

STEPHEN J. FLANAGAN, JAN OSBURG, ANIKA BINNENDIJK, MARTA KEPE, ANDREW RADIN

Deterring Russian Aggression in the Baltic States Through Resilience and Resistance

Introduction

The governments and citizens of Estonia, Latvia, and Lithuania—the Baltic states—are subject to daily Russian strategic information operations and propaganda activities that are part of campaigns designed to undermine trust in their institutions, foment ethnic and social tensions, and erode

KEY FINDINGS

- Total Defense and Unconventional Warfare (TD/UW) techniques and forces can support deterrence, early warning, de-escalation, defense against invading forces, and liberation from occupation during the course of a hybrid or conventional conflict.
- Estonia, Latvia, and Lithuania are committed to enhancing the size and capabilities of their national guards and reserve forces and increasing whole-of society resilience and resistance efforts. All three countries are improving and expanding their small special operations forces.
- The United States, other NATO allies and partners, and the European Union could take further concrete steps to support the development of Baltic TD/UW capabilities by strengthening cooperation on crisis management, intelligence sharing, civilian resilience, and countering Russian information warfare and hybrid attacks.
- The RAND assessment revealed that the technologies most likely to enhance TD/UW capabilities across all threat scenarios are night-vision devices, secure mobile communications, computing, still and video cameras, all-terrain mobility, and small arms.
- A robust technology initiative to equip resistance cells in all three Baltic states would require approximately \$125 million in initial equipping cost, plus training, operations, and maintenance funding.

confidence in North Atlantic Treaty Organization (NATO) collective defense commitments. These three countries are also vulnerable to low-level, hybrid, and full-scale attacks by Russian special operations and regular military forces deployed close to their borders. In light of these concerns, and given the imbalance between Russian and NATO conventional forces deployed in the Baltic region, these governments and others in the region have been adopting and integrating unconventional concepts into their national defense plans. These concepts—broadly defined as Total Defense (TD), a wholeof-society approach to national

Abbreviations

ATV all-terrain vehicle

CCOMC Comprehensive Crisis and

Operations Management Centre

FDF Estonian Defence Forces

EU **European Union**

FY fiscal year

GDP gross domestic product

ISR intelligence, surveillance, and

reconnaissance

LAF Lithuanian Armed Forces

LGM little green men

MANPADS

man-portable air defense system NAF National Armed Forces of Latvia NATO North Atlantic Treaty Organization NDRI National Defense Research Institute OSD Office of the Secretary of Defense

SOF special operations forces

SUV sport utility vehicle TD **Total Defense**

UAV unmanned aerial vehicle IJW Unconventional Warfare

ZS Zemessardze (Latvian National

Guard)

defense and resilience, and aspects of Unconventional Warfare (UW), which can include broad-based, state-supported resistance against invaders—are designed to enhance deterrence by denial and by increasing the cost of aggression, while also supporting conventional defense efforts to counter and repel military attacks.

Total or Comprehensive Defense refers to the integrated use of a wide range of military and nonmilitary efforts by governments and populations in order to prevent and repel military aggression, as articulated in the 2010 and 2017 Estonian National Defense Concepts,1 the 2016 Latvian National Defence Concept,² the 2017 Lithuanian National Security Strategy,3 the 2015 Swedish National Defence Bill,⁴ and the 2017 Finnish Security Strategy for Society.⁵ It includes psychological defense, internal security, ensuring the resilience of critical services, civil defense, military defense, and

international activity. Baltic UW activities considered in this report include actions outside the scope of conventional military operations, particularly by auxiliary forces, to counter a foreign occupation or support broader defense against military attacks. Examples include violent and nonviolent resistance, sabotage, subversive activities, and unconventional intelligence collection.6 Differences in national threat assessments and defense plans of each Baltic state shape different TD/UW approaches.

- The Estonian government has longstanding and highly developed territorial defense, resilience, UW, and resistance plans and capabilities, as well as a commitment to fielding additional conventional military capabilities.
- The Latvian government has given priority to developing a professional army over the past decade, but it has now committed to modernizing conventional forces, enhancing the size and capabilities of its national guard force, and improving whole-of-society resilience efforts.
- The Lithuanian government has also prioritized its conventional forces, but is taking steps to bolster the training and capabilities of national guard and volunteer forces, and has launched a major effort to educate its citizens on resilience and resistance in case of invasion.
- All three countries are improving and expanding their relatively small special operations forces (SOF) with assistance from the United States and other countries.

TD/UW activities can be performed by actors ranging from large government organizations to small groups of civilians, and can have an impact throughout the spectrum of conflict. TD and UW can enhance deterrence and, if deterrence should fail, can deny an adversary an easy victory by making an occupation costlier to the invading forces. In particular, the Baltic states have a significant history of resistance activities against invading and occupying forces during and after World War II, and preparing for resistance is part of the defense strategies of all Baltic states.

Methodology and Framework for Evaluation

In this context, the Cost Assessment and Program Evaluation and Strategy and Force Development offices of the Office of the Secretary of Defense (OSD) asked the RAND Corporation's National Defense Research Institute (NDRI) in June 2016 to assess the benefits and challenges of augmenting TD and UW capabilities of the Baltic states to deter or confound various forms of aggression, and to recommend possible courses of action.

The project team undertook an extensive literature review and scoping work to clarify the national security strategies of the three Baltic governments and identify relevant TD/UW options and key issues for analysis. It also reviewed the experience of countries such as Finland, Switzerland, Sweden, and the United States with unconventional approaches, in order to assess the possible benefits and challenges of integrating unconventional elements into defense plans for the Baltics.

The project team then conducted focused discussions with over 100 defense officials, military commanders, and other subject-matter experts in Vilnius, Lithuania; Riga, Latvia; Tallinn, Estonia; Tartu, Estonia; Helsinki, Finland; and Stockholm, Sweden. These included meetings with the SOF and National Guard/Defence League commanders, as well as with a number of conventional force commanders and senior civilian defense officials in all three Baltic states. The team also met with U.S. defense attachés, Offices of Defense Cooperation chiefs, and other U.S. military and embassy personnel in the Baltics and at U.S. European Command. Team members also participated in a symposium on resistance organized by U.S. Special Operations Command Europe, and in a NATO Special Operations Headquarters seminar for Estonian officials on countering hybrid threats.

The project team reviewed various TD/UW options and identified the most-promising ones drawing on field research and using the assessment framework outlined in the "Measures to Improve Total Defense" section. In that framework, the project team identified associated TD/UW lines of effort and objectives at various phases of conflict. The team generated multiple scenarios and associated sets of

activities covering violent and nonviolent resistance, resilience, and psychological efforts, and identified related military and nonmilitary technologies and measures of interest. We also considered potential Russian responses and countermeasures to Baltic TD/UW efforts. Finally, we identified a set of promising efforts for enhancing the Baltic states' TD/UW posture that the United States and other NATO and partner countries should explore and evaluate further. The key findings from this effort are summarized in the following two sections, and then discussed in more detail in the remainder of this report.

Risks and Benefits

TD/UW involves mostly defensive capabilities and is thus less likely to be characterized as provocative or escalatory than increases in national or NATO conventional military forces. During an invasion and occupation, TD/UW efforts can place enemy troops and supporters at risk, degrade the enemy's resupply and communications lines, damage enemy infrastructure and capabilities, and deny the enemy use of the occupied country's infrastructure—all of which could provide additional time for NATO to generate reinforcements and conduct a counterattack to restore the *status quo ante*. However, there are a number of risks associated with development of TD/UW

TD/UW involves mostly defensive capabilities and is thus less likely to be characterized as provocative or escalatory than increases in national or NATO conventional military forces.

capabilities, including diversion or abuse of military equipment and techniques for use in criminal activities and the targeting of political opponents or governmental authorities. This risk could be mitigated by limiting the number of heavy weapons—equipped "high end" violent action squads in national guard and irregular forces and integrating them into SOF units, by careful vetting of personnel, and by focused law enforcement actions. Furthermore, Russian countermeasures could be overwhelming, and might result in many civilian casualties and extensive damage to infrastructure.

Findings and Recommendations

This report concludes that TD/UW capabilities can effectively complement conventional defense efforts of the Baltic states and NATO, improve warning of an attack, augment initial defenses, and buy time for (and provide support to) national and NATO conventional responses.

A wide range of technologies can enhance the effectiveness of TD/UW efforts. These include cyber capabilities, night vision devices, tactical and long-range mobile communications systems, man-portable anti-armor and anti-aircraft (including anti-unmanned aerial vehicle [UAV]) weapons, small UAVs, small arms and explosives, computers, cameras, and printers, as well as nonlethal weapons. A robust technology initiative to equip resistance cells in all three Baltic states would require approximately \$125 million in initial equipping cost, plus training, operations, and maintenance funding. Such an initiative could be supported by national defense budgets implemented over several years, and is also scalable.

Steps that the United States and other NATO and partner countries could take to help the Baltic states increase their TD/UW capabilities and thus enhance deterrence and defense include the following:

- Expand support for planning and training for crisis management, civil defense, and countering hybrid and "gray zone" attacks.
- Coordinate increased strategic communications efforts to counter Russian information warfare activities.

- Support the creation or expansion of national and regional intelligence fusion centers to integrate civil, police, and military analysis capabilities to improve warning of impending attacks, and deepen the Baltic states' connectivity to intelligence fusion centers in neighboring countries and at NATO and the European Union (EU).
- Provide enhanced sensors and associated training to Baltics border guard forces to help them better deal with hybrid threats.
- Expand UW training of Baltics SOF and National Guard units and expand their inventory of portable anti-armor, anti-aircraft, and mining systems.
- Provide critical support capabilities such as radios, small UAVs, and night vision devices.
- Help with establishing decentralized stockpiles and caches of relevant nonmilitary supplies to sustain resistance cells in case of war, including clothing, shelter materials, medical supplies, food, water purification tools, cash, power sources, and vehicles.

At the 2016 Warsaw Summit, NATO leaders recognized that hybrid threats could trigger allied collective defense obligations and endorsed a strategy to counter them, including efforts to enhance resilience. While civil preparedness is a national responsibility, allied governments agree that NATO should help member countries assess requirements and enhance their capabilities in key areas. At the 2018 Brussels Summit, leaders announced the establishment of Counter Hybrid Support Teams to assist allied governments in preparing for and responding to hybrid threats. NATO and the EU have also pursued concrete cooperation to help member governments counter hybrid threats, enhance resilience, and improve border and maritime security. Deepening of multilateral cooperation in this area could enhance security in the Baltic states.

TD/UW efforts need to be fully integrated into U.S. and NATO plans for initial defense and reinforcement of the Baltics in order to support both lines of effort effectively and sustain the will to fight. The rest of this report will provide a more detailed treatment of threats to Baltic security, current Baltic

defense capabilities and plans, measures to improve Total Defense capabilities and capacity, and associated risks and mitigations.

Threats to Baltic Security

The Hybrid Challenge

Since Russia's covert action in and subsequent illegal annexation of Crimea in 2014, and its support for the separatist insurgency in eastern Ukraine, there have been growing concerns in the United States and Europe that the three Baltic members of NATO—particularly Estonia and Latvia, given their sizable Russophone minorities—might be vulnerable to Russian intimidation and similar hybrid warfare campaigns, and may even become the target of a Russian military invasion.

Hybrid warfare is a term used to describe the use of assertive policies, information operations, and covert and overt military and nonmilitary tactics (including cyber attacks) by Russia and other countries to advance conflicting interests or territorial claims. It sometimes involves the limited application of force, just below thresholds that would trigger a conventional military response, and is often conducted in ways that create ambiguity about the parties involved, their goals, and the validity of the legal and political claims at stake.⁸

The most aggressive application of hybrid warfare techniques against a Baltic state occurred in 2007, following the Estonian Parliament's decision to relocate a World War II memorial statue and the remains of 13 Soviet soldiers from central Tallinn to a military cemetery outside the city. This move was met with an inflammatory official Russian response, rioting in Tallinn, the siege of the Estonian Embassy in Moscow by demonstrators, punitive economic measures, and waves of cyber attacks against Estonian government and banking websites.9 The sophistication of Russian government information operations using controlled media and government-organized nongovernmental organizations has only grown since. However, a repeat of the Crimea or Donbas (Ukraine) scenarios is seen by most Baltic officials and analysts as highly

unlikely. Polling data and other information suggest that the Russophone minorities in Latvia and Estonia are far from being a cohesive "fifth column" that could be readily mobilized to rise up and welcome "little green men" promising protection, particularly now that they have seen the destruction that the Russian-backed insurgency has wrought in the Donbas. 10 Estonian government surveys have consistently shown that a plurality of the Russophone population segment supports active defense against an armed attack, and over half would be willing to personally participate in defense activities if Estonia were attacked. 11

That said, there are ethnic and cultural divisions in each Baltic society, and Russophone communities do have some general concerns about the extent of their societal integration and specific social welfare and education grievances. In addition, many Russophones in Estonia and Latvia rely on Russianorigin media for information and entertainment. The governments and citizens of all three Baltic states are subject to ongoing Russian strategic information, propaganda, and cyber efforts that are part of campaigns designed variously to undermine trust in their institutions, foment ethnic and social tensions, and erode confidence in NATO collective defense commitments.12 These activities could be used by Moscow to prepare the environment for clandestine or conventional military attacks. Even if only a small minority would be ready to create serious turmoil, it might not require a major effort to provide a pretext for Russian intervention should Moscow desire one. The RAND research team considered a range of scenarios as part of this effort, including one that some Baltic officials fear most—that Moscow might covertly orchestrate or exacerbate a domestic incident involving the Russophone community to provoke a crisis and use the ensuing turmoil as a pretext to intervene militarily to protect the Russian minority.¹³ Moscow's "Compatriot Policy" claims a legal right to protect Russian citizens wherever they reside. Another scenario might involve a limited Russian seizure of territory in one of the Baltic states under ambiguous circumstances, in an effort to confound consensus in NATO and the EU on appropriate responses and thereby cause a crisis of confidence

in both institutions and damage the credibility of NATO's defense guarantees.

Conventional Military Imbalance

Given the imbalance between Russian high-readiness forces in the Western Military District (MD) and Baltic and other NATO conventional ground forces deployed in the region, the three Baltic states are also vulnerable to Russian conventional military attacks, both with short warning or following mobilization. While NATO would be able to employ considerable military might in a protracted conflict, Russia would have a substantial time-distance advantage in the initial days and weeks of a conflict because of its immediately available forces and its ability to reinforce with ground and air units from elsewhere in Russia, which is protected by dense air defenses.14 Russia could initiate a short-warning attack following a large conventional force exercise or a snap exercise, both of which have become more frequent in recent years. RAND wargaming-based analysis in 2015 assessed that a force of 22 to 27 Russian Battalion Tactical Groups (BTGs), drawn from the Western MD and the exclave of Kaliningrad, could isolate Riga and Tallinn in 30 to 60 hours. This analysis assessed that a larger attack by 54 BTGs, which could be generated following mobilization and longer warning, would also achieve rapid success without a much larger NATO forward presence.15 A pincer movement by Russian forces invading from Kaliningrad and Belarus could also close the Suwalki Gap (a narrow, 60-mile-long

The three Baltic states are vulnerable to Russian conventional military attacks, both with short warning or following mobilization.

strip of land connecting Lithuania to Poland) and thereby block movement of NATO ground reinforcements into the Baltics.

The Role of Total Defense and Unconventional Options

In light of these concerns about both Russian hybrid and conventional attacks, the governments of Estonia, Latvia, and Lithuania have been integrating new concepts into their national security strategies that are designed to counter hybrid attacks quickly, delay and disrupt a short-warning attack, and support NATO reinforcement efforts in the face of a major theater offensive. These include:

- Total Defense, a whole-of-society approach to national security involving integrated action by a country's military, paramilitary, and police forces; civilian branches of government; nongovernmental organizations; and the general population. It includes countering information operations, psychological defense, internal security, ensuring the resilience of critical services, civil preparedness, military defense, and support to international forces. ¹⁶
- Unconventional Warfare, which in this report refers to violent and nonviolent actions outside the scope of traditional military activities that are designed to enhance deterrence, support conventional defense against military attacks, and counter a foreign occupation. Examples include resistance, sabotage, subversive activities, and unconventional intelligence collection. UW can be carried out by regular forces as well as auxiliary or irregular forces and can be a standalone effort or conducted in support of or supported by a conventional campaign. While UW often involves actions in an occupied territory or otherwise behind enemy lines, UW can take place—and targets can be located—anywhere.17

The Baltic states have a rich history of both violent and nonviolent civilian-based resistance. External factors—including great power struggles between Germany and Russia, varying Western support for independence, and political considerations

in Moscow—have often played significant roles in historical outcomes for the region. "Forest Brothers" partisans exacted some limited costs upon Soviet occupiers in 1944–1956 through guerrilla raids, ambushes, and acts of sabotage.¹⁸ However, as it became increasingly evident that Western powers would not intervene on behalf of Baltic independence, Soviet security forces ultimately were able to infiltrate the partisan forces and undermine their support networks through severe repression and agricultural collectivization. Then, through the decades of Soviet occupation, Baltic civilian efforts to preserve core cultural elements were particularly successful. By 1991, Baltic civil mobilization efforts were able to successfully exploit Moscow's mounting sensitivities to the potential costs of a coercive invasion by waging broad-based civic campaigns for independence.

Current Baltic National Defense and TD/UW Capabilities

Each of the three Baltic states has distinct threat assessments, national defense strategies, and military postures; however, all see NATO collective defense commitments and security agreements within the EU as foundational elements of their security. Each government also has differing capabilities, plans, and historical experiences with territorial defense, internal defense, UW, and armed resistance to invasion and occupation. Estonian and Latvian defense planners are concerned about both the potential for largescale conventional attacks due to their long, shared borders with Russia and the expansion of Russian hybrid threats—which have targeted both countries since the 1990s—and given the sizable Russophone population that lives in the information space of Kremlin-backed outlets. Lithuanian planners are more focused on the threat of Russian offensives from Belarus and Kaliningrad designed to close the Suwalki Gap and cut off NATO reinforcements.

This section first outlines the national security strategies of these three countries, and of their defense and state security organizations, including the active-duty and reserve ground, national guard, border security, and paramilitary forces, all of which could potentially be engaged in initial territorial defense against a range of Russian military attacks. It reviews the current size and organization of these forces, their concepts of operation, and general deployments. It then examines the plans and capabilities for resilience and resistance following an invasion that each country has established. However, assessing the capabilities of each organization to achieve its range of tasks is beyond the scope of this report.

Estonia

National Defense Concept

From 1993 to 2010, the National Defence Concept of Estonia was founded on the principles of total defense and territorial defense. In response to changes in the security environment, parliament approved a new National Security Concept in 2010, and in 2011 the government promulgated a new National Defence Strategy. These documents concluded that the most-serious potential threats to the country's security derived from hybrid challenges and a combination of internal and external developments that can no longer be addressed primarily by military means, as the previous concepts envisioned.19 The government further refined that approach, now called integrated defense and comprehensive security, which was affirmed in the 2017 National Security Concept. Comprehensive national defense is a whole-of-society approach that includes six pillars: military defense, civilian support to military defense, international action, domestic and internal security, maintenance of the state and society, and psychological defense.²⁰ The 2017 concept calls for continued military resistance, even in areas over which the state may have temporarily lost control. Each ministry of government is expected to have plans and procedures in place to support national defense in its area of responsibility. The National Security and Defense Coordination Unit in the prime minister's office oversees the integration of all these efforts on an ongoing basis, which are tested in annual, whole-of-government and whole-of-society exercises.21

Conventional Military Capabilities

With a population of only 1.3 million and compulsory military service of 8-11 months for all male citizens, the standing Estonian Defence Forces (EDF) total 6,600 personnel, mostly in the Land Forces, about half of whom are conscripts. The Land Forces include two light infantry brigades: The first, based in the north, is the main maneuver force and includes a mechanized infantry "Scouts" battalion staffed with professional soldiers; and the second, based in the south of the country, is comprised entirely of conscripts. The Estonian SOF, a separate element of the EDF since 2012, plays a significant role in national defense plans, with the primary mission of developing unconventional warfare capabilities. The 2017-2026 National Defence Development Plan has placed priority on improving readiness and procurement of additional armored mobility, artillery, and munitions stocks, indicating Estonia's interest in continuing to develop its conventional capabilities.²²

The main role of the EDF in peacetime is to prepare reserve units by training both conscripts and the reserve force (of which members are called up for refresher training every five years). Estonia has plans to mobilize a reserve force of about 60,000 troops (21,000 of whom comprise a rapid reaction structure) to provide the bulk of the country's military capabilities. Estonian defense spending comprised an average of 1.7 percent of gross domestic product (GDP) between 2005 and 2014. Under a multiparty agreement, the Estonian government has spent 2 percent of GDP on defense since 2012, and the 2018 defense budget of \$636 million represents 2.14 percent of GDP.²³

Total and Unconventional Defense Plans and Capabilities

Estonia has the most-developed TD, UW, and resistance plans and capabilities of the three Baltic governments. The Estonian *Kaitseliit* (Defence League) is a voluntary, militarily organized, national defense organization subordinate to the Commander of the Defence Forces. The Defence League has a small professional core and approximately 16,000 volunteer members organized into 15 battalions, one for each Estonian *malev* (county). It also has specialized

companies that support Estonian Army SOF, civil emergency preparedness, and cyber defense. The Defence League fulfills a variety of missions including territorial defense, defense of strategic sites, host nation support for allied troops, force protection, and cyber defense. It trains and educates the country's population in functions related to national defense. Defence League units participate in national and international exercises and, in case of war, would deploy as part of the Defence Forces following a declaration of mobilization. It has another 10,000 members in affiliated women's and youth organizations, and plans to expand its total membership to 30,000 by 2022.²⁴ The Defence League builds on the legacy of Estonian resistance forces that conducted guerrilla operations against Nazi and Soviet occupation forces in the 1940s and 1950s.

Survey research commissioned semiannually by the Ministry of Defence since 2012 has consistently revealed that Estonian citizens, including Russian speakers, have a strong sense of obligation to Estonia, and over 54 percent of all citizens (60 percent of Estonian speakers) express a willingness to participate in national defense activities (Figure 1).²⁵

Estonia has conducted a number of exercises to test the comprehensive defense concept, including two Siil (Hedgehog) exercises. The 2018 Siil exercise involved a total of 15,500 members of the Estonian Defence Forces, the Defence League, the police, the Border Guard Board, and the Rescue Board, together with allied forces. Observers of exercises in Estonia have found Defence League units to be effective and well-trained fighting forces, with high mobility and detailed knowledge of local terrain and an ability to achieve considerable surprise in the conduct of harassing attacks.²⁶ Estonian defense officials recognize, however, that Defence League and other territorial defense operations would not be able to defeat a sizable invasion force, but could disrupt and delay it in order to buy time for further mobilization of Estonian forces and NATO reinforcements.

Latvia

National Defense Concept

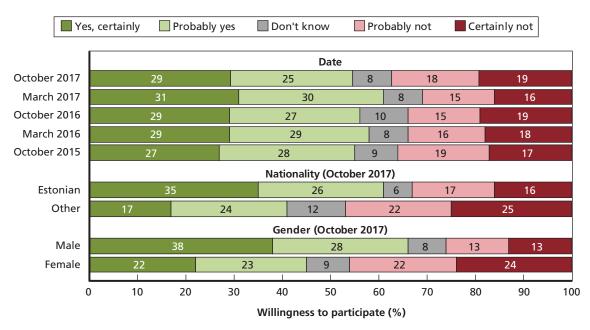
The 2016 Latvian National Defence Concept calls for cooperation among state, regional, and local authorities, as well as "the readiness and actions undertaken by individuals and legal entities during times of peace, threats and war" to support national defense.²⁷ The government recognized that bolstering the will and preparedness of citizens and private enterprise to protect the country by providing their distinct capabilities is essential to national defense given the small size of the country's regular armed forces and in light of developments in Russian policy.²⁸ The concept emphasizes preparing the population and civilian organizations for war as part of an integrated wholeof-society approach. The Latvian Ministry of Defence announced in early 2017 that the country would again pursue a strategy of total or "comprehensive" defense that it had abandoned after joining NATO in 2004, and would bolster territorial defense plans. The ministry prepared a draft report in August 2018 on implementation of a new comprehensive defense

approach based on seven pillars—military capabilities, public-private cooperation, education of society, civil defense, strategic communication, economic resilience, and psychological resilience. Following a wide-ranging review, a final report will inform the next National Defence Concept, expected in 2020.29 These actions have been accompanied by amendments to the National Security Law designed to improve the national defense system and continuity of government and set forth the duties and rights of the country's residents in case of war or occupation.³⁰ The government has undertaken additional steps in recent years to enhance the coordination of the efforts by all its ministries to contribute to national defense and has conducted periodic national-level exercises to test their effectiveness.31

Conventional Military Capabilities

The National Armed Forces (NAF) of Latvia were established in 1994 with the unification of the Defence Forces and the National Guard (*Zemessardze*, or ZS). Given Latvia's population of 1.9 million, the NAF seeks to maintain 17,500 trained military personnel in peacetime, comprised

FIGURE 1
Willingness of Estonians to Participate in Defense Activities If Estonia Is Attacked



SOURCE: Republic of Estonia, Ministry of Defence, "Public Opinion and National Defence," Autumn 2017. NOTE: Numbers may not add to 100 percent due to rounding.

of a maximum approved 6,500 professional soldiers, 8,000 members of the National Guard (600 active professionals), and 3,000 reserve soldiers.32 The Latvian government ended conscription in 2007, in favor of sustaining a small, professional force. Conscription remains unpopular, and the government contends that it lacks the resources to provide the trainers and infrastructure that would be required to reinstitute it.³³ Instead of conscription, Latvia has chosen to introduce state defense-related courses in the high-school curriculum, designed to improve social responsibility, societal cohesion, knowledge of Latvian defense plans, and defenserelated practical skills, with the goals of enhancing resilience and encouraging later enlistment in the reserves or National Guard.34

The Latvian Land Forces are organized into one infantry brigade comprised of a mechanized infantry battalion and a light infantry battalion. Latvia has special operations forces trained for a variety of missions, and plans to triple the size of the force. The Land Forces have incorporated UW elements into their planning and have taken into account U.S., Swedish, and Finnish TD/UW doctrines. Defense planning recognizes that the country's geography, including extensive marshlands, can be used to disrupt and degrade invading forces.

The global financial crisis of 2007-2008 hit Latvia hard. Defense spending averaged 1.2 percent of GDP between 2005 and 2014, which constrained force readiness and modernization. Pursuant to a three-year budget law and a 12-year defense development plan adopted in 2016, the government increased overall defense spending from 1.4 to 2 percent of GDP in 2018. The NAF plans to make significant investments in training and modern equipment for the Land Forces and National Guard to improve readiness and responsiveness and to devote at least 20 percent of the budget to procurement.³⁶ Over the coming years, the NAF plans to procure new antitank rockets, light and medium tactical vehicles, unmanned aerial vehicles, and personal equipment; it also plans to improve infrastructure, air traffic control, and general defense capabilities.37

Total and Unconventional Defense Plans and Capabilities

The National Guard (ZS) was decimated by budget cuts of 50 percent following the global financial crisis in 2007 and 2008. Riga chose to devote its limited resources to maintaining its standing conventional forces, rather than spending on sustainment of the capabilities of the ZS. However, in 2014, the government decided to invest \$76 million in training and readiness of the National Guard, and intends to increase the number of personnel to 12,000 by 2027.³⁸

The ZS is organized into three regions, but units can deploy throughout the country to support conventional forces, SOF, police, and border guards. It has specialized units for SOF support; cyber activities; psychological operations; and managing chemical, biological, radiological, and nuclear threats. The main tasks of the National Guard are to support the regular land force units in defending territory, including by providing combat support and combat logistics functions. Several battalions have been transformed into high-readiness reserve forces with engineering, sniper, and air-defense capabilities, which can be deployed immediately on international military operations. All members of the National Guard have monthly training obligations.³⁹ The National Guard is also responsible for civilian crisis management activities, supports police forces in maintaining law and order, and protects critical national security sites.

Lithuania

National Security Strategy

The 2017 Lithuanian National Security Strategy calls for the country to be defended by the Lithuanian Armed Forces (LAF), including both professional service members and National Defense Volunteers (Kariuomene/KASP) together with the forces of NATO allies. The strategy notes the need to strengthen crisis management capabilities, civil preparedness, and the "will of the population to defend the State and their total preparedness to resist by providing the possibilities to acquire and enhance military training and skills to carry out nonviolent civil resistance." All national resources are to be mobilized

and every citizen of Lithuania is expected to resist invasion and occupation in accordance with international law.⁴⁰ The Lithuanian government has taken measures to enhance interministerial coordination of national defense efforts, and the president of the republic has been given new powers to make decisions on the use of military force during peacetime.

Conventional Military Capabilities

With a population of 2.8 million, Lithuania maintains the largest armed forces of the three Baltic states, with up to 19,740 authorized (regular force and active reserve) personnel. There are about 7,500 in the Land Forces, with a peacetime organization of one mechanized infantry brigade, one motorized infantry brigade, and an engineering battalion. In wartime, training personnel and reservists would form another infantry brigade. There are about 600 personnel in the Navy and 1,000 in the Air Force.⁴¹ The Lithuanian Special Operations Forces are a separate service branch with a growing budget, and include a special mission unit (counterterrorism), Jaeger (Rangers), combat divers, and combat support and training units. 42 Lithuania eliminated conscription in 2008 but reinstated nine months of mandatory military service in September 2015 for a period of five years. Conscription is projected to bring an annual cohort of 3,500–4,000 troops, so the number of trained military personnel available for reserve forces may grow. The Lithuanian government allocated an average of only 0.95 percent of GDP between 2005 and 2014, with spending dropping significantly after the 2007-2008 global financial crisis and reaching as low as 0.77 percent of GDP in 2013. Lithuania has gradually raised defense spending to 2.01 percent in 2018, and is committed to further increases.⁴³

The 2016 Military Strategy highlights the need for the LAF to be able to provide for national defense until allied reinforcements arrive, be able to respond rapidly to conventional attacks and border violations, and be able to act in concert with national and municipal civilian institutions. The LAF established two battalion-sized rapid-reaction battle groups in 2014 to respond to hybrid threats within 2–24 hours, and has conducted large-scale exercises using an unconventional scenario with civilian institutions.⁴⁴

Total and Unconventional Defense Plans and Capabilities

The National Defense Volunteers have a full-time component of 500 professional soldiers and 4,800 volunteers who must take a three-month basic course and train a minimum of 25-30 days a year. Before Lithuania joined NATO, the National Guard primarily had a territorial defense role, but it is now designed to serve as a ready, mobile, and sustainable core reserve for the Land Forces, able to participate in the full spectrum of operations including active defense of territory, military security, host nation support, training, participation in international operations, and support of local and regional civil authorities. The National Guard is organized into six infantry battalions and an air squadron and deployed to defend the country's major population centers. It also has an SOF and a civil-military cooperation capability platoon. National Guard soldiers are trained for crisis response operations,45 augmentation of regular units, protection of critical infrastructure, support to civilian authorities and the police, and host nation support of allied forces. The approximately 11,000 members of the Riflemen's Union, a voluntary paramilitary organization, support the

While civil preparedness is a national responsibility, allied governments agree that NATO should help member countries assess requirements and enhance their capabilities in key areas.

National Guard in wartime, as do the 3,500 members of the State Border Guard Service.46

The Lithuanian government has also taken significant steps to enhance civil defense and public education for resilience and resistance. The government has identified "collective protection buildings," marked with special signs, where citizens can seek shelter in an emergency or during times of conflict. The Lithuanian Ministry of Defence and Fire Brigade jointly developed a manual in 2015 on emergency response and civilian resistance. This and an earlier manual provide guidance on resilience measures to improve citizens' chances of survival in any emergency. In October 2016, the Ministry of Defence also issued a "Guide to Active Resistance," which outlines measures citizens can pursue following an invasion, including how to cope with enemy actions and how to support armed resistance without necessarily using a weapon—including strikes, blockades, disinformation, and organizing cyber attacks against the enemy.⁴⁷ The guides have been widely distributed to those eligible for military service and elements of the National Defence Volunteer Force, as well as in schools, colleges, and public libraries; and have been made available online.

The Baltic governments have distinct national defense plans and prefer international cooperation within NATO, EU, and Nordic frameworks to Baltic regional efforts.

Role of Regional Cooperation

Regional defense cooperation among the Baltic states over the past three decades has been fairly limited, involving policy coordination; combined exercises, training, and professional military education; and a few trilateral military units and capability development projects. The three governments have distinct national defense plans and prefer international cooperation within NATO, EU, and Nordic frameworks to Baltic regional efforts.

Trilateral cooperation has gained more interest in the wake of the conflict in Ukraine. The three governments established a Combined Joint Staff Element in 2015 to coordinate defense planning at the operational level in a more systematic way, and agreed to a third iteration of the Baltic Battalion called the Baltic Forces—a nonpermanent combined battalion-size unit that could be activated for participation in NATO and EU rapid reaction forces as well as in case of an armed attack on the Baltic states.⁴⁸ SOF units from the three countries have participated in a number of international exercises over the past decade, and since 2013 Estonian and Latvian SOF units have taken part in the largest SOF exercise in Lithuania, Flaming Sword (which also involves interministerial cooperation). The three national SOF commanders signed an agreement in June 2016 to conduct further joint exercises, training course exchanges, and deployment of combined forces for special training. SOF commanders have also discussed creation of an intelligence fusion center.49

At the 2016 Warsaw Summit, NATO leaders recognized that hybrid threats could trigger allied collective defense obligations and endorsed a strategy to counter them, including efforts to enhance resilience. While civil preparedness is a national responsibility, allied governments agree that NATO should help member countries develop requirements and assess and enhance their capabilities in key related areas. At NATO's 2018 Brussels Summit, leaders announced the establishment of Counter Hybrid Support Teams to assist allied governments in preparing for and responding to hybrid threats. 51

In 2016, NATO and EU leaders also pledged to bolster cooperation to improve resilience and counter hybrid threats, and in December 2017 they agreed on a set of concrete joint initiatives, including improving situational awareness and information sharing; coordinating strategic communications; developing collaboration with the European Centre of Excellence for Countering Hybrid Threats in Helsinki; expanding staff contacts on crisis management, civil preparedness, and evaluation of resilience efforts; and taking steps to facilitate and expedite movement and border crossing of military personnel and materiel.⁵²

The three Baltic states participate in various defense cooperation formats with the Nordic states. One such example is the Nordic-Baltic Eight (NB-8), an informal regional network for political and security cooperation comprising Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden, with a rotating chair and including a defense cooperation element. Norway has an active TD concept, Finland has long followed a whole-of-society strategy for defense, and Sweden is in the process of reviving its Cold War-era TD concept, so there are opportunities for cooperation and sharing best practices on resilience and civil preparedness in this context.53 Under the Latvian chair in 2016, the NB-8 gave priority to cooperation on strategic communications, cybersecurity, and the fight against hybrid threats—which remained a focus under the successive Norwegian and Swedish chairs—along with resilience and information security.

Going beyond examples of TD/UW in the Baltic region, earlier RAND NDRI analysis also examined how key concepts of the decentralized resistance approach that was part of Swiss military strategy during the Cold War could benefit the defense of the Baltic states. This includes training and equipping local defense units, preparing transportation infrastructure for demolition to slow down an invasion, and instructing military forces, as well as the general public, in how to effectively participate in resistance activities supported by—and in support of—a coordinated information operations campaign.⁵⁴

Existing U.S. and NATO Support to TD/ UW Efforts

The United States, other allied governments, and NATO are presently providing financial support,

technical support, or both to improve TD/UW capabilities in the three Baltic states. These include:

- NATO seminars on interministerial coordination for countering hybrid warfare
- assistance for improving cybersecurity, communications, and tactical surveillance capabilities
- development of Joint Terminal Attack Controller (JTAC) capability for close air support
- development of unclassified doctrine for resilience and for a combined resistance operational concept.⁵⁵

SOF units in all three countries have benefited from their experience in Afghanistan and ongoing training in the Baltic region with U.S. and NATO SOF. This training is building mutual trust and providing experience in direct action, special reconnaissance, indigenous volunteer training, and civil-military cooperation under combat conditions. Regular and national guard forces in the three countries are also benefiting from training with U.S. and NATO SOF units as a result of the increased U.S. and NATO training tempo in recent years. The next section considers what more could be done to

At the 2016 Warsaw Summit, NATO leaders recognized that hybrid threats could trigger allied collective defense obligations and endorsed a strategy to counter them, including efforts to enhance resilience.

enhance Baltic TD/UW capabilities for a range of contingencies.

Measures to Improve Total Defense

After reviewing existing Baltic capabilities for TD/ UW and current U.S. and NATO efforts to assist their development, and drawing on structured discussions with defense officials, military commanders, and other experts in the Baltic states, the RAND team developed a framework to identify and evaluate specific TD/UW-related measures, with a focus on resistance activities and associated technologies that could enhance the TD/UW capabilities of the Baltic states. Note that the analysis discussed in this section represents the initial application of our framework based on deliberations among the RAND team and guidance received from our sponsor. Future iterations involving additional external subject-matter experts in the refinement of scenarios, vignettes, and technologies promise to provide further insights.

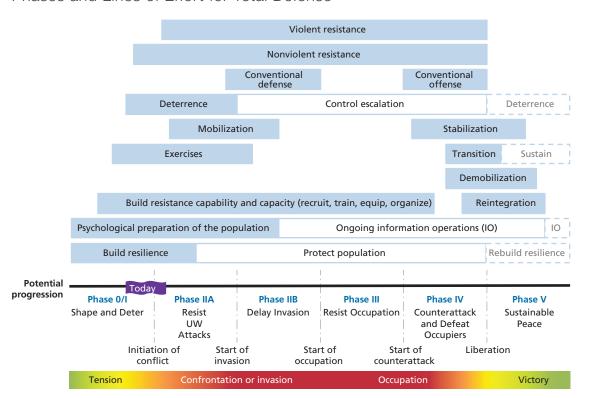
Scenarios for Resilience and Resistance

To explore TD/UW courses of action and help assess the requirements for related materiel solutions across the full spectrum of potential resilience and resistance activities, the team first posited six main phases of crisis and conflict based on the "Continuum of Military Operations," 56 as outlined in Figure 2:

- 0/I: Shape Environment and Deter Aggression
- IIA: Resist UW Attack
- IIB: Delay or Counter Conventional Invasion
- III: Resist Occupation
- IV: Assist Counterattack and Defeat Occupiers
- V: Support a Sustainable Peace.

Figure 2 also shows the TD/UW main lines of effort, and emphasizes that all lines of effort— kinetic and nonkinetic, conventional and unconventional— are taking place in parallel and are therefore influencing each other, an important consideration in this context. Figure 3 shows notional TD objectives for

FIGURE 2
Phases and Lines of Effort for Total Defense



each phase, providing strategic context for the subsequent analysis.

For each of these phases, the RAND team developed a threat scenario. RAND researchers drew on an extensive literature review and focused discussions with defense officials, military commanders, and other subject matter experts, on the employment of TD/UW activities in support of those objectives. Due to its importance to the sponsor, Phase III was covered with two scenarios. The TD/UW missions for each scenario are as follows:

1. Countering Russian operatives instigating ethnic unrest (Phase 0/I)

- 2. Countering "Little Green Men" (LGM), i.e., hostile paramilitary forces of uncertain origin, targeting key infrastructure (Phase IIA)
- 3. Delaying Russian invaders during a short-warning attack aimed at capturing territory (Phase IIB)
- 4. Preventing permanent annexation of occupied territory by Russia (Phase III)
- 5. Demonstrating that the occupied country is not defeated (Phase III)
- 6. Supporting the NATO counterattack (Phase IV)
- 7. Contributing to sustainable peace (Phase V).

Finally, in order to increase the specificity of our analysis and allow for an assessment of required

FIGURE 3

Notional Total Defense Objectives for Each Phase of Conflict

PHASES	0/I: Shape Environment and Deter Aggression	IIA: Resist UW Attack	IIB: Delay or Counter Conventional Invasion	III: Resist Occupation	IV: Assist Counterattack and Defeat Occupiers	V: Support a Sustainable Peace
	Expand/maintain popular support for defense/resistance (internal)	Maintain government control of all territory and lines of communication	Fight invaders to delay their advance (including to buy time for NATO forces to deploy)	Impose cost on invaders (in occupied country and in their homeland)	Deny occupier freedom of movement	Restore law and order, civilian control, and services
	Garner outside support for defense	Protect critical infrastructure (e.g., communications nodes, energy, government facilities, etc.)	Hold key territory or nodes	Reduce occupier capacity to control territory (and airspace)	Increase pressure on aggressor to withdraw its forces	Prevent civil war, factional fighting
OBJECTIVES	Thwart aggressor attempts to lay the groundwork for an invasion	Counter LGM	Degrade invader capabilities and capacity	Protect remaining population and institutions	Protect key infrastructure for use by counter- attack forces	Transition select units to sustainable peacetime status
OBJECTIVES	Deter aggression by preparing for denial and punishment	Disrupt local proxy organizations	Prepare for occupation	Lay in-country groundwork for counterattack	Provide intelligence to counterattack forces	Demobilization, reintegration
		Protect population	Impose costs on aggressor's homeland	Maintain internal and external popular support	Manage escalation	Maintain internal and external popular support
		Maintain internal and external popular support	Ensure that NATO forces are involved in defense		Continued protection of population	
			Continue protection of and services to populace		Maintain internal and external popular support	
			Maintain internal and external popular support			
Potential	Today	<u> </u>				
progression	Phase 0/I	Phase IIA	Phase IIB	Phase III	Phase IV	Phase V
	Shape and Deter	Resist UW Attacks	Delay Invasion	Resist Occupation	Counterattack and Defeat Occupiers	Sustainable Peace
	Initiat con	ion of Start flict invas			rt of Liber rattack	ation
	Tension Confrontation or invasion Occupation				Victory	

materiel solutions at the resistance squad/cell level, four tactical vignettes were generated for each scenario, with each of a scenario's vignettes illustrating a different type of TD/UW action and a different set of TD/UW actors (see Figure 4):

- Vignettes A: involving a "high end" violent action squad, which could be comprised of SOF operators, national guard forces, soldiers from overrun regular units, or some combination of the three, conducting more-complex kinetic operations
- Vignettes B: involving a "low end" violent action squad, which could be comprised of members of, for example, the Police Volunteers in Estonia or the Riflemen's Union in Lithuania, conducting less-complex kinetic operations
- Vignettes C: involving a UW support cell, which could be comprised of local chapter members of a patriotic organization, national guard affiliates, long-time neighbors, or a

- group of close friends, providing mostly logistical and intelligence support to the violent action squads
- Vignettes D: involving a nonviolent action cell, which could be comprised of members of patriotic organizations, national guard affiliates, student groups, neighbors, or a circle of friends, which focuses on information operations and low-risk intelligence gathering.

This effort resulted in 28 vignettes along with narratives describing the associated scenarios, which comprehensively cover peacetime, crisis, wartime, and postwar political contexts, at different levels of potential violence and risk, taking place in urban and rural physical environments, and involving different levels of NATO engagement and integration (see Figure 5). These scenarios and vignettes are discussed briefly below in order to illustrate our approach and provide concrete examples for TD/UW activities.

Scenario 1: Countering Russia-sponsored operatives instigating ethnic unrest (Phase 0/I). Ethnic

FIGURE 4
The Spectrum of Resistance Activities and Actors

High-End Violent Action	Low-End Violent Action	UW Support	Nonviolent Action			
Activities ambushing tanks raiding headquarters rescuing captives etc. Participants regulars National Guard etc. augmented by SOF	Activities ambushing convoys raiding outposts sabotage etc. Participants police volunteers Riflemen's Union etc. augmented by regulars	Activities collecting intelligence providing supplies sheltering casualties etc. Participants close friends longtime neighbors family etc.	Activities • producing information operations materials • civil disobedience • street theater • etc. Participants • neighbors • coworkers • hobbyists • etc.			
Information effects						
Psychological aspects						
	Resili	ence				

NOTE: Notional Tables of Organization and Equipment for each squad/cell are provided in Figure 7 through Figure 10.

The Set of Tactical Vignettes Covers the Spectrum of Conflict

Scenario/ Vignette	Phase	Political Context	Relative Level of Physical Potential Violence Environment		NATO Involvement
1A	0/I	Peace	High Urban		Limited
1B	0/I	Peace	Medium Urban		Limited
1C	0/I	Peace	Low	Urban	Limited
1D	0/I	Peace	None	Urban/rural	Moderate
2A	IIA	Peace	High	Rural	Moderate
2B	IIA	Peace	Medium	Rural	Limited
2C	IIA	Peace	Low	Urban	Limited
2D	IIA	Peace	None	Urban	Limited
3A	IIB	War	High	Rural	Moderate
3B	IIB	War	Medium	Rural	Moderate
3C	IIB	War	Low	Urban/rural	High
3D	IIB	War	None	Urban/rural	Moderate
4A	III	War	High	Urban/rural	Moderate
4B	III	War	Medium	Rural	Moderate
4C	III	War	Low	Urban/rural	Moderate
4D	III	War	None	Urban/rural	Moderate
5A	III	War	High	Urban	Moderate
5B	III	War	Medium	Urban	Moderate
5C	III	War	Low	Urban	Moderate
5D	III	War	None	Urban/rural	High
6A	IV	War	High	Urban/rural	High
6B	IV	War	Medium	Rural	High
6C	IV	War	Low	Urban/rural	High
6D	IV	War	None	Urban/rural	High
7A	V	Peace	High Urban/rural		Moderate
7B	V	Peace	Medium	Medium Urban/rural	
7C	V	Peace	Low	Urban/rural	Limited
7D	V	Peace	None	Urban	Limited

unrest is triggered by fabricated charges of discrimination against the sizable Russophone minorities in Estonia or Latvia. Alternatively, or in tandem, ethnic tensions are stoked by a deniable provocation, such as the 2015 Internet posting declaring the creation of a "People's Republic of Latgale" in Eastern Latvia. After local police and other security forces, which have lead responsibility, take measures to address the crisis, continuing and expanding riots lead local police to seek help from local National Guard and Defence League squads and police volunteer units. ⁵⁷

Recognizing the need to avoid escalating ethnic violence by attacking minorities, the security forces also seek the assistance of loyal local citizens—including ethnic minorities—to identify agitators, and civic leaders as well as church officials expose and condemn Russian efforts and urge calm. The associated vignettes are:

 a. National Guard and Defence League squads support local police in containing a riot

- b. police volunteers assist the police in protecting stores owned by ethnic minorities from possible majority retaliation
- c. neighbors identify and report local Russian operatives to appropriate authorities
- d. ethnic minority churches and civic leaders publicly condemn Russian interference.

Scenario 2: Countering LGM targeting key infrastructure (Phase IIA). In the context of growing tensions between a Baltic state and Russia, LGM suddenly arrive, foment turmoil in border areas, and attempt to disrupt critical infrastructure, similar to what happened in the early phases of the crises in Crimea and Eastern Ukraine. Due to the rapidly developing and widespread nature of the attacks, local police forces are at risk of being overwhelmed and thus seek help from Defence League and police volunteer units to round up the LGM in their area and prevent them from reaching their targets. Civil authorities also seek the assistance of trained volunteers from the Women's Home Defence League and other loyal citizens to report LGM activities, and use broadcast and social media channels to issue appeals for citizens to help protect critical infrastructure. The following vignettes were generated for this scenario:

- a. National Guard and Defence League squads support police raid on local LGM safe house
- b. police volunteers squad sets up a roadblock to keep LGM from reaching key infrastructure
- c. civilian support teams track and report LGM movements
- d. civilians gather around key infrastructure to deny access to LGM, record and publicize video.

Scenario 3: Delaying Russian invaders during a short-warning attack aimed at capturing territory (Phase IIB). Following mounting regional tensions and a Russian snap exercise, a Russian force of more than 20 battalion tactical groups, supported by airmobile Spetsnaz (special forces) units, attempts to capture Riga and Tallinn in an effort ultimately aimed at causing a collapse in NATO cohesion. In a supporting attack on Lithuania, a smaller Russian force is launched from Belarus and Kaliningrad

with the goal of closing the Suwalki Gap to block NATO reinforcements from Poland. Baltic Special Operations and National Guard and Defence League units, in support of conventional forces, aim to delay the Russian advance by destroying key transportation infrastructure such as bridges, and attacking Russian forces at chokepoints; they also serve as JTACs for U.S. and NATO air strikes. Behind the advancing Russian troops, lightly armed local forces ambush Russian reinforcements and logistics troops and report Russian force movements to Baltic and NATO command centers. Civilian cells organize disruptive actions to further slow the Russian advance. This scenario yielded the following vignettes:

- a. National Guard and Defence League squads destroy a key bridge, then attack Russian armor and helicopters
- b. village militia ambushes a Russian supply column
- c. support cell provides location of a Russian air defense unit to NATO for targeting
- d. nonviolent action cell mobilizes local truckers to block a key bridge with their trucks.

Scenario 4: Preventing permanent annexation of occupied territory by Russia (Phase III). The Russian military campaign outlined in Scenario 3 is partially successful. Several counties in all three Baltic states are under control of Russian forces. Russian forces have surrounded Riga and Tallinn, but the cities have not fallen. NATO is generating reinforcements, but they have not yet arrived. Small Defence League units and civilian resistance cells continue to operate in occupied areas, ambushing Russian forces, providing intelligence to Baltic forces, and supporting the evacuation of downed NATO pilots and key civilians. In unoccupied areas, Defence League units assist with reception and onward movement of NATO reinforcements. Throughout the Baltics, civilians engage in disruption to slow Russian consolidation of control in occupied areas, disseminate anti-occupation propaganda, and document atrocities on social media. The following vignettes were used for the analysis:

a. National Guard and Defence League squads organize regional escape and

- evacuation network for downed pilots and key civilians
- b. village militia selectively targets Russian patrols and officials near the village, recording action on video
- c. support cell provides supplies and intelligence support to militia units
- d. nonviolent action cell creates and distributes information on Russian actions locally and online.

Scenario 5: Demonstrating that the occupied country is not defeated (Phase III). The Russian military campaign is initially successful in one Baltic state, and its capital falls under temporary control of Russian forces. The occupied government initiates its continuity-of-government plans and withdraws to a safe harbor abroad while Russian forces conduct mopping-up operations against the remaining units of the country's conventional military. However, military and civilian resistance units continue to launch harassment strikes against Russian forces and administrators in order to demonstrate to the citizens—as well as to the Russians and the world—that the fight is far from over. Local militias support and document these raids. Citizen groups throughout the occupied country continue disruptive actions to slow consolidation of control in occupied areas and seek to undermine support for the occupiers through information campaigns. This scenario involves the following vignettes:

- a. National Guard and Defence League squads raid Russian intelligence service headquarters in the occupied city
- b. village militia provides perimeter security for an attack on Russian intelligence headquarters
- c. support cell provides pre-raid intelligence, records the raid, and creates anti-Russian propaganda
- d. nonviolent action cell coordinates mass peer-to-peer outreach to Russian and allied populations.

Scenario 6: Supporting the NATO counterattack (Phase IV). As NATO forces assemble for their counterattack, the occupation of Baltic territory proves difficult for Russia to sustain, particularly in urban areas. Harassment strikes against Russian forces and administrators, as well as disruption of lines of communication and other infrastructure by resistance forces, lead to some areas slipping from Russian control. This creates favorable conditions for the resistance to operate. When the counterattack launches, resistance forces in these areas act to degrade the defenders' freedom of movement, and simultaneously support NATO's advance by protecting critical infrastructure and providing timely intelligence to NATO forces. Police and civilian volunteers assist and shelter displaced civilians and ensure they do not get in the way of the counteroffensive. The vignettes for this scenario are:

- a. National Guard and Defence League squads attack Russian reinforcements and lines of communication
- village militia keeps Russian forces from destroying a key bridge needed by advancing NATO troops
- c. support cell provides local guides and intelligence to approaching NATO troops
- d. nonviolent action cell provides assistance and shelter to civilians displaced by fighting.

Scenario 7: Contributing to sustainable peace

(Phase V). As national and NATO forces regain control of formerly occupied areas, Defence League units provide rear-area security and help local police identify and suppress any Russian stay-behind networks. After the liberation of all three Baltic states, these forces also continue to train with national and NATO forces to apply lessons learned from the occupation and contribute to deterrence with their readiness to respond to any future hostilities. Civilian nongovernmental organizations work with local and regional authorities to support the resettlement of displaced persons and the initiation of truth and reconciliation activities. This includes the following vignettes:

- a. National Guard and Defence League squads participate in the annual NATO exercise
- b. police volunteer members watch for potential LGM activity in their neighborhoods
- c. neighbors help displaced ethnic minority families settle in

 d. student group initiates interethnic dialogue on postconflict economic opportunities.

Supportive Technologies

The RAND team then assessed technologies that could best enhance the TD/UW capabilities of the Baltic states. Starting with a list of relevant technologies derived from our discussions with experts in the Baltics, the team then undertook a qualitative assessment of the need for each of those technologies of interest in each of the vignettes outlined above. Categories of equipment considered were:

- communications, such as tactical radios and satellite phones
- information operations enablers, such as digital cameras and rugged laptops
- mobility, such as all-terrain vehicles (ATVs), off-road-capable motorcycles, and sport utility vehicles (SUVs)
- small arms, such as rifles, handguns, and grenades
- demolitions, such as explosives, fuzes, and mines
- fire support, such as anti-tank guided missiles (ATGMs) and man-portable air defense systems (MANPADS)
- nonlethal weapons, such as flash-bang grenades
- miscellaneous supplies such as medical equipment, night vision goggles, camouflage gear, power generators, and cash.

Note that we did not include purely civilian sustainment supplies such as tents, cold-weather clothing, food, or water purification capabilities, although they, of course, play an enabling role for both resilience and resistance.

For each of the vignettes in each scenario, we then assessed the necessity of each of those categories of equipment, using a rating scale of must have, should have, optional, and not needed.

To provide an example of this approach: Scenario 3, Vignette C envisions a UW support cell providing the location of a Russian air defense unit to NATO for targeting, in support of the defense

against a Russian short-warning attack on one of the Baltic states. This mission would require the following "must-have" equipment: robust secure communications (to relay information to NATO forces), all-terrain mobility (to get sufficiently close to the Russian unit), and camouflage gear (to reduce the likelihood of detection). The mission would also greatly benefit from the following "should have" equipment: night vision devices to allow for operations after dark; mobile computing, as well as still and video cameras, to document and report details of Russian equipment and its dispersal; small UAVs for additional reconnaissance capabilities; and small arms and nonlethal weapons in case the reconnaissance element needs to defend itself. Figure 6 shows the full rating matrix for Scenario 3, covering all four vignettes. Similar rating matrices were generated for all other scenarios as well.

Scores for each category were summed up across all scenarios and vignettes. This assessment revealed that the following technologies would enhance the capabilities of all types of resistance cells across all scenarios and vignettes the most:

- night vision devices
- · robust secure mobile communications
- · mobile computing
- still and video cameras
- · all-terrain mobility
- · small arms.

The RAND team's assessment of the technology requirements for only the low-end violent action squads, UW support cells, and nonviolent cells (Vignettes B/C/D) across all scenarios also resulted in the technologies listed above. Similarly, assessing requirements only for the two occupation scenarios (4 and 5, Phase III) resulted in the same list of technologies.

Assessing the technology requirements only for the non-occupation scenarios (1–3, 6, 7) across all vignettes also results in the above list, except that "mobile computing" is replaced by "nonlethal weapons."

Requirements for the high-end violent action squads (Vignettes A) across all scenarios were also assessed separately, and the results suggest similar requirements; however, "mobile computing" as well

FIGURE 6
Technology Requirements Rating Matrix for Scenario 3

Must-have (M)

Requirement scale:

requirement scare.		, optionar		caca (iv)
	Requirements for Scenario 3 (Phase IIB)			
Technology	Vignette A: destroy bridge, attack armor	Vignette B: ambush supply column	Vignette C: report Red air defense unit	Vignette D: mobilize truckers
Night vision devices	M	M	S	N
Robust secure mobile communications	S	M	M	M
Mobile computing	0	0	S	0
Still and video cameras	S	S	S	0
Man-portable anti-armor weapons	M	S	N	N
Man-portable anti-aircraft weapons	M	0	N	N
All-terrain mobility	M	М	М	S
Small UAVs	S	S	S	0
Anti-UAV weapons	S	S	0	N
Small arms	M	М	S	0
Nonlethal weapons	0	0	S	0
Rangefinders	S	S	0	N
Visual and thermal camouflage	S	М	М	N
Demolitions	M	М	N	N
Mines and mining systems	M	S	N	N

Should-have (S)

Optional (O)

Not needed (N)

as "still and video cameras" are replaced by man portable anti-armor and anti-aircraft weapons, respectively, driven by the "wartime" scenarios 3–6.

What Would it Cost?

The RAND team also developed a rough order-of-magnitude estimate of initial equipping cost based on notional Tables of Organization and Equipment for the four types of resistance units and the associated technologies described previously. For this, specific products were selected for each of the equipment categories discussed in the previous section, and costs were estimated based on commercial pricing. Sequantities required per unit were determined based on operational considerations. For example, each member of a violent action cell could be expected to need a rifle and sidearm, but only the squad and fire team leaders would need tactical radios. Furthermore, nonviolent action cells would be "heavy" on Information Operations equipment,

while the high-end violent action cell would need additional fire and demolition capabilities. Table 1 illustrates this approach. Quantities were further based on a notional size of 15 personnel for each violent action squad and UW support cell, and five core personnel for each nonviolent action cell (see Figure 7 through Figure 10).

According to these calculations, it would cost **approximately \$125 million** to initially equip 1,000 resistance units across all three Baltic states:

- 100 "high-end" violent action squads (at approximately \$510,000 each)—\$51 million
- 300 "low-end" violent action squads (at approximately \$120,000 each)—\$35 million
- 300 UW support cells (at approximately \$70,000 each)—\$21 million
- 300 nonviolent action cells (at approximately \$60,000 each)—\$18 million.

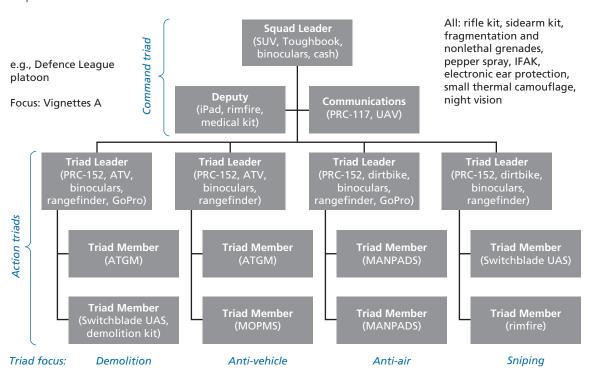
However, training, maintenance, and operations would add additional costs. If this equipment were procured over a period of five years, it would cost

TABLE 1
Equipping Levels of Notional Resistance Units

	High-End Violent Action Squad	Low-End Violent Action Squad	UW Support Cell	Nonviolent Action Cell
Communications	xxx	xx	Х	xx
Information operations	х	х	xx	xxx
Mobility	xx	х	х	xx
Fires	xx	_	_	-
Small arms	xxx	xxx	х	_
Demolition/mines	xx	х	_	_
Medical kits	xx	xx	х	х
ISR	х	х	xx	х
Nonlethal	xx	xx	х	-
Other	xxx	xx	Х	Х

NOTE: Equipping levels are indicated as follows: heavy = xxx, moderate = xx, light = x, — = none. ISR = intelligence, surveillance, and reconnaissance.

FIGURE 7
Notional Table of Organization and Equipment of a "High-End Violent Action Squad"



NOTE: IFAK = individual first aid kit; MOPMS = modular pack mine system, PRC = tactical radio.

Notional Table of Organization and Equipment of a "Low-End Violent Action Squad"

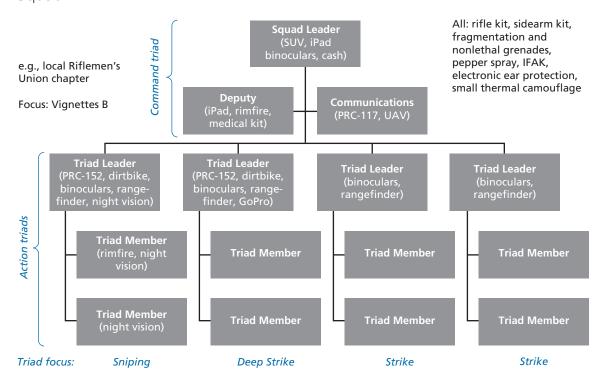


FIGURE 9

Notional Table of Organization and Equipment of a "UW Support Squad"

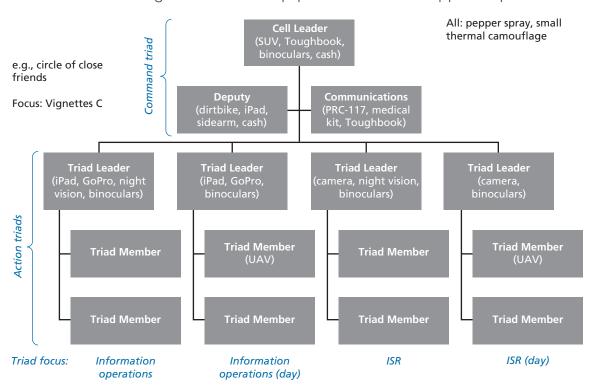
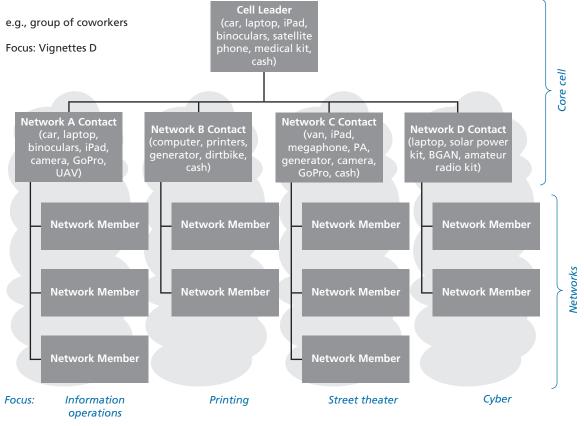


FIGURE 10

Notional Table of Organization and Equipment of a "Nonviolent Action Cell"



NOTE: PA = public address (loudspeaker) system; BGAN = portable satellite Internet connection.

about \$8 million per year for each of the three Baltic states. Such an investment in capabilities seems sustainable in light of increasing Baltic defense budgets, but would likely require some tradeoffs with spending on conventional force modernization priorities. Some of the cost could also be borne by U.S. security assistance. There have been significant increases in fiscal year (FY) 2018 and FY 2019 foreign military financing available to the Baltic countries under the European Deterrence Initiative. Some of these funds are allocated to support development of TD/UW capabilities, including \$70 million for both training and equipping forces to improve defense and security infrastructure and strengthening resilience efforts.⁵⁹

Additional Promising Total Defense Measures

The RAND project team's analysis and past RAND reports suggest the following measures could also enhance TD efforts in the three Baltic states:⁶⁰

- coordinated strategic messaging to counter Russian information warfare activities
 - funding independent Russian-language broadcast stations in the Baltics and facilitating their access to "Western" entertainment that appeals to Russophone communities
 - promoting resistance-related cultural content (e.g., movies, books, games)
 - creating broadcast infrastructure abroad in case of invasion
 - anticipating and countering the Russian "firehose of falsehood" directed at

preparations for TD, UW, and resistance (e.g., false claims of NATO troops assaulting local civilians, or claims that resistance leaders are "Nazis")⁶⁰

- resilience-enhancing efforts in order to increase the robustness of the Baltic states against "gray zone" attacks, focusing on the following areas:
 - interministerial coordination
 - building capacity for action within ministries and agencies
 - civil defense and disaster preparedness
 - improved training and equipment for police forces and border guards
 - cybersecurity and cyber defense
 - energy independence (e.g., liquid natural gas, gas pipelines, European power grid)
 - training civilians in nonviolent and lowend resistance methods
- decentralized stockpiling of relevant nonmilitary supplies, so that in case of war resistance cells can be quickly established and cells can focus on their mission rather than on obtaining sustainment items, e.g., outdoor clothing, boots, shelter materials, medical supplies, food, water purification equipment, batteries, generators, gasoline, and vehicles, as well as cash and instruction materials on conducting resistance.

Risks and Mitigations

There are a number of risks associated with development of TD/UW capabilities. Diversion of the military equipment that might be provided to resistance cells could lead to some of those systems ending up on the black market. A solution to that problem might be to keep the number of heavy weaponsequipped "high end" violent action squads low or integrate them into SOF National Guard or Defence League units to improve control. There is also potential for abuse of the capabilities and equipment by squad or cell members who engage in criminal activities, or for targeting minorities or government authorities. These risks could be mitigated through careful vetting of squad and cell personnel and law

enforcement actions. Measures against infiltration of resistance squads or cells by Russian agents would also have to be taken.

Expanding TD/UW units and capabilities could also increase the risk to the inhabitants of the Baltic states in the event of a Russian invasion. The members of prospective resistance cells would likely be targeted by Russia in the event of an invasion, and the combination of violent and nonviolent methods would increase the risk to any broader group of civilians participating in low-end resistance activities. Russian counterinsurgency campaigns in Chechnya suggest that Moscow may use tactics that cause disproportionate harm to civilians in the event of a violent resistance movement opposing military action.⁶² Efforts to develop UW could increase casualties in the face of a Russian invasion, although such efforts may still be desirable given their potential to enhance deterrence by denial.

Furthermore, TD/UW efforts alone would be insufficient to defend against a full-scale Russian military attack in the Baltic states. In light of the Baltic experience after World War II—when resistance activities in all three countries collapsed once it became clear that the West was not going to liberate them from Soviet occupation—TD/UW efforts need to be tied to a conventional campaign, including a NATO counterattack within weeks or months (not years or decades), to be viable contributors to defense and deterrence.

On an operational level, the Baltics offer limited sanctuary for guerrillas: There are no mountains or expansive wilderness areas, and modern multispectral ISR capabilities make it easier to detect even small groups hiding in the woods. Resisters would therefore have to seek sanctuary mainly in urban areas. Furthermore, fewer citizens than in the post-World War II era know how to survive "off the grid," but the regional culture of summer houses in the countryside and memories of hard times under the Soviet occupation and in the 1990s foster a resilience mindset, even among urban populations. In addition, Baltic citizens today have access to much more information (including training and motivational videos, technical data, and social networks) than did their ancestors.

Due to changed social norms in the West, including in the Baltic states, recruiting for violent resistance could be more challenging than it has been in previous conflicts. Gaining political and material support for the widespread implementation of UW efforts in the Baltics from other allies may be challenging as well, but attitudes may be shifting, as Sweden, Norway, and Finland have also taken measures to strengthen their TD efforts.

At the strategic level, immediate decisive action can get inside the adversary's decisionmaking loop, enabling off-ramps to wider conflict—for example, if an opportunistic adversary realized that events were not unfolding as planned and required riskier or more-escalatory actions to achieve its goals. Decentralized, ubiquitous, aggressive resistance (both violent and nonviolent), synchronized with a global strategic messaging campaign, can make it clear that a country—even though it may be occupied—is not vanquished. In the case of a Baltic scenario, this message could be critical to sustaining international political support for the liberation of the region. A number of Baltic defense officials emphasized their conviction that "loss of territory does not equal loss of the war." However, allied support—moral and practical, military, diplomatic, economic—is needed for successful resistance.

Russian Reactions and Countermeasures

Russian military exercises regularly identify unconventional defense and resistance capabilities as factors that must be addressed in planning military operations against potential adversaries. Historic Russian campaigns in the Baltics and Ukraine in the late 1940s and early 1950s employed overwhelming force against UW tactics, but took substantial time to eliminate violent resistance, with nonviolent resistance continuing in the Baltics until the three states regained independence in 1990 and 1991. When pursued intensively by Baltic populations, unconventional defense and resistance tactics substantially increased the Soviet Union's cost of maintaining military control of Baltic territory—in resources, manpower, and diplomacy.

More recently, Russian planning appears to have assumed that its irregular forces used in the Crimea operation would meet limited or no resistance, but operations in the Donbas reflect Moscow's concerns about the ability of the Ukrainian military and volunteer forces to almost defeat Russian-backed irregular and proxy forces.⁶³ ZAPAD (a regular Russian military exercise) and other exercise scenarios have reportedly integrated urban counterterrorist and counterinsurgency operations with large-scale conventional operations and mop-up of surviving enemy units and resistance forces. There appears to be a new emphasis in Russian planning on use of SOF, ISR, and airborne forces. In its exercises, the Russian military employs the Federal Security Service (FSB), border troops, and national guard forces in "counterterrorism operations" against adversaries that are engaged in countering actions very similar to what the Russians did in Donbas with proxy forces.⁶⁴ The FSB and Main Intelligence Unit (GRU) have also made use of Russia-based organized criminal networks for arms smuggling and to support proxy forces in the Donbas campaign.65

Enhancing Baltic resilience efforts could frustrate Russian concepts designed to achieve rapid victory by breaking the will to fight in these societies. Overall, such resistance and resilience efforts seem likely to have an impact on Moscow's strategic calculus if it were considering a military operation against any of the Baltic states (Figure 11). However, a thorough net assessment of Baltic TD/UW capabilities and Russian countermeasures would require more-detailed analysis and wargaming.

Conclusions

This report reviewed the national security strategies of the governments of Estonia, Latvia, and Lithuania with a focus on current unconventional plans and capabilities, which include societal resilience, violent and nonviolent resistance, and total or comprehensive defense. It advanced a framework for evaluating the utility of UW and TD measures at various phases of conflict for the purposes of deterrence and defense in the Baltic region. It identified military and civilian technologies that could enhance the effectiveness

FIGURE 11
Key TD/UW Activities to Affect Russia's Strategic Calculus

Russia's intent (example)	Destabilize Baltic states	Generate pretext for invasion	Create fait accompli	Make NATO look powerless	Avoid defeat	Destabilize Baltic states
Russia's action (example)	Position military units near border	Instigate minority riots	Seize Baltic territory	Maintain occupation	Counter NATO liberation forces	Cyberattack on power grid
Unconven- tional counter (example)	Expand defense volunteer program	Augment riot police with local defense volunteers	Village militia takes down key bridge	Resistance actions uploaded to social media	Village militia protects key bridge	Prepared population, increased resilience
Benefits and risks	+ Sustainable - Diversion	+ Local knowledge – Infiltration	+ Rapid response – Timing, C2	+ Shows fight is not over - Retribution	+ Rapid response - Timing, C2	+ Also for other hazards - Cost
Potential	_					
progression	Phase 0/I Shape and Deter	Phase IIA Resist UW Attacks	Phase IIB Delay Invasion	Phase III Resist Occupation	Phase IV Counterattack and Defeat Occupiers	Phase V Sustainable Peace
	Initiation of Start conflict invas		o. startor sta		rt of Liber rattack	ration
	Tension Confrontation		n or invasion	Occup	ation	Victory

NOTE: C2 = command and control; + = benefit, - = risk.

of these efforts, estimated the cost of procuring those technologies, and explored possible tradeoffs, while also considering the risks of expanding UW and TD efforts and potential Russian responses and countermeasures.

Findings, Recommendations, and Further Analysis

TD and UW capabilities have the potential to delay and disrupt Russian military aggression against the Baltic states, and to make occupation of a Baltic state very costly to the invading forces, thereby enhancing deterrence. These techniques and forces could also support a NATO liberation campaign and ease the transition to a sustainable peace after the end of military operations by supporting stabilization, demobilization, and reconstruction activities. We have identified a number of low-cost measures that could enhance these capabilities.

First, the United States and NATO should pursue additional actions to help the Baltic states enhance their capabilities, capacity, training, and equipping for TD/UW, including the following steps:

- expand support to planning and training for crisis management, civil defense, and countering hybrid and "gray zone" attacks
- coordinate increased strategic communications efforts to counter Russian information warfare activities and increase psychological resilience
- support the creation or expansion of national and regional intelligence fusion centers to integrate civil, police, and military analysis capabilities to improve warning of impending attacks, and deepen their connectivity to intelligence fusion centers in neighboring countries and at NATO and the EU
- provide enhanced sensors and associated training to Baltic border guard forces to help them better deal with hybrid threats
- expand UW training of Baltic SOF and national guard units and expand their inventory of portable anti-armor, anti-aircraft, and mining systems
- provide critical UW equipment such as radios, small UAVs, and night vision devices
- help with establishing decentralized stockpiles and caches of relevant nonmilitary supplies to sustain resistance cells in case of war,

including clothing, shelter materials, medical supplies, food, water purification equipment, cash, power generators, and vehicles.

Additional measures could be taken to enhance coordination of national civil emergency activities with NATO and EU crisis management and military contingency plans to protect the Baltic and other Central and East European states from hybrid and other threats to their sovereignty. The NATO Comprehensive Crisis and Operations Management Centre (CCOMC) at Supreme Headquarters, Allied Powers Europe (SHAPE), which monitors open source and intelligence information to identify emerging crises and develop assessments and response plans following guidance from the North Atlantic Council, is a valuable resource in this context.66 CCOMC has liaison officers from the EU, but deepening information exchanges and assessments with the European Union Intelligence Analysis Centre (EU INTCEN) and national civil authorities could strengthen early warning of and coordinated response to emerging crises.⁶⁷

While this report has identified some of the most promising TD/UW activities that could enhance deterrence and resilience in the Baltic states, further analysis is warranted on several other issues including

- a more-detailed assessment of current and planned TD/UW capabilities, training requirements, costs, and vulnerabilities in Estonia, Latvia, and Lithuania, to clarify priority efforts in each country
- possible Russian countermeasures as well as preparations for and responses to them
- continued tracking of the attitudes of Baltic populations, government civilians, and defense force members toward UW/TD activities to assess their sustainability.

The TD/UW efforts described here complement other recommendations to build the capabilities and capacity of the regular Baltic security forces and whole-of-government resilience against a wide range of possible forms of Russian aggression. Additional U.S. and NATO deployments of forces and enabling capabilities to bolster conventional deterrence in the region may also be desirable. A determination of the

balance between these components will depend on further analysis of the costs and benefits of different approaches relative to the risk and consequence of various forms of Russian aggression.

Endnotes

- ¹ Republic of Estonia Ministry of Defence, "Basic National Defence Documents," webpage, 2018a.
- ² Republic of Latvia Ministry of Defence, The National Security Concept of the Republic of Latvia (2016-), 2015.
- ³ Ministry of National Defence, Republic of Lithuania, National Security Strategy, 2017.
- ⁴Government Offices of Sweden, "The Swedish Defence Bill 2016–2020," webpage, 2015.
- ⁵ Ministry of Defence of Finland, Security Committee, *Security Strategy for Society, Government Resolution / 2.11.2017*, Helsinki: The Security Committee, 2017.
- ⁶While the three Baltic governments have concepts for unconventional warfare using auxiliary forces, their efforts in this sphere have focused on enhancing their national guard and special operations forces. U.S. support to Baltic governments in the development of these latter capabilities has been pursued through Security Force Assistance and Foreign Internal Defense programs. In this report, unconventional warfare does not, unless specified, refer to UW operations by U.S. forces, which are defined as "activities conducted to enable a resistance movement or insurgency to coerce, disrupt, or overthrow a government or occupying power by operating through or with an underground, auxiliary, and guerrilla force in a denied area." These U.S. concepts are defined in U.S. Joint Chiefs of Staff, Joint Publication 3-05, Special Operations, Washington, D.C., July 16, 2014, chapter II. Senior U.S. military officers have noted that foreign internal defense, security assistance, foreign officer exchange programs, and other activities can contribute to implementation of emerging U.S. UW concepts and doctrine. See Joseph L. Votel, Charles T. Cleveland, Charles T. Connett, and Will Irwin, "Unconventional Warfare in the Gray Zone," Joint Force Quarterly, No. 80, 1st Quarter 2016, p. 108. For more information on some of the nonviolent civil resistance tactics included in our analysis, see also Maciej Bartowski, "How Democratic Societies Can Fight and Win Against Authoritarian Hybrid Onslaught," Free Russia Foundation, March 2018.
- ⁷ Michael J. McNerney, Ben Connable, S. Rebecca Zimmerman, Natasha Lander, Marek N. Posard, Jasen J. Castillo, Dan Madden, Ilana Blum, Aaron Frank, Benjamin J. Fernandes, In Hyo Seol, Christopher Paul, and Andrew Parasiliti, *National Will to Fight: Why Some States Keep Fighting and Others Don't*, Santa Monica, Calif.: RAND Corporation, RR-2477-A, 2018.
- ⁸This definition is derived from official NATO statements on this threat. See NATO Press Office, "Warsaw Summit Communiqué," July 9, 2016, paragraph 72. For detailed discussion of the debate over Russia's use of these tactics see Andrew Radin, *Hybrid Warfare in the Baltics: Threats and Potential Responses*, Santa Monica, Calif.: RAND Corporation, RR 1577-AF, 2017, pp. 5-12.

- ⁹ For a discussion of both the "Bronze Soldier" incident and of the Compatriot Policy and its impact in Estonia, see Heather A. Conley and Theodore P. Gerber, *Russian Soft Power in the 21st Century: An Examination of Russian Compatriot Policy in Estonia*, Washington, D.C.: Center for Strategic and International Studies, August 2011, pp. 4-6ff; and Linda Robinson, Todd C. Helmus, Raphael S. Cohen, Alireza Nader, Andrew Radin, Madeline Magnuson, and Katya Migacheva, *Modern Political Warfare: Current Practices and Possible Responses*, Santa Monica, Calif.: RAND Corporation, RR-1772-A, 2018, pp. 85-102.
- ¹⁰ See Eva Bērziṇa, ed., *The Possibility of Societal Destabilization in Latvia: Potential National Security Threats, Executive Summary of the Research Project*, Riga, Latvia, National Defence Academy of Latvia, Center for Security and Strategic Research (CSSR), 2016, pp. 29–31; Radin, 2017, pp. 23–27.
- ¹¹ Juhan Kivirähk, "Public Opinion and National Defence," Tallinn, Estonia: Estonian Ministry of Defence, Autumn 2017.
- ¹²RAND team discussions with officials and analysts in Vilnius, Lithuania; Riga, Latvia; and Tallinn, Estonia, August–September 2016. Each government has plans and personnel tasked to counter these threats quickly, using a variety of methods including social media postings and cyber network defenses. See also Raphael S. Cohen and Andrew Radin, *Russia's Hostile Measures in Europe: Understanding the Threat*, Santa Monica, Calif.: RAND Corporation, RR-1793, 2019, pp. 1–18, 19–61, and Todd C. Helmus, Elizabeth Bodine-Baron, Andrew Radin, Madeline Magnuson, Joshua Mendelsohn, William Marcellino, Andriy Bega, and Zev Winkelman, *Russian Social Media Influence: Understanding Russian Propaganda in Eastern Europe*, Santa Monica, Calif.: RAND Corporation, RR-2237-OSD, 2018.
- ¹³ RAND team discussions in Vilnius, Riga, and Tallinn, August 2016. See, for example, Jānis Kažociņš, "Will Latvia Be Putin's Next Victim in 2015?" in Andris Sprūds and Diāna Potjomkina, eds., *Latvian Foreign and Security Policy Yearbook 2015*, Riga, Latvia: Latvian Institute of International Affairs and Friedrich Ebert Stiftung, 2015, pp. 75–76.
- ¹⁴ Scott Boston, Michael Johnson, Nathan Beaucham-Mustafaga, and Yvonne K. Crane, *Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority*, Santa Monica, Calif.: RAND Corporation, 2016, RR-2402.
- ¹⁵ See David A. Shlapak and Michael Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016. Subsequent wargames have suggested similar results.
- ¹⁶ Total Defense (also called comprehensive defense) strategies are articulated in the 2010 and 2017 Estonian National Defence Concepts, 2016 Latvian National Defence Concept, 2017 Lithuanian National Security Strategy, 2015 Swedish National Defence Bill, Norway's 2016 Long-Term Defence Plan, and the 2017 Finnish Security Strategy for Society.
- ¹⁷ As explained in endnote 6, this report examines possible Baltic use of unconventional warfare tactics rather than U.S. UW operations.
- ¹⁸ For a history of resistance efforts in Estonia see Mart Laar, *The Forgotten War: Armed Resistance Movement in Estonia 1944–1956*, 2nd ed., Tallinn, Estonia: Grenadier, 2007.

- ¹⁹ Tomas Jermalavičius, Piret Pernik, and Martin Hurt, *Comprehensive Security and Integrated Defence: Challenges of Implementing Whole-of-Government and Whole-of-Society Approaches*, Tallinn, Estonia: International Centre for Defence and Security, February 2014, pp. 47–50.
- ²⁰ Republic of Estonia, Ministry of Defence, National Security Concept, 2017, p. 3.
- ²¹ Project team non-attribution discussions in Tallinn, Estonia, September 2016, and Republic of Estonia Government Office, "The Coordination of Security and National Defence Management," webpage, 2018.
- ²² Republic of Estonia Ministry of Defence and Defence Forces, *National Defence Development Plan*, 2017–2026, undated.
- ²³ Republic of Estonia Ministry of Defence, "Defence Budget," webpage, 2018b.
- ²⁴ Battalions are equipped with armored personnel carriers, towed artillery, mortars, some anti-tank weapons, machine guns, and sniper rifles. Kaitseliit, "Estonian Defence League," webpage, 2018.
- 25 Kivirähk, 2017.
- ²⁶ Non-attribution discussions in Tallinn, Estonia, July 2016.
- ²⁷ Republic of Latvia Ministry of Defence, *The National Defence Concept*, 2016.
- ²⁸ Republic of Latvia Ministry of Defence, The National Security Concept of the Republic of Latvia (2016-), 2015, pp. 13–14.
- ²⁹ Republic of Latvia Ministry of Defence, "Comprehensive Defence," 2018b
- ³⁰ Under a 2018 measure, citizens are obliged to comply with general mobilization and to eschew collaboration with illegal governance structures and any adversary's armed units. Sargs.lv, "Izmaiņas likumdošanā: iedzīvotāju pienākumi kara laikā" [Legislative changes: population's responsibilities in war], October 31, 2018
- ³¹ Republic of Latvia Ministry of Defence, 2016a. The government has also enacted a law that obliges the Commander of the NAF to take immediate action to counter external aggression even without orders from the civilian leadership, and similarly authorizes any NAF officer to neutralize any identified threat in the absence of other orders.
- ³² A reserve soldier is a member of the National Armed Forces Reserve. Reserve soldiers generally have previous military service, but since 2018, the government is offering training courses for individuals without previous experience to become reserve soldiers. A reservist is a Latvian citizen (man or woman), mostly with no previous military experience, who is part of the NAF reserve but would only be called upon active service in case of mobilization. Latvian National Armed Forces, "NAF Reserve [NBS reserve]," website, 2018.
- ³³ Olevs Nikers, "Latvia Pursues 'Total Defense' Concept, Rejects Conscription," *Eurasia Daily Monitor*, Vol. 15, No. 58, May 2, 2017.
- ³⁴ Marta Kepe and Jan Osburg, "Total Defense: How the Baltic States Are Integrating Citizenry into Their National Security

- Strategies," *Small Wars Journal*, undated. These courses include learning about the national defense system and strategy, and international humanitarian law, as well as gaining individual skills in areas such as self-defense and survival. See Rūdolfs Krieviņš, "National Defense Lessons are Interesting, but not Widespread in Schools [Valsts aizsardzības mācība interesanta, bet skolās nav plaši izplatīta]," LSM.LV, 2016.
- ³⁵ Gatis Kristovskis, "SOF Commander: Latvia to Triple Elite Military Units," *Defence Matters*, October 5, 2016.
- ³⁶ Latvian Public Broadcasting, "Latvia's Defense Spending Will Hit 2% of GDP in 2018," October 11, 2017.
- ³⁷ Republic of Latvia Ministry of Defence, "Latvian Government to Invest €234 Million in Defence Procurement This Year," February 22, 2018.
- 38 "Latkovskis: Zemessardzes attīstības plāni ir ambiciozi, bet izpildāmi [Latkovkis: National Guard Development Plans Are Ambitious but Achievable]," *Diena*, January 24, 2018.
- ³⁹ Olevs Nikers, "Latvia Focuses on Improving Societal Resilience and Increasing Size of National Guard," *Eurasia Daily Monitor*, Vol. 15, No. 17, February 5, 2018.
- ⁴⁰ Ministry of National Defence, Republic of Lithuania, *National Security Strategy*, Resolution No. XIII-202, January 17, 2017, pp. 12-14, paragraphs 18.9, 18.10, and 18.14.1.
- ⁴¹ Ministry of National Defence, Republic of Lithuania, "Human Resources Policy: Facts and Figures," webpage, 2018b.
- ⁴² Lithuanian Armed Forces, "Special Operations Forces," webpage, 2018b.
- ⁴³ Ministry of National Defence, Republic of Lithuania, "Budget Statement: Appropriations for National Defence 2018," 2018a.
- ⁴⁴ Ministry of National Defence, Republic of Lithuania, "Lithuanian Defence System: Facts and Trends," webpage, 2018c.
- ⁴⁵ Lithuanian Armed Forces, "National Defence Volunteer Forces," webpage, 2018a.
- ⁴⁶ Riflemen's Union, "2016–2017 metų palyginamoji statistinė ataskaita apie Šaulių sąjungos šaulius [2016–2017 Comparative Statistical Report on Riflemen's Union]," 2018.
- ⁴⁷ Ministry of National Defence, Republic of Lithuania, "Ministry of National Defence Issued Third Publication on Civil Resistance," October 27, 2016b. The second manual entitled, "Prepare to Survive Emergencies and War: A Cheerful Take on Serious Recommendations," has been issued in English and is also posted on the Ministry of Defence website.
- ⁴⁸ Republic of Latvia Ministry of Defence, "Baltic Combined Joint Staff Element (B-CJSE)," webpage, undated; Uģis Romanovs and Māris Andžāns, "The Trilateral Military Cooperation of the Baltic States in the 'New Normal' Security Landscape," in Andris Spurds and Maris Andzans, eds., *Security in the Baltic Sea Region: Realities and Prospects*, Riga, Latvia: Latvian Institute of International Affairs, The Riga Conference Papers, 2017.
- ⁴⁹ Discussions in Vilnius, Riga, and Tallinn, August 2016, and in Vilnius in April 2017. Ministry of National Defence, Republic of Lithuania, "Baltic SOF Commanders Signed Further Cooperation Agreement," June 6, 2016.

- ⁵⁰NATO Press Office, "Warsaw Summit Communiqué," July 9, 2016, paragraphs 72–73, 83, and 122.
- ⁵¹ NATO Press Office, "Brussels Summit Declaration," July 11, 2018, paragraphs 21 and 50.
- ⁵² NATO Press Office, "Common Set of New Proposals," December 5, 2017.
- ⁵³Government of Finland, Security Committee, Ministry of Defence, *Security Strategy for Society*, Government Resolution / 2.11.2017, February 11, 2017; see Government of Sweden, "Swedish Defence Commission Presents Report on Total Defence Concept and Civil Defence," December 20, 2017; and Björn von Sydow, "Resilience: Planning for Sweden's 'Total Defence," *NATO Review*, April 4, 2018.
- 54 Jan Osburg, *Unconventional Options for the Defense of the Baltic States: The Swiss Approach*, Santa Monica, Calif.: RAND Corporation, PE-179-RC, 2016. Note that RAND research on "unconventional options" for territorial defense in Europe ranges back several decades; see, e.g., Horst Mendershausen, *Territorial Defense in NATO and Non-NATO Europe*, Santa Monica, Calif.: RAND Corporation, R-1184-ISA, 1973. For a more-detailed look at Swiss TD/UW efforts during the Cold War, see Kevin D. Stringer, "Building a Stay-Behind Resistance Organization—The Case of Cold War Switzerland Against the Soviet Union," *Joint Forces Quarterly*, Vol. 85, Second Quarter 2017.
- ⁵⁵ Project team discussions with U.S. and Baltic officials; U.S. Department of State, *Congressional Budget Justification Foreign Operations, Fiscal Year 2017, Appendix 3*, 2016, pp. 45–7, 69–72.
- ⁵⁶ Joint Chiefs of Staff, *Joint Publication 3-0, Joint Operations*, U.S. Department of Defense, 2017.
- ⁵⁷ The Estonian government established a voluntary organization called "assistant police officers" in 2014 to support the Police and Border Guard Board in certain law enforcement tasks. It is subordinate to the Ministry of Interior, which also oversees Volunteer Rescue Workers and Voluntary Maritime Rescue Workers. See Republic of Estonia Ministry of the Interior, "Internal Security Volunteers," webpage, 2016.
- ⁵⁸ For example, in the "Small Arms" category, the cost of a rifle kit consisting of one M4 carbine with sling, magazines, magazine carrier, 500 rounds of 5.56mm ammunition, and a suppressor was estimated at \$1,500. In the "Information Operations" category, the cost of a laptop was estimated at \$2,000, based on the price of a Panasonic Toughbook.
- ⁵⁹ The FY19 request was for \$6.5 billion. The Department of Defense requested \$4.8 billion in FY18 and \$3.4 billion was appropriated in FY17. Jen Judson, "Funding to Deter Russia Reaches \$6.5B in FY19 Defense Budget Request, *Defense News*, February 2, 2018; The White House, "President Donald J. Trump's Support for Estonia, Latvia, and Lithuania," April 3, 2018.
- 60 Christopher Paul and Miriam Matthews, *The Russian "Fire-hose of Falsehood" Propaganda Model: Why It Might Work and Options to Counter It*, Santa Monica, Calif.: RAND Corporation, PE-198-OSD, 2016; Todd C. Helmus, Elizabeth Bodine-Baron, Andrew Radin, Madeline Magnuson, Joshua Mendelsohn, William Marcellino, Andriy Bega, and Zev Winkelman, *Russian Social Media Influence: Understanding Russian Propaganda in Eastern Europe*, Santa Monica, Calif.: RAND Corporation, RR-

2237-OSD, 2018.; Radin, 2017; F. Stephen Larrabee, Stephanie Pezard, Andrew Radin, Nathan Chandler, Keith Crane, and Thomas S. Szayna, *Russia and the West After the Ukrainian Crisis: European Vulnerabilities to Russian Pressures*, Santa Monica, Calif.: RAND Corporation, RR-1305-A, 2017.

61 Paul and Matthews, 2016.

⁶² See for example, Mark Kramer, "The Perils of Counterinsurgency: Russia's War in Chechnya," *International Security*, Vol. 29, No. 3, Winter 2004–2005, pp. 9–10.

⁶³ Michael Cohen, "Ukraine's Battle at Ilovaisk, August 2014: The Tyranny of Means," *Army Professional Online Journal*, June 10, 2016, pp. 2–8; Alec Luhn, "Anatomy of a Bloodbath," *Foreign Policy*, September 6, 2014.

⁶⁴ Gundren Person, *Russian Military Capability in a Ten-Year Perspective—2016*, Stockholm, Sweden: Swedish National Defence Research Institute (FOI), FOI-R-4326--SE, 2016, pp. 52, 56–59.

⁶⁵ See Mark Galeotti, "Crimintern: How the Kremlin Uses Russia's Criminal Networks in Europe," European Council on Foreign Relations, April 18, 2017.

⁶⁶ Discussions at NATO SHAPE, Mons Belgium, February 2, 2017. For a description and video on the functions of the CCOMC, see NATO Supreme Headquarters Allied Powers Europe, "Comprehensive Crisis and Operations Management Centre," March 19, 2015.

67 EU INTCEN is a civilian intelligence function of the EU that provides intelligence analyses, early warning, and situational awareness warning to the High Representative of the European Union for Foreign Affairs and Security Policy and other EU decisionmakers based on intelligence from the EU member states intelligence and security services. See European Union Intelligence Analysis Center, "EU INTCEN Fact Sheet," February 5, 2015.

References

Bartowski, Maciej, "How Democratic Societies Can Fight and Win Against Authoritarian Hybrid Onslaught," Free Russia Foundation, March 2018. As of February 4, 2019: https://www.nonviolent-conflict.org/wp-content/ uploads/2018/12/Civil-Resistance-Russia.pdf

Bērziņa, Eva, ed., *The Possibility of Societal Destabilization in Latvia: Potential National Security Threats, Executive Summary of the Research Project*, Riga, Latvia: National Defence Academy of Latvia, Center for Security and Strategic Research, 2016. As of January 3, 2019:

http://www.academia.edu/37621540/The_Possibility_of_ Societal_Destabilization_in_Latvia_Potential_National_ Security_Threats

Boston, Scott, Michael Johnson, Nathan Beaucham-Mustafaga, and Yvonne K. Crane, Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority, Santa Monica, Calif.: RAND Corporation, RR-2402, 2016. As of August 24, 2018:

https://www.rand.org/pubs/research_reports/RR2402.html

Cohen, Michael, "Ukraine's Battle at Ilovaisk, August 2014: The Tyranny of Means," *Army Professional Online Journal*, June 10, 2016. As of September 10, 2018:

https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2016-Online-Exclusive-Articles/Ukraines-Battle-at-Iloyaisk/

Cohen, Raphael S., and Andrew Radin, *Russia's Hostile Measures in Europe: Understanding the Threat*, Santa Monica, Calif.: RAND Corporation, RR-1793-A, 2019, pp. 1–18, 19–61. As of February 4, 2019:

https://www.rand.org/pubs/research_reports/RR1793.html

Conley, Heather A., and Theodore P. Gerber, Russian Soft Power in the 21st Century: An Examination of Russian Compatriot Policy in Estonia, Washington D.C.: Center for Strategic and International Studies, September 2011. As of August 24, 2018: https://www.csis.org/analysis/russian-soft-power-21st-century

European Union Intelligence Analysis Center, "EU INTCEN Fact Sheet," February 5, 2015. As of May 2, 2018: http://www.gdr-elsj.eu/wp-content/uploads/2016/01/20150206_factsheet_eu_intcen_en.pdf

Galeotti, Mark, "Crimintern: How the Kremlin Uses Russia's Criminal Networks in Europe," European Council on Foreign Relations, April 18, 2017. As of May 3, 2018: http://www.ecfr.eu/publications/summary/crimintern_how_the_kremlin_uses_russias_criminal_networks_in_europe

Government of Finland, Security Committee, Ministry of Defence, *Security Strategy for Society*, Government Resolution, February 11, 2017. As of May 2, 2018: https://turvallisuuskomitea.fi/en/security-strategy-for-society/

Government of Sweden, "Swedish Defence Commission Presents

Report on Total Defence Concept and Civil Defence," December 20, 2017. As of May 2, 2018:

http://www.government.se/press-releases/2017/12/swedish-defence-commission-presents-report-on-total-defence-concept-and-civil-defence/

Government Offices of Sweden, "The Swedish Defence Bill 2016–2020," webpage, 2015. As of August 20, 2018: https://www.government.se/government-policy/defence/the-swedish-defence-bill-2016-2020

Helmus, Todd C., Elizabeth Bodine-Baron, Andrew Radin, Madeline Magnuson, Joshua Mendelsohn, William Marcellino, Andriy Bega, and Zev Winkelman, *Russian Social Media Influence: Understanding Russian Propaganda in Eastern Europe*, Santa Monica, Calif.: RAND Corporation, RR-2237-OSD, 2018. As of June 14, 2018:

https://www.rand.org/pubs/research_reports/RR2237.html

Jermalavičius, Tomas, Piret Pernik, and Martin Hurt, Comprehensive Security and Integrated Defence: Challenges of Implementing Whole-of-Government and Whole-of-Society Approaches, Tallinn, Estonia: International Centre for Defence and Security, February 2014.

Joint Chiefs of Staff, *Joint Publication 3-0, Joint Operations*, U.S. Department of Defense, 2017. As of October 23, 2018: http://www.jcs.mil/Doctrine/DOCNET/JP-3-0-Joint-Operations/

Judson, Jen, "Funding to Deter Russia Reaches \$6.5B in FY19 Defense Budget Request, *Defense News*, February 2, 2018. As of June 1, 2018:

https://www.defensenews.com/land/2018/02/12/funding-to-deter-russia-reaches-65b-in-fy19-defense-budget-request/

Kaitseliit, "Estonian Defence League," webpage, 2018. As of April 28, 2018: http://www.kaitseliit.ee/en/edl

Kažociņš, Jānis, "Will Latvia Be Putin's Next Victim in 2015?" in Andris Sprūds and Diāna Potjomkina, eds., *Latvian Foreign and Security Policy Yearbook 2015*, Riga, Latvia: Latvian Institute of International Affairs and Friedrich Ebert Stiftung, 2015, pp. 71–79. As of August 15, 2018:

http://liia.lv/en/publications/

latvian-foreign-and-security-policy-yearbook-2015-429

Kepe, Marta, and Jan Osburg, "Total Defense: How the Baltic States Are Integrating Citizenry into Their National Security Strategies," *Small Wars Journal*, undated. As of June 5, 2018: http://smallwarsjournal.com/jrnl/art/total-defense-how-the-baltic-states-are-integrating-citizenry-into-their-national-security-

Kivirähk, Juhan, "Public Opinion and National Defence," Tallinn, Estonia: Estonian Ministry of Defence, Autumn 2017. As of April 27, 2018:

http://www.kaitseministeerium.ee/sites/default/files/elfinder/article_files/public_opinion_and_national_defence_2017_october.pdf

Kramer, Mark, "The Perils of Counterinsurgency: Russia's War in Chechnya," *International Security*, Vol. 29, No. 3, Winter 2004–2005, pp. 5–63. As of January 4, 2019:

 $https://www.\hat{b}elfercenter.org/sites/default/files/files/publication/kramer.pdf$

Krieviņš, Rūdolfs, "National Defense Lessons Are Interesting, but Not Widespread in Schools [Valsts aizsardzības mācība – interesanta, bet skolās nav plaši izplatīta]," *LSM.LV* [Latvian Radio and Television Internet News Edition], March 3, 2016. As of January 4, 2018:

https://www.lsm.lv/raksts/zinas/latvija/valsts-aizsardzibas-maciba--interesanta-bet-skolas-nav-plasi-izplatita.a171936/

Kristovskis, Gatis, "SOF Commander: Latvia to Triple Elite Military Units," *Defence Matters*, October 5, 2016. As of April 29, 2018:

http://defence matters.org/news/sof-commander-latvia-triple-elite-military-units/1092/

Laar, Mart, The Forgotten War: Armed Resistance Movement in Estonia 1944–1956, 2nd ed., Tallinn, Estonia: Grenadier, 2007.

Larrabee, F. Stephen, Stephanie Pezard, Andrew Radin, Nathan Chandler, Keith Crane, and Thomas S. Szayna, *Russia and the West After the Ukrainian Crisis: European Vulnerabilities to Russian Pressures*, Santa Monica, Calif.: RAND Corporation, RR-1305-A, 2017. As of June 14, 2018:

https://www.rand.org/pubs/research_reports/RR1305.html

"Latkovskis: Zemessardzes attīstības plāni ir ambiciozi, bet izpildāmi [Latkovkis: National Guard Development Plans Are Ambitious but Achievable]," *Diena*, January 24, 2018. As of August 24, 2018:

https://www.diena.lv/raksts/latvija/zinas/latkovskis-zemessardzes-attistibas-plani-ir-ambiciozi-bet-izpildami-14189597

Latvian National Armed Forces, "NAF Reserve [NBS Rezerve]," website, 2018. As of June 6, 2018: https://www.mil.lv/lv/rezerve

Latvian Public Broadcasting, "Latvia's Defense Spending Will Hit 2% of GDP in 2018," October 11, 2017. As of April 29, 2018: https://eng.lsm.lv/article/society/defense/latvias-defense-spending-will-hit-2-of-gdp-in-2018.a253243/

Lithuanian Armed Forces, "National Defence Volunteer Forces," webpage, 2018a. As of April 28, 2018: http://kariuomene.kam.lt/en/structure_1469/national_defence_

volunteer_forces_1357.html

——, "Special Operations Forces," webpage, 2018b. As of August 28, 2018:

 $http://kariuomene.kam.lt/en/structure_1469/special_operations_forces.html$

——, "Structure," webpage, 2018c. As of August 28, 2018: http://kariuomene.kam.lt/en/structure_1469.html

Luhn, Alec, "Anatomy of a Bloodbath," *Foreign Policy*, September 6, 2014. As of August 25, 2018: https://foreignpolicy.com/2014/09/06/anatomy-of-a-bloodbath/

McNerney, Michael J., Ben Connable, S. Rebecca Zimmerman, Natasha Lander, Marek N. Posard, Jasen J. Castillo, Dan Madden, Ilana Blum, Aaron Frank, Benjamin J. Fernandes, In Hyo Seol, Christopher Paul, and Andrew Parasiliti, *National Will to Fight: Why Some States Keep Fighting and Others Don't*, Santa Monica, Calif.: RAND Corporation, RR-2477-A, 2018. As of February 23, 2019.

https://www.rand.org/pubs/research_reports/RR2477.html

Mendershausen, Horst, *Territorial Defense in NATO and Non-NATO Europe*, Santa Monica, Calif.: RAND Corporation, R-1184-ISA, 1973. As of February 15, 2019: https://www.rand.org/pubs/reports/R1184.html

Ministry of Defence of Finland, Security Committee, *Security Strategy for Society, Government Resolution*, Helsinki: Security Committee, February 11, 2017.

Ministry of National Defence, Republic of Lithuania, "Baltic SOF Commanders Signed Further Cooperation Agreement," June 6, 2016a. As of May 2, 2018:

http://kam.lt/en/news_1098/current_issues/baltic_sof_commanders_signed_further_cooperation_agreement.html

——, "Ministry of National Defence Issued Third Publication on Civil Resistance," October 27, 2016b. As of April 28, 2017: http://kam.lt/en/news_1098/current_issues/ministry_of_national_defence_issued_third_publication_on_civil_resistance.html?pbck=20

——, *National Security Strategy*, Resolution No. XIII-202, January 17, 2017. As of September 12, 2018: https://kam.lt/en/defence_policy_1053/important_documents/strategical_documents.html

——, "Budget Statement: Appropriations for National Defence 2018," 2018a. As of April 29, 2018: https://kam.lt/en/budget_1065.html

——, "Human Resources Policy: Facts and Figures," webpage, 2018b. As of August 29, 2018:

https://kam.lt/en/human_resource_policy_1062/facts_and_figures.html

——, "Lithuanian Defence System: Facts and Trends," webpage, 2018c. As of August 24, 2018:

 $https://kam.lt/en/defence_policy_1053/important_documents/\\ lithuanian_defence_system_facts_and_trends.html$

NATO Press Office, "Warsaw Summit Communiqué," July 9, 2016. As of May 2, 2018:

https://www.nato.int/cps/en/natohq/official_texts_133169.htm

____, "Common Set of New Proposals," December 5, 2017. As of May 2, 2018:

 $https://www.nato.int/cps/en/natohq/official_texts_149522. \\ htm?selectedLocale=en$

—, "Brussels Summit Declaration," July 11, 2018. As of August 24, 2018:

https://www.nato.int/cps/en/natohq/official_texts_156624.htm

NATO Supreme Headquarters Allied Powers Europe, "Comprehensive Crisis and Operations Management Centre," March 19, 2015. As of May 2, 2018:

https://shape.nato.int/comprehensive-crisis-and-operations-management-centre-

Nikers, Olevs, "Latvia Pursues 'Total Defense' Concept, Rejects Conscription," *Eurasia Daily Monitor*, Vol. 15, No. 58, May 2, 2017. As of August 25, 2018:

https://jamestown.org/program/latvia-pursues-total-defense-concept-rejects-conscription/

——, "Latvia Focuses on Improving Societal Resilience and Increasing Size of National Guard," *Eurasia Daily Monitor*, Vol. 15, No. 17, February 5, 2018. As of August 25, 2018: https://jamestown.org/program/latvia-focuses-improving-societal-resilience-increasing-size-national-guard/

Osburg, Jan, *Unconventional Options for the Defense of the Baltic States: The Swiss Approach*, Santa Monica, Calif.: RAND Corporation, PE-179-RC, 2016. As of August 14, 2018: https://www.rand.org/pubs/perspectives/PE179.html

Paul, Christopher, and Miriam Matthews, *The Russian "Firehose of Falsehood" Propaganda Model: Why It Might Work and Options to Counter It*, Santa Monica, Calif.: RAND Corporation, PE-198-OSD, 2016. As of May 25, 2018: https://www.rand.org/pubs/perspectives/PE198.html

Person, Gundren, *Russian Military Capability in a Ten-Year Perspective—2016*, Stockholm, Sweden: Swedish National Defence Research Institute (FOI), FOI-R-4326--SE, 2016.

Radin, Andrew, *Hybrid Warfare in the Baltics: Threats and Potential Responses*, Santa Monica, Calif.: RAND Corporation, RR 1577-AF, 2017. As of August 24, 2018: https://www.rand.org/pubs/research_reports/RR1577.html

Republic of Estonia Government Office, "The Coordination of Security and National Defence Management," webpage, 2018. As of April 28, 2018:

https://riigikantselei.ee/en/co-ordination-security-and-national-defence

Republic of Estonia Ministry of Defence, *National Security Concept*, 2017.

——, "Basic National Defence Documents," webpage, 2018a. As of January 2, 2019:

http://www.kaitseministeerium.ee/en/objectives-activities/basic-national-defence-documents

——, "Defence Budget," webpage, 2018b. As of April 27, 2018: http://www.kaitseministeerium.ee/en/objectives-activities/defence-budget

Republic of Estonia Ministry of Defence and Defence Forces, *National Defence Development Plan*, 2017–2026, undated. As of April 27, 2018:

http://www.kaitseministeerium.ee/riigikaitse2026/arengukava/eng/

Republic of Estonia Ministry of the Interior, "Internal Security Volunteers," webpage, 2016. As of August 28, 2018: https://www.siseministeerium.ee/en/internal-security/volunteers

Republic of Latvia Ministry of Defence, "Baltic Combined Joint Staff Element (B-CJSE)," webpage, undated. As of June 6, 2018: https://www.mod.gov.lv/en/nozares-politika/international-and-regional-cooperation/regional-cooperation/baltic-combined-joint

——, The National Security Concept of the Republic of Latvia, (2016-), Adopted by Saeima/Parliament, November 26, 2015. As of January 3, 2019:

https://www.mod.gov.lv/sites/mod/files/document/NDK_ENG_final.pdf

——, *The National Defence Concept*, Approved by the Cabinet of Ministers May 24, 2016; adopted by Saeima/Parliament, June 16, 2016a. As of January 3, 2019:

https://www.mod.gov.lv/sites/mod/files/document/AIMVAK_260516.pdf

——, "Latvian Government to Invest €234 Million in Defence Procurement This Year," February 22, 2018a. As of May 3, 2018: https://www.mod.gov.lv/en/news/latvian-government-investeu234-million-defence-procurement-year

——, "Comprehensive Defense," webpage, 2018b. As of January 3, 2019:

https://www.mod.gov.lv/en/nozares-politika/comprehensive-defence

——, "Informatīvais ziņojums 'Par visaptverošas valsts aizsardzības sistēmas ieviešanu Latvijā' [Draft Report on 'Implementation of Comprehensive National Defense System in Latvia']," June 18, 2018c. As of January 11, 2019: https://www.mod.gov.lv/sites/mod/files/document/AiMzin_090818.pdf

Riflemen's Union, "2016–2017 metų palyginamoji statistinė ataskaita apie Šaulių sąjungos šaulius [2016–2017 Comparative Statistical Report on Riflemen's Union]," 2018. As of June 6, 2018: https://www.sauliusajunga.lt/lss-veiklos-ataskaitos/

Robinson, Linda, Todd C. Helmus, Raphael S. Cohen, Alireza Nader, Andrew Radin, Madeline Magnuson, and Katya Migacheva, *Modern Political Warfare: Current Practices and Possible Responses*, Santa Monica, Calif.: RAND Corporation, RR-1772-A, 2018. As of September 12, 2018: https://www.rand.org/pubs/research_reports/RR1772.html

Romanovs, Uģis, and Māris Andžāns, "The Trilateral Military Cooperation of the Baltic States in the 'New Normal' Security Landscape," in Andris Spurds and Maris Andzans, eds., Security in the Baltic Sea Region: Realities and Prospects, Riga, Latvia: Latvian Institute of International Affairs, The Riga Conference Papers, 2017. As of June 6, 2018:

http://liia.lv/en/publications/security-in-the-baltic-sea-region-realities-and-prospects-the-riga-conference-papers-2017-643

Sargs.lv (Military News Web Portal), "Izmaiņas likumdošanā: iedzīvotāju pienākumi kara laikā, [Legislative Changes: Population's Responsibilities in War]," October 31, 2018. As of January 4, 2019:

http://www.sargs.lv/Zinas/Latvija/2018/10/31-01. aspx#lastcomment

Shlapak, David A., and Michael Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016. As of August 24, 2018:

 $https://www.rand.org/pubs/research_reports/RR1253.html\\$

Stringer, Kevin D., "Building a Stay-Behind Resistance Organization—The Case of Cold War Switzerland Against the Soviet Union," *Joint Forces Quarterly*, Vol. 85, Second Quarter 2017.

U.S. Department of State, Congressional Budget Justification Foreign Operations, Fiscal Year 2017, Appendix 3, 2016. As of August 23, 2018:

https://2009-2017.state.gov/s/d/rm/c6112.htm

U.S. Joint Chiefs of Staff, Special Operations, *Joint Publication* 3-05, Washington, D.C., July 16, 2014. As of January 2, 2018: http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf

von Sydow, Björn, "Resilience: Planning for Sweden's 'Total Defence,'" *NATO Review*, April 4, 2018. As of May 2, 2018: https://www.nato.int/docu/review/2018/Also-in-2018/resilience-planning-for-swedens-total-defence/EN/index.htm

Votel, Joseph L., Charles T. Cleveland, Charles T. Connett, and Will Irwin, "Unconventional Warfare in the Gray Zone," *Joint Force Quarterly*, No. 80, 1st Quarter 2016, pp. 101–109. As of January 2, 2018:

https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-80/jfq-80_101-109_Votel-et-al.pdf

The White House, "President Donald J. Trump's Support for Estonia, Latvia, and Lithuania," April 3, 2018. As of June 1, 2018: https://www.whitehouse.gov/briefings-statements/president-donald-j-trumps-support-estonia-latvia-lithuania/

Acknowledgments

The authors would like to thank the more than 100 U.S., Estonian, Latvian, Lithuanian, Finnish, and Swedish officials, military officers, experts, and journalists who shared their insights on national territorial defense, resilience, and resistance plans and capabilities, as well as perspectives on how these measures can enhance deterrence and defense in the Baltic region. We are grateful to Michael Payne, then-director of strategic analysis and wargaming at the Office of Cost Assessment and Program Evaluation in the Office of the Secretary of Defense (OSD), for sponsoring this project. We also appreciate the support for our work provided by several other officials in OSD, including James Mitre, principal director, Strategy and Force Development; Thomas Goffus, Deputy Assistant Secretary of Defense for European and NATO Policy; Rachel Ellehuus, principal director for European and NATO Policy; as well as COL David Millner, U.S. Army, and COL Cynthia Matuskevich, U.S. Army, who were successive country directors for Estonia, Latvia, and Lithuania at OSD. The final report benefited from insightful peer reviews by Ben Connable, senior political scientist at the RAND Corporation, and Robert Nurick, nonresident senior fellow in the Transatlantic Security Initiative at the Scowcroft Center for Strategy and Security of the Atlantic Council.

Within RAND, we greatly valued the support of the leadership of the International Security and Defense Policy Center of the National Defense Research Institute: Christine Wormuth, director; Seth Jones, former director; and Christopher Chivvis, former associate director. This report also benefited from a review by Sarah Meadows. We are also very grateful to Kysha Barnes for her support during the planning and execution of the research and Rachel Ostrow for her efforts in editing and finalizing the project report.

About This Report

This report documents research and analysis conducted as part of a project entitled "Assessing the Effectiveness of Unconventional Options for the Defense of the Baltic States." The research explored how unconventional defense, resilience, and resistance plans and capabilities being pursued by the governments of Estonia, Latvia, and Lithuania—the Baltic states—can enhance deterrence and counter Russian hybrid aggression and outright military attacks in the Baltic region. It defines a framework for assessing the utility of these efforts and suggests how they could be improved with modest additional expenditures to bolster conventional national, U.S., and NATO defense plans across the spectrum of conflict. The report's findings will be of interest to policymakers, military planners, legislators, and defense analysts in the United States, the Baltics, and other NATO and partner countries.

This research was supported by the Office of the Secretary of Defense and conducted within the International Security and Defense Policy Center of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community.

RAND operates under a "Federal-Wide Assurance" (FWA00003425) and complies with the *Code of Federal Regulations for the Protection of Human Subjects Under United States Law* (45 CFR 46), also known as "the Common Rule," as well as with the implementation guidance set forth in DoD Instruction 3216.02. As applicable, this compliance includes reviews and approvals by RAND's Institutional Review Board (the Human Subjects Protection Committee) and by DoD. The views of sources utilized in this study are solely their own and do not represent the official policy or position of DoD or the U.S. Government.

For more information on the RAND International Security and Defense Policy Center, see www.rand.org/nsrd/ndri/centers/isdp or contact the director (contact information is provided on the webpage).



The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous.

RAND is nonprofit, nonpartisan, and committed to the public interest.

RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

Limited Print and Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/ permissions.

For more information on this publication, visit www.rand.org/t/RR2779.

© Copyright 2019 RAND Corporation

www.rand.org