

Conflict Update # 165

August 28th, 2022

Conflict Assessment

Russian losses – 46,750 (+250) soldiers killed and 140,000 injured, 1,942 (+3) enemy tanks, 4,257 (+6) armored combat vehicles, 1,050 (+5) artillery systems, 274 (+2) MLRS systems, 148 (+0) air defense systems, 234 (+0) warplanes, 202 (+0) helicopters, 838 (+2) UAVs of the operational-tactical level, 196 (+0) cruise missiles, 15 (+0) warships/cutters, 3,171 (+6) trucks and tankers, 76 fuel bowsers and 99 (+0) units of specialized equipment.

Key takeaways

New explosions reported in near Alupka and Simeiz - There is new information about explosions in occupied Crimea occurring earlier today.

Eyewitnesses say that the forest near Simeiz started burning after explosions, writing on local Telegram channels.

Simeiz is an urban-type village near Yalta. It's located on the southern slopes of the Crimean Mountains.

Other explosions were heard on the southwestern coast of Crimea while a series of powerful explosions thundered near Cape Fiolent. According to the Russian-installed governor of Sevastopol, Mikhail Razvozhaev, an air defense system reacted in Sevastopol.

Local groups on social media also reported 10 explosions in Kozacha Bay, which is also located near Sevastopol.

Explosions targeted area near Sokil plant in Nova Kakhovka - Photos and videos featuring the explosions at the Sokil plant in the city of Nova Kakhovka were published online yesterday.

Local residents say that there were several “hits” on the territory of the plant.

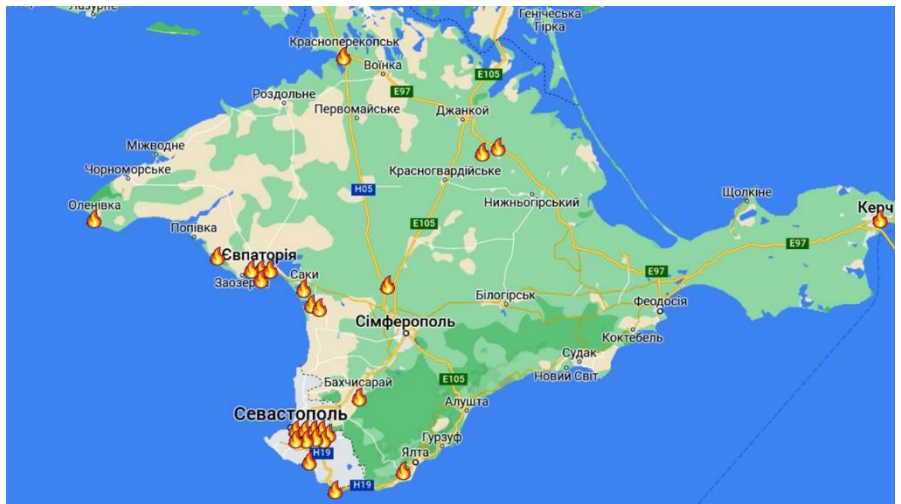
It is reported that there was a Russian EW on the territory of the plant, though this information can't be confirmed yet.

Serhii Khlan, deputy of the Kherson Regional Council, reported on his Facebook page that the Ukrainian servicemen hit the headquarters of the Russian BTG.

“Although the propagandists write that their ‘air defense system’ was clearly heard, the Armed Forces of Ukraine struck Russians in Nova Kakhovka. Ours hit the headquarters that the Russians had set up at the Sokil factory,” he wrote.

Ukrainian forces continue to repel Russian attacks on key Donbas city of Bakhmut - Ukrainian military forces have continued to foil Russian attempts to break through around the strategic city of Bakhmut to extend control over the Donbas region.

Having taken Syevyerodonetsk and Lysychansk weeks ago, Russian forces have focused on the key city of Bakhmut.



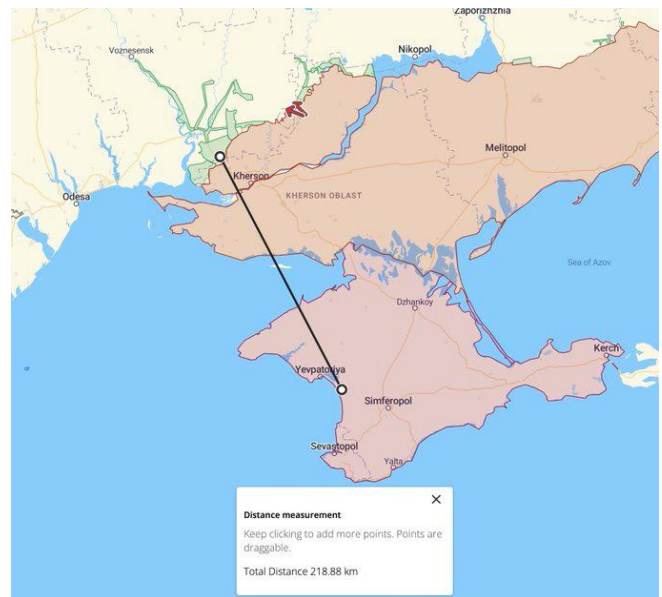
The town -- which had an estimated 70,000 residents before Russia launched its unprovoked full invasion on February 24 -- was shelled again on August 27, as were nearby Soldedar and Zaitseve, according to a Ukrainian military report.

It said Ukraine halted advances near two other major towns, Slovyansk and Kramatorsk.

Does Ukraine have a stash of domestically developed ballistic missiles?

- Much about what caused a series of explosions that tore through Russia's Saki Airbase in Crimea, remains murky. Russia had claimed what happened was an accident, and that the resulting damage was minimal and caused no casualties but provided no hard evidence to substantiate this and ordered an evacuation of surrounding areas.

Ukrainian officials claimed that the incident was a strike, with a subset of them further saying it was carried out using unspecified domestically-developed stand-off weapons. If it was indeed a standoff strike from outside Crimea, it would have had to involve a weapon that Ukraine doesn't officially possess, but they certainly were close to in recent years.



Victor Andrusiv, who resigned from his position as adviser to the country's Interior Minister in July for unclear reasons, specifically claimed that Ukraine had missiles with ranges between 200 and 300 kilometers (approximately 124 to 186 miles) already in service in a post on the Telegram social media network. Andrusiv had previously called publicly for long-range strikes on the Kerch Strait Bridge that links Russia to occupied Crimea.

It remains to be seen whether or not the Ukrainian claims, to include the employment of some kind of weapon the country has developed itself, are ultimately confirmed. Ukrainian forces would need a ground-based weapon system with the kind of range that Andrusiv mentioned to hit Saki from areas they control in the southeastern end of the country.

Still, the blasts at the base could still have been caused by strikes carried out by manned aircraft, drones of various complexities, short-range missiles clandestinely launched from within Crimea or off its shores, sabotage, or a simple accident. Regardless, evidence is certainly mounting that Russia's initial claims as to how limited the destruction from the blasts was a lie.

Whatever happened at Saki Airbase, especially in light of Andrusiv's Telegram post, has raised a key question: where are Ukraine's domestically-developed short-range ballistic missiles?

Hard details can be challenging to pin down, but what is undeniable is that Ukrainian rocket and missile firm Pivdenne, also known as the Yuzhnoye Design Office, has been working on some level on a short-range ballistic missile designed to be fired from a road-mobile transport-erector-launcher (TEL) since at least 2003. The roots of this project reportedly trace back to the end of the Cold War and Ukraine's independence from the Soviet Union. That decoupling spurred a desire to craft a domestically developed successor to the Tochka-U short-range ballistic missile that would be roughly equivalent to Russia's Iskander-M. Both sides of the current conflict in Ukraine have employed stocks of Soviet-era Tochkas.

The missile, and the complete weapon system that it is a part of, have been referred to over the years as Sapsan, Grom, Grim, Grim-2, and Hrim-2. Sapsan appears to be the name applied to a larger effort that this weapon, and other

components of the complete system, including a 10-wheeled TEL that can be loaded with two containerized missiles at a time, were developed under.

The Grom/Grim/Grim-2/Hrim-2 nomenclature appears to refer to versions of the missiles and/or systems, of which there appear to be domestic and export-specific variations. The different spellings largely seem to be a product of how Russian and Ukrainian have been transliterated into the Roman alphabet over the years, and they all translate to Thunder/Thunder-2 in English.

Pictures of solid-fuel rocket motors associated with the Grom/Grim/Grim-2/Hrim-2 design have emerged in the past, but there do not appear to be any pictures of prototype or production examples of the complete weapon. A model publicly displayed in 2016, which had the name "Grom" written on the side, showed a design that was similar, at least in broad strokes externally, to Russia's Iskander-M.



The initial Grom/Grim design at least had an expected range of around 280 kilometers (174 miles), would carry a warhead weighing 480 kilograms (around 1,060 pounds), was 6.4 meters long (just under 21 feet), and nearly a meter (3.28 feet) in diameter at its widest, according to a website with a 2015 copyright date for Ukroboronexport, which appears to have been supplanted since then by Ukrainian state arms broker Ukroboronprom. That same webpage said that the missile, as designed, would have an inertial guidance system assisted by a satellite navigation link, along with some kind of unspecified terminal homing capability.

It's not clear if any of those specifications apply to the subsequent Grim-2/Hrim-2 design. The Ukroboronexport webpage says that Grom would be launched from an eight-wheeled TEL capable of carrying just one missile at a time, which clearly did not carry over to subsequent iterations of the missile.

It is planned that the Grom launcher vehicle will be also capable of carrying and launching Korshun land attack cruise missiles with a range of 280-700 km. The Korshun missile is planned to be developed in Ukraine. It resembles a Soviet Kh-55 air-launched cruise missile.

New light on the Wagner Group - Private military companies (PMCs) are officially illegal in Russia - but despite considerable efforts to keep them in the shadows, the Wagner Security Group's ties to the Kremlin have been demonstrated before through its backer, Yevgeny Prigozhin, a man close to Putin. With the war in Ukraine, the strategy changed: billboards began appearing around Russian cities to recruit new fighters for the war, publicly identifying the organization as an extension of the Russian military.

Since its establishment in 2014 by intelligence officer Dmitry Utkin to support separatists in the Donbas, the company never formally existed on paper and its name was taboo, which also meant that personnel information was unavailable, even to the families of fighters who died in the field. This changed after the company's involvement in the war in eastern Ukraine entered the public sphere in Russia with state news reports indirectly mentioning their involvement on the battlefield, referring to it as an "orchestra" alluding to the homonymous German composer.

According to the Guardian's investigation, joining the group requires a passport not from a NATO country or Ukraine and good medical conditions; the entire procedure takes place on WhatsApp or Telegram, contacting the recruiter numbers on the posters. This extended and simplified recruitment process to find fighters for Russia could betray the

real conditions of the Russian armed forces, especially because of the money offered to those who enlist, which comes to several times the salary of regular soldiers.

Dealing with a lack of fighters

The Kremlin cannot afford to resort to mass recruitment because it would make Putin unpopular, and to cope with the troop shortage in Ukraine it is resorting to the covert method of offering amnesty to its prisoners in exchange for their volunteering as fighters. The Wagner Group's involvement in prisoner recruitment is again speculated and not independently verifiable, but it aligns with British intelligence information. The case refers specifically to a penal colony in St. Petersburg, where men in uniform made the offer to 11 detained prisoners.

This information is followed by the report about Russian soldiers "refusing to fight and trying to leave the army," forcing the government to find alternatives. Although the Defense Ministry denies it, billboards and mobile recruitment centers have appeared throughout Russia, accompanied by campaigns on state television and job ads on websites for military specialists, to find volunteers to enlist on the front lines. The goal is the formation of "volunteer battalions" motivated by "lucrative cash bonuses," according to the British military, while unverifiable reports claim that these financial promises have so far not been fulfilled.

Human rights groups and lawyers report on the growing number of troops refusing to fight and the repercussions suffered by those who have terminated their contracts with the Ministry of Defense and have managed or are attempting to return home from Ukraine. (StopFakeNews.org).

China

China to forgive loans to 17 African countries – Earlier this week we reported that China was to forgive various African loans and the rationale behind the move. Here is a fuller report of their post.

The Chinese government has revealed plans to forgive 23 interest-free loans to 17 African countries and also revealed its intention to provide food assistance to struggling nations.

The Chinese Foreign Minister, Wang Yi, disclosed the plans in a post on the ministry's website, but failed to specify which countries owed the money or the amount of the loans.

"China will waive the 23 interest-free loans for 17 African countries that had matured by the end of 2021," Mr Wang said at the Forum on China-Africa Cooperation, according to a statement.

He pledged that China would continue actively supporting and participating in the construction of major infrastructure projects in Africa through financing, investment and assistance.

"We will also continue to increase imports from Africa, support the greater development of Africa's agricultural and manufacturing sectors, and expand co-operation in emerging industries such as the digital economy, health, green and low-carbon sectors."

"What Africa wishes for is a favourable and amicable cooperation environment, not the zero-sum Cold War mentality," Wang said, according to the post.

Since the Forum on China-Africa Cooperation took place in Senegal in November 2021, Beijing has delivered \$3 billion of \$10 billion of credit facilities pledged to African financial institutions, Wang said in the speech.

In addition, this year, China has agreed to tariff-free entry to 98% of exports from 12 African countries and has provided emergency food assistance to Djibouti, Ethiopia, Somalia and Eritrea, he said.

“So far this year, China has signed exchange of letters with 12 African countries on zero tariff for 98% of their export items to China. We have provided emergency food assistance to Djibouti, Ethiopia, Somalia, and Eritrea. More African agricultural produce has reached the Chinese market through the green lanes,” he added.

Putin

Putin’s Five (False) Narratives for War - The Kremlin and its agents are peddling false arguments to amplify the case for war in Ukraine. They are rice-paper thin.

Tempting as it might be for, he cannot simply kick off a new phase of his war in and against Ukraine without first laying the groundwork of reasoning for his aggression.

As many commentators have noted, we don’t know what Putin is going to do, maybe he himself is still undecided, and maybe the loud and detailed announcements of the sanctions Russia will come under if they encroach further into Ukraine are changing the calculus in the Kremlin. Nevertheless, the rhetoric that precedes military action continues unabated and comes from high-level Russian sources such as blue-ticked Embassy and Foreign Ministry Twitter accounts.

The top five (false) narratives from Russia that are most common at present, being pumped out by Russian state TV for a domestic audience and being parroted by the Kremlin’s apologists globally, are as follows.

1. The language issue in Ukraine

The purpose of this strain of disinformation is to present Ukraine as divided, contrasting the Russian-speaking east with the Ukrainian-speaking west. There is a nugget of truth here —that Ukrainians do speak different languages, and predominantly (though not entirely) it is along regional lines. The leap that the propagandists want to take from this though is that a large part of the country (the east, where there is war) is disaffected by the official state policy on language.

The reality is that Ukrainians are united by indifference to language choice. Ukraine isn’t divided by the language issue. Almost everyone is fully fluent in and comfortable with either language. Bilingual conversations are commonplace. Russia wants to portray the Russian language, and therefore Russian speakers by extension, as being oppressed. But that the sole state language is Ukrainian has no significant effect on the ordinary life of anyone in Ukraine.

It is notable that some newly arrived correspondents from the West report with some surprise that Russian-speaking cities want nothing to do with Putin’s imperial plans.

2. Ukraine has plans to re-take the Donbas by military force

This myth is entirely fabricated in Russia. It is highly plausible that Russia plans to ostensibly protect its newly minted citizens local to the Donbas, who have taken Russian passports in the last three years. The notion that Ukraine has military designs can be disproved by credible and independent parties.

Since the outbreak of war, the Organization for Security and Co-operation in Europe (OSCE) has had a team of international observers (including 25 Russian citizens) mandated to report everything they see on the ground in Eastern Ukraine. The OSCE’s reports are a dry reading of the facts, they take no sides.

The men and women who make up this special monitoring mission (SMM) are drawn from across the globe, and they undertake dangerous work. If Ukraine was moving equipment or manpower into place to retake the Donbas by military force, the OSCE SMM would be immediately aware of and report this.

Nevertheless, Russia's Ambassador to the United Nations still pretended that this was a real possibility at the recent emergency Security Council meeting over the situation in Ukraine.

3. Russia is under threat!

Putin likes to portray himself, equally, as a man of great strength and as a victim. If you run one of the most sophisticated propaganda campaigns ever seen, those diametrically opposed notions can coexist and be accepted by some with little discernable cognitive dissonance.

The only threat that points in Russia's direction is the threat to the Putin regime from ideas such as democracy and rooting out corruption. But, just to placate the doubters, consider what military action against Russia might look like. We know that Ukrainians have signed up to fight in territorial defense, but they hardly amount to a shock force capable of seizing and holding Russian territory. Elsewhere, the supposed threat from NATO states bordering Russia amounts to far fewer than the 130,000 Russian personnel now deployed. Nothing in the 31-year history of modern Ukraine suggests its leaders would order military action amounting to mass suicide. The idea is, for all manner of reasons, preposterous.

4. Ukraine is populated by Nazi sympathizers and fascists.

There are two roots to this fabrication, and one main reason for it to be used now. That reason is because it is easier to kill another person after they have been dehumanized. Wars require soldiers to kill the enemy, an act made much easier if the enemy is a fascist or a Nazi preparing to commit atrocities.

One of the roots of noxious propaganda lies in the fact that during World War II (yes, today's propaganda has a tail that runs back 75 years) some Ukrainians decided to oppose the Red Army by joining the Germans. This is a very simplified version of that history, for reasons of space, but suffice to say those Ukrainians did not require a German presence to fight the Red Army; they would have done so regardless.

The second root derives from the fact that some modern-day Ukrainians, are motivated by obnoxious far-right ideologies. Such people, sadly, can be found everywhere. Extremists are abhorrent regardless of their nationality (there are more than a few in Russia), but such views are proportionally far less common in Ukraine than they are in other, even European, countries.

5. Ukraine refuses to abide by the Minsk peace agreement.

It would be remiss not to include this factor in this list of current propaganda narratives, as it is again being pushed by Russia as justifying its bellicose behavior.

The facts are as follows. There is disagreement between the sides on how Minsk should be implemented. The timing and conditions for the local elections envisaged in the agreement are one such dispute. What we have seen from Russia is repeated bad faith when it comes to the stated aim of Minsk — the return to Ukrainian government control of the territories up to the international border. Rather than work towards that aim, Russia frustrates it. That has allowed the Kremlin to deepen its hold on the territories it invaded nearly eight years ago. It appears that Russia will never, in fact, return them. That should be recognized since the facts on the ground tell us that this is so.

The key issue to note is that Russia refuses to abide by point one, a ceasefire, and the withdrawal of whole categories of weapons.

It is perhaps worth reflecting in the period since Russia agreed as part of Minsk to stop its armed aggression, it has refused to do so.

Impacts

Putin's NATO nightmare: Poland to receive 250 M1 Abrams tanks - More M1 Abrams tanks are headed closer to Russia – During the Cold War, the United States military developed the M1 Abrams tank for a future conflict against the Warsaw Pact, and it was designed largely for fighting that was expected to occur in Europe where it could provide more mobile firepower for armored formations. However, it was never actually used in combat in Europe – and only had its baptism of fire during the Persian Gulf War in 1991, when a total of 1,848 M1A1 main battle tanks (MBTs) were deployed to Saudi Arabia to take part in the liberation of Kuwait.

Despite concerns as to how the tanks would handle the sand, as well as apprehension over months with little maintenance, the Abrams proved superior to the Soviet-era T-55, T-62, and even T-72 tanks that were used by the Iraqi military. During the war, only 18 Abrams tanks were taken out of service due to battle damage while only nine were permanent losses. Not a single Abrams crewman was lost in the conflict.

Now more than 40 years after it was introduced, the latest variant of the Abrams – named for the late General Creighton W. Abrams, former Army Chief of Staff and commander of the 37th Armored Battalion – will soon roll into Poland. However, instead of taking part in an invasion, the American-made tanks are heading to the former Warsaw Pact nation to replace the Soviet-era MBTs that the Polish military has operated for decades, which are being transferred to Ukraine.



This week, the U.S. Army officially signed a long-awaited contract with General Dynamics Land Systems (GDLS), the Abrams prime contractor, which will see 250 M1A2 System Enhancement Program version 3 (SEPV3) MBTs delivered to Poland under a \$1.15 billion contract. It concludes a year-long negotiation with the NATO ally to purchase the fleet of tanks.

“NATO’s strength lies in its unity, which has never been greater than it is today,” said Doug Bush, assistant secretary of the Army for Acquisition, Logistics and Technology, and the U.S. Army’s acquisition executive. “This award is an example of the Army’s continuing work with our industry partners to increase production of critical military equipment capabilities to ensure we continue to meet the needs of our partners and allies.”

Zelensky orders schools and universities to work offline from September 1 - Offline education process will take place only if there are protective facilities in schools and universities. In addition, the final decision on the format of education is made by regional civil-military administrations together with the students’ parents. If parents disagree with offline study, they may choose an online mode, an individual schedule, or transfer their child to home study.

A number of Russian media spread the news that Zelensky allegedly “ordered” all schools and universities in Ukraine to open on September 1. “They urge parents to prepare their children for offline education,” the media claim. Moreover, these articles report that parents unsuccessfully tried to oppose such a decision, and even put up posters asking not to expose their children to danger.

Toxins in soil, blasted forests – Ukraine counts cost of Putin’s ‘ecocide’ - The woods outside Chernihiv were quiet in late August when Anatoliy Pavelko scrambled into a 10-metre bomb crater with a trowel and an icebox full of

sample jars. He wanted to find out what the Russian FAB-250 bomb left behind when it carved this gaping hole into the ground in the spring.

Four months earlier, the environmental lawyer was dug in on a frontline just a few kilometres away, shells crashing around him in the bitter fight to keep Russian forces out of Kyiv.

Now he has taken temporary leave from his unit of volunteers and returned to Chernihiv for a more familiar battle on a different front in the war against Moscow.

Russia's invasion has killed tens of thousands of Ukrainians and destroyed homes and entire cities. It is also devastating Ukraine's environment, an "ecocide" that activists worry is going largely unrecorded amid the broader national tragedy.

"Most people pay attention to loss of life and damage to infrastructure, but lots of people and even the national government forget about losses and damage caused to the environment," said Pavelko, who specialized in protection of rivers before the war.

Now he and other activists have launched an urgent campaign to catalogue the damage and future risks, from toxins left by shells in agricultural soil to chemicals leached into groundwater after bombings and fires, and from ancient woodland torn apart by modern weapons to rivers tainted by sewage after waste treatment sites were bombed.

There is medium-term environmental damage at a key water treatment plant in the city, damaged in repeated shelling, so it no longer has capacity to treat all the sewage piped in after heavy rains.

Managers fear in the autumn they will have to release untreated waste into a nearby river that flows down to the capital. "If the water isn't cleaned, people in Kyiv will have shit in their drinking water," plant manager Natalia Mazyuk said bluntly. The facility had been newly upgraded; one of the tanks that was put out of service had only gone into operation a month before it was bombed.

A city oil depot, set ablaze in a bombing, burned for days, causing breathing problems and releasing chemicals that will have settled on the ground and sunk into water supplies.

There are trees and whole areas of woodland destroyed by shelling and bombs that will take decades to grow back. Their ecosystems will also need years to recover, robbing the people of Chernihiv of an important resource.

Containment

America is gifting Ukraine a new air defense network to stop Russia's strikes - "Factoring in that Ukraine is also set to receive four compatible IRIS-T air defense batteries from Germany (pictured right), that means Kyiv will eventually have a dozen networkable modern air defense batteries."

Ukraine is getting new air defense systems that won't make things easier for Russia: August 24 was the 31st anniversary of Ukraine's independence



from the Soviet Union—and Moscow did not let the day pass without yet another vicious attack, peppering the town of

Chaplyne with a lethal hail of Smerch rockets, and Iskander and S-300 missiles. Hits to residential areas, the train station and a passenger train killed 25 civilians and wounded 50.

Fortunately, Russia's ability to inflict such terror attack appears likely to decline over time. One reason is depletion of missile stocks and inability to rapidly build them back up. Another factor is that Ukraine's ground-based air defenses are strengthening, not weakening,

This trend was discernible in the \$2.98 billion military aid package the U.S. announced the same day, the largest given by Washington to Ukraine yet.

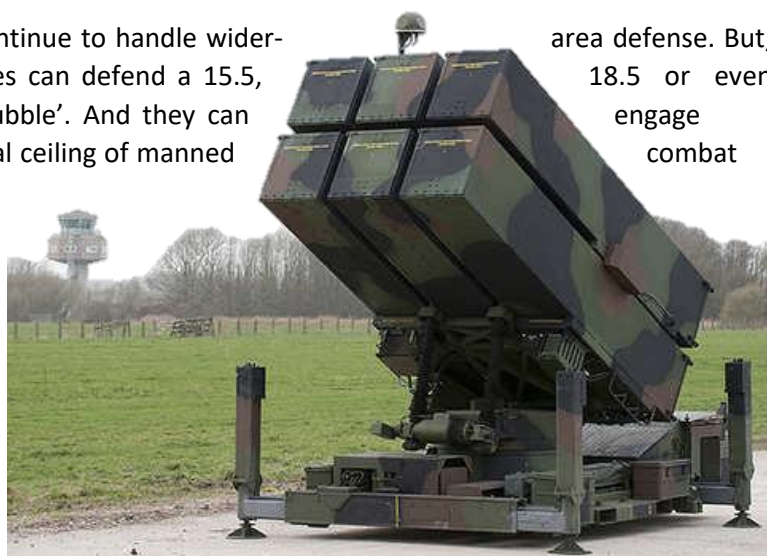
This package, which focused on "long-term...multi-years investments" included no less than six NASAMS air defense batteries to supplement two already donated to Ukraine, with delivery unrolling over the next year or two.

Ukraine's older ground-based Soviet-era air defenses systems, supplemented by Western short-range missiles, have performed beyond expectations, shooting down a large share of cruise missiles and accounting for most of the 100 confirmed Russian jet and helicopters losses in the war as of late August, confining Russian tactical jets to attacking frontline targets rather than Ukrainian supply lines.

But benefiting from sensors and missiles decades more modern than those used by Ukraine, medium-range NASAMS batteries could reduce cruise missile threats to Ukrainian cities, or closer to the frontline, make even hit-and-run airstrikes far riskier. The systems are apparently new production, meaning they're likely the latest NASAMS-3 model (pictured below) which can fire both medium-range AIM-120 radar-guided missiles and short-range AIM-9X Sidewinder heat-seeking missiles.

Ukraine's dated but powerful S-300P batteries will continue to handle wider- depending on the AIM-120 variant, NASAMS batteries can defend a 15.5, 28.5-miles radius—enough to protect a city-sized 'bubble'. And they can aircraft flying up to 65,000 feet, the maximum practical ceiling of manned aircraft.

Each battery includes multiple launchers and MPQ-64F1 Sentinel radars effective at detecting even low-flying aircraft/missiles; and a stealthier MSP-500 optical sensor for relatively close threats. The battery's fire control system is designed to network with other batteries, including the IRIS-Ts Germany will eventually supply. However, Ukraine will likely need to devise workarounds to coordinate with its Soviet-technology defenses.



area defense. But, 18.5 or even engage combat

Kyiv will need to choose between enhancing defense of cities like Dnipro, Lviv and Kyiv from cruise missiles, or deploying near the frontline at Kharkiv, Kramatorsk or Mykolaiv where threats are denser, and there's greater risk of losses to Russian artillery and air defense suppression strikes. Fortunately, with twelve NASAMS and IRIS-T batteries, Kyiv may be able to do both to a degree.

Ukraine is getting VAMPIREs—but were they lurking there all along? – As referred to in Friday's Update, the U.S. will also purchase a counter-drone system called VAMPIRE for Ukraine, which stands for Vehicle-Agnostic Modular Palletized ISR Rocket Equipment. This is actually a boxy four-round rocket-launcher pod mated to an independent 24-volt generator and a WESCAM MX-10 stabilized electro optical/infrared sensor turret with target-tracking capabilities.

This package can be easily fitted both onto military vehicles and civilian pickup trucks and launch 70-millimeter laser guided AGR-20 Advanced Precision Kill Weapons System (APKWS) rockets, an especially affordable form of guided weapon.

APKWS rockets can actually be used against ground targets and manned aircraft or missiles too. Nonetheless, the counter-drone application is evident: Ukrainian troops are compelled to expend costly anti-aircraft missiles designed to intercept supersonic fighters on cheap Russian surveillance drones because of the risk these may call down very lethal artillery bombardments. APKWS thus offers a lower-cost guided weapon for disabling smaller, lower-flying drones.

The Pentagon prior announced transfer of APKWS rockets to Ukraine in May without explaining their launch platform. It's not clear if they have been employed as part of a different system than VAMPIRE, or if VAMPIREs have in fact been in use all along.

It's worth noting that Germany is also including 20 pickup trucks and 2,000 70-millimeter laser-guided rockets in its arms package for Ukraine. It seems likely these systems may be able to share the same ammunition supply.

Winning the artillery war: ammo, counterbattery radars and surveillance drones - After Moscow's failed early advances, Russian forces have leaned on overwhelming artillery bombardments to slowly bash away Ukrainian defenses in Eastern Ukraine. By the end of June that strategy seemed to be working, but the following month the tables began to turn as Ukrainian forces used U.S.-delivered HIMARS rocket systems to vaporize Russian ammunition dumps and supply links behind the frontline. By August, that's estimated to have reduced munitions expended by Russia to 5,000-6,000 shells daily, one-third the previous rate.

Ukraine's big guns still face daunting odds, so much of the U.S. assistance is aimed at helping them, notably by sending 245,000 more 155-millimeter shells, on top of 75,000 given earlier in August. This NATO-standard caliber is compatible with most of the howitzers given/sold to Ukraine including the German PzH 2000, Czech Zuzana 2, French CAESAR, Polish Krab, and U.S.-built M109 and M777 howitzers. In July Ukraine reportedly expended 3,000 155-millimeter shells daily, at which rate the combined 320,000 shells given by the U.S. might last 3-4 months.

Washington is also sending 65,000 120-millimeter heavy mortar rounds. Heavy mortars are easier to tow than howitzers and have a comparably devastating blast effect but much shorter range (usually 4-5 miles).

Ukraine already uses PM38 and 2B11 120-millimeter mortars, and an indigenous M120 Molot system. Kyiv has also received Finnish KRH-92s mortars of this caliber, and in August, Washington donated 20 of its own 120-millimeter systems as well as 20,000 shells.

Even with Western aid, though, Ukraine can't match Russian numerical superiority in shells and guns. That means it has no choice but to fight smarter with its smaller arsenal.

One tactic is to consistently knock-out Russian batteries with counter-battery fires. Towards that end, Ukraine is receiving an additional 24 counter-battery radars (pictured right). Radars previously received from the U.S. have allowed Ukrainian batteries to rapidly trace back the origin point of Russian shelling and precisely attack the guns—a procedure Ukrainian gunners are executing many times faster than Russia does.

But a Ukrainian defeat at Pisky linked to absent counterbattery capability highlight that Kyiv's forces still need additional counterbattery coverage and better

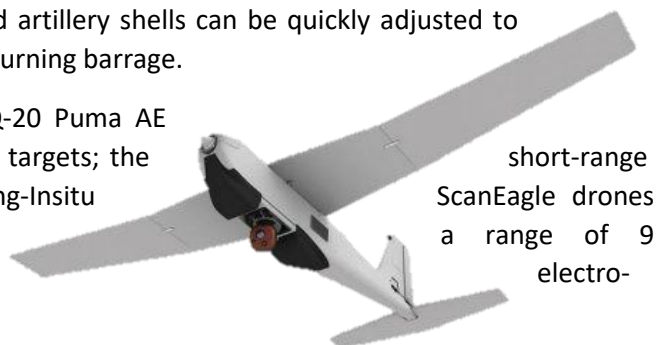


communications and organization. Extra radars should at least help the former problem.

Another tactic to overcome Russia's ammunition advantage is to make a smaller number of shells achieve the same or greater effect. One method is to use expensive GPS-, laser- and even radar-guided shells to guarantee a shot lands on target.

But with assistance from a drone spotter, even cheap unguided artillery shells can be quickly adjusted to land on a point target without need for a massive, ammunition-burning barrage.

Thus Washington is transferring additional hand-launched RQ-20 Puma AE surveillance drones (seen to the right) to help Ukraine acquire targets; the Puma will complement 15 longer-range/endurance Boeing-Insitu



short-range ScanEagle drones a range of 9 electro-

donated to Ukraine earlier in August. The 13-pound RQ-20 has miles, can stay aloft for two hours, and carries a high-quality optical/infrared camera turret.

RQ-20s earlier received by Ukraine reportedly have proven useful spying on Russian artillery around Kharkiv and Zaporizhzhia.

Ukraine says it needs at least 100 HIMARS and longer-range rockets - The recent addition of new long-range fires capabilities to Ukraine's arsenal has played a key role in defending against stalled Russian forces. But additional mobile rocket batteries and longer-range rockets would allow Ukraine to mount more effective counter attacks and reclaim territory stolen by Russia, Oleksii Reznikov, minister of defense of Ukraine, said.

Ukraine currently has 16 High Mobility Artillery Rocket Systems, or HIMARS, able to strike ranges of 85 kilometers or 52 miles, as well as Howitzer cannons with a range of 18 miles. Speaking at an Atlantic Council event Tuesday, Reznikov said the HIMARS had already helped Ukraine destroy hundreds of Russian command stations, as well as ammunition storage areas.

But in order to effectively protect Ukraine's massive border and wage counter attacks on Russians occupying Ukrainian territory, they would need orders of magnitude more. "We would need at least 100 [HIMARS] I think. That would become a game-changer on the battlefield," he said, adding that Ukraine also needs ammunition retrieval and preparation systems for their 100 Howitzer cannons, as well as more UAVs to plot where to send long-range strikes.

"We are using HIMARS systems precisely, like...surgery, because we will not use the Russian strategy of, how we call, meat grinder," he said, referring to the imprecise Russian shelling that has led to hundreds of civilian casualties.

Ukraine presently does not have the capacity to re-take the Donbas.

Instead it is making operational life for Russian BTGs as difficult as possible in that Ukraine has targeted Russian resupply routes, ammunition depots and command posts.

Of particular import are the last-listed – command posts – where they have been able to precisely geolocate map coordinates and eliminate them one by one.

These are extremely important strikes as they decapitate Russian abilities to control and command forces in the field.

Czech Republic, Poland agree to protect Slovak airspace until delivery of U.S.-supplied F-16s - The Czech Republic and Poland signed an agreement to protect the airspace of neighbor and fellow NATO member Slovakia as Bratislava ceases use of its old Soviet-made MiG-29 fighter jets at the end of this month.

The protection agreement signed on August 27 is scheduled to run until Slovakia receives an order of new F-16s from the United States, expected sometime in 2024.

Defense Ministers Mariusz Blaszczak of Poland, Jana Cernochova of the Czech Republic, and Jaroslav Nad of Slovakia signed the agreement at a Slovak air base.

"Polish fighters will preferably be taking off from a base located on Polish territory. Czech fighters will also provide airspace protection tasks from a base located on the territory of the Czech Republic and will return to their home bases once the task is completed," the spokeswoman for the Slovak Defense Ministry said.

Nad last month said Slovakia may consider offering its current fleet of 11 MiG-29s to Ukraine in a possible swap of some kind as Kyiv battles against Russia's invasion.

The 11 MiG-29s are worth an estimated \$300 million.

Silicon Valley to the frontline in Ukraine: Using tech in the war against Russia - Ukraine's tech diaspora races to mobilize Silicon Valley in war with Russia Ukrainians working at Western tech companies band together to knock down disinformation websites, encourage Russians to turn against their government, and speed the delivery of medical supplies, as Amazon pledges logistics, cybersecurity support for Ukraine.

Ukrainians working at Western tech companies are banding together to help their besieged homeland, aiming to knock down disinformation websites, encourage Russians to turn against their government, and speed delivery of medical supplies.

They are seeking, through email campaigns and online petitions, to persuade firms such as internet security company Cloudflare, Alphabet Inc's Google, and Amazon to do more to counter Russia's invasion of Ukraine.

"Companies should try to isolate Russia as much as possible, as soon as possible," said Olexiy Oryeshko, a staff software engineer at Google and a Ukrainian American. "Sanctions are not enough."

He was one of nine tech activists interviewed by Reuters who are of Ukrainian heritage or are Ukrainian immigrants and are responding to a call by Kyiv to form a volunteer "IT army."

Ukraine's deputy minister of digital transformation said Wednesday that the online forces now numbered more than 250,000 people, carrying out their own ideas. read more This "IT army" has already reached over 50 million in Russia, in part through 100,000 phone calls using an automated recording demanding Moscow's retreat, said the official, Alexander Bornyakov.

At Google, workers including hundreds of Ukrainian heritage have signed an internal letter addressed to CEO Sundar Pichai calling on the search giant to deliver more aid to Ukraine and modify its services such as Maps and advertising tools, according to a company software engineer who spoke on condition of anonymity.

The Ukrainian military assessed Polish CPC for the KRAB self-propelled

guns - The 155mm KRAB self- propelled howitzers (pictured right) in the Armed Forces of Ukraine are controlled by Polish command vehicles.

Polish command post carriers (CPC) are made on the chassis of decommissioned 2S1 Gvozdika self-propelled howitzers.



Both the engine and the remaining units in CPC are replaced: the gearbox is automatic, a modern radio station is installed, which allows it to constantly be in touch with the rest of the cars.

Sanctions

U.S. Computer firm Dell ceases Russia operations - Dell Technologies on August 27 said it had ended all operations in Russia after shutting its offices earlier this month, becoming the latest Western company to leave Russia in the face of Moscow's full-scale invasion of Ukraine.

Dell, a U.S. computer company, is a key supplier of servers in Russia.

It suspended sales in Ukraine and Russia in February as it monitored the situation to determine its next moves.

UN Coordinator says more Ukrainian grain must be shifted to provide space for new harvest - The UN coordinator for a Black Sea grain deal said that millions of tons of food needs to be moved out of Ukrainian silos to make room for the next harvest.

Amir Abdulla, UN coordinator for the Black Sea Grain Initiative, said on August 27 that the grain deal has "started creating some space, but much more grain needs to shift to make space for the new harvest."

A day earlier, Ukrainian President Zelenskyy said in a late-night address that Ukraine has exported more than 1 million tons of agricultural products by sea over the past month.

"The grain-exporting initiative has been working for almost a month and, during this time, our three seaports...have exported the first million tons," Zelenskyy said.

GeoMilitary

We are now in a global cold war - When former British Prime Minister Winston Churchill laid out the contours and stakes of the first Cold War at Westminster College in Fulton, Missouri, in 1946, he didn't just talk about Europe. What people remember, of course, is this famous line: "From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the continent." But later on in the speech, Churchill also warned of the coming "shadow" of tyranny "alike in the West and in the East."

The nascent Cold War, in other words, was already going global—even as it was being defined for the first time. That Cold War may have ended three decades ago, but another, very different sort of cold war is beginning. And this one is also about to go global. NATO's leaders recently convened with an eye on the Indo-Pacific, and they are preparing to confront China as well as Russia.

And as we saw at the Nato summit in Madrid—where the leaders of Japan, South Korea, Australia, and New Zealand met for the first time—new battle lines were being drawn that could last for generations.

In contrast to the 40-year-long US-Soviet confrontation, which pitted two great powers utterly isolated from each other into separate spheres, this struggle is marked by a multidimensional relationship where China and the West trade and invest with one another even as they compete and where Russia, China's partner in authoritarianism and anti-Americanism alike, stays viable—though heavily sanctioned—by supplying oil, gas, and grain to the other side.

But neither should we deceive ourselves that the contours and stakes of a long-term confrontation aren't coming plainly into view. A cold war is simply a raw struggle for power and the right to set the rules for global conduct; it occurs largely behind the scenes in private deal-making and covert action rather than on the battlefield. And that's what we're facing.

What caused this war? First, Washington has undergone a generation-long transformation from a bipartisan policy of eager engagement with China—seeking to turn Beijing into a fellow "stakeholder" in the global system, as former US President George W. Bush's deputy secretary of state, Robert Zoellick, once put it—to a bipartisan policy of unrelenting confrontation. And helped along by the shock of Russia's invasion of Ukraine, Washington appears to be bringing a once-reluctant Europe along with it.

The new strategic concept for Washington grew out of a communique issued after the last Nato summit, which warned for the first time against China's "systemic challenges to the rules-based international order and to areas relevant to alliance security."

At the time, European leaders were still resisting US pleas to address the strategic challenge from Beijing; former German Chancellor Angela Merkel spent much of her 16 years in power cultivating ties with China. Russia's invasion, with China's endorsement (if not yet military support), has dramatically changed that approach.

German Chancellor Olaf Scholz, along with US President Joe Biden and other G-7 leaders, announced a new \$600 billion global infrastructure initiative intended to counter China's Belt and Road Initiative. And NATO will launch a new "strategic concept"—a 10-year plan—to address the threat from China for the first time.

The shift began to accelerate in the last few months when Biden and NATO allies broadened their policy of helping to defend Ukraine against Russian aggression into a policy of undermining the power of Russia itself—or, as US Defence Secretary Lloyd Austin said, "to see Russia weakened."

In a speech in late April, then British Foreign Secretary Liz Truss further raised the stakes when she declared that "NATO must have a global outlook" and "preempt threats in the Indo-Pacific," ensuring "that democracies like Taiwan are able to defend themselves."

The expansion of NATO beyond Europe has been happening for some time—first in the Middle East and then in Afghanistan, where the alliance shared miserably in the 20-year debacle of what became a US-orchestrated withdrawal. But now, NATO is crossing a Rubicon in Asia.

In remarks at the White House on the eve of Biden's Europe trip, US National Security Council spokesperson John Kirby was careful to say "this isn't about creating some like version of NATO in the Pacific." But he also said the new strategic concept has been "building on what has been months and months of discussions and deliberations with the allies about the threat that China poses to international security well beyond just the Indo-Pacific region."

Kirby added: "I think it's a reflection of our allies' equal concerns over the effect of Chinese economic practices, use of forced labour, intellectual theft, and coercive, aggressive behaviour not just in the region but elsewhere around the world." Or as NATO Secretary-General Jens Stoltenberg put it recently in newly stark terms that echo the hardened rhetoric coming from the US: "For the first time, we will address China and the challenges it poses to our interests, security, and values."

Meanwhile, Washington has been arming up Japan and South Korea (along with Australia) even as it invited Tokyo and Seoul to join the Nato summit as "observers." It sure is beginning to resemble a "like version of NATO in the Pacific."

Again countering Beijing in a tit-for-tat way reminiscent of the Cold War, the US responded to China's new military engagement in the Solomon Islands by launching Partners in the Blue Pacific, intended as an informal group consisting of the US, Britain, Australia, Japan, and New Zealand aimed at reinvigorating economic and diplomatic ties with Pacific Island nations, the White House said—or to put it more bluntly, paying attention to them now that Beijing has.

Beijing, in turn, recently launched its Global Security Initiative (GSI) to oppose the Quadrilateral Security Dialogue, the Washington-orchestrated grouping of the US, India, Japan, and Australia. The as-yet-undefined GSI would "oppose the

wanton use of unilateral sanctions," Chinese President Xi Jinping said, as well as "hegemonism, power politics, and bloc confrontation."

What does it all add up to? It's as impossible to say now—exactly, anyway—as it was for Churchill at Westminster College in March 1946. Churchill spoke at a time when Moscow hadn't yet gotten the bomb, Chinese communists hadn't yet taken over, and he still held out hope that the new UNO or "United Nations Organization," as Churchill called it, could yet be "a true temple of peace in which the shields of many nations can someday be hung up, and not merely a cockpit in a Tower of Babel."

But plainly, the major Western powers now believe that—from Mariupol, Ukraine, on the Black Sea to Taipei, Taiwan, on the Taiwan Strait and possibly all the way to Honiara, Solomon Islands, in the South Pacific—a new sort of iron curtain is descending around the world. In front of that line on the European continent lie the newly invigorated Western European and NATO countries as well as the former Soviet bloc states that have since joined NATO or want to, including the Baltic countries and now Ukraine. "Essentially, where NATO is going is sort of back to somewhat of a Cold War posture," said Max Bergmann, director of the Europe Program at the Centre for Strategic and International Studies, on June 21.

And when it comes to Asia, in front of this new curtain lies firm Western allies and democracies, such as Japan, Australia, and South Korea. On the other side are the unapologetic tyrannies of Russia, China, and a passel of states they've come to dominate or align with, from Belarus to Pakistan to North Korea.

More broadly, the US and allies may now face the formidable combination of two nuclear powers: "a resource-rich Russia partnered with a technologically and economically powerful China," the CIA's former chief Russia analyst, George Beebe, told FP in late April.

Again, the contours and stakes aren't nearly as straightforward as they were during the first Cold War, even as the world has seen the rise of a new non-aligned bloc. During the Cold War period, the stark ideological clash between communism and democracy/capitalism was clear. By contrast, most nations of the world, from the Middle East and South Asia to Latin America and Africa, aren't buying into America's attempt to frame the conflict as a global fight for freedom. A still-globalized economy—which wasn't a factor during the Cold War—is playing a wild-card role, especially since a rising China depends so much on it for its prosperity while a weakened Russia depends so much on China for its own economic health.

As Stoltenberg put it recently: "We don't regard China as an adversary, but we need to realize that the rise of China, the fact that they're investing heavily in new modern military equipment—including scaling significantly their nuclear capabilities, investing in key technologies, and trying also to control critical infrastructure in Europe coming closer to us—makes it important for us also to address that."

What we don't know yet is how far NATO's need to address the problem will go. Seen in retrospect, the first Cold War may have been inevitable. Churchill certainly had a presentiment of what was to come despite holding out hopes in his Fulton speech that the two "marauders" he was warning against—"war and tyranny"—could be blunted. "I repulse the idea that a new war is inevitable; still more that it is imminent. It is because I am sure that our fortunes are still in our own hands and that we hold the power to save the future that I feel the duty to speak out," he said then.

What's going on now may also be inevitable—in other words, the US and Western and Asian allies may be simply dealing with facts on the ground by accepting and confronting them. But the world could also be witnessing, as suspected, a failure of imagination and political courage on the part of the West. What that would mean is a negotiated way out. This may not be possible with Russia right now, but after all, it is now the junior partner to China and depends on its good graces. And the relationship between the West and China exists on so many different levels, including the

common need to address climate change and open trade, that some sort of modus vivendi under the current international system should be possible.

By contrast, the US is throwing up its hands. In a newly published essay in Foreign Affairs, "The Hollow Order: Rebuilding an International System That Works," Philip Zelikow, a former senior official in the George W. Bush administration, writes: "The need for a new world order is apparent."

No wars, even cold ones, are inevitable. Yes, China and Russia were probably always going to find a way to resist US and Western dominance. With his murderous invasion, Putin is now beyond the pale. But that doesn't mean that Beijing couldn't be wooed to keep one foot in the international system. In Washington, however, the political risk of looking soft on China is almost as pervasive as the risk of looking soft on Iraq once was nearly 20 years ago. Biden, himself, succumbed to the first political temptation, ultimately backing the Iraq war to his regret. Now, hammered in the polls and facing likely setbacks at the US midterm elections in November, Biden appears to be embracing the second temptation.

In his remarks in recent months, even China's hardline leader, Xi, has appeared to be looking for a way out. Speaking at the BRICS Business Forum, Xi declared, "We in the international community should reject zero-sum games and jointly oppose hegemonism and power politics."

Although it comes from a dubious source, that's still a pretty good idea on the whole. Is it naive to think that there is no way of achieving it? (Michael Hirsch of Foreign Policy).

Chinese private security firms are growing their presence in Africa: why it matters - Chinese private security companies have found a profitable niche market in Africa: guarding Chinese executives and construction sites. They're also securing Chinese vessels at sea against piracy.

The growing presence of Chinese private security companies in Africa comes against the backdrop of a global security architecture that's in transition.

These changes reflect the US moving away from being the world's sheriff to its offshore security balancer. America is using its strategic alliances and intervening to protect its interests abroad only when necessary.

Today, regional recalibration is the name of the game.

The demand for Chinese security services in Africa has increased significantly since the 2013 launch of China's Belt and Road Initiative. This is the country's blueprint for its engagement with the continent.

But private security companies have captured less attention than the rise of private military companies and mercenaries like the Wagner Group.

The growth of Chinese private security companies comes as Beijing increases its investment in large infrastructure projects in Africa. China is also investing in mining projects across the continent. However, in nations like the Democratic Republic of Congo, Sudan and South Sudan, ongoing political unrest means government security services are wanting.

China's reliance on these countries for resources explains why it's become more anxious about security in Africa.

This highlights the need for bilateral and multilateral agreements on the private security sector between China and African nations. They need to agree on codes of conduct for oversight, regulation and cooperation. Increased sector scrutiny, based on best practices, would also help prevent the growth of unregulated private security firms.

Failing to establish these regulations could lead to negative spillovers. Private security companies could abuse authority or fail to operate along clear guidelines. It could also lead to unaccountable mercenaries and rogue foreign militia. This would affect African populations and the viability of the Belt and Road Initiative.

Three peculiarities - Africa's private security sector is characterized by three peculiarities.

- First, the continent still carries the stigma associated with mercenaries' actions during post-colonial conflicts. The kind of heavily armed soldiers that wrought havoc over the last three decades may no longer be the norm. But the stigma persists.
- Second, well before the launch of the Belt and Road Initiative and Beijing's focus on private security companies, several Chinese companies operating in Africa organised a sort of armed militia. These were established to protect Chinese interests from criminal or political violence. These ranged from natural resource extraction to small businesses.
- Third, Africa is witnessing the return of well-structured groups of international private military companies. These companies support local governments and international interests, such as Moscow's muscular return to the African continent.

As a result, the expansion of Chinese private security companies – and their implications for the continent's security landscape – has drawn less scrutiny.

It's important to consider how Chinese private security companies interact with local government security forces and the substantial Chinese peacekeeping presence on the continent.

Prepared or not, Chinese companies are extending feelers in African countries to establish security business partnerships. This has been seen in Mali, Djibouti, Egypt, Ethiopia, South Africa and Tanzania.

GeoPolitics

Moldova's Sandu condemns Russia, presses EU bid in Independence Day speech - Moldovan President Maia Sandu marked the 31st anniversary of the small nation's independence following the collapse of the Soviet Union with a speech that included a condemnation of Russia's invasion of Ukraine and a push for the country's eventual EU membership.

"Russia's unjust war against Ukraine clearly shows us the price of freedom," she told a crowd on August 27 at the Great National Assembly Square in the capital, Chisinau.

"The war will end, and we will be able to get out of these crises stronger, more resilient," she said, speaking alongside Prime Minister Natalia Gavrilita and Igor Grosu, the speaker of the parliament.

Moldova, one of Europe's poorest countries, has a long border with Ukraine and has been hosting hundreds of thousands of Ukrainian refugees since the start of Moscow's unprovoked invasion of Ukraine.

Russia has some 1,500 troops in Moldova's Moscow-backed separatist region of Transdniestria, a sliver of land sandwiched between Moldova proper and Ukraine.

In recent months, Transdniestria separatists claimed that Kyiv had orchestrated what they claimed were shootings, explosions, and drone incursions, raising fears that Moldova could be drawn into the conflict in Ukraine.

Moldova's parliament voted on July 28 to extend a state of emergency for 60 days after the government said it still needed special powers to deal with the fallout from Russia's invasion of Ukraine.