Land warfare in Ukraine
Modern Battlefield of Europe
The war in Ukraine began in 2014 and there are no signs of it ending in the near future. It is the longest conflict on the European continent since the Second World War, and the only ongoing military conflict on the European continent. The war in Ukraine is usually linked to other conflicts in the post-Soviet region, stemming from the continuation of the Russian ‘near abroad’ policy, which seeks to maintain influence in countries of the former USSR1 and the Eastern Bloc countries. We can also view this policy in the context of the renewed West-Russia rivalry, which includes broader geopolitical themes, such as NATO enlargement or energy security. The events directly leading to the Ukrainian crisis in 2013 and following the annexation of Crimea are shortly discussed in first subhead of chapter; “Timeline of the war”.

This study overall focuses on the military features of the Ukrainian conflict, beginning with a timeline of the most important events that took place. There is a prominent focus on land warfare, opposing actors in the conflict, support from abroad, and the military strength and capabilities of Ukraine. The war in Ukraine is interesting from a land warfare perspective due to the fact that modern technology and strategies are being used in combination with old Soviet weapons and vehicles.

The separate subhead of the study focuses on the humanitarian situation in Donbas in order to present the war’s impact on the soldiers and citizens of the Donbas region.

Chapter 2.3 focuses on military exercises conducted during the war by different actors.

A specific chapter is dedicated to the examination of a new Russian way of warfare, which is being used in the war in Ukraine.

1 USSR – The Union of Soviet Socialist Republics
TIMELINE OF THE WAR

Political background and annexation of Crimea

Ukraine has been balancing its foreign policy between the West and Russian since gaining independence in 1991. Ukrainian independence resulted in problems with Russia, because, among many other issues, a large amount of Russian military personnel and huge amounts of material, were suddenly in a foreign country. Most important were the Soviet nuclear weapons and Russian Black Sea fleet stationed in Sevastopol on the Crimean Peninsula. The question of nuclear weapons was resolved in 1994 by the signing of the Budapest Memorandum. Ukraine agreed to hand all of its nuclear weapons to Russia in exchange for security assurances from Russia, the United States, Great Britain and France. After this, Russia and Ukraine signed many more treaties regarding their mutual partnership, cooperation, and the Black sea fleet (Bilinsky, 1999). The treaties were revoked by both sides after the annexation of Crimea in 2014. Since the 1990’s there were discussions in Ukraine about joining NATO and the EU, and both were declared as a priority for Ukraine (Roudik, 2014).

This schism in Ukrainian geopolitics escalated in 2013 when President Viktor Yanukovych refused to sign an association agreement with the EU which resulted in massive protests in the Ukrainian capital – Kyiv, and in other Ukrainian cities. The biggest protests took place in Kyiv’s main square, Maidan Nezalezhnosti (literally: square of independence), which is why the protests became known as Euromaidan. Protests continued during 2014 and escalated to violent clashes between protesters and police, which resulted in hundreds of wounded and many dead. President Yanukovych was forced to flee the capital city, first to Eastern Ukraine, and later to exile in Russia (DPR, online). Elections were held on the 25th of May 2014, and Petro Poroshenko become the new president of Ukraine. Two days later he signed an association agreement with the EU („Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.).

Beginning on the 26th of February 2014, pro-Russian protests appeared in Simferopol, the capital of Crimea. At the same time, unidentified soldiers began to seize military facilities, airfields, and governmental and media buildings. On the 27th of February 2014, these armed and unidentified groups surrounded and occupied the Crimean regional parliament and raised the Russian flag on top of the building („Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.).

In order to avoid more bloodshed, the Ukrainian government ordered its soldiers in Crimea to not resist. The invaders were later identified as members of the Russian army, although it was repeatedly denied by Russian President Putin at the time. These soldiers blocked all of the roads and other transport links connecting Crimea with Ukraine. After annexation of the whole peninsula, the Crimean parliament decided to hold a referendum on its status. On the 16th of March 2014, the people voted for Crimea to join the Russian Federation as an integral part. This referendum was not recognised as credible, or in line with international law by the majority of countries, because it was in contradiction to the Ukrainian constitution (article 73, in regard to border changes). The referendum took place after the annexation, when the media were already controlled by pro-Russian forces, and international observers were not present during the referendum (Matzek, 2016).

The annexation prompted the levying of economic sanctions on Russia by the United States, Canada, Australia, the EU, and many others (Wang, 2015).
On the 6th of April 2014, armed separatist groups stormed police stations in Donetsk and seized arms located there. They called for secession from Ukraine and the creation of the Donetsk Republic, and these rebels wanted to hold a referendum on independence. Separatist militants launched offensives in Kramatorsk and Slavyansk on the 12th of April 2014 and took over military and police headquarters in the region. The next day, the Ukrainian government initiated an Anti-terrorist Operation (ATO) and sent troops against rebels in Slavyansk. They were however pushed back, and separatists seized all their military equipment. Separatists also tried to seize a military base in Mariupol, which is an important Ukrainian harbour city, however they were defeated and repulsed by the Ukrainian army.

On the 17th of April 2014, the Ministers of Foreign Affairs of Russia, Ukraine, USA and the EU met in Switzerland for the Geneva Accords, where they decided to task the OSCE monitoring mission with overseeing the conflict’s de-escalation.

Referendums for the independence of DPR (Donetsk Peoples Republic) and LPR (Luhansk Peoples Republic) were held on the 11th of May 2014 without any international observers, and resulted in the creation of these republics, recognised only by Russia. Separatists conducted offensives against Ukrainian positions in Luhansk district and on the 26th of May, and again on the 11th of July 2014 against rebel forces attacking Donetsk airport. On the 23rd of August, 260 Russian trucks crossed the border with Ukraine. Russians claimed that trucks carried only humanitarian aid to war torn regions while Kiev described it as a direct invasion. The Russian claims were obviously false because the trucks were accompanied by rebel soldiers, and not the Red Cross, which usually accompanies similar humanitarian help.

In February 2015, rebels began bombardment of Ukrainian positions and then encircled and attacked the city of Debaltseve. Discussions on resolving the conflict continued under the leadership of the OSCE and also by the Normandy-format, which includes France, Germany, Ukraine and Russia. These negotiations eventually resulted in the Minsk II agreement. A ceasefire was planned to come into force on the 15th of February 2015, while heavy fighting still continued around Debaltseve and the village of Loginovo (Birnbaum, Demirjian, 2015). However, following the 15th of February, fighting continued and rebels and Ukrainian forces blamed each other for violating the Minsk agreement. The battle of Debaltseve continued until the 18th of February, when Ukrainian forces started to withdraw from the city under heavy fire. President Poroshenko called for a UN peace keeping mission in Debaltseve, and for an EU mission to Eastern Ukraine. The OSCE was let into Debaltseve and described the situation in the city as a humanitarian catastrophe (Flikke, 2015).

The villages of Maryinka and Krasnohorivka became places of conflict between Ukrainian and separatist forces at the beginning of June 2015. The Ukrainian government accused separatists of conducting a full-scale offensive in this region, with more than 10 tanks and 1,000 fighters. The battle of the village Shyrokyne ended with the withdrawal of separatist forces, but their tanks and heavy artillery stayed close. Shyrokyne is an important frontline village, just around 21 km from a

2 OSCE – Organisation for Security and Cooperation in Europe
strategic Ukrainian port of Mariupol, which was most likely the aim of the separatist attacks (Pro-Russian Fighters..., 2015). Hostilities and violations of the Minsk agreements continued for the rest of 2015 and 2016 with varying intensity. Victims appeared not only among soldiers and civilians, but also between personnel of the OSCE, monitoring the situation in Donbas (Latest from OSCE..., 2015).

Ukraine adopted a new military doctrine at the beginning of September 2015, which names Russia as a main threat and aggressor. The doctrine specifies situations in which the military security of Ukraine can be endangered. The main threat scenario is a full-scale military offensive by Russia against Ukraine (Prentice, 2015). The Russian government published its new national security strategy on January 1st, 2016. The strategy explicitly cited the expansion of Western interests in Ukraine as a major security threat to Russia (Russia Publishes New National..., 2016).

During 2016 and 2017, many important separatist commanders were killed, such as Arsen Pavlov, under the nick name “Motorola,” and commander Tolstykh, with the nick name “Givi” (Kramer, 2016), (Cullison, 2017). Nevertheless, the Situation in Donbas has not changed much in the past few years. There are no major military operations, but the Minsk agreements have been constantly violated by both sides of conflict (Russo-Ukraine War – 2018). Tension escalated after the assassination of another separatist leader, Alexander Zakharchenko, who was president of the non-recognised DPR on 31 August 2018 (Litvinova, 2018).

A serious incident occurred on the 25th of November 2018 in the Kerch Strait, which connects the Azov and Black Seas. Three Ukrainian ships were seized in the Kerch Strait by Russian ships while on their way from Odessa to Mariupol. The Russian border control first tried to stop Ukrainian vessels by appeal, but after they continued on their course, the Russian ships opened fire and one of them crashed into a Ukrainian vessel. This was followed by Russian special forces boarding the ships. Six Ukrainian sailors were injured and the whole crew, consisting of 24 sailors, were detained. Moscow claims that the ships entered territorial waters under Russia’s jurisdiction illegally, while the United States and Ukraine blamed Russia for aggression and breaking international laws. Following this incident, President Poroshenko signed the decision of the Security Council to introduce martial law for a period of 30 days. Martial law was introduced in a number of regions which are perceived to be most threatened by Russia and its allies, such as the regions bordering Russia, Belarus, Transnistria, and the coast of the Black and Azov Seas (Finabel Info Flash, 2018). Following the Ukrainian declaration of martial law, Russia declared the deployment of the S-400 surface-to-air missile systems on the Crimean Peninsula (Soldatkin, 2018). Other measures by Ukraine were the banning of Russian men of military age (16-60 years old) from entering Ukraine for the duration of martial law, and the denial of the rights of foreigners to enter Crimea via Ukraine (Batchelor, Carroll, 2018).
Specifics of modern warfare in Ukraine

Soldiers on both sides of the conflict have built trench systems for protection against enemy artillery. The trenches of the Ukrainian army and separatists are so close in some areas that they can hear each other talk. Ukrainian soldiers have even reported being able to pick out enemies’ accents: Russian, Chechen, South Ossetian, etc. because of the closeness (Financial Times: Забытая война..., 2018). As Col. Liam Collins puts it “the situation in eastern Ukraine might best be described as World War I with technology” (Collins, 2018, online).

The two greatest threats the soldiers consistently deal with are sniper fire and artillery. Soldiers must regularly attempt to avoid being spotted from an Unmanned Aerial Vehicles (UAV). UAVs can serve as Intelligence, surveillance, and reconnaissance (ISR) platforms for artillery; people spotted by a UAV have only a few minutes before the artillery fire hits their position. In the technological development area, UAVs currently dominate counter-UAV capability.

When the war began, the Ukrainian army was the second biggest in Europe, but it did not have a single modern UAV. Russia has deployed a wide range of electronic warfare systems in Donbas, using them to destroy communications, locate enemy positions, and subsequently target them with long-range artillery. Communications must be short and infrequent, and tactical operation centres must run their antennas hundreds of meters away. These new technologies make command and communication more difficult, and commanders have to get used to an environment where they do not have information dominance and do not know the exact position and status of their units at all times. Soldiers need to be experts in navigation using only a map and compass because of the vulnerability of GPS technology.

Russians have spoofed GPS signals and captured videos of unencrypted transmissions from Ukrainian UAVs to view the feeds as the aircrafts are flying over Ukrainian positions during take-offs and landings. According to Col. Liam Collins, Russians have targeted soldiers, commanders, and their families using cell phones and social media to undermine their morale and will to fight. “They have penetrated the cellular network for locational data and information operations, sending targeted messages to individual soldiers showing them nearly real-time pictures of their families and asking if they know whether their families are safe” (Collins, 2018, online). The Russians also send messages after an artillery strike telling soldiers to abandon their positions; or that their corrupt oligarchs are not worth dying for. In another cases, the separatists tracked Ukrainian artillery units by using a malware implant on Android devices.

Separatists eliminated Ukrainian helicopters ability to serve as medevacs, or on ISR missions, by extensively deploying Russian air defence systems. The Ukrainian Air Force has essentially been grounded from the very beginning of the war and Ukrainian helicopters fly only in rear and in extremely low altitude (Collins, 2018).

Urban warfare is one of the typical types of warfare in Ukraine, and cases of warfare in dense urban terrain have occurred many times during the war in Donbas. Specific examples of urban warfare are the Second Battle of Donetsk Airport. At one-point, Ukrainian forces controlled the first and second floors of international airport while separatists occupied the basement tunnel system and the third floor. The monitoring of unit locations and coordination of units was extremely difficult in this environment.
It is estimated that 70 to 85% of all casualties in Ukraine are a result of artillery fire, which has become very deadly, especially massed barrages with use of howitzers and mortars or 122-mm Grad rocket launchers. Heavy tanks are also widely used in the battlefields of Donbas. Separatists are equipped with Russian T-90s protected with new active protection systems against missiles, which is so effective that Ukrainian anti-tank crews gave it the nickname “magic shield”. While tanks are generally very resistant on the battlefield, Infantry Fighting Vehicles (IFV) are not in the same condition. Most of them are relics from the Soviet-era and they are very vulnerable to mines, rockets or artillery. Because of the obsolete protection inside IFVs, mechanised infantry generally dismounts far from the battle front and continues on foot, which exposes them to direct enemy fire, artillery, drones, etc., and slows their movement significantly (Doran, 2016).

In order to cover up from UAVs or drones, vehicles are covered by camouflage netting which they put on in case they stop for any length of time.

Anti-vehicle land mines are frequently used in Donbas to destroy tanks, IFVs or any other military vehicles (Collins, 2018).

**Actors of the conflict and their military strength**

The direct actors of the conflict are the Donetsk and Lugansk Peoples Republics, which together form the so-called Novorossiya. Their military forces are known as Joint Army Forces of Novorossiya, and for better cooperation in negotiation and in military actions the DPR and LPR opted for a joint command (LPR, online). Their adversary is the Ukrainian army. Donetsk and Lugansk Republics have direct and indirect support of the Russian Federation, which officially denies any role in the conflict. The Ukrainian army and government are supported by the EU and NATO.
The formation of the Donetsk Peoples Republic (DPR) was enabled by the weak Ukrainian army and by the formation of paramilitary separatist militias. They are formed by the dissolved Security police “Berkut”, which were involved in the Maidan protests and are blamed for the deaths of many protesters; Russian-speaking locals, which are majority in Donbas; and many Cossacks and Russian nationalists which joined the separatists from abroad. Pro-Russian paramilitary groups will be more closely examined later in this chapter.

The DPR was declared on the 7th of April 2014 after fast territorial gains and successes against Ukrainian forces. Immediately after this success, leaders of the DPR started to demand independence from Ukraine (DPR, online). Similar developments occurred in Lugansk Peoples Republic (LPR). The LPR declared independence from Ukraine on the 12th of May 2014. During April 2014, more than 10 regions declared independence from Ukraine, but only the DPR and LPR survived (LPR, online).

Another main actor of the conflict is the Ukrainian government and Ukrainian military forces. The Ukrainian government formed after Maidan faced many problems from the beginning of its creation. Economic decline, weak and corrupted army and police, in combination with weak support of the governments in eastern regions, caused many problems for the new Ukrainian leadership.

The Ukrainian army was in very poor condition at the beginning of the conflict. After creation of an independent Ukraine, the Ukrainian army was considered the fourth most powerful conventional army in the World. Only the USA, Russia and China had larger armies. But that rapidly changed during the early post-Soviet era when the
The Ukrainian army was massively underfunded, there was no carried maintenance of equipment, and troop training and reforms were slow and inadequate. As a result, few of the Ukrainian formations were combat ready and considered operational at the start of the war (Denchev, Georgiev, Trendafilov, Zlatkov, 2016). Ukraine also had not had any serious military strategy after the fall of the Soviet Union, like many of the countries in Eastern Europe (Karber, 2015).

The lack of reforms in the Ukrainian army was reflected also in placement of Ukrainian forces at the beginning of the conflict. They were located on the western side of the country where they were stationed during Cold War period in order to face NATO threats. No threat was excepted from the East and therefore there was almost no military presence in the Eastern Ukraine.

This situation resulted in the reorganisation of the army in mid-June 2014, when government offensives in Eastern Ukraine began, but after slow progress, the army failed to achieve any significant victory (Government of Ukraine, online).

Investments in military forces after the outbreak of war in Donbass was the first significant increase in defence spending after two decades of stagnation and decline. Before the war, the budget for military spending was only 1% of GDP. This amount of spending for defence did not allowed Ukrainian forces to develop and undertake any important and necessary reforms, and resulted in the reduction of training, and the deterioration of armaments and military equipment. In 2015 and 2016, investments in the Ukrainian military budget has risen to 2.5% GDP. But still, these investments were not enough to start technical modernisation and development, but merely to conduct military operations in Donbas. Expenses for the war in Donbas were covered not only by the Ministry of Defence budget, but also by private funds, ranging from families of soldiers to oligarchs like Ihor Kolomoyskiy, and foreign donors and governments as well. The most active countries involved in the funding of the Ukrainian military effort are USA, Canada, Great Britain and Japan (Wilk, 2017).

The Ukrainian army had been a fully professional army with a contract system since 2013. However, during the fiercest fighting in Donbas, there was a new series of partial mobilisations of conscripts, which allowed a relatively rapid increase in troops on the ground. Although this mobilization covered quantity demands, these new conscript soldiers had poor, or even no military training. As the war continued, the number of volunteers declined and it became common for young Ukrainians to avoid military service due to poor leadership and conditions of service, as well as the number of deaths and injuries. However, recently recruits have been lured back to contract service due to the Ukrainian governments increase in salaries which made the army one of the most attractive employers in Ukraine.

As of the beginning of February 2017, 37,000 soldiers were serving in operations in Donbas. The Ukrainian armed forces have an operational reserve of 130,000 men with combat experience from Donbas, and by as early as October 2016, 280,000 Ukrainians had served in the Donbas. Since the beginning of the war, many other changes in the Ukrainian army occurred including organisational structure, creation of the new operational headquarters closer to the front lines (in Chernihiv and Dnipro City), and new general military and combat support brigades have been, or are being, created. The formation of many new units was criticized from advocates of the professionalisation of the Ukrainian army, because there were problems already with
training and equipment of existing units. A new element in the structure of the Ukrainian army are the Special Operations Forces, specifically trained to operate in the typical conditions of war in Donbas (with a significant role in irregular actions). These forces consist of 2 SPETSNAZ regiments, 2 special operations centres, and 4 information and operations centres. Recruitment and training had been carried out according to NATO standards. Organisation of these special forces begun at the end of 2016.

At the beginning of the conflict, military equipment of the Ukrainian army was in disastrous conditions, and only equipment of forces deployed to missions abroad had good quality and well-maintained equipment. This, in part with poor training, was the main reason for Ukrainian loses during the first months of the conflict. During the first two years of the conflict between 2014 and 2016, the Ukrainian army lost around 800 fighting vehicles (including tanks and self-propelled artillery). Around half of them were abandoned by the crews, usually because of technical failure.

Two years after the official termination of cooperation between the Russian and Ukrainian arms industries, the Ukrainian army was severely lacking certain equipment and munitions, and it was impossible for the Ukrainian army to effectively function without making purchases from Russia like it had in the past. The functioning of most Ukrainian weapons and military equipment is dependent on Russian components. Imports of Russian components during embargo is organised by a network of intermediaries with help of Belarusian, and partly Moldovan, companies (Wilk, 2017).

Another problem was the frequent changes in leadership of Ministry of Defence, Ministry of Interior and in General Staff (KONFLIKT NA UKRAJINE – KONIEC V…., 2017). This situation helped the DPR and LPR in the creation and stabilisation of their republics.

The Ukrainian army was able to reorganise and regroup after initial problems. An important factor was the strong support of the Ukrainian army in Western Ukraine. Citizens, political organisations and paramilitary groups in this region supported the Ukrainian army from the very beginning. Members of various paramilitary groups eventually became soldiers of the Ukrainian army or National Guard, where they contributed to higher morale and better training with their motivation and experiences.

In the financial support of the Ukrainian army and paramilitary groups, Ukrainian oligarchs have played a significant role (Government of Ukraine, online). Since the beginning of the war, Ukraine has intensified efforts to replace its outdated Russian-made military gear with new equipment from NATO member states. For example, a leading defence group in Ukraine, Ukroboronprom, has signed a deal with a producer form Germany – Deutz AG, to acquire engines for their armoured personnel carriers (APC) (Denchev, Georgiev, Trendafilov, Zlatkov, 2016).

One of the most important actors in the Ukrainian conflict is the Russian Federation. For Russia, Ukraine is a significant geopolitical area in which the maintenance of influence is of vital interest. Following the events in Maidan, Moscow reacted to this as a threat to its own security, and supported President Yanukovych. Any possibility of Ukraine joining NATO is absolutely unacceptable for Russian political elites. Russian officials expressed their concerns about the spreading of NATO influence to the East many times (Ukraine: Military Deadlock, Political Crisis, 2016). Russia has already demonstrated
the defence of their strategic interests in their self-proclaimed sphere of influence in Georgia already by force, where there were serious concerns from the Russian side about Georgia entering the EU and NATO.

The Russian Federation provided significant support to the DPR and LPR from the beginning of the conflict, including weapons, technique and unofficial military units. This is denied by the majority of Russian officials. They admit only to providing humanitarian help to separatist regions, financial help to separatist republics, and existence of military units comprised of volunteers from Russia and Russian soldiers who are out of service.

The Russian military has been shaped by a number of conflicts and reforms since the fall of the Soviet Union, and it is in a state of ongoing military reform. Russia experienced important lessons from the wars in Chechnya and Georgia, while also learning from American experiences in Iraq and Afghanistan. Under the administration of President Putin, the Russian army went through “rapid modernization and increased complexity of equipment attempts to professionalize military education, and a restructuring of the military to a more expeditionary model in order to project Russian influence into Europe, the Middle East, and Asia” (RUSSIAN NEW GENERATION WARFARE HANDBOOK, 2016, pdf., p.2).

Russia created new Battalion Tactical Groups (BTGs), intended for smaller operations within Russia’s regional sphere of influence. Current developments in Russian military vehicles are focused on replacing human components with mechanisms in tanks or IFV’s (such as autoloader systems). New technologies like this require less soldiers but more trained and skilled personnel. Russia is trying to professionalize its military with contract soldiers rather than one-year conscript soldiers, which currently make up the majority of the Russian army. The government is attracting Russians to become professional soldiers by increasing pay, improving military housing, and by a comprehensive public information campaign in order to inspire patriotism and interest in military service.

One of the main components of reforming military thinking in Russia is the “Gerasimov doctrine”, which is part of the “Russian New Generation Warfare”. This new kind of warfare does not necessarily focus on battlefield victory, but rather on regime change in the targeted country. Gerasimov doctrine is examined in more detail in chapter 2.4. (RUSSIAN NEW GENERATION WARFARE HANDBOOK, 2016, pdf.).

The equipment of Russian soldiers is also part of the military reforms and soldiers are getting better protection against small arms and possess a lot of new subsystems, such as night optics, and navigation, communication, and reconnaissance subsystems. The number of active personnel in the Russian army in 2015 was 766,000 men, and tank numbers were 15,500 tanks (Bender, 2015).

Mechanised forces are equipped mostly by modern lighter armoured vehicles and modernised T72B tanks. Other series of tanks and armoured vehicles commonly used by the Russian army are T90, T80, other types of T72, BTR-90, BMP-3M and 9P162 KORNET (RUSSIAN NEW GENERATION WARFARE HANDBOOK, 2016, pdf.).

One of the most famous and elite military forces of Russia are SPETSNAZ, which are examined in more detail in chapter 2.4. Moscow is also funding and training proxy organisations in Ukraine like the Russian Orthodox Army, the Chechen “Vostok” Battalion, or the Night Wolves motorcycle club mostly composed of former Russian military members. Members of pro-Russian proxy organi-
sations are motivated by religion or patriotic feelings towards Russia and the Orthodox Church and are trained for special tasks like the capturing of buildings, or reconnaissance. The Night Wolves motorcycle club is supported by Vladimir Putin, who is a member of the club, and the Orthodox Church. Night Wolves arrived into Crimea during its annexation and assisted Russian and pro-Russian forces with the annexation and the organization of the referendum. Another paramilitary group operating in Donbas are the Cossacks from Russia and Ukraine, and the Chetnik Guards from Serbia.

Within Russia, the military command is divided into four military districts: Western, Central, Southern, and Eastern Military Districts. The main military operations in Ukraine were commanded as part of Russia’s Southern Military District with headquarters in the city of Rostov-on-Don. The command of this area covers southern Russia, the Caucasus, and the Black and Caspian Sea fleets („Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.).

Many citizens of other nationalities have fought in Ukraine as well. Within the separatist forces there are mainly Serb and Bulgarian foreign fighters, as well as the previously mentioned fighters from Russia itself, and these men significantly increased the overall number of separatist fighters, and helped with their successes (LPR, online). Fighters from abroad are not only among the separatists however, and hundreds of foreign fighters also joined pro-Ukrainian militias, and the Ukrainian army. The Pro-Ukrainian foreign fighters are mainly from across Europe, and some of them are even from the USA and Australia (The Foreign Fighters…, 2016). According to data provided by the Ukrainian Ministry of Defence in 2017, 100 foreigners are fighting in official Ukrainian army units, including citizens of Belarus, Georgia, Lithuania, Moldova, and even Russia (Meet the foreign fighters…, 2017).

Indirect actors of the conflict are the EU, as the biggest political supporter of Ukraine, and the USA, as a military supporter and provider of training for Ukrainian soldiers (Ukraine: An Opportunity for Reinforced European Diplomacy, 2018).

In the Ukrainian conflict we can see two incomparably strong adversaries, while one of them denies presence in the conflict, and states that it is civil war. The Ukrainian army has undertaken a lot of reforms and rapidly strengthened its military potential since the beginning of the war. Either way, in the case of full military conflict between Russia and Ukraine, it would most likely result in a swift military victory for Russia. Yet, the Ukrainian government, and their military donors and political supporters, are doing their best to strengthen the Ukrainian military to a level in which any full-scale attack against Ukraine would be strongly disadvantageous for the aggressor.

Military exercises and weapons provided to Ukraine

Since the beginning of the crisis many military exercises were held by both sides of the conflict and by other actors in the region. US troops started to train Ukrainian infantry in April 2015. The training was held in Yaroviv near the Polish border, under the name “Operation Fearless Guardian”. At the same time, Canada reported the deployment of 200 Canadian soldiers in Western Ukraine in order to train Ukrainian soldiers as well. Before that, many other military exercises occurred in the region, for example, the NATO military exercise in May 2015 in Estonia (Luhn, 2015). NATO and the Ukrainian navy con-
ducted joint military exercises in the Black Sea under the name Sea Breeze 2015 (September Ceasefire Largely…, 2015). Apart from land and naval exercises, Ukraine also conducted large-scale air exercises, like the one form October 2018 with the USA and seven other NATO countries (Britain, Netherlands, Belgium, Denmark, Estonia, Poland, and Romania) in Western Ukraine. The 12-day-long drills under the name Clear Sky 2018 included fighter jets, transport planes, as well as drones (Ukraine Launches Air Exercises…, 2018).

Russia, like Ukraine and NATO, held military exercises as well. Between the 14th and 20th of September 2017, Russia and its ally Belarus carried out the vast military exercise “West 2017”, which took place in the northwest region of Russia, the Kaliningrad region, and in Belarus. It was the biggest Russian military exercise since the fall of the Soviet Union (Globsec Magazine 3/2017, 2018). An even bigger exercise followed the next year, in September 2018 under name “East 2018”. “Russia has launched what it has called its largest ever military drills, with hundreds of thousands of troops joining Chinese soldiers in a show of force condemned by NATO as a rehearsal for large-scale conflict” (Russia begins its largest…, 2018, online). Russia’s defence minister, Sergei Shoigu, said that this exercise was even bigger than the biggest Soviet and Warsaw pact military exercise of the Cold War, “West 81”. “Taking part in the drills are around 300,000 Russian soldiers, 36,000 military vehicles, 80 ships and 1,000 aircraft, helicopters and drones, as well as 3,500 Chinese troops” (Russia begins its largest…, 2018, online).
The USA supports Ukraine not only by enabling joint military exercises, but also by the selling of weapons to the Ukrainian army. The U.S. Department of State has approved the license for Ukraine to buy certain types of light weapons and other small arms. “The license covers weapons in categories such as semi-automatic and automatic firearms up to .50 calibre weapons, combat shotguns, silencers, military scopes, flash suppressors, and parts” (U.S. Approves License…, 2017, online). The U.S. government has also exported military related equipment to Ukraine in the past, during the two previous U.S. administrations (U.S. Approves License…, 2017).

In March 2018, the State Department approved the sale of anti-tank weapons to Ukraine and in July 2018 the U.S. officially sold Javelin antitank missiles and launch units. It was a deal worth about $47 million. The Department of Defence announced an additional $200 million in military aid to Ukraine, bringing the total amount of aid provided since 2014 to $1 billion (U.S. State Department Approves…, 2018).

The Gerasimov model of Hybrid Warfare

General Valery Gerasimov is the Chief of Staff of the Russian Military and author of the concept of Hybrid Warfare. The Gerasimov concept is based on the belief that nowadays conflicts differ significantly from past conflicts of the Cold War period or the Second World War. Modern conflict feature “undeclared wars, hybrid operations combining military and non-military activities, and smaller precision-based forces” („Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.). Gerasimov observed American and Western European experiences from recent wars, such as the Gulf War, Operation Iraqi Freedom, and the operation in Libya. He noticed that political, cultural, economic and other non-military factors played decisive role in the outcome of the operation. General Gerasimov expressed his belief that the line between war and peace has been blurred in his 2013 report called “The Main Trends in the Forms and Methods of the Armed Forces”. His opinion on the overlap between war and peace is supported by examples like colour revolutions and the Arab Spring. These democratic uprisings are not oriented at starting the war, but often result in foreign intervention, civil war, or a humanitarian crisis. These events are typical examples of modern era conflicts according to Gerasimov. In modern war, the main focus must be oriented on intelligence and information. All operations in modern wars are less distinguishable, including strategic and tactical levels, as well as offensive and defensive actions, and objectives are achieved in remote contactless wars. The Gerasimov model for modern Russian warfare has been developed under the title “The Role of Non-military Methods in Interstate Conflict Resolution.” The Gerasimov model of Hybrid warfare comprises six stages of development. Each stage involves non-military measures as well as increasing military involvement as the conflicts escalates.

Phases of Gerasimov Hybrid warfare:

1. Covert origins: this is the initial phase of hybrid warfare in which political opposition and resistance in the form of political parties, coalitions, and labour/trade unions are formed against the opposing regime. Typical for the initial phase is a broad, comprehensive, and sustainable information warfare campaign in order to shape the environment towards a Russian purpose with employment of strategic deterrence. Potential for military activity in this phase emerges.
2. Escalations: In the second phase, political and military leaders in regions are made aware of the developing conflict. Russia exerts political, diplomatic or economical pressure on the targeted regime or non-state actors. Applied measures in this stage can be, for example, economic sanctions or the suspension of diplomatic relations.

3. Start of conflict: The third phase starts as adversary actors start making more unfriendly or hostile actions, such as demonstrations, protests, subversion, sabotage, assassinations, paramilitary engagements, etc. In this stage of the conflict, Russia starts with the strategic deployment of its forces towards the region of conflict if there are Russian strategic or national security interests.

4. Crisis: Russia commences military operations, accompanied by strong diplomatic and economic activities alongside a persistent information campaign in order to change public opinion in favour of Russian intervention.

5. Resolution: This stage is focused on the search for the best paths to resolve the conflict. The key aspect is the change of leadership in the region or state in which the conflict took place (regime change). The goal is to reset the political, military, economic, and social situation in the region and return it to peace and order.

6. Restoration of peace: The final stage of the Gerasimov doctrine can be protracted. Russia attempts to reduce tensions and conduct peacekeeping operations. This stage includes the diplomatic and political measures required to establish a post-conflict settlement that addresses the original causes of conflict (Little Green Men: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf).

A vital part of Hybrid Warfare is the swift destruction, disruption, or the taking control of: communications, infrastructure, economic and political institutions. As well as the disruption of enemy command with the use of proxy forces in the military sphere, or cyber domain. Russia developed and tested its new form of Hybrid Warfare during the conflict with Georgia in 2008, and in Estonia via Cyber Warfare in 2007. In order to achieve their goals, Russia established state connected media and youth groups in targeted countries to spread its points of view, and to mobilize ethnic Russian minorities in neighbouring countries by appealing to their language, heritage, and their feeling of marginalisation or suppression by the country in which they live. This can be achieved in combination with creating the perception of “Mother Russia” as their protector. The belief of despair in military and political leadership is created by the Russians in targeted countries, after which people lose confidence in their local leadership.

The Gerasimov doctrine is part of the latest Russian operational concept, which has evolved in five distinct periods since 1920, according to Vasily Kopytko, professor at the Operational Art Department of the General Staff Academy (Selhorst, 2016).

Hybrid Warfare tactics were used during the annexation of Crimea, and then later to seize governmental buildings, police stations, and territory of the current non-recognised republics of DPR and LPR. Police officers and local political leaders were bribed or coerced...
to cooperate with Russian led insurgents or forced to resign from their positions. Angry local crowds, often led by Russian operatives, also coerced Ukrainian military forces into surrendering. Typical Hybrid warfare tactics include the use of proxy forces, like local militias, or other groups imported from Russia or abroad. Paramilitary groups claimed that they came to Ukraine to fight for ideological reasons, but later on many of these groups admitted that they were paid, equipped, and deployed by Russia. After the start of the Ukrainian anti-terrorist operation in Donbas, many other Ukrainian forces were surrounded by local people and surrendered to the Russian SPETSNAZ. The presence of these Russian special forces, and paratroopers, have been reported many times since the start of the conflict (“Little Green Men”: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.).

There are various Russian ‘SPETSNAZ’ forces, and they are considered “a cross between US Rangers and the British SAS. They have a range of uses. They can fight but they are also trained for intelligence work. To establish insurgencies. To control them. To smuggle arms. To wage guerrilla wars” (Smith, 2018, p.9, online). Their involvement in Crimea and Eastern Ukraine was a semi-covert mission which involved the use of masks on their faces and uniforms without identification of unit or state flags, while also operating in plain view (“Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.). SPETSNAZ forces can be inserted behind enemy lines and serve in surveillance and reconnaissance missions or they can also be used as an advanced force for clearing the way for the less agile conventional forces (or rebels and paramilitary groups). In their missions, SPETSNAZ rely on speed, stealth, and surprise. Six different SPETSNAZ brigades have been involved in the Ukraine conflict since the beginning of war (Smith, 2018).

SPETSNAZ forces have been involved in many different missions in the context of waging Hybrid war in Donbas, from occupying buildings, to sabotage, and the involvement in direct military clashes. The first GRU (The Main Directorate of the General Staff of the Armed Forces of the Russian Federation) operative was arrested in Ukraine in March 2014 and he admitted to being a GRU officer (Bukkvoll, 2016).

During protests in the Donbas region, pro-Russian crowds surrounded armed vehicles of the Ukrainian army various times, and then the Russian SPETSNAZ operatives attacked and disarmed the Ukrainian forces. In many cases, Ukrainian soldiers refrained from shooting when civilians were around, and complied with demands for withdrawal or surrender. Russian SPETSNAZ or other Russian operatives were included in most of the operations in 2014 which were focused on the surrounding and taking over of governmental buildings, police stations, Ukrainian military positions or media buildings (Little Green Men: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf.).

An example of sabotage that Russian special forces performed was the blowing up of train wagons with jet fuel at Osnova railway station in September 2014. During this action an alleged GRU agent was killed. Russian SPETSNAZ groups often operated behind the front lines in Ukraine, and in cooperation with rebels. They would attack Ukrainian convoys and lay mines on Ukrainian held territory to disrupt Ukrainian military movements (Bukkvoll, 2016).

The Gerasimov model of Hybrid warfare brings a whole new perspective on waging war in modern times. His doctrine was built on facts learned from the latest military conflicts in the world, like Iraq and Georgia, where asymmetric warfare and the blurring
of lines between war and peace were essential features. Gerasimov doctrine is a way of war which takes advantage of these facts. The role of large numbers of land forces in this kind of war is less necessary than it used to be, and land forces face new challenges going into the future.

When it comes to the composition of land forces used in Hybrid wars, most important are special forces units, like SPETSNAZ, which are able to conduct covert, swift, and decisive operations. Other significant changes in warfare are the use of proxy soldiers, volunteers, and paramilitary units, which officially are not under the command of any country.

**Human Rights violations in Donbas**

According to the UN Office of the Prosecutor, since the beginning of the conflict, the shelling of populated areas in both government-controlled territory and areas controlled by separatists occurred many times. The office of the Prosecutor also reported several civilians injured or killed by firearms on both sides. Many cases of destruction occurred due to the shelling of residential areas, including schools and kindergartens, in areas controlled by the government and rebels, while improperly being used for military purposes. Both sides detained fighters and civilians which were allegedly ill-treated, and many of them have been exchanged in mutual prisoner releases. Violations of human rights happened on both sides during the detention and interrogation of prisoners, with the use of electric shocks or beatings being reported (Report on Preliminary Examination Activities, 2016, pdf.).

The Ukrainian Ministry of foreign affairs stated that they highly value the work of the UN human rights monitors but according to them, the majority of civilian deaths were caused by separatist artillery fire. Nevertheless, the UN report claims that many of these incidents were committed by Ukrainian forces. The following case shows one example of war crimes in Ukraine: “two suspected rebels were kept in a dry well and then killed by "a drunken soldier" who threw a grenade down the shaft” (Ukraine conflict: UN accuses..., 2016, online). Most of the reported crimes were committed at the start of the conflict, in late 2014 and early 2015 (Ukraine conflict: UN accuses..., 2016).

Malaysian flight MH17, flying from the Netherlands to Malaysia, was shot down over Ukraine on the 17th of July 2014 by the BUK-weapon system, killing all 298 people on board. The UN Security Council adopted resolution no. 2166 demanding an international investigation of the incident. The investigation of the crash was led by a Dutch team. On the 25th of May 2014, Dutch Investigators reported that flight MH17 was downed by the Buk missile fired by Russia’s 53rd Anti-aircraft Missile Brigade from within separatist controlled territory. The British-based investigation group Bellingcat came to the same conclusion as the Dutch team had, and Bellingcat investigators also identified Russian military officer Oleg Ivannikov, a GRU officer, as working undercover in Eastern Ukraine and coordinating militias and separatists in the territory of the crash of MH17. Ivannikov is said to have also supervised the transport of weapons across the Russia-Ukraine border (Bellingcat Links High-Ranking..., 2018).

Russia denied responsibility or involvement in the Downing of MH17, and like Putin said many times, they were not part of the investigation and thus cannot trust the results. Putin blamed the Ukrainian government for not closing the air space over the territory of Donbas, and Russian media published many different versions of the incident (Путина спросили про Боинг МН 17, 2018). Some
of these versions included stories like: MH-17 was shot down by a Ukrainian jet, it was blown up by a missile intended for the Russian President’s plane, or a version in which it was shot down by a BUK missile but not one made by Russia (Disinfo News: The Kremlin’s..., 2018).

War in Ukraine is one of the main topics for the OSCE, and this is highlighted by the new Slovak presidency of the organisation in 2019, which emphasises that the war will remain a top priority. For 2019, the Chairperson-in-Office is Minister of Foreign and European Affairs of the Slovak Republic, Miroslav Lajčák, and according to Minister Lajčáks, the Slovak presidency has big ambitions to be more active and present in Ukraine and get more results on the resolution of the conflict (Yar, 2019).
CONCLUSION

The war in Donbas provides important lessons on waging modern warfare, and the use of land forces in the 21st century. It’s a lesson on conventional, as well as Hybrid warfare as well. Conventional war in Ukraine is waged mainly on land, with the use of soldiers, tanks, other vehicles, and heavy artillery, even though the latest escalation took place at sea (the incident in Kerch strait). Land warfare is supported by heavy use of drones, cybernetic attacks, and information warfare. Actors which take part in the war are learning a lot about modern warfare, and they are modernising their strategies, doctrine, and military equipment in order to conform to this new reality. These reforms are significant for the Russian Federation as part of a larger series of military reforms they have been implementing since before the war in Ukraine.

The case of Ukraine is an example of a situation in which chronic underfunding of an army, and a lack of reforms in doctrine, can cause huge problems in the case of a sudden breakout of war, and should be a warning for other European countries.

Despite the escalation of tension in November 2018, the situation has calmed down. However, intermittent fighting continues, with frequent small clashes on the contact line, but at a low intensity, and with no significant territorial changes. 2019 will most likely continue the same way, and the war looks like it may eventually turn into a “frozen conflict”, just like in other post-Soviet regions with territorial disputes. The Russian Federation has an interest to keep some sort of war or frozen conflict going in Ukraine, because this situation will make it impossible for Ukraine to continue its integration efforts with the EU or NATO.

For Europe, this conflict means a change in the security environment, and a conflict in their neighbourhood. It threatens the European security architecture, and it increases tensions in all of Central-Eastern Europe. Military reactions from the NATO side have so far mainly come in the form of military exercises in Central and Eastern Europe, and in military aid and training to Ukraine.

War in Ukraine is also an opportunity for European armies to work closely together in development and cooperation of their land forces, and with a focus on new ways of war that have been demonstrated in the Ukrainian conflict. This conflict has raised many new challenges for modernising land forces and their strategies and doctrines. European armies should be focused on countering Hybrid threads and learn how to face enemies in Hybrid and proxy wars. Lessons provided from the war in Ukraine are also important in the sphere of use of tanks, drones and electronic warfare. It is a challenge for the future of European armies to adapt to the new environment of warfare, where disinformation predominates, and where special unmarked forces, militias, and proxy soldiers are the new norm.
• (2018) COLLINS, L. A NEW EASTERN FRONT: WHAT THE U.S. ARMY MUST LEARN FROM THE WAR IN UKRAINE. In ausa.org [online]. [cit. 2018-12-01], Available at: https://www.ausa.org/articles/new-eastern-front-what-us-army-must-learn-war-ukraine
• (2016) DENCHEV, S. GEORGIEV, A. TRENDAFILOV, Y. ZLATKOV, B. CONFLICT IN UKRAINE. Pdf. In CRISIS MANAGEMENT AND DISASTER RESPONSE CENTRE OF EXCELLENCE
• DPR. In ucdp.uu.se. [online]. [Accessed 2019-01-02]. Available at: http://www.ucdp.uu.se/#actor/5840
• „Independent Ukraine“ In britannica.com [online]. [Accessed 2018-12-01], Available at: https://www.britannica.com/place/Ukraine/Independent-Ukraine
• (2015) KABER P.A. “Lessons Learned” from Russo-Ukrainian War. In Historical Lessons Learned Workshop. 50 s.
• LPR. In ucdp.uu.se. [online]. [Accessed 2019-01-02]. Available at: http://www.ucdp.uu.se/#/actor/5839
• „Little Green Men“: a primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014, pdf. The United States Army Special Operations Command Fort Bragg, North Carolina
(2016) RUSSIAN NEW GENERATION WARFARE HANDBOOK. Pdf. In Asymmetric Warfare Group


• (2017) WILK, A. “The best army Ukraine has ever had Changes in Ukraine’s armed forces since the Russian aggression”, Warsaw – Poland, CENTRE FOR EASTERN STUDIES, NUMBER 66 BN 978-83-65827-05-0

• (2019) YAR, L. Ambiciozne, no realistické: Slovenské predsednictvo v OBSE chce byť aktívne najmä na Ukrajine. In euractiv.sk [online]. [Accessed 2019-01-03]. Available at: https://euractiv.sk/section/vonkajsie-vztahy/news/ambiciozne-no-realisticke-slovenske-predsednictvo-v-obse-chce-byt-aktivne-najma-na-ukrajine/?fbclid=IwAR3Xidfxqx8UXkU7Rl5d7Kh1FZ_x_rURANd8E_cBoBIAL_kVj7mDPzUH0


Created in 1953, the Finabel committee is the oldest military organisation for cooperation between European Armies: it was conceived as a forum for reflections, exchange studies, and proposals on common interest topics for the future of its members. Finabel, the only organisation at this level, strives at:

- Promoting interoperability and cooperation of armies, while seeking to bring together concepts, doctrines and procedures;
- Contributing to a common European understanding of land defence issues. Finabel focuses on doctrines, trainings, and the joint environment.

Finabel aims to be a multinational-, independent-, and apolitical actor for the European Armies of the EU Member States. The Finabel informal forum is based on consensus and equality of member states. Finabel favours fruitful contact among member states’ officers and Chiefs of Staff in a spirit of open and mutual understanding via annual meetings.

Finabel contributes to reinforce interoperability among its member states in the framework of the North Atlantic Treaty Organisation (NATO), the EU, and ad hoc coalition; Finabel neither competes nor duplicates NATO or EU military structures but contributes to these organisations in its unique way. Initially focused on cooperation in armament’s programmes, Finabel quickly shifted to the harmonisation of land doctrines. Consequently, before hoping to reach a shared capability approach and common equipment, a shared vision of force-engagement on the terrain should be obtained.

In the current setting, Finabel allows its member states to form Expert Task Groups for situations that require short-term solutions. In addition, Finabel is also a think tank that elaborates on current events concerning the operations of the land forces and provides comments by creating “Food for Thought papers” to address the topics. Finabel studies and Food for Thoughts are recommendations freely applied by its member, whose aim is to facilitate interoperability and improve the daily tasks of preparation, training, exercises, and engagement.

You will find our studies at www.finabel.org

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