Permanent Structured Cooperation (PESCO): Expanding Defense Cooperation between European Union Countries

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Abstract

The main objective of the present study is to analyze the European Union defense policy on the example of Permanent Structured Cooperation (PESCO). It will be possible thanks to a comprehensive analysis of individual PESCO projects, participating countries, determinants and perspectives for the development of defense policy. The main hypothesis of the article is that although the strongest military European Union countries, relying on PESCO, seek to expand defense cooperation, this cooperation has no visible impact on increasing their armed forces. The article contains information about the genesis of the European Union Security and Defense Policy and the legal basis of Permanent Structured Cooperation, as well as a detailed list of all PESCO projects with the countries participating in them. An analysis of the implementation of PESCO projects indicates that they are dependent on external factors. This study uses methods appropriate to the science of international relations. Its research tools include an analysis of the literature on the subject, documents, and statistical data.

Keywords: defense policy, European Union, Permanent Structured Cooperation, PESCO

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Introduction

The European Union defense policy has gained significance after changes in the Treaty of Lisbon and the creation of the Common Security and Defense Policy (CSDP). The activities of the EU were formalized at the time of the adoption of PESCO at the end of 2017. The aim of this study is to present the involvement of the European Union in the policy of defending Europe after the implementation changes which took place in 2009. The author discusses the evolution of the European Union's policy in this area, which has taken place in recent years. The European Union's adoption of this course of action was influenced by a number of conditions and dynamic changes in the international environment, such as the political uncertainty of the United Kingdom in the context of Brexit, the terrorist threat on the European continent, migration movements and the related migration crisis, and the election of Donald Trump as president of the United States. The European Union's defense policy also became related to the activities carried out by NATO. All these factors contributed to the creation of joint structured cooperation at the end of 2017.

The study has been divided into several parts. The first part sets out in detail the activities of the European Union following the adoption of the Treaty of Lisbon in 2009, up to the launch of PESCO. Next, the legal base of PESCO is presented. The main part of the text is an analysis of the essence of Permanent Structured Cooperation together with statistical data of individual projects, their purpose, countries participating in them, and conclusions. The last part is a presentation



of the factors currently having the greatest impact on the nature of the cooperation and an attempt to indicate the prospects for the European Union's defense policy.

1. European Union defense policy after the Treaty of Lisbon

In the era of dynamic changes in the international environment, the European continent's defense policy is one of the central topics considered by entities dealing with this issue. As for international organizations, from the beginning the defense of the European continent was a responsibility of the North Atlantic Alliance. Over time, the mechanisms and basic principles of action with regard to defense began to be introduced by the European Union. This process started with the introduction of the European Security and Defense Policy (ESDP) in 1999, renamed the Common Security and Defense Policy (CSDP) by the Treaty of Lisbon in 2009. Thus, the European Union has created a legal basis and institutional mechanisms for its defense policy, trying to make them similar to the activities carried out by NATO in this area.

In the Treaty of Lisbon of December 1, 2009, the most important provisions concerning the European Union's external policy are contained in Title V of the Treaty, together with general and specific provisions. The basic statement is that the European Union strives to develop relations and build partnerships with third countries and international organizations that uphold the principles of democracy, the rule of law, the universality and indivisibility of human rights and fundamental freedoms, respect for human dignity, the principles of equality and solidarity, and respect for the principles of the United Nations Charter and international law (Article 21). A direct link has been established between the functioning of the Communities' defense policies and their external policies (Potocki 2018).

The Common Foreign and Security Policy (CFSP) is based on the provisions of the Maastricht Treaty. The Treaty of Lisbon clarified that this policy is subject to specific rules and procedures and that its implementation is entrusted to the High Representative for Foreign and Security Policy and Member States on the basis of mutual political solidarity, identifying issues of general interest and achieving an increasing degree of convergence. The Member States are obliged to support and respect the Union's decisions in this area and work to strengthen and develop mutual political solidarity. Article 25 sets out the instruments through which the European Union implements its common foreign and security policy. The Treaty of Lisbon introduced a new nomenclature for these instruments. They include general guidelines, the adoption of decisions in the form of joint actions, common positions and rules for the implementation of decisions on actions and positions, as well as systematic cooperation between the Member States (Potocki 2017, 153).

As far as defense issues are concerned, the most important issue is the integration of the defense component (CSDP) into the Communities' external policies. The European Union has gained the capacity to make decisions, plan and conduct military operations. The CSDP, based on the treaty provisions, is intended to maintain peace, prevent conflicts, and strengthen international security, which can be achieved with the capabilities of the Member States. In addition, the types of civilian and military missions are specified in detail, such as joint disarmament operations, humanitarian and rescue missions, military advice and support, armed crisis management missions, peacemaking, and missions treated as post-conflict stabilization operations. In carrying out specific operational tasks, the Member States should ensure that appropriate civilian and military measures can be provided (Góralski 2009, 77–78).

Prior to the launch of Permanent Structured Cooperation, the European Union implemented specific action programs to make its defense policy more effective. One of the implementation documents was the Implementation Plan in the field of security and defense, which set out the EU's level of ambition in the field of security and defense, addressing three basic tasks, namely responding to external conflicts and crises, building the capacity of partners and protecting the EU and its citizens (Maliszewska-Nienartowicz 2017, 51–54). Another implementation document was the European

^{1.} See: Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007, OJ C 306, 17.12.2007, p. 1–271.

Defence Action Plan, which focused on providing the necessary capabilities and supporting the European defense industry. A key component of the Defence Action Plan was the establishment of the European Defence Fund (EDF), which would finance collaborative research projects under the Multiannual Financial Framework until 2020 and support the development of defense capabilities agreed by the Member States. The strengthening of defense cooperation between the Member States has been reflected in the establishment of Permanent Structured Cooperation (PESCO).

2 PESCO legal basis

The possibility for Member States to engage—on a voluntary basis—in Permanent Structured Cooperation (PESCO) in the area of security and defense was introduced by article 42(6) of the Lisbon Treaty on European Union (TEU) which provides that "those Member States whose military capabilities fulfill higher criteria and which have made more binding commitments to one another in this area with a view to the most demanding missions shall establish permanent structured cooperation within the Union framework".²

The European Council on June 22–23, 2017 agreed "on the need to launch an inclusive and ambitious Permanent Structured Cooperation (PESCO)" to strengthen Europe's security and defense and to help reach the level of ambition of the EU expressed in the EU Global Strategy published in 2016.

On November 13, 2017 ministers from 23 Member States signed a joint notification on PESCO and handed it over to the High Representative and the Council (without Portugal, Ireland, Denmark, Malta and the United Kingdom). Two additional Member States (Portugal and Ireland) joined them on December 7, 2017. The joint notification set out the principles of PESCO, the list of ambitious and more binding common commitments the Member States agreed to undertake, and proposals on PESCO governance. Among the PESCO principles agreed by the participating Member States is the one according to which PESCO should serve as "an ambitious, binding and inclusive European legal framework for investments in the security and defense of the EU's territory and its citizens." The Participating Member States also "consider an inclusive PESCO as the most important instrument to foster common security and defense in an area where more coherence, continuity, coordination and collaboration are needed."

On December 11, 2017, the Council Decision (CFSP) 2017/2315 of 11 December 2017 formally established PESCO with 25 Member States participating. It allows willing and able Member States to jointly plan, develop and invest in shared capability projects, as well as to enhance the operational readiness and contribution of their armed forces. The ultimate objective is to optimize the available resources and improve their overall effectiveness, with a view to the most demanding missions and operations and contributing to the fulfillment of the Union's level of ambition.⁴

3 The essence of PESCO

The draft was presented at the meeting of the Foreign Affairs Council on November 13, 2017, attended by 23 countries. Finally, the draft was adopted on December 11, 2017, with Denmark, Malta and the United Kingdom opting out. Malta, the only neutral state to opt out, argued that it was going to wait and see how PESCO developed, in order to see whether it would not impinge on the country's neutrality. Denmark is a member of NATO but not a member of PESCO. While PESCO was formed partly due to doubts over the United States commitment to NATO, officials stress that PESCO will be complementary to NATO security rather than in competition with it. The United Kingdom, which was still in the European Union in 2017, was not part of PESCO due to

^{2.} See: Treaty of Lisbon..., op. cit.

^{3.} See: Notification on Permanent Structured Cooperation (PESCO) to the Council and to the High Representative of the Union for Foreign Affairs and Security Policy. https://www.consilium.europa.eu/media/31511/171113-pe sco-notification.pdf.

^{4.} See: Council Decision (CFSP) 2017/2315 of 11 December 2017 establishing permanent structured cooperation (PESCO) and determining the list of participating Member States. OJ L 331, 14.12.2017, p. 57–77.

Brexit. British officials have made it clear that the UK is keen to cooperate with the EU on defense after 2019. Britain may be able to participate but only if it provides substantial funds and brings expertise to the table, according to EU officials.

A list of the first 17 tasks was established in 2017, mainly concerning such issues as training, development of military capabilities or operational readiness in the field of defense. The PESCO Implementation Plan was adopted on March 6, 2018 (Gotkowska 2018, 23–28). The aim of Permanent Structured Cooperation is to strengthen the defense integration of the participating countries. The project does not mean building a "European army" but rather conducting joint development programs in the field of defense technologies, harmonizing plans for the technical modernization of the armed forces, joint purchases of weapons, strengthening the interoperability of troops, and creating multinational military units. In December 2017, more than 20 commitments were adopted, most of which are "soft projects." The most important of them concern cooperation in the field of cyber defense, acceleration of national decision-making procedures on the use of armed forces in operations, and a regular increase in the defense budgets of the countries participating in the project. The states signing the document have committed themselves to participating in at least one military capability project. The analysis of the project clearly indicates its "soft character." Any references to the creation of a real defense union are avoided, and in some circles it is even mentioned that the project is not ambitious. Contrary to initial fears, there has been no diversification of the countries or closer integration of a few Member States, which might have resulted in something like a "hard defensive core." The strategy was accepted by almost all EU countries (with the exception of Denmark, Malta and United Kingdom) despite the previous doubts of some of them (Gotkowska 2018, 23–28).

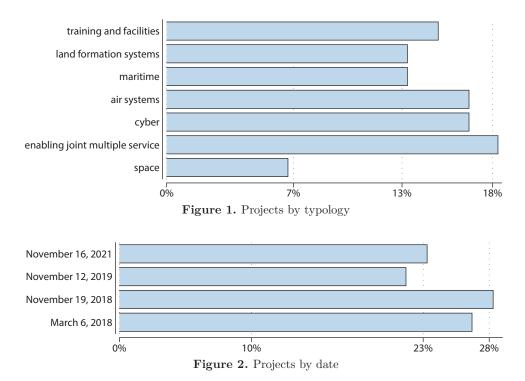
Structured cooperation under PESCO is based on two pillars. Firstly, it refers to the commitments of the participating countries to adopt specific actions in the field of modernization and transformation of the armed forces. Activities in this area, by the decision of March 6, 2018, were divided into two phases (2018–2020 and 2021–2025) (Terlikowski 2018). Secondly, and more importantly, we are talking about joint development of military capabilities through the implementation of mutual projects. Each project is run by the so-called framework state. In addition to it, there are between a few and a dozen participants and observers. So far, four phases of the adoption of new projects have taken place, on March 6, 2018, November 19, 2018, November 12, 2019, and November 16, 2021 respectively. As of June 30, 2022, there are 60 projects to be implemented. Seven groups of projects can be specified, respectively concerning: Training and Facilities, Land Formation Systems, Maritime, Air Systems, Cyber, Enabling Joint Multiple Service, and Space.

Commitments to participate in structured cooperation and to develop military capabilities within the EU are very general and de facto countries that are reluctant to adopt a common defense policy will find arguments not to get involved in this policy. The most binding provision seems to be the one on the need to participate in at least one project developing capabilities treated as strategic. The states participating in PESCO are also supposed to participate in European Battlegroups, to support EU missions and operations, and to increase funding for EU missions and operations.

In the end, the provisions on PESCO did not include those about the need to allocate 2% of each Member State's GDP to military purposes. The countries should only regularly increase their defense spending and allocate 20% of their investment expenditure in the medium term and 2% of their budget to research and development. On the other hand, project management is the responsibility of the Member States. They can propose specific projects in accordance with the commitments they have signed and they ultimately decide on the selection of specific projects. The EU High Representative for Foreign and Security Policy also has some influence on the development of structured cooperation in the field of defense (Gotkowska 2018, 21).

One more project was adopted in the first phase (March 6, 2018) but it has been closed and is not included in the statistics. It was the European Union Training Mission Competence Centre (TMCC), led by Germany and the following participants: Austria, Czechia, Spain, France, Ireland, Italy, Luxemburg, Netherlands, Romania, and Sweden. The overarching aim of the EU TMCC was to improve the availability, interoperability, specific skills and professionalism of the personnel involved in EU Training Missions. The focus was on personnel designated to staff positions at the

operational and strategic levels and mainly within the framework of an individual employment.⁵ The project members decided to close the project in 2020 with a set of recommendations which could be adapted within EU institutions.



Of the 25 countries involved in PESCO, 17 are leaders in at least one project. The countries that do not lead any project are Croatia, Cyprus, Finland, Ireland, Latvia, Luxembourg, Slovenia, and Sweden. Statistical data indicate that it is mainly large countries, often called the "core of the European Union," that are involved in the creation of projects In this case, it is France (14 projects), Italy (11 projects). and Germany (8 projects) (see table 5 on page 45). Defense policy is the domain of the "old" Europe. EU members from the 2004 enlargement and beyond avoid greater involvement in structured cooperation. This may indicate differences in the approach to the role of international organizations in the defense of the European continent. While Western Europe is becoming a promoter of change, striving to increase the effectiveness and importance of the military context in the European Union, the "new" Europe—i.e., countries from Central and Eastern Europe, focus on NATO and see the United States as their main ally. For this region, the idea of NATO's so-called "eastern flank" and cooperation with the North Atlantic Alliance as a guarantor of security are becoming a priority. Such differentiation is not conducive to European integration and may contribute to widening divisions within the EU, separating the "core" of Europe from other countries.

The information presented in table 5 is also confirmed by the analysis of all participants in PESCO projects. The statistics in the table below confirm the greater involvement of the countries from the south of Europe, which is the "core" of the EU's defense policy. France is the most involved (44 projects—i.e., almost 75% of all PESCO projects), followed by Italy (30 projects), Spain (25 projects), and Germany (23 projects) (see table 6 on page 46). All these countries belong to the group of so-called "old" countries of the European Union. Of the countries that joined the EU in 2004 and during subsequent enlargements, it is Romania (16 projects) and Poland (13 projects) that are the most active. Interestingly enough, both Romania and Poland are trying to participate in defense policy projects, but they are not the leaders of the countries. Romania leads only 2 projects, while Poland leads only one. Looking at the statistical data, one should also pay attention to Ireland, which is involved in only one project.

^{5.} See: [closed] European Union Training Mission Competence Centre (EU TMCC). Accessed 2022-12-28. https://www.pesco.europa.eu/project/european-union-training-mission-competence-centre/.

Table 1. PESCO projects adopted on March 6, 2018

Project name	Type	Leader	Participants	Objective
European Training Certification Centre for European Armies	Training Facilities	Italy	Greece	Promote the standardization of procedures among European Armies; enable the staff to practice the entire spectrum and control.
Deployable Military Disaster Relief Capability Package (DM-DRCP)	Land Formation Systems	Italy	Greece, Spain, Croatia, Austria	Develop DM-DRCP through the establishment of a specialized military assets package deployable at short notice within both EU-led and no EU- led operations.
Armoured Infantry Fighting Vehicle / Amphibious Assault Vehicle / Light Armoured Vehicle	Land Formation Systems	Italy	Greece, Slovakia	Develop and build a prototype vehicle which would be based on a common platform and support fast deployment maneuver, reconnaissance, combat support, logistic support, command and control, and medical support.
Indirect Fire Support (EuroArtillery)	Land Formation Systems	Slovakia	Italy, Hungary	Develop a mobile precision artillery platform, which would contribute to the EU's combat capability requirement in military operations.
EUFOR Crisis Response Operation Core (EUFOR CORE)	Land Formation Systems	Germany	Greece, Spain, France, Italy, Cyprus, Austria	Contribute to the creation of a coherent full spectrum force package, which could accelerate the provision of forces.
Maritime (semi-) Autonomous Systems for Mine Countermeasures (MAS MCM)	Maritime	Belgium	Greece, France, Latvia, Netherlands, Poland, Portugal, Romania	Deliver a world-class mix of (semi-) autonomous underwater, surface and aerial technologies for maritime countermeasures. Enable the Member States to protect maritime vessels, harbors and off shore installations.
Harbour and Maritime Surveillance and Protec- tion (HARMSPRO)	Maritime	Italy	Greece, Poland, Portugal	Deliver a new maritime capability which will provide the Member States with the ability to conduct surveillance and protection of specified maritime areas. Deliver an integrated system of maritime sensors, software and platforms which fuse and process data to aid the detection and identification of a range of potential maritime threats.
Upgrade of Maritime Surveillance (UMS)	Maritime	Greece	Bulgaria, Ireland, Spain, France, Croatia, Italy, Cyprus	Enhance UMS and potential Response Effectiveness of the EU by using the existing infrastructure, deploying assets and developing related capabilities in the future. Integrate land-based surveillance systems, maritime and air platforms in order to distribute real-time information to the Member States, so as to provide timely and effective response in international waters.
European Secure Software defined Radio (ESSOR)	Cyber	France	Belgium, Germany, Spain, Italy, Netherlands, Poland, Portugal, Finland	Develop common technologies for European military radios. Guarantee the interoperability of EU forces in the framework of joint operations, regardless of which radio platforms are used. Provide a secure military communications system.

Tab. 1 continued

Project name	Type	Leader	Participants	Objective
Cyber Threats and Inci- Cyber dent Response Information Sharing Platform (CTISP)	Cyber	Greece	Italy, Cyprus, Hungary, Portugal	Develop more active defense measures, potentially moving from firewalls to more active measures.
Cyber Rapid Response Teams and Mutual Assistance in Cyber Security (CRRT)	Cyber	Lithuania	Estonia, Croatia, Netherlands, Poland, Romania	Ensure a higher level of cyber resilience and collectively respond to cyber incidents.
Strategic Command and Control (C2) Systems for CSDP Missions and Operations (EUMIL- COM)	Cyber	Spain	Germany, France, Italy, Luxemburg, Portugal	Improve the command and control systems of EU missions and operations through the provisions of an ambitious strategic level suite of capabilities in modular and scalable approach for future developments. Conduct several simultaneous operations, with all kinds of forces, anywhere in the world in cooperation with NATO.
European Medical Com- Enabling Joint mand (EMC) Multiple Servic	Enabling Joint Multiple Services	Germany	Belgium, Czechia, Estonia, Spain, France, Italy, Lux- emburg, Hungary, Nether- lands, Poland, Romania, Slovakia, Sweden	Support the EU with an enduring medical capability to enable joint and combined operations. Increase the readiness of military medical support.
Network of Logistic Hubs in Europe and support to Operations	Enabling Joint Multiple Services	Germany	Belgium, Bulgaria, Greece, Spain, France, Croatia, Ita- ly, Cyprus, Lithuania, Hun- gary, Netherlands, Poland, Slovenia, Slovakia	Belgium, Bulgaria, Greece, Use a network of existing logistic installations for business to prepare equip-Spain, France, Croatia, Ita- ment for operations. Use depot space for spare parts for ammunition and to ly, Cyprus, Lithuania, Hun- harmonize transport and deployment activities. gary, Netherlands, Poland, Slovenia, Slovakia
Military Mobility	Enabling Joint Multiple Services	Nether- lands	Belgium, Bulgaria, Czechia, Germany, Estonia, Greece, Spain, France Croatia, Italy, Cyprus Latvia, Lithuania Luxembourg, Hungary Austria, Portugal Poland, Romania Slovenia, Slovakia Finland, Sweden	Support the member states' commitment to simplify and standardize cross-border military transport procedures. Enable the unhindered movement of military personnel and assets within the borders of the EU.
Energy Operational Function (EOF)	Enabling Joint Multiple Services	France	Belgium, Spain, Italy, Slovenia	Develop new systems of energy supply for camps deployed in the framework of joint operations and for soldier connected devices and equipment.
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Source: Own work based on document entitled Permanent Structured Cooperation (PESCO)'s projects – Overviev, https://www.consilium.europa.eu/media/53013/20211115-pesco-projects-with -description.pdf.

Table 2. PESCO projects adopted on November 19, 2018

Project name	Type	Leader	Participants	Objective
Helicopter Hot and High Training (H3 Training)	Training Facilities	Greece	Italy, Romania	Provide EU's Helicopter Aircrews with specialized flight and tactics training.
Joint EU Intelligence School (JEIS)	Training Facilities	Greece	Cyprus	Provide education and training in intelligence disciplines.
EU Test and Evaluation Centers	Training Facilities	France	Sweden, Slovakia	Promote the EU test and operational evaluation center capabilities, ensuring that they are used in priority for EU supported projects.
Integrated Unmanned Ground System (iUGS)	Land Formation Systems	Estonia	Belgium, Czechia, Germany, Spain, France, Latvia, Hungary, Netherlands, Poland, Finland	Develop UGS capable of manned-unmanned and unmanned-unmanned teaming with other robotic unmanned platforms and manned vehicles to provide combat support and combat service support to ground forces.
EU Beyond Line Of Sight (BLOS) Land Battlefield Missile Systems	Land Formation Systems	France	Belgium, Cyprus	Develop an EU new generation medium range BLOS Land Battlefield missile systems family. Integrate on an extensive variety of platforms.
Deployable Modular Underwater Intervention Capability Package (DIVEPACK)	Maritime	Bulgaria	Greece, France, Romania	Develop an interoperable specialized modular asset for full spectrum defensive underwater intervention operations in expeditionary setting.
European Medium Altitude Long Endurance Remotely Piloted Aircraft Systems – MALE RPAS (Eurodrone)	Air Systems	Germany	Germany Czechia, Spain, France, Italy	Common use in dedicated areas of a newly developed, operationally relevant, affordable and sovereign Europe
European Attack Helicopters TIGER Mark III	Air Systems	France	Germany, Spain,	Improve significantly the TIGER global efficiency through a consistent upgrade of its decision, aggression and communication capabilities.
Counter Unmanned Aerial System (C-UAS)	Air Systems	Italy	Czechia	Develop an advanced and efficient system of systems with C2 dedicated architecture, modular, integrated and interoperable with C2 infrastructure. Deploy and reach operational status.
European High Atmosphere Airship Platform (EHAAP) – Persistence Intelligence Sur- veillance and Reconnaissance (ISR) Capability	Cyber	Italy	France	Develop cost-efficient and innovative ISR platform (balloon based) that will provide persistence in the area of operations.

Tab. 2 continued

Project name	Type	Leader	Participants	Objective
One Deployable Special Operations Forces (SOF) Tactical Command and Control (C2) Command Post (CP) for Small Joint Operations (SJO) — (SOCC) for SJO	Cyber	Greece	Cyprus	Develop and operate a SOCC for SJO with SOF Tactical C2 capabilities.
Electronic Warfare Capability and Interoperability Program for Future Joint Intelligence, Surveillance and Reconnaissance (JISR)	Cyber	Czechia	Germany	Produce a comprehensive feasibility study of the existing EU electronic warfare (EW) capabilities and the gaps that need to be filled.
Chemical, Biological, Radiological and Nuclear (CBRN) Surveillance as a Service (CBRN SaaS)	Enabling Joint Multiple Services	Austria	France, Croatia, Hungary, Slovenia	Establish a persistent and distributed manned-unmanned sensor network consisting of Unmanned Aerial System (UAS) and Unmanned Ground Systems (UGS) that will be interoperable with legacy systems which should be used for EU missions and operations
Co-basing	Enabling Joint Multiple Services	France	Belgium, Czechia, Germany, Spain, Netherlands	Improve the sharing of bases and support points operated by project Member States.
Geospacial, Meteorological and Oceanographic (GeoMETOC) Support Coordination Element (GMSCE)	Enabling Joint Multiple Services	Germany	Belgium, Greece, France, Luxembourg, Austria, Portugal, Romania	Enhance geospatial, meteorological and oceanographic (GeoMETOC) support for missions and operations by means of an architecture that connects and improves significantly the European GeoMETOC capabilities.
EU Radio Navigation Solution (EURAS)	Space	France	Belgium, Germany, Spain, Italy, Poland	Promote development of EU military PNT (positioning, navigation and timing) capabilities.
European Military Space Surveillance Awareness Network (EU-SSA-N)	Space	Italy	Germany, France, Netherlands	Develop and autonomous, sovereign EU military SSA capability that is interoperable, integrated and harmonized with the EU -SST Framework initiative for the protection of European MS Space assets and services.

Source: Own work based on document entitled Permanent Structured Cooperation (PESCO)'s projects..., op. cit.

Table 3. PESCO projects adopted on November 12, 2019

Project name	Type	Leader	Participants	Objective
Integrated European Joint Training and Simulation Centre (EUROSIM)	Training Facilities	Hungary	Germany, France, Poland, Slovenia	Establish a tactical training and simulation cloud based network which could connect and integrate the geographically spared simulations sites and training capacities into one real time.
EU Cyber Academia and Innovation Hub (EU CAIH)	Training Facilities	Portugal	Spain	Develop a technologically skilled workforce, a cyber-savvy ecosystem, and an effective pipeline of future employees.
Special Operations Forces Medical Training Centre (SMTC)	Training Facilities	Poland	Hungary	Establish a medical training and excellence center focused on medical support for special operations.
CBRN Defence Training Range (CBRNDTR)	Training Facilities	Romania	France, Italy,	Provide CBRND individual and collective training at EU level, both in simulated and live conditions, in order to increase the interoperability between EU Member States.
European Union Network of Diving Centres (EU-NDC)	Training Facilities Romania	Romania	Bulgaria, France	Coordinate and enhance the operations of EU diving centers in order to better support CSDP missions and operations.
Maritime Unmanned Anti-Submarine System (MUSAS)	Maritime	Portugal	Spain, France, Sweden	Develop and deliver an advanced command, control, and communications (C3) service architecture.
European Patrol Corvette (EPC)	Maritime	Italy	Greece, Spain, France	Design and develop a prototype for a new class of military ship.
Airborne Electronic Attack Air Systems (AEA)	Air Systems	Spain	France, Sweden	Develop a system which should be interoperable with the existing and planned EU Member States' assets. This capability will allow European and NATO forces to safely operate within EU territories.
Cyber and Information Do- Cyber main Coordination Center (CIDCC)	Cyber	Germany	France, Hungary, Netherlands	Develop, establish and operate a multinational Cyber and Information Domain (CID) Coordination Centre (CIDCC) as a standing multinational military element.
Timely Warning and Interception with Space-based TheatER surveillance (TWISTER)	Enabling Joint Multiple Services	France	Germany, Spain., Italy, Netherlands, Finland	Strengthen Europe's ability to better detect, track and counter threats through a combination of enhanced capabilities.
Materials and components for technological EU com- petitiveness (MAC-EU)	Enabling Joint Multiple Services	France	Germany, Spain, Portugal, Romania	Develop the European Defence Technological and Industrial Base (EDTIB) in the area of materials and components technologies.

Tab. 3 continued

Project name	Type	Leader	Participants	Objective
EU Collaborative Warfare Capabilities (ECoWAR)	Enabling Joint Multiple Services	France	Belgium, Spain, Hungary, Poland, Romania, Sweden	Belgium, Spain, Hungary, Increase the ability of the armed forces within the EU to face collectively Poland, Romania, Sweden and efficiently the upcoming threats that are more and more diffuse, rapid, and hard to detect and to neutralize.
European Global RPAS Insertion Architecture System (GLORIA)	Enabling Joint Multiple Services	Italy	France, Romania	Develop a robust and persistent Modeling and Simulation architecture to analyze, evaluate and define Remotely Piloted Aircraft Systems (RPAS).

Source: Own work based on document entitled Permanent Structured Cooperation (PESCO)'s projects..., op. cit.

Table 4. PESCO projects adopted on November 16, 2021

Project name	Type	Leader	Participants	Objective
Main Battle Tank Simulation and Testing Centre (MBT-SIMTEC)	Land Formation Systems	Greece	France, Cyprus	Establish the MBT simulation center, based on existing national infrastructure.
EU Military Partnership (EU MilPart)	Land Formation Systems	France	Estonia, Italy, Austria	Encourage the Member States' commitment to sustain their partners' military forces.
Essential Elements of European Escort (4E)	Maritime	Spain	Italy, Portugal	Develop the most important systems of any surface combatant that may be built in Europe between 2035 and 2045, covering five areas: the combat system, the communication and information system, the navigation system, the platform management system, and Integration of System of Systems.
Medium size Semi-Autonomous Surface Vehicle (M-SASV)	Maritime	Estonia	France, Latvia, Romania	Develop a medium size semi-autonomous surface vehicle with multiple missions modules.
Strategic Air Transport for Air Systems Outsized Cargo (SATOC)	Air Systems	Germany	Czechia, France, Netherlands, Slovenia	Fill the critical shortfall for Strategic Air Transport for Outsized Cargo by developing a European solution for the transport of outsized and heavy cargo.
Next Generation Small RPAS (NGSR)	Air Systems	Spain	Germany, Portugal, Romania, Slovenia	Germany, Portugal, Roma- Develop the next generation of tactical UAS. nia, Slovenia
Rotocraft Docking Station Air Systems for Drones	Air Systems	Italy	France	Provide the MoDs with a new capability to launch, operate and recover large numbers of small Unmanned Air Systems from rotocraft platforms.

Continued on next page

Tab. 4 continued

Project name	Type	Leader	Participants	Objective
Small Scalable Weapons (SSW)	Air Systems	Italy	France	Provide the MoDs with a new, small, low-cost weapon, featuring the capability to provide scalable effects and the ability to loiter/re-loiter.
Air Power	Air Systems	France	Greece, Croatia	Increase the air superiority capabilities of the armed forces of EU Member States.
Future Medium-size Tacti- Air Systems cal Cargo (FMTC)	Air Systems	France	Germany, Sweden	Increase the air mobility capabilities of the armed forces of EU Member States with the new Future Mid-Size Tactical Cargo (FMTC).
Cyber Ranges Federations (CRF)	Cyber	Estonia	Bulgaria, Finland, France, Italy, Latvia, Luxembourg	Enhance the European Cyber Ranges capability by federating existing national Cyber Ranges into a larger cluster with more capacity and unique services.
Automated Modelling Iden- Cyber tification and Damage Assessment of Urban Terrain (AMIDA-UT)	Cyber	Portugal	Spain, France	Create an automated system/equipment/tool for improved and faster mapping and identification of target structures.
Common Hub for Governmental Imagery (CoHGI)	Space	Germany	Spain, France, Lithuania, Luxemburg, Netherlands, Austria, Romania	Establish a common hub to facilitate the exchange of classified governmental imagery at European level.
Defence of Space Assets (DoSa)	Space	France	Germany, Italy, Austria, Poland, Portugal, Romania	Increase the EU's operational efficiency in the space domain by making the best use of current and future space assets through cross-cutting space functions of reactive access to space an in-space maneuverability.
Source: Own work based on doct	ument entitled Permane	nt Structured	$Source: Own \ work \ based \ on \ document \ entitled \ Permanent \ Structured \ Cooperation \ (PESCO)'s \ projects, \ op. \ cit.$	op. cit.

Leader	Training Facilities	Land Formation Systems	Maritime	Air Systems	Cyber	Enabling Joint Multiple Services	Space	Total
France	1	2	-	3	1	5	2	14
Italy	1	2	2	3	1	1	1	11
Germany	-	1	-	2	1	3	1	8
Greece	2	1	1	-	2	-	-	6
Spain	-	-	1	2	1	-	-	4
Estonia	-	1	1	-	1	-	-	3
Portugal	1	-	1	-	1	-	-	3
Romania	2	-	-	-	-	-	-	2
Austria	-	-	-	-	-	1	-	1
Belgium	-	-	1	-	-	-	-	1
Bulgaria	-	-	1	-	-	-	-	1
Czechia	-	-	-	-	1	-	-	1
Hungary	1	-	-	-	-	-	-	1
Lithuania	-	-	-	-	1	-	-	1
Netherlands	-	-	-	-	-	1	-	1
Poland	1	-	-	-	-	-	-	1
Slovakia	-	1	-	-	-	-	-	1
Total	9	8	8	10	10	11	4	60

Table 5. Type of projects with leader countries

4. Determinants and perspectives

Within the framework of PESCO, The European Union assumed the integration of defense and arms industries of the participating countries. It was expected that PESCO would result in new, joint military units and the development of armaments. Analyzing individual projects, it turns out that most of them are not strictly related to armaments and concern educational programs, training, and harmonization of procedures and regulations (Terlikowski 2020). There are few projects aimed at developing the military potential.

When initiating PESCO, the European Union also did not foresee external circumstances, which largely influenced its implementation. Firstly, the coronavirus seriously affected the defense policy in the first months of the pandemic. The creation of the COVID-19 Task Force and the first analyses published in April 2020 were a step forward.⁶ Particularly important was the report of August 2020, which contained further scenarios for the implementation of the defense policy in the event of the development of the pandemic. The conclusions point to the possibility of combining structures, funding and procedures, which would contribute to greater efficiency and effectiveness (Sánchez Cobaleda 2020).

The COVID-19 pandemic could also have an effect on the planning on the EU level as strategic priorities are changing. Societal resilience and non-military threats are very likely to become higher priorities. PESCO projects including—e.g., the European Medical Centre (EMC) and the Special Force Medical Training Centre suggest that the EU is aware of this. In the longer term, the EU could also develop its own military command and control center to manage this type of crisis, supporting the civilian protection mechanism. The taskforce that the EU launched to share

^{6.} See: "Covid-19. Lessons and Implications for EU Security and Defence." May 2020. https://www.eeas.europa.eu/sites/default/files/factsheet-covid-19_lessons.pdf.

^{7.} See: "How the COVID-19 crisis has affected security and defence-related aspects of the EU." European Parliament In-Deph Analysis by Christoph O. Meyer, Martin Bricknell, Ramon Pacheco Pardo, and Ben Jones, PE

Table 6. Overall statistics by type of project

All PESCO countries	Training Facilities	Land Formation Systems	Maritime	Air Systems	Cyber	Enabling Joint Multiple Services	Space	Total number of projects
France	4	5	6	8	6	11	4	44
Italy	3	5	4	4	5	6	3	30
Spain	1	3	4	4	3	8	2	25
Germany	1	2	-	5	4	7	4	23
Greece	3	4	5	1	2	3	-	18
Romania	3	-	3	1	1	6	2	16
Portugal	1	-	4	1	4	3	1	14
Netherlands	-	1	1	1	3	5	2	13
Poland	2	1	2	-	2	4	2	13
Belgium	-	2	1	-	1	7	1	12
Hungary	2	2	-	-	2	5	-	11
Cyprus	1	3	1	-	2	2	-	9
Austria	-	3	-	-	-	3	2	8
Czechia	-	1	-	3	1	3	-	8
Croatia	-	1	1	1	1	3	-	7
Estonia	-	2	1	-	2	2	-	7
Slovenia	1	-	-	2	-	4	-	7
Sweden	1	-	1	2	-	3	-	7
Bulgaria	1	-	2	-	1	2	-	6
Luxemburg	-	-	-	-	2	3	1	6
Slovakia	1	2	-	-	-	3	-	6
Finland	-	1	-	-	2	2	-	5
Latvia	-	1	2	-	1	1	-	5
Lithuania	-	-	-	-	1	2	1	4
Ireland	-	-	1	-	-	-	-	1

information on CSDP as well as mobilize national armies to transport patients and medical supplies across the EU earlier in 2020 is an example of the ways in which the defense sector can contribute to social resilience. Another example is obliging the European Defence Fund to finance CBRN medical countermeasures. Due to the pandemic, digital innovation has accelerated, which is also evident in the EU's defense policy. Thus, COVID-19 can contribute to more effective operational planning and management. 9

Secondly, attention should be paid to the events that took place in 2022. In February 2022 there was the aggression of the Russian Federation against Ukraine, and for the first time a capability developed within the PESCO project was formally activated in an operational context. Cyber Rapid Response Teams and Mutual Assistance in Cyber Security (CRRT) coordinated by Lithuania were activated following a request from Ukraine to help the country's institutions face cybersecurity challenges. CRRT consist of 8-12 cybersecurity experts pooled form six participating countries

 $^{653.623-}January\ 2021.\ https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653623/EXPO_IDA(2021)\\ 653623-EN.pdf.$

^{8.} See: "The role of armed forces in the fight against coronavirus." European Parliament Briefing by Tania Latici, PE 649.401 – April 2020. https://www.europarl.europa.eu/RegData/etudes/BRIE/ $2020/649401/EPRS_BRI(2020)$ $649401_EN.pdf$.

^{9.} See: "The impact of COVID-19 on CSDP." European Union Institute for Security Studies, Brief no. 17, by Tobias Pietz, September 2021. https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief_17_2021_web.pdf.

(Lithuania, Croatia, Estonia, Netherlands, Poland, and Romania). O Cyber Rapid Response Teams allow the Member States to help each other to ensure a higher level of cyber resilience and collectively respond to cyber incidents. CRTT are equipped with a commonly developed deployable cyber toolkits designed to detect, recognize and mitigate cyber threats. The teams can provide assistance with training, vulnerability assessments and other requested forms of support. In practical terms, this could mean support in monitoring the threat landscape, detecting and mitigating cyber-attacks or supporting the further investigation of cyber attacks. The EU has become a major player in countering the Russian threat. The union is now taking a fresh look at the range of instruments it has at its disposal, including those that were unimaginable earlier, such as the supply of lethal weapons to Ukraine (Raik 2022).

PESCO projects mainly concern the development of innovative defense technologies, armaments and military equipment. There is a clear lack of projects to increase the forces available in the EU. The initiatives adopted concern niche capabilities, are relatively small, and can only indirectly help to conduct real operations (Terlikowski 2020).

The implementation of PESCO raises several issues to be addressed. There are questions about the participation of non-EU countries in the projects. So far, no binding decisions have been made in this matter. Potential opening up to NATO members (e.g., the United Kingdom, a country with high military potential) would make it possible to increase the importance of the program, perhaps launch new projects and strengthen the EU-NATO cooperation. On the other hand, the question arises whether the participation of non-European countries in PESCO will lead to a situation where they will receive funding from the European Union budget (EDF), for which there is no consent at the moment (Terlikowski 2020).

Another debatable issue concerns the funds allocated to the European Defence Fund. Finland's proposals of 2019 assumed a reduction in the budget, which would mean that the pool of the projects that could be co-financed would be much smaller. The final decision on the establishment of the EDF was taken by the Council and the European Parliament in 2019/2020. The fund started functioning on January 1, 2021 with a total agreed budget of EUR 7.953 billion (in current prices) for the 2021–2027 period. Roughly one-third will finance competitive and collaborative defense research projects, in particular through grants, and two-thirds will supplement the Member States' investment by co-financing the costs of defense capabilities development following the research stage. ¹²

To sum up, it should be stated that the implementation of PESCO is geographically determined. Most of the projects involve large countries from the south of Europe. However, the projects they initiate are relatively small and few countries participate. The development of the European Union's defense policy is based on less formalized and smaller bilateral and multilateral mechanisms.

Concluding remarks

The launch of PESCO is certainly an increase in the importance of the European Union in the defense policy of the continent and a supplement to the activities carried out by NATO. However, it should be stressed that EU Member States participate voluntarily in PESCO projects and that there is no need for greater involvement. This is important for countries that look with some skepticism at the permanent structured cooperation of the European Union and attach greater importance to cooperation with NATO as a component of the defense system of the European continent.

It should be stressed that the implementation of the structured cooperation program is subject to external conditions. In this respect, the two key events, which occurred after 2020, are the SARS-CoV-2 pandemic and the aggression of the Russian Federation against Ukraine in February 2022. While the coronavirus pandemic has hampered the development of the program (no new initiatives

^{10.} See: ``Activation of first capability developed under PESCO points to strength of cooperation in cyber defence. ``Topical Period Period

^{11.} Ibid.

^{12.} See: "European Defence Fund (EDF)." European Defence Agency, Accessed 2022-07-11. https://eda.europa.eu/what-we-do/EU-defence-initiatives/european-defence-fund-(edf).

in 2020) and called into question the development of PESCO for some time, Russia's actions have shown the reality of the threat to the European continent and contributed to the intensification of the defense activities of most of its countries.

References

- GOTKOWSKA, J. 2018. Czym jest PESCO? Miraże europejskiej polityki bezpieczeństwa, Punkt Widzenia. Warszawa: Ośrodek Studiów Wschodnich im. Marka Karpia.
- GÓRALSKI, W. 2009. "Rozwój i ewolucja systemu decyzyjnego Wspólnej Polityki Zagranicznej i Bezpieczeństwa Unii Europejskiej." In *Dyplomacja czy siła? Unia Europejska w stosunkach międzynarodowych*, edited by S. Parzymies, 54-84. Warszawa: Wydawnictwo Naukowe Scholar.
- Maliszewska-Nienartowicz, J. 2017. "Założenia globalnej strategii na rzecz polityki zagranicznej i bezpieczeństwa UE przełom czy stagnacja?" Sprawy Międzynarodowe 70 (2):46-62.
- POTOCKI, Ł. 2017. "European Union Defence Policy—Treaty Dimension." Facta Simonidis 10 (1):147-161. doi: 10.56583/fs.140.
- РОТОСКІ, Ł. 2018. "Polityka obrony kontynentu europejskiego relacje WPBIO/PESCO do NATO." Visnyk L'vivs'koho universytetu. Seriya «Mizhnarodni vidnosyny» [Вісник Львівського університету. Серія «Міжнародні відносини»] 45:107-118. doi: 10.30970/vir.2018.45.0.9456.
- RAIK, K. 2022. "EU Defence Facing Russia: Eastern European Security after the Invasion of Ukraine." European Council on Foreign Relations, Last Modified 2022-03-02, accessed 2022-12-28. https://ecfr.eu/article/democratic-defence-eastern-european-security-after-the-invasion-of-ukraine/.
- SÁNCHEZ COBALEDA, A. 2020. "Covid-19: a New Threat to European Security and Defence." Esade Business & Law School, Last Modified 2020-08-19, accessed 2022-12-28. https://dobetter.esade.edu/en/covid-19-security.
- TERLIKOWSKI, M. 2018. "Pierwsze projekty PESCO: w poszukiwaniu przełomu." Polski Instytut Spraw Międzynarodowych, Last Modified 2018-05-08, accessed 2022-12-28. https://pism.pl/publikacje/Pierwsze_projekty_PESCO__w_poszukiwaniu_prze_omu.
- Terlikowski, M. 2020. "Dwa lata PESCO." Polski Instytut Spraw Międzynarodowych, Last Modified 2020-01-23, accessed 2022-12-28. https://pism.pl/publikacje/Dwa lata PESCO.