

## RESEARCH FORUM Column

## The European Sky Shield Initiative

Milan Varda, Research forum

In the face of evolving security challenges and increasing geopolitical tensions, Europe has embarked on a bold new venture to strengthen its air defense capabilities. The European Sky Shield Initiative (ESSI), proposed in 2022 by Germany's chancellor, Olaf Scholz, is designed to enhance the continent's defense posture and ensure a secure, sovereign sky over European nations. This brief article will explore what this initiative is, its system components, current developments and obstacles, as well as its significance for Serbia.

The primary purpose of the European Skyshield Initiative is to enhance Europe's collective defense capabilities. With global security dynamics rapidly changing, particularly in light of rising tensions in Eastern Europe and other volatile regions, the need for a robust and coordinated air defense system has never been greater. A key factor in the creation of the initiative is the recognition that individual countries, even those with strong military capabilities, may struggle to defend their skies against sophisticated and highly coordinated aerial threats. The initiative is a response to the growing threat of both state and non-state actors who possess increasingly advanced air and missile technology. Whether it's from rogue states, terrorist organizations, or potential military adversaries, the need for an effective shield to protect civilian populations, critical infrastructure, and military assets is paramount. Additionally, the initiative serves to strengthen European integration and solidarity in defense matters. The idea is to pool resources, share intelligence, and harmonize defense policies, creating a more cohesive and efficient defense framework across the continent. It is important to note that some of the ESSI members are not EU member states, like Switzerland, the UK and Norway, making this initiative potentially open even for non-EU members.

The European Skyshield Initiative was the result of years of diplomatic and military cooperation among European Union member states and NATO partners. It arose from discussions about Europe's vulnerability to air and missile threats and the limitations of existing national defense systems. The initiative began to take shape after a series of meetings between defense ministers, military officials, and international security experts from across Europe.

This initiative is designed to counter a wide range of aerial threats, from hostile aircraft, drone strikes, cruise missile attacks, to even ballistic missiles and hypersonic threats. The

initiative's focus is on building a common defense architecture that can respond quickly and effectively to threats from the aerospace domain, integrating air and missile defense systems across participating countries. The Skyshield program is envisioned to create a multi-layered defense grid capable of detecting, tracking, and intercepting incoming threats. By leveraging the latest technology in radar systems, satellites, and surface-to-air missile defense platforms, the initiative promises to provide comprehensive protection for the airspace of all participating countries.

One of the key components of the initiative is the integration of advanced radar systems, which provide continuous surveillance of airspace, and missile defense technologies. These technologies are being linked together to form a seamless air defense network that can react swiftly to threats. ESSI seeks to enhance interoperability and collective defense by pooling resources and coordinating the procurement of modern air defense systems. ESSI's modular structure allows member states to contribute according to their needs and budgets, aiming for faster, more cost-effective coverage than fragmented national systems. The core systems envisioned for ESSI include:

- 1. **Skyranger 30 (Germany)** This is a short-range turret air defense system. This system can act as a point defense system and defend against drones, rotary wing aircraft and cruise missiles.
- 2. **IRIS-T SLM (Germany)** A medium-range surface-to-air missile system capable of intercepting aircraft, drones, and missiles. It offers highly accurate and mobile defense coverage up to 40 km.
- 3. **Patriot (USA)** A long-range air defense system widely used across NATO countries. It can target tactical ballistic missiles, cruise missiles and aircraft with a range of over 70 km for missiles and up to 160 km for aircraft. This system even has a track record of engaging hypersonic threats in Ukraine, like 47M2 Khinzhal quasiballistic missile and Zircon hypersonic cruies missile. Due to its range, a singular system can cover entire regions and even some smaller countries.
- 4. **Arrow 3 (Israel)** A very long-range missile defense system designed to intercept exo-atmospheric ballistic missiles while they are still in space. With a range of up to 2,400 km, it provides high-altitude interception capability and is designed for threats like long-range ballistic missiles potentially carrying nuclear payloads. The singular system can coerce the entire European continent.

The initiative, however, is not been agreed upon by all of the EU member states. France, for example, prefers developing EU-made systems and views ESSI as over-reliant on non-European (particularly U.S. and Israeli) technology, potentially undermining EU strategic autonomy.

This initiative could have some influence on Serbia as well. Just by being a member of the ESSI, the longest-ranged defense layer, the Arrow 3 missile system, would be able to protect Serbia regardless of potential ballistic missile threats, as it covers the entire continent. However, by entering, Serbia could significantly enhance its air and missile defence capabilities. Currently, Serbai employs FK 3 and Pantsi S systems, as well as various legacy systems. These can protect Serbia against aircraft and cruise missiles, and

to a lesser degree against ballistic missiles. However, by entering ESSI, Serbia would gain exceptional antiballistic missile capabilities. Likewise, procuring even the shortest range systems could lead to greatly improved defense against drones, the rising threat in aerial warfare, as the war in Ukraine shows. Furthermore, procuring longer-range systems, even if i conjunction with other states, could provide a layered missile defense, as well as anti-hypersonic capability. The greatest benefit, however, comes from networking. The continent-wide radar network would enable countries to assess threats earlier, and from multiple angles, acting as a force multiplier, thereby allowing all of the states to employ more robust air defense capabilities. Serbia would be a great benefactor of this initiative.