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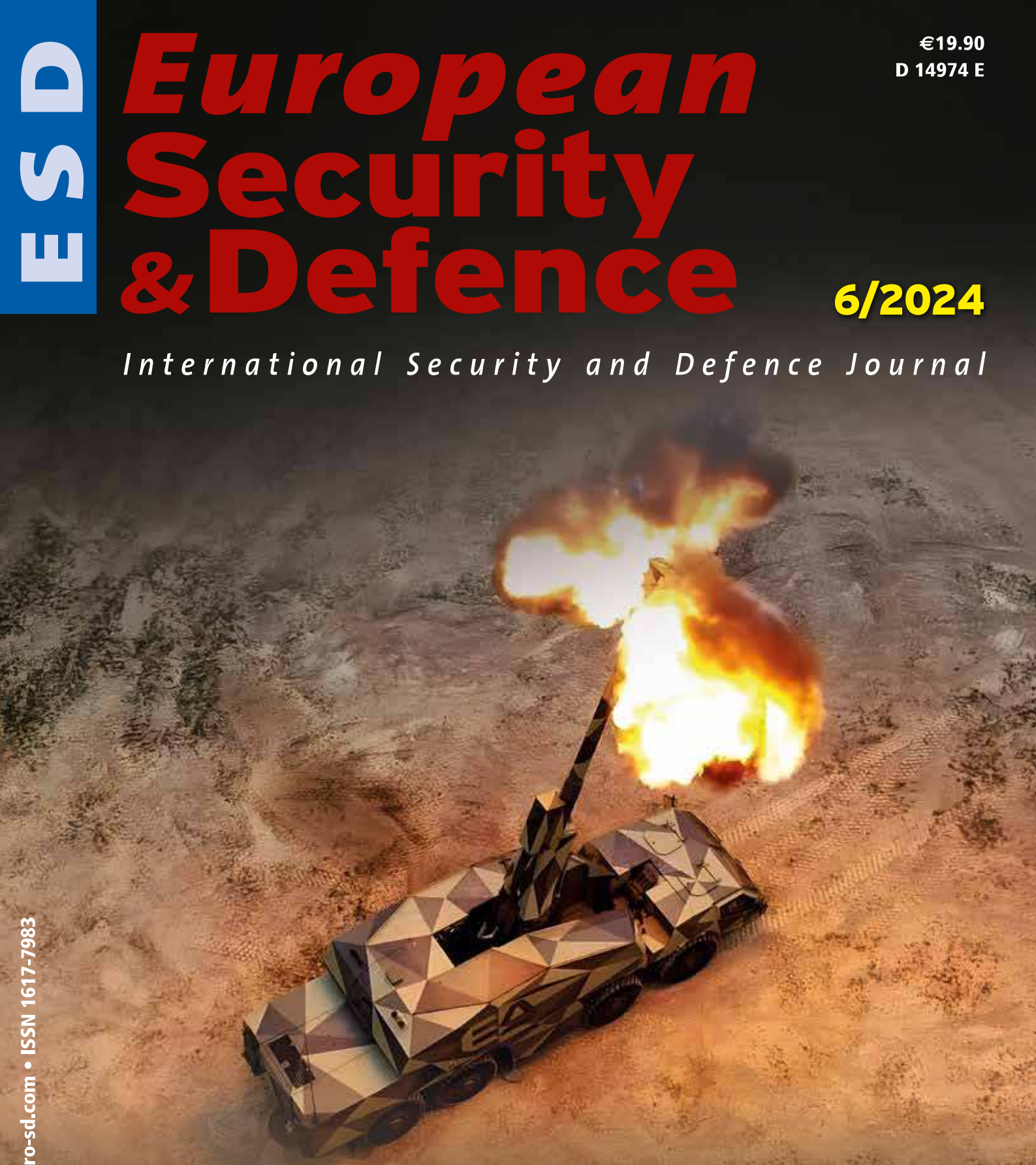

Eurosatory Focus

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Politics • Armed Forces • Procurement • Technology

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A Swiss Eagle V against a mountain backdrop. The Eagle V has been developed into well-equipped reconnaissance platform in Switzerland's Taktische Aufklärungssystem (TASYS) configuration.

More of the same

The Stockholm International Peace Research Institute's (SIPRI's) 2023 yearbook recorded a total of 56 armed conflicts, five more than in 2021. Many of them are regarded as "low intensity" by SIPRI, which the institute considers to be a conflict with less than 1,000 deaths per year. It recorded several high-intensity conflicts with deaths between 1,000 and 9,999 per year, this category included Brazil and Mexico, as well as large portions of Africa. High intensity conflicts are differentiated from the wars in Ukraine and Myanmar, which are regarded as major armed conflicts. The data indicate the level of violence prevalent in the world as well as its nature. A major war is very much the exception at present, most conflicts – even those leading to a significant loss of life – involve non-state actors and criminal gangs.

It follows that the primary purpose of protected mobility platforms now and in the future will be much the same as it has always been: protect infantry against blasts and IEDs, as well as small arms ambushes as they conduct patrols and operations amongst the population. The smaller platforms, epitomised by the JLTV, will likely dominate unless a large-scale deployment necessitates the broader resumption of duties by platforms in the MaxxPro or Cougar class. There is, of course, the wider question around the skills needed to conduct those types of operation, and the ability of any military to retain and improve upon them while it simultaneously builds and develops its forces to face true existential threats. However, if protected mobility platforms are at least kept within the core equipment of a force, there should be a less dramatic learning curve when forces deploy into low-intensity scenarios.

Outside of patrols and low-intensity warfighting, protected mobility platforms will need to adapt to the needs of a force preparing to fight against peer opponents. In effect, protected mobility platforms will have to adjust to this new context in the same way that conventional heavy armour adapted to the GWOT. This will include adjustments to the mission systems they carry, as is the case with TITAN, it will also require militaries to reconsider how their troops navigate a battlespace.

Overall, it is clear that protected mobility will remain an important and central capability for modern armed forces, regardless of their focus. As a result, the following decade should yield further developments for this platform type. The most challenging in terms of design will be survivability. The design requirements covered above were established before the technology to produce drones had been democratised and when non-state actors were generally organised at a section level. ISIS made extensive use of drones, and was able to coordinate its actions at a company level. Russia, Ukraine, and now Syria are also deploying FPV drones, and many insurgents now have access to ATGMs, all of which raise the risk to protected mobility platforms. All of these threats can be countered, but it is not clear how this will be achieved within the narrow space, weight, and power limits of common protected mobility vehicle designs.

ing for the lack of mass in many European armies and facilitate a new style of dispersed operations. This is ultimately a long-term aspiration that will necessitate significant technological investment, but the creeping presence of this technology even within the current generation suggests that there is at least a clear path to its progression.

The issue of balancing vehicle survivability, mobility, and weight appears to be a more vexing conundrum. As APSs proliferate and efforts to tailor them to a local C-UAV role become more advanced, MBTs may become less reliant on their passive amour. Crew reduction through the exploitation of AI may also allow for the shedding of weight. However, what has been seen of the next generation so far does not provide a clear answer as to how MBTs will deal with the problem of being detected in the first place, nor as to how hybrid-electric drives can supersede conventional diesel engines. If MGCS is to be successful, future MBT developments will have to begin addressing these pressing issues with concrete solutions.

Credit: Rheinmetall

Achieving a lower weight than the current generation of MBTs was a key motivator in the development of the KF51 Panther. One way in which the design achieves this is to integrate the various sensors and other subsystems such as the Strikeshield APS into its armour. This can be appreciated by comparing its turret with other European MBTs, which tend to be more cluttered.

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