



GENERALIZATION AND ASSESSMENT OF TERRITORIAL DEFENSE FORCES APPLICATION EXPERIENCE IN 2022

POLICY BRIEF

MYKOLA BIELIESKOV, ANTON MURAVEINYK

GENERALIZATION AND ASSESSMENT OF TERRITORIAL DEFENSE FORCES APPLICATION EXPERIENCE IN 2022

IN THE COURSE OF REPELLING OF RUSSIAN
AGGRESSION AGAINST UKRAINE ALONG
WITH TDF ROLE IN FUTURE STRUCTURE
OF UKRAINIAN DEFENSE FORCES



NGO "COME BACK ALIVE!"

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NGO “COME BACK ALIVE!”

Bohdana Khmelnytskoho St., 32, office 41, Kyiv, Ukraine

Phone: +38 (068) 500 88 00

Website: savelife.in.ua/en

E-mail: office@savelife.in.ua

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NGO “AGENCY FOR LEGISLATIVE INITIATIVES”

Vozdvyzhenska St., 45, office 404, Kyiv, Ukraine

Phone: +380 44 531 37 68

Website: parlament.org.ua/en

E-mail: info@parliament.org.ua

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“We will be able to wrestle our independence for all future generations of our nation. And to guarantee it, to guarantee security for our nation we’ll ensure comprehensive development of Territorial Defense Forces. When nation is armed, when our people are capable of defending themselves — that’s the best foundation of national security”.

President of Ukraine Volodymyr Zelenskyy, October 2, 2022¹

¹ “We will ensure the systematic development of the Territorial Defense Forces, as the ability of people to defend themselves is the best foundation for national security — President”: <https://www.mil.gov.ua/en/news/2022/10/02/we-will-ensure-the-systematic-development-of-the-territorial-defense-forces-as-the-ability-of-people-to-defend-themselves-is-the-best-foundation-for-national-security-president>

Summary

This policy brief contains a succinct history of development and application of Territorial Defense Forces (TDF) during the new phase of Russian aggression after 24 February 2022. Conditions of TDF on the eve of Russian all-out aggression and employment concept evolution during 2022 have been studied. Legislation provisions adopted on the eve of a new phase of Ukraine-Russia war stipulating start of TDF system/national resistance overhaul have been described.

Policy brief contains assessment of TDF experience done using DOTMLPFI methodology. Employment of this methodology made it possible to reveal both strong and weak points of the TDF system. Document also determines the role and place of TDF forces within the current and future structure of Ukrainian Defense Forces taking into account unique features of the security environment, present/future threat and objective limitations.²

² DOTMLPFI is an acronym for *Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, and Interoperability*.



1. TDF experience in repeal of Russian all-out aggression against Ukraine

1.1. TDF state on 24 February 2022

Ukrainian law “On fundamentals of national resistance” entered into force formally on January 1, 2022.³ This law stipulated key aspects of renewed TDF functioning as a separate Ukrainian Armed Forces branch. As the law entered into force Russia had been deploying a grouping of forces capable of waging all-out war in case of proper political decision adopted. Thus, implementation of the law “On fundamentals of national resistance” as to the provisions related to TDF was done under conditions of increasing threat of all-out aggression.

Formally, the new TDF model guaranteed a possibility to engage 130 thousand persons (25 brigades and 150 battalions) to Ukrainian Defense Forces in case of need, alleviating to a certain extent the enemy’s technological advantage by mass and comprehensive character of prospective resistance.⁴ However little time was left to implement specific organizational steps — it was assumed that it would take 2-3 years to implement fully new law’s provisions related to TDF.⁵

Establishment of TDF according to the peacetime table of organization became the first priority task at the beginning of 2022 — creation of Command Headquarters and four regional headquarters, cadre nucleus of brigades (90-120 persons) and battalions (up to 50 persons).⁶ Thus, the cadre nucleus of a typical TDF brigade was envisioned to contain up to 400 contract servicemen — depending on the number of battalions in each brigade. This was the way to implement a decision which stipulated an increase of the Ukrainian Armed Forces number of 10 thousand servicemen which would become the foundation to enlarge TDF to above mentioned level under martial law. Establishment of command and control system, acquisition of places of permanent residence and establishment of armories to contain weaponry were also first priority tasks. Second stage of TDF development envisioned creation of a reserve system. Manning of the TDF reserve system was meant to be completed in May-June 2022. Selection of a list of voluntary formations of local communities to augment Defense Forces in regional and local communities where military command deemed it necessary was meant to be a third stage of TDF development.

Formal establishment of peacetime brigades’ table of organization in 13 border regions was done till end of January 2022 — the proper level of manning of brigades’ nucleus reached 70%⁷

³ Запрацював закон України про основи національного спротиву — <https://www.radiosvoboda.org/a/news-zakon-pro-natsprotyv/31633197.html>

⁴ В Україні пришвидшується формування підрозділів Сил територіальної оборони ЗСУ — <https://www.mil.gov.ua/news/2022/01/18/v-ukraini-prishvidshuetsya-formuvannya-pidrozdiliv-sil-teritorialnoi-oboroni-zsu/>

⁵ “У кожній бригаді тероборони вже є необхідна кількість мінометних підрозділів” — Анатолій Баргилевич — <https://armyinform.com.ua/2021/10/03/u-kozhnij-brygadi-teroborony-vzhe-ye-neobhidna-kilkist-minometnyh-pidrozdiliv-anatolij-bargylevych/>

⁶ “Нас не злякали у 2014 році, то чому ми маємо лякаться тепер?” — командувач Сил тероборони генерал Юрій Галушкін — <https://fakty.ua/394770-general-yurij-galushkin-nas-ne-ispugali-v-2014-godu-pochemu-my-dolzhen-pugatsya-teper>

⁷ Олексій Резніков “Національний спротив: наступний етап зміцнення оборони” — <https://www.pravda.com.ua/columns/2022/01/24/7321420>

level. Rest of brigades and battalions were meant to reach the proper level of cadre nucleus manning at the end of February 2022. Reservists training with a parallel goal to attain 70%⁸ level of manning of brigades by reservists was planned to begin in March 2022.

At the same time as the Russian threat was increasing there was a parallel increase of Ukrainian citizens' readiness to sign TDF reservist's contracts. At the end of 2021 — beginning of 2022 sociological surveys indicated readiness to join TDF forces — 56% of interviewed say “Definitely yes” and “Rather yes”.⁹ In some cities like Kyiv and Kharkiv there were field exercises of TDF brigades/battalions, training for civilians on basics of national resistance. Kyiv TDF forces underwent a familiarization course on how to use national ATGM of Stugna-P and Korsar types.¹⁰ TDF brigades and battalions were in early stages of acquiring their permanent places of residence.

When Russia launched all-out aggression against Ukraine on 24 February 2022 TDF were in process to complete the first stage of organizational measures implementation according to law “On fundamentals of national resistance” provisions related to TDF and at the beginning of second stage of measures implementation. Within implementation of the first stage's measures a number of problems became visible and were not addressed fully.¹¹ Acquisition of permanent places of residence for brigades and battalions was a slow process which slowed down the process of establishment of armories to store weaponry. Thus, when Russian launched all-out aggression, weaponry envisioned for brigades and battalions of TDF was mainly at central storages instead of permanent places of residence of TDF formations. At the first stage of organizational development, the level of material support in such categories as communication equipment, means of personal protection, automobile transport was inadequate and didn't even meet the needs of the TDF cadre nucleus.

Improvement of TDF order of organization according to the 2018 concept (creation of TDF cadre brigades) and settlement of all legal issues related to TDF and national resistance shall be treated as major accomplishments of the TDF system on 24 February 2022. At the same time TDF under law “On fundamentals of national resistance” model were at the early stage to attain the initial level of capability to perform fully assigned tasks — especially within the framework of participation in repelling all-out aggression.

1.2. Role of TDF during first month of all-out war with Russia

On February 24, 2022, Russian Federation proceeded to implement the plan to destroy Ukrainian statehood through the isolation and capture of Kyiv, encirclement of Ukrainian grouping of forces in Donbas, occupation of the Dnipro Left Bank, and cutting off Ukraine from access to the sea. One of the first steps, which was meant to facilitate thwarting the enemy's

⁸ Volodymyr Zelenskyy: An effective model of territorial defense is a reliable rear for the army, and together they form the basis of a strong Ukraine — <https://www.president.gov.ua/en/news/volodimir-zelenskij-efektivna-model-teroboroni-ce-nadijij-t-72829>

⁹ 56% українців готові вступити до тероборони, — дослідження Українського інституту майбутнього (фото) — <https://focus.ua/uk/voennye-novosti/504318-56-ukraincev-gotovy-vstupit-v-teroboronu-opros-ukrainskogo-instituta-budushchego-foto>

¹⁰ Київські тероборонці практично опанували застосування протитанкових ракетних комплексів “Стугна” та “Корсар” — <https://armyinform.com.ua/2022/02/11/kyivski-teroboronczi-praktychno-opanovuvaly-zastosuvannya-protytankovyh-raketnyh-kompleksiv-stugna-ta-korsar>

¹¹ Р. Хомчак: Для формування Сил ТрО ЗСУ у бюджеті на 2022 рік передбачено майже 3,1 млрд грн — <https://www.rnbo.gov.ua/ua/Dialnist/5274.html>

plan, was to maximally simplify the procedure for Ukrainian citizens to join the TDF brigades and battalions. Ukrainian Minister of Defense O. Reznikov called on citizens to join the TDF. For this it was necessary to have only a passport.¹² In the same way then TDF commander General Yu. Galushkin urged Ukrainian citizens not to go to overburdened assembly centers, but directly to TDF military bases.¹³

As a result, by the end of February 26, 2022, at least 50,000 citizens had joined TDF.¹⁴ In general, as of May 2022 TDF comprised about 110,000 Ukrainian citizens. Also, up to 700 voluntary formations of local communities were formed numbering 70,000 people.¹⁵ The build-up of battalions and brigades according to the wartime table of organization was accomplished by the end of February 2022. Here it's important to emphasize the fact that according to the established norms the TDF brigade **has to be built up in 25 days** which does not meet the requirements of modern war conduct. In parallel recruits who lacked basic military skills underwent initial military training.

TDF began to perform a full range of territorial defense tasks.¹⁶ Rear regions TDF brigades and battalions focused on ensuring functioning of state authorities, protecting critical infrastructure facilities, and ensuring order and security in populated areas. At the same time border and frontline TDF brigades and battalions actually performed the same range of tasks as the regular Defense Forces.

TDF units reinforced regular Defense Forces during the battles for Kyiv, Chernihiv, Kharkiv, Mariupol; Sumy, Mykolaiv, Kherson, Zaporizhzhia, Donetsk and Luhansk regions. Tasks performed included not only maintaining order in the respective territories, but also direct combat activities and the formation of a longer front line. The major goal was to prevent Russian rapid isolation of the key Ukrainian areas of resistance in order to localize and destroy isolated areas of systemic resistance.

A number of important episodes can be highlighted in this context. Preservation of Ukrainian control over Nizhyn and Pryluky towns of Chernihiv regions thanks to the local TDF units, 58 separate motorized infantry brigade and 54 separate reconnaissance battalion did not allow Russian forces to use the railways to support grouping of forces that was advancing towards Kyiv on Dnipro Left Bank. Conducting isolation actions against individual settlements of Chernihiv and Sumy regions forced Russian troops to divert forces necessary for the continuation of the offensive.

Despite the fact that Chernihiv city defense involved units of 1st separate tank and 58th separate motorized infantry brigades, as well as the 54th separate reconnaissance battalion, National Guard, National Police, the State Border Service of Ukraine and other security and defense forces, it was precisely the TDF units that provided the largest augment of city garrison personnel and took part in battles with Russian regular armed forces. At the same time, during

¹² Резніков сказав, як отримати зброю в підрозділах тероборони — <https://www.ukrinform.ua/rubric-ato/3411510-reznikov-skazav-ak-otrimati-zbrou-v-pidrozdilah-teroboroni.html>

¹³ Territorial Defense Commander: "It is critical to hold out tonight and the coming few days" — https://en.lb.ua/news/2022/02/25/9219_territorial_defense_commander_it.html

¹⁴ За дві доби в українську армію мобілізовані майже 100 тис. громадян — Залужний — <https://interfax.com.ua/news/general/803416.html>

¹⁵ Нині вже створено понад 700 добровольчих формувань територіальних громад — <https://armyinform.com.ua/2022/05/17/nyini-vzhe-stvoreno-ponad-700-dobrovolchyh-formuvan-terytorialnyh-gromad>

¹⁶ Частина третя статті 3 ЗУ "Про основи національного спротиву" — <https://zakon.rada.gov.ua/laws/show/1702-20?lang=en#Text>

the defense of the city of Sumy, the TDF units were the basis of the garrison and were able to keep this regional center under Ukrainian control.¹⁷

Moreover, Chernihiv region TDF units inflicted damage on the enemy's logistics columns.¹⁸ The Poltava region TDF units aided Ukrainian regular Defense Forces in collection, processing and use of intelligence information for conducting artillery strikes on Russian columns that were trying to break through from the Sumy region.¹⁹ The Sumy region TDF units destroyed the equipment left by the enemy, attacked the Russian logistics system and assisted in countering the enemy's sabotage and reconnaissance group. In the Zaporizhzhia region, after the enemy's breakthrough from the temporarily occupied Crimea, the newly formed TDF units conducted rearguard battles with the aim of exhausting the enemy and played a significant role in a new frontline formation.²⁰

On the very first day of Russian full-scale aggression, Kherson region TDF units also began combating the enemy. However, due to the enemy's significantly superior forces and incomplete process of TDF brigade build-up, Kherson region TDF units suffered losses and were forced to retreat in the direction of Mykolaiv in order to continue defensive operation on new positions.²¹ In November 2022, Kherson region TDF units took part in the liberation of the regional center.

To sum it up, TDF brigades and battalions played an important role in derailing the enemy's original plan to liquidate Ukrainian statehood by conducting a quick offensive operation. TDF involvement made it possible to prevent attempts to quickly and comprehensively isolate Kyiv, Kharkiv and Chernihiv; use the railway infrastructure in the interests of enemy forces logistics. Isolation actions by the Russian troops against individual settlements of Chernihiv and Sumy regions due to the successful actions of TDF units weakened Russian offensive capacity. Separately, it is worth highlighting the fact that TDF forces managed to deploy in the shortest possible time. First TDF units in the border regions were armed during 3-4 hours after the invasion commenced and immediately engaged in combat missions.

The TDF actions during the first month of the all-out war made it possible to realize in practice the concept of national resistance through the all-encompassing nature of defense and the task of maximizing the level of damage inflicted to the enemy. The actions of the TDF brigades of Kyiv, Kharkiv; Kyiv, Chernihiv, Sumy, Kharkiv, Donetsk, Luhansk and Zaporizhzhia regions during the first month of the Russian full-scale invasion were noted with fact that they were the first ones to receive battle flags at the end of August 2022.²²

¹⁷ How Sumy's residents kept Russian forces out of their city — <https://www.theguardian.com/world/2023/jan/02/how-sumy-residents-kept-russian-forces-out-of-their-city>

¹⁸ Тероборона в ділі: під Черніговом знищено колону військової техніки ворога, фото — <https://apostrope.ua/ua/news/society/accidents/2022-03-09/teroborona-v-dele-pod-chernigovom-unichtojena-kolonna-voennoy-tehniki-vraga-foto/261913>

¹⁹ В гостях у тероборонців Полтавщини побувала кореспондентка АрміяInform — <https://armyinform.com.ua/2022/03/12/v-gostyah-u-teroboroncziv-poltavshhyny-pobuvava-korespondentka-armiyainform>

²⁰ Сили оборони Запорізького краю знищили 32 окупантів, по 2 ворожі танки, РСЗВ "Град", БТР та 7 авто — <https://armyinform.com.ua/2022/04/01/syly-oborony-zaporizkogo-krayu-znyshhyly-32-okupantiv-po-2-vorozhi-tanky-rszv-grad-btr-ta-7-avtomobiliv>

²¹ Подвиг у Бузковому парку. Невідома історія окупації Херсона — <https://www.pravda.com.ua/articles/2022/11/8/7375378/>

²² Бригадам тероборони вручили бойові прапори — <https://www.ukrmilitary.com/2022/08/b-flag.html>

1.3. Current role of TDF in Russian-Ukraine war

Alterations in the character of combat on both the Russian and Ukrainian sides impacted the subsequent employment of the Armed Forces' TDF in the war between Ukraine and Russia. Russia not only reduced the scope of its ambitions only to seize the territories of Ukrainian south and east regions, but also changed the tactics its forces applied. Instead of trying to break Ukrainian defenses by means of a numerical advantage in armored vehicles, the Russian forces switched to the so-called "artillery offensive", when Ukrainian positions were subjected to maximum fire before introducing infantry and armored vehicles into battle. As a result, the role and importance of the so-called contact battles was significantly reduced, compared to the first period of the full-scale war — the so-called "artillery duels" and counter-battery fighting took a predominant role. Simultaneously, the Ukrainian approach to conducting defense also underwent changes — a model of establishment and upkeep of a continuous front line and echeloned defense on all directions of active hostilities was chosen instead of a combination of mobile focal and static defense. These circumstances had a decisive influence on the TDF employment.

Employment of TDF to perform tasks outside the zones²³ and districts²⁴ of territorial defense, where the relevant brigades and battalions underwent manning, training and, in some cases, first combat application was a key feature of this period. It was a forced step, taking into account the need to create a continuous front line and echelon defense in the East and South of Ukraine. Formally, the Law of Ukraine "On the Fundamentals of National Resistance" provided for such a possibility — the TDF command reminded on this hypothetical scenario during the first stage of the law implementation back in January 2022.²⁵ Besides, the corresponding step reflected the practice of involving separate TDF battalions to perform tasks within the framework of the Anti-Terrorist Operation in Eastern Ukraine as early as 2014–2015. However, for a segment of the TDF troops and their families proved it hard to reconcile themselves with this, mistakenly believing that the functionality of TDF brigades and battalions ends at the boundaries of the zones and districts where the relevant brigades and battalions have been established.

On the one hand, such a step was a logical continuation of the practice when frontline TDF brigades and battalions reinforced the Ukraine Defense Forces main combat units within the framework of operations of the first months. Moreover, before going to the front, the TDF units underwent the necessary training involving familiarization with new types of weapons (ATGM, MANPADS, grenade launchers and mortars), which would allow them to better perform their tasks. In the same way, thematic classes before going to the front took into account the peculiarities of conducting combat operations in a specific direction.²⁶ Besides, the use of TDF battalions and brigades was envisaged and carried out within the framework of operational-tactical grouping of forces, which meant the possibility of support from Defense Forces units

²³ Territorial defense zone is a part of the land territory of Ukraine with boundaries that coincide with administrative borders of Autonomous Republic of Crimea, a region (oblast) or a city with a special status.

²⁴ Territorial defense district is a part of the land territory of Ukraine with boundaries that coincide with those of an administrative district of Autonomous Republic of Crimea, a region (oblast) or a city with a special status.

²⁵ Юрій Галушкін: Ми можемо розгорнути Сили тероборони і цим взагалі не допустити війни — <https://armyinform.com.ua/2022/01/19/yurij-galushkin-komanduvach-syl-terytorialnoyi-oborony-zbrojnyh-syl-ukrayiny-my-mozhemo-rozgornuty-syly-teroborony-i-czym-vzagali-ne-dopustyty-vijny>

²⁶ Зведений підрозділ провів контрольне заняття перед відбуттям на передову — <https://armyinform.com.ua/2022/06/01/zvedenyj-pidrozdil-proviv-kontrolne-zanyattya-pered-vidbuttyam-na-peredovu>

with heavier weapons in case of need.²⁷ However, the relevant training could not fully prepare TDF units for the above-described change in the nature of combat and tactics on the part of both Russia and Ukraine. It is also worth noting that a large part of the TDF brigades and battalions could not organize the training process properly, so they had to study directly in the combat zone.

In general, TDF faced tasks that they could not fully address. The net result of this was a series of incidents, when the TDF units could not withstand enemy's tactics of "artillery offensive" or combined arms offensive and chaotically left their positions in Eastern Ukraine. However, similar incidents were not limited only to TDF — withstanding the Russian tactics of the "artillery offensive" turned out to be a difficult task for some professional brigades and battalions of the Armed Forces of Ukraine.

On the other hand, it is worth noting the crucial role played by TDF in the counteroffensive actions in the Kharkiv region in May 2022, as well as in general by maintaining a continuous front line through creation of the necessary density of forces and equipment. Along with the episodes of unsuccessful task execution, it is worth mentioning examples of successful task execution to create/maintain a continuous front line by such brigades as, for example, the 110th Separate Territorial Defense Brigade (Zaporizhzhia region). Besides, the main responsibility for covering the state border in Northern Ukraine fell on the TDF units after the retreat of the Russian formations in late March — early April 2022 and after the liberation of parts of Kharkiv Oblast at the end of September 2022. In the same way, the use of TDF to create/maintain a continuous front line in the East and South of Ukraine allowed the release and/or rotate the most combat-proven heavy brigades — among other things to perform tasks within the framework of the Balaklia-Kupyansk and Kherson offensive operations.

Thus, starting from mid-April 2022, adaptation to altercations in tactics and the nature of combat on both the Russian and Ukrainian sides has become a major challenge for TDF. The necessity to adapt to new conditions is determined by the extraordinary circumstances in which Ukraine found itself after February 24, 2022. Despite individual episodes of unsuccessful task performance, the TDF showed readiness for transformations and demonstrated the ability to effectively perform assigned tasks in new circumstances outside the zones and districts where relevant brigades and battalions have been raised.

²⁷ Засоби захисту мають 100% військових, які залучені до ведення бойових дій — Собко — <https://fakty.com.ua/ua/ukraine/20220517-zasoby-zahystu-mayut-100-vijskovykh-yaki-zalucheni-do-vedennya-bojovyh-dij-sobko>

2. Assessment of TDF experience based on DOTMLPFI methodology

2.1. Doctrinal documents

The fundamental documents which determine the functioning and application of TDF are the Law of Ukraine “On the Fundamentals of National Resistance” and relevant resolutions of the Cabinet of Ministers of Ukraine.²⁸

Pursuant to these documents on January 17, 2022, President of Ukraine approved the Doctrine for TDF application, which determined the basics of training and execution of tasks, the order of organization, command and interaction, provision of TDF.²⁹ This Doctrine was based on the provisions of the third part of Article 3 of the Law of Ukraine “On the Fundamentals of National Resistance” regarding the tasks of the TDF.

Recognition of the growing threat from Russia along with admission of significant imbalances in power potentials in favor of the enemy is the basis of Doctrine. Document proceeded from the assumption that an all-encompassing nature of national resistance, including through the development of TDF, could be Ukraine’s response in such conditions. In practice, the corresponding provision was meant to be implemented by readiness to inflict the maximum level of damage on the enemy, as well as the defense of territories and the protection of the population. As a result, priority was given to the development of the capabilities of the TDF in the border and front-line regions. In addition, the Doctrine defined the key qualities of TDF, which would aid in the performance of the assigned tasks — the ability to perform asymmetric actions using the effect of surprise and knowledge of the terrain, the speed of deployment, the ability to act autonomously, etc.

Developments in the course of Russian full-scale aggression against Ukraine showed that the TDF were involved in the performance of the entire spectrum of territorial defense tasks, including the reinforcement of units of the Defense Forces of Ukraine within the framework of conducting high-intensity combat operations, which was highlighted in the Doctrine. During the first month of repelling the full-scale aggression of the Russian Federation, the actions of TDF of the front-line regions in practice realized the provisions of TDF Doctrine. At the same time, the doctrinal basis of ground defense needs to be improved and clarified taking into account the experience of hostilities after mid-April 2022.

Another document that regulates the use of the TD Forces is the Consolidated Territorial Defense Plan of Ukraine. It was put into effect on February 24, 2022, by the decree of the President of Ukraine based on the decision of the National Security and Defense Council of Ukraine. It is worth noting that as of February 2022, content of the Consolidated Plan had not been brought into line with the new legislation and the TDF Doctrine due to time and resources deficit.

²⁸ Певна законодавча база знаходиться за посиланням: <https://sprotyvg7.com.ua/zakonodavcha-baza>

²⁹ Президент затвердив Доктрину територіальної оборони — <https://www.ukrmilitary.com/2022/01/doktrina-tro.html>

2.2. Organization

The Law of Ukraine “On the Fundamentals of National Resistance” provides for the following components of Territorial Defense: military, civil and military-civilian.

Pursuant to the Law, **the military component** includes not only TDF, but also other forces and means of the Security and Defense sector involved in the performance of territorial defense tasks. But in practice, when the military component of the Territorial Defense is in question it primarily concerns TDF. Also, TDF as a separate branch of the armed forces is entrusted with the leading role in the organization and execution of territorial defense tasks.

As of the end of 2022, the TDF consisted of:

- ◆ command of TDF;
- ◆ four regional offices of TDF;
- ◆ 31 brigades of TDF and, accordingly, 183 battalions which constitute those brigades.

It is important to note that as of February 2022 25 brigades of TDF consisting of 150 battalions were formed in Ukraine. After the administrative reform, allocation of the TDF units took place according to the administrative-territorial principle, when each region and city with a special status had one brigade, and constituent TDF battalions were placed one in each district and regional center. However, with the beginning of a new stage of Russian aggression against Ukraine, 6 brigades were additionally raised in cities and regions where this was stipulated by the legislation and the number of population.

At the same time, within the framework of the application of TDF formations and units, the relevant forces have been transferred under operational subordination of interspecies groupings of forces. On the other hand, TDF Command concentrated its attention on the organization of training, support and reconstitution of the relevant units and formations. The updated two-level organizational structure (contract nucleus and reservists) of TDF brigades and battalions demonstrated its effectiveness in repelling Russian large-scale aggression during the first month. Existence of an organizational-staff core in peacetime made it possible to quickly increase the number of forces by engagement of reservists. This model should be preserved, because it will allow both to conduct necessary training of the reserve and not to disengage reservists from active economic life.

However, the practice of employing TDF by transferring individual (combined) companies to other units demonstrated questionable effectiveness. Deficit of coordination, training and communication equipment, as well as the lack of logistical and medical support, led to the poor use of individual TDF transferred companies and, as a result, losses that could have been avoided. At the same time, the practice of forming and employing in combat of combined battalions based on TDF brigades proved to be more successful and deserves further study/implementation, as well as the involvement of full-fledged TDF brigades. Employment of TDF as part of an interservice grouping of forces, in which heavy formations provide adequate fire support and the logistical base for the training of TDF remains an ideal option.

Also, in the context of the structure of the TD Forces it should be noted that after the beginning of Russian full-scale invasion during 2022 changes have been made to TDF order of organization several times in accordance with the experience gained in practice which is good evidence of the flexibility of the system.

The military-civilian component of territorial defense includes headquarters of territorial defense zones (districts) and voluntary formations of local communities in accordance with the legislation.

The headquarters of zones (districts) of TDF were envisioned to be permanent territorial defense management bodies within zones (districts) of territorial defense and were to be subordinated to the heads of the zones (districts) of territorial defense. At the same time Heads of Regional/District Administrations were meant to assume positions of heads of such zones (districts) of the territorial defense, respectively, and the commanders of the respective TDF brigades and battalions were meant to be the chiefs of staffs of the zones (districts). In practice, such a scheme did not work properly due to the lack of understanding of the subordination process, duplication of functions, and the redeployment of TDF formation/units outside their territorial defense zones (districts).

Voluntary formations of local communities (VFLC), by their very nature, were supposed to be paramilitary units that could be formed within those communities where military leadership saw such a necessity. In peacetime, members of the VFLC do not hold the status of military personnel and are not exempt from conscription or mobilization. But during the performance of tasks (including during wartime) or during training, the same social security and guarantees apply to them as to active military personnel (except compensation). Members of the VFLC have the right to use personal hunting weapons to repel aggression and may also be provided with military grade weapons pursuant to decision of the command. The VFLC must report to the commander of the TDF unit according to the territorial principle.

The experience of VFCL formation and employment at the first stage of a full-scale invasion exposed both the strengths and weaknesses of this concept. Through formation of VFCL all over the territory of Ukraine it was possible to engage more than 70,000 people to the Defense Forces — some of whom have taken and continue to take direct part in hostilities. That feature is considered a success story of the VFCL concept. As important as that given implementation of such a concept, Ukraine managed to legalize the vast majority of voluntary initiatives that were able to take shape in the format of VFCL. This situation after commencement of full-scale hostilities since 24 February 2022 differs significantly from the period of spring-summer 2014 when a significant number of volunteer formations operated without any legal basis at all. This advantage is very important from the point of view of the legal standpoint of troops employment in the course of repelling armed aggression.

On the other hand, the procedure for forming the majority of VFLC in February-March 2022 was violated. Besides, establishment of at least part of such formations was politicized, which created certain threats at the community level. This led to the fact that most of VFLC subsequently had to be disarmed and reduced.

Also, after the departure of the relevant TDF formation and units outside their zones /districts, VFLC remained virtually without leadership. This contributed to increasing their dependence on local authorities, which is unacceptable. Therefore, the concept of VFLC as a part of the system of national resistance must be refined.

The civilian component of territorial defense includes state bodies and local self-government bodies involved in territorial defense.

2.3. Training

Formally, the training cycle of a TDF reservist should have comprised 120 hours a year. Within its framework, reservists would receive/uphold the basic skills of tactical medicine; tactical, fire and engineering training, master orientation on the terrain. In practice, on February 24, 2022, the TDF training system was not functioning properly — the one which would correspond to the scale of the updated TDF's tasks.

Therefore, after February 24, 2022, the training of a significant part of reservists has been carried out in the process of repelling a full-scale aggression. This often happened with the involvement of funds/training grounds/training centers of other branches of the Armed Forces of Ukraine. The concept of the “Mobile Training Center” which was implemented by the TDF Command was the attempt to partially strengthen the personnel training system. Training within the framework of the corresponding center is carried out during the units' restoration of combat capability. In general, the hostilities demonstrated an urgent need to become familiar with a wider range of weapons and to acquire skills in their effective use for better performance of assigned tasks. In the same way, practice has shown **the critical importance** of organizing high-quality personnel training at the battalion and brigade level. For this purpose, the TDF Command created training centers, where battalion staff officers, company and platoon commanders, and non-commissioned officers acquire proper qualification.

2.4. Resources allocation

The transformation of the TDF into a separate branch of forces of the Armed Forces, subordinated directly to the Armed Forces Commander-in-Chief, laid conditions for ending the practice of funding and staffing based on the residual principle, which existed when TDF were part of the Ground Forces. The 2022 budget, before the start of the Russian full-scale invasion, provided for the allocation of up to UAH 3.4 billion for the needs of TDF.

However, in practice, the incomplete character of the implementation of organizational measures under the Law “On the Fundamentals of National Resistance” related to TDF negatively affected the state of real resource allocation of TDF. Unsettled issues of obtaining places of permanent residence and creation of weapons storage facilities made it difficult to quickly arm TDF reservists on February 24, 2022. Deficit of personal protection means, communication equipment and automobiles were also an acute problem, which for a long time was addressed mainly by involvement of charitable assistance. During the first days after the full-scale invasion weaponry of TDF was transported by ordinary civilian transport, which literally had to stand in “military traffic jams” near the central weapon storage bases for days. In addition, provision of more serious means of destruction (ATGM, grenade launchers, MANPADS, etc.) in the process of engaging directly in hostilities was another serious issue.

In general, at the beginning of the Russian full-scale invasion the TDF brigades were armed mainly with light infantry weapons. However, there were often cases that even weapons provided for in the list of standard equipment like ZU-23-2, Soviet ATGMs, MANPADS, grenade launchers etc. were missing. Also, as of February 2022, only 60 mm mortars were expected to be part of TDF standard weaponry. Subsequently, 82 mm mortars were introduced into TDF. During 2023 it is planned to introduce 120 mm mortars, because TDF formations and units do not have enough firepower to perform combat missions.

Thus, the weaponry, material and technical support, logistics available on February 24, 2022, turned out to be insufficient for the rapid and high-quality implementation of the Doctrine of Territorial Defense in practice. **This state of affairs was the result of the long TDF subordination to the Ground Forces of the Ukrainian Armed Forces, where TDF was financed and provided on a residual basis.** This negative experience should be taken into account in the ongoing defense review and future military building projects.

2.5. Quality of command and education

The current Doctrine of Territorial Defense defines the key role of leadership in achieving the goal of TDF – the ability of the command component to act proactively and under conditions of uncertainty. The acquisition of leadership qualities by key officers/NCOs should both compensate for the lack of forces and means, and ensure the fulfillment of a significant list of tasks by TDF.

The formal provision of a peacetime nucleus of brigades and battalions with commanding staff within the framework of the first organizational stage (January-February 2022) did not mean in practice the availability of all skills to high-quality perform assigned tasks. The command component during this period of updated TDF development was staffed according to the residual principle, mostly from the staff of Operational commands of the Ground Forces of the Ukrainian Armed Forces.

The combat actions confirmed in practice the need to improve the level of professional training of the command staff of the company-battalion-brigade level. It concerns the management of personnel within the framework of combat, as well as the organization of its training.

Inability to perform the tasks assigned to TDF was the consequence of the deficit of competent officers in key positions in the brigades and battalions of the TDF. For example, in May 2022, directly in the combat zone, the commander of TDF had to independently plan the operation of one of the brigades of TDF due to insufficient qualifications of the headquarters officers of this brigade.

The newest project “Captains’ School” was implemented in order to improve qualification of key TDF officials on the basis of the TDF command. Within the framework of this project the training of platoons’ and companies’ commanders, and officers of battalion headquarters takes place in accordance with NATO countries procedures. The similar project is planned to be broadened to other branches of the Armed Forces after successful implementation within the framework of TDF.

2.6. Personnel

TDF did not feel a deficit of people willing to join them in the circumstances of the impending war and the beginning of a full-scale Russian aggression. For example, in the first few days after February 24, 2022, the manning level of the brigades of Kyiv and the Kyiv region was more than 400%. As a result, it was decided to raise additional TDF brigades. After February 24, 2022, the most motivated part of Ukrainian society became the TDF reservists. The former TDF commander general Yu. Galushkin gave an example when the queue of reservists in front of the military unit did not disperse even during air raids on the capital.

However, the high level of motivation only partially compensated for the deficit of qualifications and skills, which had to be improved in parallel to repelling the full-scale aggression of the Russian Federation.

In the same way, the process of TDF manning with reservists revealed a certain conflict of interests with other branches of the Armed Forces of Ukraine. Part of the reservists who got involved into TDF belong to the operational reserve of the first order, while the TDF reserve is a component of the operational reserve of the second order. As a result, tankers, artillerymen, operators of radio electronic systems, etc. who should have been assigned to other branches of the Armed Forces of Ukraine but due to the lack of prior mobilization deployment in the chaos of the first days after February 24, were assigned to the units of TDF. Thus, their engagement into TDF reduced the number of operational reserves for regular combat units of the Armed Forces, but at the same time increased the qualification and professional level of TDF battalions and brigades allowing them to perform the relevant tasks.

Strengthening and preserving the skills of the personnel, high level of motivation, which contributed to the rapid manning of TDF battalions and brigades on wartime order of organization remains a key issue.

2.7. Military infrastructure

Until February 24, 2022, TDF faced problems with obtaining places of permanent residence and as a result creating weaponry storages. This, as mentioned above, had a negative impact on the ability to quickly switch on to the implementation of assigned tasks. Today, the majority of TDF battalions and brigades still do not have de jure PPR, compensating for this with lease agreements for various civilian real estate objects, which again affects conduct of activities, as well as accounting for the expenditure of funds and resources for bringing these objects to a normal state.

Likewise, TDF do not possess their own infrastructure for proper training. Instead, overloaded military training grounds are used. In part, the problem with the infrastructure for training is solved by use of private facilities that are provided for training on a partnership basis.

2.8. Interoperability

Obtained experience of repelling a full-scale Russian aggression showed the strengths and weaknesses of interaction with the other Armed Forces branches and other formations of the security and defense sector of Ukraine.

The deficit of means of communication and a developed algorithm of interaction within the framework of the created groupings of forces was clearly manifested in the first months of Russian full-scale aggression. Isolated cases of so-called “friendly fire” during the first weeks was one of the consequences of this. The interaction in the process of subordinating TDF units to units of other branches of troops was a separate problem. Strengthening the technical component of interoperability, as well as developing relevant interaction skills are seen as major requirements as a result.

3. The future security environment of Ukraine and its impact on defense policy

World order transformations have historically been accompanied by wars and local armed conflicts. The full-scale Russian aggression against Ukraine, which began on February 24, 2022, confirms this trend. The large-scale employment of the military instrument for significant territorial adjustments and the imposition of one's will, which has been increasingly considered an anachronism in world politics after 1945, can no longer be considered as something impossible. The "end of history" period has finally ended.

Regardless of the development of events at the front and the formula for the political settlement of the current war, Russia will remain a neighbor of Ukraine. The optimistic scenario consists of a deep political transformation of Russia, the formation of a new foreign policy and national identity and, as a result, acceptance of Ukraine's independence as a fait accompli. **Preservation of an existential military threat from Russia** should continue to be a basic scenario in Ukrainian strategic planning.

The next major factor, that will impact Ukrainian defense planning and policy, shall be an assumption that in nearest future our state most likely won't gain credible security guarantees like the ones provided by Article 5 of Washington agreement establishing NATO, despite the quantitative and qualitative progress in cooperation with NATO countries after 24 February 2022 and non-alternativeness of NATO membership goal, which was seconded by 30 September 2022 bid. As the result, state and people of Ukraine will bear main responsibility of guaranteeing its security despite incredible progress in cooperation with NATO countries in security and defense field after 24 February 2022.

Finally, defense planning and defense policy will take place under the influence of such negative factors as demographic changes, destruction and economic losses caused by Russian armed aggression. The resource base of Ukraine **will constrain the ability** to do a military build-up that will rely solely on the establishment of a technological advantage or will allow maintaining a significant peacetime professional army. Similarly, manning and creation of the reserve of the Armed Forces must take into account the need to minimize the negative impact on the economic activity of the most economically active part of the population.

To sum it up, it can be stated that there will be significant economic and demographic constraints in Ukraine and the hope of securing an overwhelming technological advantage over the enemy by obtaining modern weapons from partner countries cannot be the foundation of Ukrainian Military Strategy.

At the same time, the warfighting after February 24, 2022, demonstrated the need for Ukraine to deploy, employ and maintain Defense Forces grouping numbering about 1 million people as soon as possible.



4. TDF role in Ukraine's Armed Forces prospective model

Despite all the shortcomings and weaknesses demonstrated by the hostilities after February 24, 2022, it can be confidently asserted that **the TDF model, which was established by the law “On the Fundamentals of National Resistance”, has generally shown its effectiveness.** In the future, attention shall be concentrated on eliminating weaknesses and shortcomings, according to the DOTMLPFI methodology, while preserving the strengths of this model.

The transformation of the TDF into a separate branch of forces directly subordinated to the Armed Forces Commander-in-Chief and the two-level system of brigades' and battalions' manning brought it out of the margins of the Armed Forces structures and changed the practice by which the TDF had been financed and developed on a residual basis.

In the same way, the Law of Ukraine “On the Fundamentals of National Resistance” in the TDF part established the institutional and legal framework for the rapid engagement of up to 200,000 people to repel the full-scale Russian aggression. In particular, it concerns the status of the TDF's troops. This moment contrasts with the situation of 2014–2015, when countering Russia's limited aggression in Donbas was accompanied by a parallel clarification of the institutional and legal framework, including the status of the military involved.

The two-level model of manning brigades and battalions of TDF can be considered as promising in Ukrainian conditions, because it simultaneously fulfills two key tasks — the ability to quickly (within 48 hours) engage potentially up to 250,000 motivated and trained citizens to the defense, but at the same time not to pull out the economically active population from economic activity in peacetime or in the interwar period.

The key tasks of TDF, along with the preparation for the fulfillment of territorial defense tasks in accordance with the third part of Article 3 of the Law of Ukraine “On the Fundamentals of National Resistance”, for the future should be considered the preparation of citizens for national resistance and, as a result, the formation of a reserve to strengthen the main Defense Forces in the event of an extreme necessity.

This task is related to the decree of the President of Ukraine No. 36/2022 in the part regarding “the introduction of a model of an intensive military training system as a possible alternative form of military service and the termination of the conscription of Ukrainian citizens”.³⁰ In this way, the involvement of the TDF will allow it to intensify the training system within the framework of preparation for national resistance. At the same time service in the TDF reserve can be considered as a possible alternative to the completion of service by conscription.

In the same way, reliance exclusively on technological means of destruction within the framework of future military build-up as opposed to the human factor (mass and scale of resistance) is not promising in our realities due to financial and technological constraints. The massive and all-encompassing nature of the national resistance, which will be guaranteed among other things by TDF preservation, can actually reduce enemy advances only to key roads. This will make enemy's logistics and support vulnerable and paralyze its ability to advance deep into the country's territories, minimize its inroads and create a basis for disrupting the enemy's

³⁰ УКАЗ ПРЕЗИДЕНТА УКРАЇНИ №36/2022 Про першочергові заходи щодо зміцнення обороноздатності держави, підвищення привабливості військової служби у Збройних Силах України та поступового переходу до засад професійної армії — <https://www.president.gov.ua/documents/362022-41285>

aggressive intentions. De facto, it can be assumed that the effective system of national resistance of Ukraine can become **one of the main factors of non-nuclear deterrence of the enemy**, along with the development of Ukrainian own missile program.

On the other hand, it is necessary to take into account a number of possible scenarios that may negatively affect the defense capability of Ukraine through the partial or complete elimination of the current TDF model. Refusal to build a separate command vertical, directly subordinated to the Commander-in-Chief of the Armed Forces, may push TDF back to the period before the adoption of the Law “On the Fundamentals of National Resistance” — in terms of the appropriate level of financial and personnel allocation and, as a result, an acceptable formula in terms of “level of allocation — received capabilities”. The previous experience of TDF being in the structure of the Ground Forces of the Armed Forces should serve as a warning in this case.

Similarly, an attempt to transform TDF brigades into infantry/motorized infantry may lead to their marginalization in matters of capacity development and maintenance. Repeat of 2015 practice of creating motorized infantry brigades on the basis of TDF looks doubtful, first of all, due to the limitation of the demographic potential of Ukraine in terms of the ability to re-create new TDF brigades and battalions in the relevant zones and districts of defense.

After all, previous Ukrainian experience of defense planning and practical defense policy shows that the results of the corresponding efforts may turn out to be suboptimal. At the same time, there is a need to train and engage the maximum number of citizens in comprehensive resistance and inflict the maximum level of damage on the enemy.

At the same time, only in the case of a separate TDF command structure and powers being preserved it's possible to talk about the effective operation of the system of national resistance **with people at the community level**. Effective work with communities within the framework of the unified military vertical is impossible. At the same time, community level activities are the key to the successful development of the system of national resistance in Ukraine.

5. Conclusions and recommendations

- ◆ TDF should be the basis for building a national resistance system — as **one of the key factors of non-nuclear deterrence of the enemy**.
- ◆ The model of TDF should be preserved as a concept that has shown its effectiveness and unique added value in repelling a full-scale aggression of Russia after February 24, 2022.
- ◆ An attempt to partially or completely eliminate the current model of TDF as a separate branch of force directly subordinated to the Commander-in-Chief of the Armed Forces may lead to the marginalization of the TDF role in the defense system of Ukraine (as was the case from 2015 to 2021).
- ◆ The current TDF model is almost the most optimal from the point of view of the ratio of the funds allocated to the obtained effect and the strengthening of Ukraine's defense capabilities.
- ◆ The two-level model of TDF brigades' and battalions' manning should be preserved as such, which makes it possible the necessary training of reservists, but does not pull off a significant number of the economically active population from economic activity.
- ◆ Further development of the TD Forces should be aimed at eliminating weaknesses and shortcomings in accordance with the DOTMLPFI methodology.
- ◆ Both the legislative framework and the TDF Doctrine of the application need to be updated from the point of view of taking into account the experience after February 24, 2022.
- ◆ TDF forces should play a key role in the preparation of Ukrainian citizens for national resistance, as well as the implementation of the Decree of the President of Ukraine No. 36/2022 regarding “the introduction of a model of an intensive system of military training as a possible alternative form of military service and the termination of conscription of Ukrainian citizens”.