Tomorrow's Affairs
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Assessment of tomorrow

By: TA | AP Insight

Spillover from Russian invasion on Ukraine continues - how can Europe protect itself?

European governments are preparing a "drone wall" for defense against Russia. Setting up this system requires solving a complex set of technological, financial and bureaucratic problems.

Estonia is extending a fence along its border with Russia and building anti-tank ditches and bunkers in preparation for a potential conflict with Moscow.

But those defenses won't guard against the threat that Estonia and its NATO allies face from Russian drones and electronic warfare.

From the Baltics to the Black Sea, countries bordering Russia, Belarus and Ukraine are facing the spillover from Moscow's war in Ukraine.

The incursion of about 20 Russian drones into Poland this month shone a spotlight on holes in NATO's air defenses, as multimillion-dollar jets had to be scrambled to respond to drones that cost thousands and that ended up crashing into the Polish countryside.

Russia denied that it targeted Poland, but Polish officials suggested that it was intentional.

Faced with a growing problem, some European Union defense ministers will meet Friday to discuss creating a "drone wall."

NATO warned Russia on Tuesday that it would defend against any further breaches of its airspace, after Estonia said that Russian fighter jets violated it last week.

But although the alliance knows how to identify threats from jets and missiles, dealing with drones is a greater challenge, officials said.

In Poland, "most of the drones were not detected," Estonian Defense Minister Hanno Pevkur said. "This is a real gap we have to solve."

Military and defense officials from the Baltic countries of Estonia, Latvia and Lithuania — NATO and EU members that border Russia — told The Associated Press that defending against drones requires solving a complex set of technological, financial and bureaucratic problems.

Europe needs cheaper technology to buy and to speed up slow production and procurement cycles, they said. But even then, drone technology is advancing so quickly that anything bought now could be outdated in months.

"What I need," said Lt. General Andrus Merilo, who commands Estonia's military, is technology that is "good enough, it's affordable and can be produced in mass."

"I don't need high-end capabilities of which I can fire only one, against targets which will be attacking in hundreds," he said.

Europe's drone challenge

Russia is using drones every night in Ukraine, because each drone is a "lottery ticket that always wins," said Kusti Salm, a former top official at Estonia's Defense Ministry.

That's because a drone either hits something or, if Ukraine shoots it down with a missile, it drains Kyiv's air defenses and finances, since missiles are more expensive than drones, said Salm who now runs Frankenburg Technologies, a company developing low-cost anti-drone missiles.

Although NATO countries have a "very good understanding" of how to defend against conventional threats such as missiles and planes, they need to rapidly improve at dealing with drone threats, said Tomas Godliauskas, Lithuania's vice-minister of national defense.

> Slow, low-flying drones made from wood, fiberglass, plastic or polystyrene might not be detected by radar systems

When the Russian drones flew into Poland, NATO nations deployed fighter jets and attack helicopters and put missile defense systems on alert. But none of those options was specifically designed for drone warfare.

Although Russia and Ukraine have been firing more and more drones at each other, there has been less investment in counter-drone systems, Salm said.

He suggested that's partly because it's easier to get a drone to fly than it is to develop something to detect or intercept it.

Slow, low-flying drones made from wood, fiberglass, plastic or polystyrene might not be detected by radar systems searching for a fast-moving missile made of metal, or they might look like birds or a plane.

Enemy operatives can also bypass defenses by launching drones from inside a country, as Ukraine did to devastating effect when it attacked Russian airfields this year.

There are also other technological hurdles, including trying to jam the enemy's drones and communications without cutting your own, Merilo said.

Multiple drone incidents

In August, a Ukrainian drone — possibly sent off course by Russian electronic jamming — landed in a field in southeastern Estonia. It crashed because the military wasn't capable of detecting it, Merilo said.

The Estonian military and border force have also lost drones — used for surveillance and to stop illegal border crossings — to Russian jamming, which has also been blamed for disrupting flights.

> The number of incidents shows that Europe needs to solve its drone problem right now - Māris Tūtins

Other drones have crashed in Romania, Moldova, Lithuania and Latvia, and there have been multiple unidentified drone sightings over military facilities and airports in Europe, including in Germany, the U.K., Norway and Denmark, where air traffic was halted for several hours at Copenhagen Airport on Monday.

The number of incidents shows that Europe needs to solve its drone problem "right now," said Col. Māris Tūtins, head of information analysis and operations at Latvia's Joint Forces Headquarters.

Drone wall

There is growing support among European leaders for establishing some sort of drone wall along the EU's eastern border, though the 27-nation bloc in March denied funding to a joint Estonia-Lithuania proposal to establish one.

The EU needs to prioritize funding for the project, Pevkur said. But although support for the idea is growing, actually creating a drone defense system won't be easy.

The EU needs to prioritize funding for the project - Hanno Pevkur

"Drones are not mosquitoes," the Estonian defense minister said, suggesting that they would be unlikely to be zapped by an "electronic wall" along NATO's borders.

There are many types of drones, including those used for intelligence and

reconnaissance, that fly at high altitude, that are used in attacks or that even remain attached to a thin fiber-optic cable while flying, making them impossible to jam.

Russia also uses decoy drones in Ukraine that carry no payload and are designed to exhaust air defenses.

Any plan to defend against drones needs a multilayered approach, including sensors, "electronic warfare ... also low-cost small missiles or attack drones," Merilo said.

Need for cheaper and more plentiful technology

Although the need for better drone defenses isn't new, it's still largely only possible to buy systems that are "really expensive," take a long time to develop and can't be mass-produced, Merilo said.

He suggested that's partly because big defense companies that have spent decades developing billion-dollar air defense systems might not want something new — and cheaper — on the market.

"We have to understand this game," Merilo said, adding that some technology does exist, but "the question is who — and how fast they can start producing."

Facing nightly onslaughts, Ukraine is rapidly developing its own technology, including long-range attack drones and smaller ones for use on the front lines.

> In Ukraine, it's sometimes only a matter of weeks between drone technology being developed and used on the battlefield

While big defense companies play a critical role in the defense of Europe, Latvia and some other NATO countries have turned to smaller companies — such as Salm's Frankenburg — to acquire its small anti-drone missiles once they're in production.

But a piecemeal approach isn't ideal, Salm said. Instead, the EU needs to invest more in European startups, which can turbocharge drone defense production that can be used by allies across different weapons systems, he said.

Europe needs to switch to "semi-wartime thinking" and foster greater collaboration between the military, government and defense industries to be able to fill its technology gap, Godliauskas said.

In Ukraine, it's sometimes only a matter of weeks between drone technology being developed and used on the battlefield.

Europe "doesn't have time" to spend years waiting to acquire equipment, the Lithuanian official said.

Another lesson from Ukraine is that what works today, might not work tomorrow, Godliauskas said.

While drone defense is critical now, it would be wrong to forget about everything else, Tūtins said. That's because Moscow is using "all means possible" to destabilize Europe, including hybrid warfare and cyberattacks, he said.