CIVIL DEFENSE — THREATS AND THREAT PERCEPTIONS

When threats materialize – the relevance of the Russian attack on Ukraine for Swedish civil defense planning

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The Russian war of aggression in Ukraine has been going on for three weeks. At the same time, Sweden is in the middle of intensified efforts to rebuild the country's civil defense. This memo provides an analysis of what the invasion teaches us from a civil defense perspective, and how the Ukrainian experience can inform Swedish action in this domain moving forward.

Despite the abundance of scenarios to inform civil defense planning, Swedish authorities report that it is difficult to conceptualize what a war might mean for them. These authorities still find that the threat of war is abstract and difficult to translate into concrete preparedness-raising measures. As a result, Swedish authorities struggle to operationalize the goal for civil defense, which is to develop the following capabilities: ¹

- protect the civilian population
- safeguard the most important societal functions
- maintain necessary supplies
- contribute to the military defense's capabilities in the event of armed attack or war in the world around us,
- maintain society's resilience to external pressures and contribute to the willingness to defend
- contribute to strengthening society's capability to prevent and deal with extraordinary events in peacetime
- contribute with available resources to the capability to participate in international peace-building and humanitarian operations

Russia's illegal and unprovoked invasion of Ukraine offers concrete examples of why it is urgent for Sweden to develop these capabilities. The Russian Armed Forces (AF) have demonstrated a blatant disregard for the rules of war and attacked civilians and civilian infrastructure. Meanwhile, Ukrainian civilian society shows remarkable resilience given that it is facing an attack by a numerically and technologically superior adversary. This suggests that civil defense capabilities may serve as an important equalizer in the initial stages of such wars.

By studying Ukraine, Swedish authorities might finally come to grips with what the goal for civil defense means for them. The Russian invasion offers modern and real world examples of how a war in Europe might play out.

That said, no two conflicts are ever the same. It is unlikely that a military attack on Sweden would have exactly the same characteristics as the Russian invasion of Ukraine. That should not prevent Swedish authorities from using Ukraine as a shorthand to understand what might happen in a war, so long as they pay heed to the circumstances that are unique to the current war.

This tentative analysis is organized into five sections, corresponding to the first five of the seven goals – those that have direct connection to war – and is based primarily on media accounts of Russian military action and the situation for civilian society in Ukraine after three weeks of war.

GOAL 1: "PROTECT THE CIVILIAN POPULATION"

Russian military action

In brief, the Russian AF have shown a disregard for civilian lives, firing on population centers with a variety of heavy weapon systems. These appear to include cluster munitions and unguided bombs.^{2, 3} Delivery has come in the form of (at least) air strikes, cruise missiles and artillery fires.^{4, 5, 6} At the time of writing, the city of Mariupol has also been under siege without running water, power or sanitation for more than two weeks.⁷ Furthermore, there are reports of several military attacks on healthcare facilities around the country.⁸

Civilian society in Ukraine

Protection of the civilian population takes many forms, but the following belong to the core capabilities: shelters, evacuation, health care, emergency services and warning information (air raid warnings etc.). With the declaration of martial law on February 24, the State Emergency Service of Ukraine along with a wide range of organizations



 including local state administrations and commercial enterprises – were instructed to form a single state civil protection system.⁹

Media reports indicate use of the metro system for shelter, at least in Kyiv and Kharkiv. ^{10, 11} Beyond this, there are reports of basements (particularly in hospitals) being used. ¹² According to reports from before the invasion began there is a limited amount of dedicated bomb shelters – most of them a legacy from Soviet times – for essential personnel, and the majority of the population has to rely on improvised shelters. ¹³

After 20 days of war, almost 3 million refugees had left the country and even before the conflict began there were some 850,000 internally displaced people (IDPs).^{14, 15} The number of IDPs has now risen to 6.7 million and UNHCR projects as many as 4 million refugees.¹⁶ Much of the movement appears to be spontaneous, with government-organized evacuations seemingly restricted to wholly or partially besieged cities.

One week into the invasion, the healthcare situation was becoming very difficult.¹⁷ Already strained by the COVID-19 pandemic, health care is now focusing on trauma patients with necessary supplies – insulin, oxygen and cancer medicines in particular¹⁸ – running low or being completely unavailable. The WHO has noted that even though oxygen stores remain intact in some places, an inability to find drivers for distribution prevents effective resupply. Wartime injuries, such as those from blasts or fragmentation, that otherwise are very uncommon present particular difficulties even for experienced medical staff.¹⁹

When it comes to emergency services, we know little of the overall picture, but there are continued reports of first responders being active even in contested areas.²⁰

Air raid sirens are available and used in many cities around Ukraine.²¹ In addition, government warnings and information are sent out to the public from verified accounts on Telegram and other social media platforms as Internet and cellular networks remain functional in many areas.²²

GOAL 2: "SAFEGUARD THE MOST IMPORTANT SOCIETAL FUNCTIONS"

Russian military action

The Russian AF have sought, and in two cases gained, control of power plants – the closed Chernobyl plant and the Zaporizhzhia plant.^{23, 24} Only the latter delivers electricity to the grid, whereas the former stores spent nuclear fuel.

While several cities have come under attack and had societal functions interrupted, Mariupol appears to be

the most severely affected with heating, water and power completely cut off, while Russian forces maintain a siege.

There has been a – relative to widespread expectation – lack of cyber operations and electronic warfare thus far²⁵, with continued internet and cellular functionality in many areas.²⁶ Several hundred cell phone masts have, however, been destroyed or damaged, creating local communication outages.²⁷

Ukrainian ports are experiencing a naval blockade, preventing sea transport.²⁸ Among incidents in the Black Sea, a Japanese cargo ship was struck by a missile, an Estonian cargo ship sunk and a Bangladeshi ship hit by a bomb or missile.^{29,30}

Civilian society in Ukraine

We have not found reports of larger power outages, with the exception of the besieged city of Mariupol and power to the Chernobyl power plant, necessary for safe nuclear waste storage. Gas, necessary for heating in large parts of the country, continues to flow to Ukraine from Poland, Hungary and Slovakia.³¹ Furthermore, gas from Russia transiting Ukrainian territory also keeps flowing.³²

One week into the war, train services were still available in parts of the country, even if the railway system has come under attack on several occasions.³³ Civilian air traffic was suspended on the first day of the invasion after having declined over a period of weeks prior to the invasion due to security concerns.^{34, 35}

Financial services were restricted when martial law was declared on February 24, affecting areas such as cash withdrawal and currency exchange, but have not seem to come under serious attack from the Russian side.³⁶

Hospitals and morgues haven been forced to create and use mass graves, as they lack capacity to perform normal burials, and identification of civilian victims is not always possible.³⁷

GOAL 3: "MAINTAIN NECESSARY SUPPLIES"

Russian military action

Russia has attacked fuel depots and gas pipelines, but we have not seen reports of attacks on fuel transports.^{38, 39} A warehouse complex storing vegetables has been struck in Mykolaiv⁴⁰ – one example of food storage being hit – and as was mentioned earlier, multiple healthcare facilities have been targeted by air strikes and artillery. Given that Russia has imposed a naval blockade and that commercial air traffic is suspended, road and rail are the only remaining transport options. Those options, however, are under considerable threat due to the ongoing military operations.

Civilian society in Ukraine

The maintenance of necessary supplies can be done in three major ways: storage, import and domestic production. A complementary measure supporting domestic production is export control. Among these supplies, food, fuel and medical substances and equipment are among the most important in the short term.

Much of Ukraine's food production and distribution has been halted due to a shortage of workers and drivers, active fighting on many roads and a lack of gasoline.⁴¹ Even so, a large number of stores remain open, even in some areas that experience heavy fighting. However, even if food and medicine is available in warehouses and logistics centers, getting it to the general population has become increasingly difficult. Resupply from import is also disrupted due to a lack of drivers willing to enter Ukraine.

On March 9, the Ukrainian government banned export of a number of agricultural products including staples such as wheat, oats and buckwheat, in a bid to mitigate the situation.⁴²

GOAL 4: "CONTRIBUTE TO THE MILITARY DEFENSE'S CAPABILITIES"

Russian military action

The war in Ukraine demonstrates that certain civilian resources are useful for an adversary during an invasion and the Russian AF appear to be opportunistic in terms of their attacks on infrastructure: if a function is useful to the invading forces, it has avoided attack. Related to this are reports of Russian soldiers looting shops and Ukrainian homes. 43 On the other hand, the fact that Russia has, on the whole, deliberately and extensively attacked civilian infrastructure is a sign that they recognize that the Ukrainian military effort is dependent upon civilian society for essential supplies.

As was mentioned earlier, in the section on safeguarding societal functions, communications and electricity remain available in large parts of Ukraine. Neither does water supply seem to have been widely attacked, with one of the notable exceptions being the siege of Mariupol. Many of the other goods and services have been disrupted or interrupted due to military operations, or the threat thereof.

Civilian society in Ukraine

In the Swedish civil defense system, there are plans to supply the Swedish Armed Forces with goods and services from civilian society. Among these, we find electricity, fuel, healthcare, transportation, certain forms of communication, water and food. It is so far unclear to what extent the Ukrainian military has been relying upon civilian society to secure their need of goods and services, but in principle,

most militaries have logistical structures that are to some extent integrated with civilian supply chains.

As was mentioned above, martial law was declared in Ukraine on February 24. As a consequence, city state administrations and local self-government bodies were ordered to establish defense councils and provide assistance to the military command.⁴⁴ This shows that during the initial stage of the conflict, the military's need for resources had a high priority. It also suggests that civilian society may need to offer support to the military.

GOAL 5: "MAINTAIN RESILIENCE AND WILLINGNESS TO DEFEND"

Russian military action

Russian initial measures to break the Ukrainan willingness to defend by non-military means, such as disinformation and propaganda, appear largely unsuccessful. At this point it would seem that the strategy has become one of increasingly ruthless attacks on civilians and civilian infrastructure. So far, this strategy only seems to galvanize support for the Ukrainian cause, but the long-term effects remain to be seen. Since the official Russian position has been that the war is not a wider invasion or occupation, but a "special military operation" aimed at liberating the Donbass region⁴⁵, the Russian media strategy has largely been one of denial and obfuscation.

Civilian society in Ukraine

Ukrainian authorities appear to have been exceptionally deft at inspiring its population and troops, with the Ukrainian president Volodymyr Zelenskyy playing a crucial role in this effort. In Ukraine and beyond, the president and the administration have had a massive presence both on social media platforms and in regular media reporting. In social media, there has been a steady flow of alleged Ukrainian military successes from pro-Ukrainian accounts while Ukrainian military defeats or challenges have been rare. This is unlikely to be a balanced reflection of reality on the ground, but it demonstrates a successful Ukrainian effort to shape the narrative of the war. The fact that internet and mobile communications still work ensures the rapid spread of both Ukrainian and Russian war narratives.

While martial law is in place, preventing much of the male population from leaving the country, there has also been a flow of applicants to the Territorial Defense Forces as well as Ukrainians returning from abroad to join the military effort. 46, 47 The invasion has prompted the formation of an unarmed civilian resistance movement, with protests against Russian troops carried out in many contested or occupied areas. 48

Russian state and state-backed media were restricted in Ukraine even before the invasion, something that created controversy. ⁴⁹ After hostilities began, Russian media outlets have also been restricted in the EU and a number of other countries. ⁵⁰

CONCLUDING REMARKS

The Russian invasion of Ukraine has struck a serious blow to Ukrainian civilian society, even as Ukrainian military defense is exceeding many prior expectations. It is, unfortunately, a showcase of the extreme difficulties of maintaining civil defense capabilities in the face of a particularly ruthless adversary, despite the fact that some areas of Ukrainian civilian society are showing high levels of resilience.

Three weeks into the war, the overall trend is very troubling with civilians and civilian infrastructure coming under increased fire and societal functions heavily degraded, at least in parts of the country. Goods and services that might still be available in certain areas are becoming harder to maintain and resupply.

The following points are suggested as lessons for Swedish civil defense planning moving forward:

- Civilians and civilian infrastructure will face indiscriminate attack if it aligns with Russian military strategy, and preparations for both on-site protection and evacuation are vital.
- It is entirely realistic that one part of the country is under attack or suffering severe societal disruptions, while other parts of the country remain relatively unaffected. It is therefore relevant to plan for redistribution of resources and movement of people between these zones.
- Maintaining the flow of goods into and within the country, even under the threat of military attacks, is of paramount importance, and transportation – air, sea and land – will be a strategic target. However, Sweden must be prepared for a scenario where it becomes entirely cut off from global supply chains.

- Stored supplies run the risk of being stuck at larger warehouses as transport degrades, and must therefore promptly be dispersed as widely as possible once large combat operations begin, if not before
- Information operations and psychological defense are vital to rallying support within and without the country for the military defense.
- While military reliance on civilian or civil defense capabilities might be unavoidable, it can quickly become untenable when the aggressor specifically targets civilian society.
- Kinetic attacks will be preferred over cyber attacks in open conflict.

There are plenty of caveats to the analysis presented. A conflict between Russia and Sweden might see a different mix of military capabilities used. Swedish military strategy would also play into to where and how the battle is fought, and this could well differ from how the current invasion is developing. There is also the matter of how the war is going. It would seem that Russia was aiming for a rapid Ukrainian collapse and was likely expecting the Ukrainian civilian population to be more sympathetic to the Russian invasion. After initially holding back on measures directed at the civilian population, Russian tactics have changed and are now creating humanitarian crises and disasters in many areas. The paradox then might be that the better the military defense is going, the worse things are likely to get in the civil defense domain.

Even with the differences mentioned above, and many more that have not been, there are important similarities between the civil defense challenges faced in Ukraine and those that could face Sweden in a large-scale conflict. The relevance of the war in Ukraine for Swedish civil defense planning is therefore, we would argue, very high. Perhaps the most important lesson for Swedish observers is that war is not an abstract concept, it is a risk that you can prepare for.

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