. My personal experience as an artillery battalion Commander is that brigades spend a large amount of time and effort on the tasking and positioning of the battle groups and spend little time on developing a deep operation. An important reason for this focus is that the Brigade Commander seeks the decisive decision during the close operation. North Atlantic Treaty Organization (NATO) supports this approach. It states that deep operations are normally conducted at the Division level and above because this level of formation has the resources to conduct close and deep operations simultaneously. However, should a brigade focus primarily on close operations? Because of potential hybrid threats in the context of which the initiator avoids frontal assaults and carries out actions from a great distance, this question is becoming increasingly pertinent concerning land operations. It is also a question that is arising with increasing frequency because of the greater range of options made available to a Brigade Commander by advanced sensors, weapon systems, and types of ammunition. I would therefore like to contribute to the current discussion regarding the brigade deep fight.

In his role of special staff officer for Joint Fire Support, the Artillery Battalion Commander advises the Brigade Commander on the use of his organic Fire support and the Fire support assigned to the brigade, as is the practice in most NATO countries. He positions the Fire support assets in such a way that the brigade can operate as effectively as possible in deep, close, and rear operations. Because of the 'long arm' of the artillery, the artillery battalion Commander often acts as the *ambassador* of the deep fight. My experiences during brigade-led exercises taught me how a deep operation, with the use of available enablers, significantly contributes to mission success.

I wrote this article to raise the level of knowledge among Brigade Commanders and planners regarding the brigade deep battle. I want to convince them that an effective deep fight creates conditions for success in close operation. The article is also of interest to others in that it provides insight into how a brigade should handle a deep fight. The focus is on the operational theme of warfighting, and although doctrine recognizes both a physical and a psychological dimension in deep operations, I limit myself in this article to the physical one.

In the first part of the article, I present several generalities regarding deep operations before discussing the emergence and historical development of such operations. I then describe how a brigade can effectively plan and execute the deep operation. This subsequent part is largely based on my own experiences and is augmented with U.S. best practices. This is because, within NATO, the Americans have for many years led the way in the development and refinement of military concepts. The focus of the article is on designing a deep operation. The targeting process is not described in detail.

#### Generalities

When planning an operation, the brigade uses the NATO Tactical Planning for Land Forces (APP-28). This is a rational estimate that the Commander and his staff use to assess, step by step, different possible solutions and ultimately make a decision. According to the Netherlands' doctrine, during a planning process, a Commander and his staff can use a planning tool to organize the brigade's combat power. Indeed, doctrine recognizes different frameworks that may be geographically, functionally, or effect-oriented. This article focuses on a linear and contiguous geographic framework, which is referred to as the geographical framework. A Brigade Commander uses geographic coordination measures to align maneuver, airspace, Fire support, mobility, logistics, and other aspects of an operation. In a combat context, a brigade focuses mainly on a geographic framework. Within a geographical framework, a Commander and his staff distinguish between deep, close and rear operations. These operations may take place either successively or simultaneously. A Commander must distribute his combat power well. In a well-considered way, he must specify when and by what means he intends to engage his adversary, who is spread across the area assigned to the Commander. Unfortunately, I know from personal experience that in some cases, the deep operation is limited to specifying positions for the brigade reconnaissance unit to make early warning for the brigade possible. The brigade, therefore, does not use the opportunity to deliver a major blow to the adversary in-depth and does not sufficiently exploit the power of the Fire support.

The security situation at the edges of the NATO treaty area in Europe has been changing rapidly in recent years. NATO units, including those of the Netherlands Armed Forces, must take account of an adversary that is capable of rapidly deploying a large conventional force. Moreover, such an adversary uses hybrid methods of warfare. To have a chance of success in a conflict with such an adversary, brigades should do everything in their power to ensure that the adversary is in a degraded state by the time it makes contact with the brigades' battle groups. A brigade must therefore already engage the adversary in the depths of enemy territory to disrupt and delay the adversary. This will prevent the adversary from conducting an all-out attack on the brigade's maneuver units in the Forward Edge of the Battlefield Area (FEBA) at full fighting strength. This aim underscores the urgency of engaging in combat in depth. Our modern artillery plays a key role in this regard.

According to Netherlands' doctrine, each organizational level has a deep operation. I would qualify that statement by asserting that each level with command and control, maneuver, Fire support, and intelligence capabilities can conduct its deep operation. A brigade has these capabilities. The brigade staff has to align these capabilities to create synergy such that the ultimate effect is greater than the sum of its parts. This is how the brigade conducts combined arms warfare, a unique characteristic of a brigade. Doctrine discusses depth in terms of the expansion of an operation in time and space based on aims, means available, and the objectives to be achieved. Today's deep operation can properly be considered to be tomorrow's close operation. This is simply because enemy units that are positioned in the rear area may appear at the front the following day, engaging the adversary in-depth forces the Commander to think beyond the close operation. He must look for opportunities to attack the adversary in his rear area to deprive him of the will to fight.

#### 1. The evolution of the deep operation

The deep battle has its origins in a Russian theory of warfare. This theory was based on experiences at the Western Front during the First World War. Russian experiences during the war against Japan at the beginning of the 20th century also contributed to the development of the theory. Following the First World War, Russia looked for ways to break the deadlock of trench warfare. The adversary was always able to use reserves in-depth to reinforce a threatened sector in time, even before the attacker was able to exploit penetrations. The Russian military theorist Mikhail Tukhachevsky (1893–1937) believed that offensive-oriented units could break

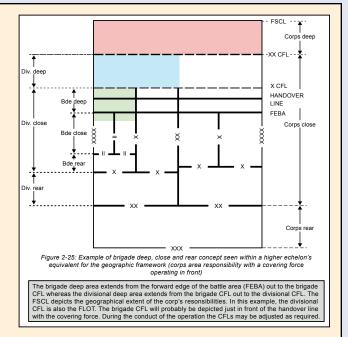
#### What is geographic depth?

Deep operations are variable and are not bound to fixed, assigned distances. Operations conducted against an unbound enemy beyond the FEBA, the front line, can be classified as deep operations. In a theoretical sense, technological possibilities, the range of sensors, Command, Control, Communications, Computers and Intelligence (C4I), and weapon systems determine the boundaries of a deep operation.

Example of the brigade deep, close and rear concept seen within a higher echelon's equivalent for the geographical framework (Handbook Tactical Operations, 2-70).

this deadlock. The emphasis in this regard was mainly on maneuvering. Tukhachevsky introduced the idea of the deep battle to break through the enemy's first line of defense. His friend Vladimir Triandafillov further developed the idea of the deep battle during the interwar period. Triandafillov introduced the term 'shock armies' for units that were capable of breaking in and subsequently cutting through the enemy's line of defense. Georgii Isserson later translated the deep battle idea into a concept for deep operations. He focused primarily on time and space factors in-depth and the organization of units in echelons. Isserson became convinced that it was technological developments in particular that made deep operations possible. He referred in this regard to innovations, such as the use of airborne troops in combination with mechanized operations, long-range weapon systems, including air forces, which underwent considerable development in the interwar period, more accurate artillery, and the gathering of intelligence far beyond the front line. In short, a deep operation is a dynamic concept and is directly related to technology.

During the Cold War, the Soviet Union continued to take deep operations as the starting point. The Warsaw Pact, to which the Soviet Union was a party, formed various operational maneuver groups. These attack formations, meant to overwhelm, were echeloned in depth. The enormous mass of tanks, artillery, and mechanized infantry, all of which could advance in-depth, offset NATO's



qualitative overmatch. The objective of a Warsaw Pact attack formation was to break through the front line and achieve a decisive blow to advance deep into Europe. NATO would respond to such an offensive by conducting delaying actions to give U.S. units the time required to relocate from the U.S. mainland to the European theatre of operations. This was evidenced by NATO's annual Reforger exercises. If NATO's conventional response to the 'red hordes' proved inadequate, the Alliance could use tactical nuclear weapons. Fortunately, such an offensive and the response to it never materialized. The result would undoubtedly have been a very large-scale conflict.

Following the failure of Vietnam, the U.S. military had to reinvent itself in the 1970s. In Europe, more specifically in Germany, the U.S. military saw the Warsaw Pact's tremendous quantitative overmatch on the other side of the Iron Curtain. How could you defend yourself against such large formations? U.S. military experts were forced to study different views on warfare in more detail. They did not limit themselves to contemporary views. They also focused on the lessons learned from World War I. They thoroughly examined what England, Germany, and Russia did with these lessons learned. The doctrines that the German and Soviet militaries used in the interwar period were studied in detail. Moreover, the Americans paid close attention to operations of the Israel Defense Forces during the Six-Day War (1967) and the Yom Kippur War (1973).

The Americans were impressed by Israel, a country with limited strategic depth that had nevertheless managed, twice within a decade, to defeat forces that were vastly superior in number. Neighboring Egypt, Syria, and Jordan, supported by other countries in the Middle East, had twice attempted to defeat Israel militarily but had not succeeded.

Based on Israeli experiences with firepower during the Yom Kippur War and to establish a conventional response to a large-scale Soviet attack, the Americans developed the concept of Active Defense in the 1970s and 1980s. The central idea was extending the battlefield, the purpose of which was to yield ground slowly to gain time for the preparation and execution of a NATO counterattack. This doctrine was heavily criticized, as the battlefield would be extended in a backward rather than a forward direction. In contrast to Tukhachevsky's theory, the Active Defense doctrine originated from a defensive context. The development of Active Defense shifted the emphasis to firepower rather than the maneuver.



The Americans continued to think about how they could turn defensive-oriented Active Defense into a general operational concept. In this connection, the use of depth was important to them. The idea of extending the battlefield ultimately resulted, in the 1980s, in the American AirLand Battle (ALB) concept, the motto of which was 'Fight outnumbered and win.' The key basic principles of the ALB concept were initiative, depth, flexibility, decentralized authorizations, and synchronization. For the first time, a deep operation and a forward extension of the battlefield were envisioned. The concept provided the option of firing in-depth on the second echelon to create favorable conditions for the close operation. The ALB concept focused primarily on the army corps level. This level provided the fundamental headquarters. The Divisions would engage in combat, while the army corps, with organic (rocket) artillery and in coordination with airpower, would conduct the deep operation.

There was a major role in the ALB concept for Close Air Support (CAS) and Battlefield Air Interdiction (BAI), but the air force was never in favor of airpower in the role of 'flying artillery'. The air force's priority was achieving air superiority. The next priority was attacking ground targets of strategic significance that were located far beyond the battlefield, preferably through BAI. This situation changed, however. The creation of a Tactical Air Command resulted in a functional relationship with the land domain. The air force now contributed to both deep and close operations. The U.S. specifically developed the A-10 Warthog fixed-wing aircraft and the Apache attack helicopter for these tasks. Forward Air Controllers (FACs) to guide CAS and Fire Support Coordination Measures, such as the Fire Support Coordination Line, were used to achieve simultaneity and coordination during an operation. The introduction of the Multiple Launch Rocket System (MLRS) made it possible for the army corps to independently engage targets at a great distance. The MLRS launched the Army Tactical Missile System, which has a range of 300 kilometers.

In the 1980s, the Follow-On Forces Attack (FOFA) strategy gave NATO a variant of the ALB concept. NATO units were to stop and cause as much damage as possible using delay, disrupt, and destroy operation, in-depth to the Warsaw Pact's second echelon and to not be overwhelmed by this second echelon if the Warsaw Pact's first echelon was stuck or had been destroyed. According to the experts, the destruction of these units using the aforementioned destroy operations was not feasible. As part of NATO's deep operation, this form of interdiction would take place simultaneously with the elimination of the first echelon during the close operation. The most important instruments for NATO's deep attack were the air force, artillery, Special Forces, electronic warfare, and deception.

There are historical reasons for the scant attention paid in the Netherlands to the deep battle at the brigade level. One of them is practical in nature. The number of training areas in which deep-operation exercises can be conducted is limited in Europe. Consequently, a deep operation often remains an exercise on paper and a computer. The physical effects of such an operation are therefore not visible. There is another important reason for the limited interest in deep operations, and something can be done about it. When the Royal Netherlands Army still had an army corps with Divisions, they were the levels that conducted deep operations. The brigades focused on the Division's close operations and did not have the

**Simultaneity** is the ability to perform activities simultaneously and in an integrated way in deep, close and rear operations. Linked to the right timing, simultaneity results in a situation in which the effects are greater than they would be if the activities were performed in isolation. Simultaneous operations significantly degrade an adversary's capabilities. They deprive an adversary of his freedom of action, reduce his flexibility and staying power, and frustrate his plans and coordination. Furthermore, they impair his decision-making process. They, therefore, create an unsolvable dilemma for the enemy Commander. He must respond to multiple threats in the breadth and depth of his formations. The simultaneous use of combat power everywhere in the assigned area prevails over the attrition method of successive operations.

The term 'simultaneity' actually comes from the world of theatre and film, where playwrights and scriptwriters have different actions that take place simultaneously on the stage or in the film, as a result of which the actions reinforce each other.

means to operate in-depth. The primary task of the brigade's artillery battalion, at the time with a planning range of 15 kilometers, was to support the maneuver battalions. Indeed, the brigade's artillery battalion was organized for this purpose: for each maneuver battalion, there was a combat battery without further, specific capabilities to conduct deep operations at brigade level. Following the disappearance of the Dutch Army Corps in the 1990s and later also at the Division level, brigades were only moderately strengthened with means that made it possible to conduct deep operations at the brigade level.

Another development of the 1990s was the attention that the Netherlands Armed Forces started to devote to expeditionary operations, the main focus being on peace support (the Balkans) and security (Iraq and Afghanistan, for example). Although such operations certainly had a deep dimension, these deep operations were mainly limited in terms of time and circumscribed according to the objective. Moreover, these deep operations were not conducted within a Geographical Framework, as is usual in combat campaigns. These developments meant that knowledge about deep operations was never properly built up at brigade headquarters.

#### 2. The contemporary deep battle of the brigade

Although many capabilities have been centralized as a result of spending cuts, the current Dutch Brigade certainly has capabilities to conduct combined arms warfare (using an integrated approach) in operational circumstances. Situational awareness is a key condition for the successful conduct of operations. This applies in full to deep operations. Using the available sensor capabilities, such as the Brigade Reconnaissance Unit, Remotely Piloted Aerial Systems (RPAS), electronic tracking and jamming capabilities, and (weapon location) radars, a brigade can detect and identify targets that are deep in enemy territory. Directed from the sensor operations cell, a brigade

In addition to the basic principles of military operations, deep operations have the following characteristics: (1) simultaneity, (2) an integrated approach, also known as combined arms warfare, (3) accurate, reliable and current intelligence, (4) a continuous targeting process and (5) an integrated planning process.

U.S. Army, ATP3-94/2 Deep Operations, September 2016



with a sensor-to-shooter link can rapidly close the kill chain.

The artillery battalion remains the most important instrument for a brigade's deep fight because it can engage precision and area targets up to a range of 50 kilometers. The higher level in the chain of command can also temporarily and locally strengthen the organic brigade with Joint (air power, for example) and combined (MLRS, for example) enablers. Furthermore, offensive (tactical) cyber capabilities are now available to a brigade. The cyber dimension is playing an increasingly important role in deep operations in terms of both sensor capabilities and, particularly, effector capabilities. The Brigade Commander is therefore certainly capable of conducting an effective deep operation, although the close operation should never be completely dependent on the outcomes of the deep operation.

High-quality, deep-find, and strike capabilities play a crucial role in dealing with Anti-Access/Area Denial (A2/AD) weapons. These weapon systems, such as long-range ground and air defense missiles, can keep an adversary at a distance or deny access to an area. Russia has established what is referred to as A2/AD bubbles at several strategic locations, such as at Kaliningrad, the Kola Peninsula, and Crimea. From Kaliningrad alone, Russia can potentially significantly impede the deployment, supply, and/ or reinforcement of NATO troops in the Baltic states.

In a conflict with a near-peer competitor, there are usually more targets than systems for detecting and taking combat action. In such situations, Commanders must make choices. To successfully conduct a brigade deep fight, brigade planners must spend a significant part of the time on the preparation of the deep fight. They must synchronize the planning of the deep operation with the planning of close and rear operations. The Brigade Commander must provide guidelines so that the planners can formulate answers to the following questions:

- 1. How can the brigade influence the ECOA in a way that is as favorable as possible for the brigade?
- 2. How, where, when, and with what means can the brigade degrade the adversary as much as possible so that there is a

### favorable combat power ratio for the brigade during the close operation?

When developing a plan for a deep battle, the brigade planners must focus on the effects to be achieved. In this connection, a shared understanding of definitions is important because everyone involved must mean the same thing regarding an effect to be achieved. For example, the term 'to neutralize' caused a great deal of confusion during operations of the British Special Air Service (SAS) in Northern Ireland at the beginning of the 1970s. To British politicians, 'to neutralize' meant rendering IRA fighters hors de combat without killing them, whereas to the battle-hardened SAS members, 'to neutralize' meant eliminating IRA fighters. The targeting process is part of command and control and depends on accurate intelligence. This process makes it possible for the brigade to rapidly and effectively respond to opportunities that emerge or to threats that have been identified. This is done by identifying and selecting targets in the planning phase that are the most appropriate to engage. In this way, the brigade links scarce sensor capabilities to lethal and/or non-lethal force capabilities and operates in a focused and effective manner.

The land tactical targeting process is an integral part of command and control. It is the element that links design, plan, and control. By means of planning, conducting, and evaluating operations and activities, the land tactical targeting process focuses the unit's efforts on identified, selected, and prioritized targets. The land tactical targeting process is cyclical and has four phases: (1) Decide, (2) Detect and Track, (3) Deliver and (4) Assess (D3A).

C-JISTARC 01 doctrine bulletin: 'Inlichtingenondersteuning aan het TBM'

Critical capabilities that the adversary needs to complete his mission are placed on the High-Value Target List (HVTL). Engaging high-value targets takes the sting out of the adversary, as it were. During the planning process, the brigade staff develops its Courses of Action (COAs), partly based on the ECOA of which it is aware and the HVTL. This results in the High-Payoff Target List. This list includes enemy targets whose destruction will significantly contribute to the success of the brigade's COA.

In an Effects Guidance Matrix (EGM) of each high-payoff target, brigade planners then record which sensors in the identified Target Area of Interest (TAI) will perform target identification. A TAI is an area that the brigade is interested in because of the nature and number of potential targets. An EGM also specifies when and by what means the brigade must engage the target, what the desired effect must be, who will perform the Battle Damage Assessment and what criteria the brigade must use during target selection. Brigade planners must include enough redundancy in the EGM for both sensors and force capabilities because 'two is one, one is none.' For example, brigade planners must often plan ground-based Fire support as a backup to CAS in case the aircraft is re-tasked at the last minute. In broad terms, the EGM is the product of the brigade targeting process. Thorough planning, including that of the deep battle, ensures that the brigade allocates enough combat power capabilities and means to the deep fight. It must be possible for some of these means, such as RPAS and artillery, to switch flexibly between the deep and close battle. The EGM is therefore an important document that should be accorded a prominent place in the brigade order rather than be appended to an annex.

#### 3. Takeaways

The brigade must focus much more on the deep battle. The brigade staff often devotes a great deal of thought to the planning of the close operation because it is in this operation that the Commander usually seeks to decide the matter. However, it is important to bear in mind that the conditions in which the brigade conducts the close battle are often determined by the successful activities of the brigade that preceded them, that is, by the brigade's deep battle. Mission success or failure, therefore, depends to a large extent on the effort that the brigade has put into the deep battle.

The brigade needs to resume conducting combined arms warfare, and the brigade deep operation is simply part of such warfare. In operational circumstances, the Brigade Commander has enablers that make the deep battle possible. This deep battle creates the conditions for a future close battle. They help the Brigade Commander take or retake the initiative and therefore dictate the pace of the battle. An integrated approach to planning and controlling capabilities generates synergy. However, the outcome of the close operation should never depend entirely on the outcome of the deep operation. The brigade must ensure that the close operation is supported by sufficient means once it starts.

Finally, an effectively conducted deep operation disrupts the enemy Commander's decisionmaking cycle. Depriving him of his freedom of action prevents him from deploying his troops where and when he wants to. A well-executed deep operation makes it possible for the brigade to engage a numerically superior adversary from a distance and thereby ensure a more favorable combat power ratio for the close operation. With a deep operation, a brigade exploits its technological superiority and limits its casualties.

As the Commander of the artillery battalion, I was proud to make a significant contribution to brigade combat operations. The artillery can support a brigade not only in the close battle; it can do so, particularly in the deep battle. Each enemy eliminated by Fire support in-depth is no longer a threat to the maneuver units at the FEBA. The deep battle is, therefore, a modern translation of the time-honored adage of Sam Colt, the American who made the revolver famous:

#### "Never send a man if you can send a bullet."

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