

FIGHTER JETS FOR UKRAINE: A REALITY CHECK

Andreea LOSEKAMM, PhD Candidate

*National Intelligence Academy, Bucharest,
Management Specialist, US Department of State*

DOI: 10.55535/RMT.2023.4.19

After several NATO countries agreed to supply Ukraine with tanks after months of wrangling, the Ukrainian government is intensifying its demands for Western-style fighter jets. However, even with a few Western jets, Ukraine would hardly be able to destroy the powerful Russian air defence systems. In addition, and more importantly, Western fighter jets place enormous demands on infrastructure and training. A delivery decision would primarily be a political signal of long-term support for the country. However, it would not have any impact on the battlefield at this point in time.

With the pressure on western states to deliver these weapon systems, the fears of a further escalation of the Russian war of aggression in Ukraine are increasing. There is concern that Ukraine would use Western combat aircraft to bomb targets on Russian territory, which, in turn, could push Vladimir Putin to further escalate the conflict. However, even though Ukraine has already attacked targets on Russian territory without resorting to aircraft, this specific risk of escalation is overestimated.

Even if the risk of escalation from Ukrainian airstrikes on Russian territory is low, a number of other factors speak against the delivery of Western combat aircraft to Ukraine in the near future. Although these are primarily of a practical and not political nature, they nevertheless make it difficult to rebuild the Ukrainian air force with modern fourth-generation jets in the near future.

Keywords: fighter jets; escalation; Air Force; NATO; EU;

INTRODUCTION

No sooner has the debate about supplying battle tanks to Ukraine ended, than the next discussion begins: *Should the West supply the most modern combat aircraft?* The Ukrainian government has wanted Western fourth-generation combat aircraft since the start of hostilities. The Ukrainian Air Force, for example, already called for US *F-15 Eagles* and *F-16 Falcons* on Twitter in March 2022, under the statement “*give us the tools, and we will finish the job!*”. Since then, this wish has not been withdrawn: On his trip to Europe in February 2023, Ukrainian President Volodymyr Zelensky again asked for additional longer-range missiles’ deliveries and combat aircraft.

With the pressure on western states to deliver these weapon systems, the fears of a further escalation of the Russian war of aggression in Ukraine are increasing. There is concern that Ukraine would use Western warplanes to bomb targets on Russian territory, which, in turn, could push Vladimir Putin to further escalate the conflict. However, even though Ukraine has already attacked targets on Russian territory without resorting to aircraft, this specific risk of escalation is overestimated.

WHY ATTACKS ON RUSSIA’S LAND ARE UNLIKELY

Russia has long assumed Western air superiority and has therefore invested significant resources in the development of integrated air defence systems as reported by the Royal United Services Institute for Defence and Security Studies/ RUSI (Bronk, 2020). Russian systems are among the most powerful in the world and cover large parts of Ukrainian airspace. On the front lines, Ukraine even faces multiple tiers of different anti-aircraft defence systems. To avoid being shot down at long range, Ukrainian fighter jets fly most of their missions just a few meters above the ground (Sabbagh, 2023), which severely limits their performance.

Despite Ukraine’s isolated successes in suppressing Russian air defence systems using US-supplied anti-radar missiles, the threat posed by Russian anti-aircraft defences will continue to be a relevant factor in the Ukraine war. It is because in order to successfully suppress and destroy enemy air defence positions in the long term, large-scale air campaigns are required, as illustrated by Operation Allied Force (Larson, Savych, 2007, pp. 63-124) during the Kosovo War in 1999.

At that time, the Allied air forces had around 80 combat and attack aircraft at their disposal just to suppress the enemy air defence systems. As part of the 78-day military operation, they fired a total of 743 anti-radar missiles at 44 known anti-aircraft batteries to ensure freedom of manoeuvre for subsequent jets. However, such anti-radar missiles rarely achieve direct hits, because the battery crew can simply switch off their radar in the event of an attack and thus usually no longer offers a target for the approaching anti-radar missile. For the destruction of enemy anti-aircraft systems, NATO therefore deployed additional combat aircraft that were to penetrate Serbian airspace when new surface-to-air threats appeared and destroyed them with heavy ammunition. However, it was only with moderate success. Only three of the most modern anti-aircraft batteries in the then Federal Republic of Yugoslavia, a total of 25 SA-6 “Gainful”, were destroyed, even though the systems were already 30 years old at the time.

Despite the use of electronic countermeasures and over 1,500 towed decoys, two coalition aircraft were also shot down and several others damaged. Last but not least, machines and crews were stretched to the limit of man and machine, which prompted the US Air Combat Command after the operation to increase the planned purchases of F-16Cs suitable for suppression missions from 30 to 100 units.

Even with NATO’s capabilities for such complex air campaigns, Ukraine will hardly be able to permanently suppress or even destroy the Russian air defence systems with a few jets. In addition to combat aircraft, additional aircraft would be required for aerial refuelling and reconnaissance, which would be defenceless against enemy air defence systems.

Considering the powerful Russian air defence systems, Western-style combat aircraft would therefore be practically exclusively defensive weapons. Equipped with modern air-to-air guided missiles, they could push back Russian jets from the front lines and also help intercept cruise missiles with their powerful radar systems. Similar to the HIMARS rocket launchers already delivered, they could also be used to attack fixed ground targets such as ammunition depots near the front lines. However, the Ukrainian airforce will hardly be able to fly attacks on Russian territory – neither without nor with western jets. The enormous range of numerous modern long-range weapons is based primarily on the fact that they are dropped from great heights. The situation would only be different if the West also delivered long-range cruise missiles for the new Ukrainian fighter jets. However, even these would be vulnerable to Russian air defence systems for short-range defence.

TRAINING, OPERATIONS AND LOGISTICS

Even if the risk of escalation from Ukrainian airstrikes on Russian territory is low, a number of other factors speak against the delivery of Western combat aircraft to Ukraine in the near future. Although these are primarily of a practical and not political nature, they nevertheless make it difficult to rebuild the Ukrainian air force with modern fourth-generation jets in the near future.

First of all, widespread aircraft models such as the US *F-16 Fighting Falcon* or the European *Eurofighter Typhoon* require highly qualified aviation and technical personnel for operation and maintenance. Experienced F-16 instructors estimate that at least between 6 and 12 months of high-intensity training would be required (Hunter, *The War Zone Magazine*, 2022) before Ukrainian pilots could even be sent into combat. Western fighter jets may differ only slightly from Soviet types in terms of flight performance, but technologically the difference is huge, especially in radar systems, electronic warfare systems and other sensors.

WHO COULD TRAIN UKRAINIAN PILOTS TO FLY THOSE F-16S THEY ARE NOT SUPPOSED TO BE GETTING?

Another interesting point is raised around the question: *Who Could Train Ukrainian Pilots To Fly Those F-16s They’re Not Supposed To Be Getting?* (Tegler, *Forbes Magazine*, 2023)

British Prime Minister Rishi Sunak (Chuter, *Defence News*, 2023) has committed to train Ukrainian combat jet pilots, according to a statement made ahead of a visit to London by Ukrainian President Volodymyr Zelensky. Other reports (Tegler, *ib.*, 2023) emerged affirming that a pair of Ukrainian pilots are in the USA for an evaluation of their ability to fly and fight using F-16s. It happens while President Biden and his administration repeatedly downplayed the idea of providing F-16s to Ukraine, as it might be seen as a dry-run for who might train them and where.

Another mentionable help comes from Germany (Siebold, *Reuters*, 2023), where, currently, advanced air defence weapons training is being undergone.

Romania’s air force intervention in Ukraine

While on a BBC show on 30 March 2023, the Minister of Foreign Affairs of Romania, Bogdan Aurescu, avoided answering on how Romania helps Ukraine, claiming that it is “*more efficient*” (Aurescu, *BBC Interview*, 2023) and “*better for Ukraine*” not to disclose the extent of its military aid.

Supporting MFA's statement, Romanian President, Klaus Iohannis, (Mediafax, 2023) re-affirmed one month later (April 2023) that Ukraine will receive all the support needed, without further details.

MAINTENANCE AND THE TRAINING OF THE TECHNICAL STAFF

An even bigger problem than the training of the flight crew would be the maintenance and the training of the technical staff. Because while artillery pieces or tanks can be transported overland to Poland or another NATO country and serviced there, aircraft usually have to be repaired where they landed after their mission – that is, in Ukraine. Depending on the level of qualification, the training of the technical staff takes several years to decades, and all the manuals would also have to be translated.

At least initially, a considerable number of civilian contractors from the West would therefore probably have to support the Ukrainian ground crew with maintenance – and this at airfields that would immediately become important targets for Russian ballistic missiles and cruise missiles. This does in fact result in risks of escalation: if a large number of Western nationals were to die in a Russian air raid, the political pressure on the respective governments to intervene directly in the conflict could increase.

At the same time, most Western combat aircraft models are anyway only designed to operate on well-equipped airfields with extensive maintenance infrastructure and high-quality asphalt runways, because their low engine inlets are prone to ingestion of foreign objects. Since regular attacks on Ukrainian airfields by Russian rockets and cruise missiles must be expected during the war, the infrastructure required to operate the jets could probably only be built after a ceasefire, even if Ukraine has already started to do so.

“THE FUTURE CANNOT BE PREDICTED, BUT FUTURES CAN BE INVENTED”

(Gabor, 1963)

It is clear that the educational system is facing some existing aggressions pressure to upgrade its level of competency. In the defence area, education of all ranks should be accessible, coordinated, modernized, and cost effective. Less resources need to produce high quality results.

The goal in this introspection is to determine whether the objectives set forth by the governments regarding digitalization, learning, and teaching could be rediscovered in practical study programs in the military education.

According to Elstad and Hafnor (2017), digitalization is the deliberate use of technology in the educational setting to promote learning and develop adaptable learning systems. There is a chance that they might mix up while being spread in the school system. This is intriguing because comprehensive education reform may call for digitalizing communication, teaching strategies, and learning resources.

At European Union (EU) level, the *Digital Education Action Plan (2021-2027)* was adopted as a new initiative of the legislative instance to support the process of adapting the entire education and training system of the EU Member States to the challenges of digitalization in a sustainable and efficient manner. This Digital Education Action Plan set out a long-term strategic vision for the *new digital*, in which education must be of high quality, comprehensive and available across Europe. The European Union aimed to address these new challenges and opportunities arising from the COVID-19 pandemic. The pandemic has led to unprecedented use of technology for education and training purposes, calling for greater cooperation at Member State level in the area of digital education, under the internationalization of higher education. At the same time, the plan highlights the importance of cross-sectoral cooperation to bring education into the digital age, with new opportunities to be identified along the way.

One of the major developments in education is the internationalization of higher education (de Wit, Altbach, 2021, pp. 28-46). The goal of security and defence education is to train highly specialized military (officers) and civilian professionals who can work in both domestic and foreign settings with co-workers and individuals of other nationalities, sometimes in very difficult situations. In order to enable students to develop skills, collaborate, and form networks, it is crucial to boost the internationalization process in higher education using both traditional and virtual modalities. By examining and discussing the extensive internationalization experiences of the higher education, this article responds to the research question: *What initiatives and policies of internationalization may be implemented, and how, in order to improve the European Security and Defence Higher Education?*

International aspects have long been a part of university research, but less so in teaching. As a crucial development for improving university graduates' integration into the workforce, the increasing globalization of economies and societies, which began at the end of the previous century, necessitates a Higher Education (HE) with more internationalization programs.

RESEARCH AND DEVELOPMENT ACTIVITIES. IMPLEMENTATION OF DIGITALIZATION IN DEFENCE HIGHER EDUCATION

Although there is no clear answer on what Romania is bringing to the table in terms of air force support in Ukraine, the number of HE achievements boosted the internationalization process with its research and development activities.

The implementation of *Digitalization in Defence Higher Education/DDHE* is a transnational project coordinated by “Henri Coandă” Air Force Academy, Braşov, Romania, in partnership with three other universities from Bulgaria, Poland and Greece. Its aim is to continue the process of standardizing the skills of each specialization at the European level and to uniformize the speed of development of the technical systems used in all fields of activity and their digitalization. Throughout the project, peers from European organizations are mainly involved in the dissemination process at various stages in order to achieve a high impact at the international level as well as a high transferability of the project results.

The project objectives are structured on 5 levels, including: people, technologies and processes. The possible directions drawn for the development of the digital transformation of higher education are as follows:

1. Increasing the level of digital skills of teachers;
2. Increasing the level of digital skills of students;
3. Creating digital educational resources;
4. Creating AR application for courses;
5. Creating a digital library.

FURTHER SIGNIFICANT ACHIEVEMENTS AS REPORTED BY THE MILITARY EQUIPMENT AND TECHNOLOGIES RESEARCH AGENCY

According to the Military Equipment and Technologies Research Agency (<https://www.acttm.ro>), the following significant achievements and acquisitions can be mentioned:

Project name: PROTECTION SYSTEM OF VEHICLES AGAINST PG-7 ANTI-TANK GRENADE

The aim of the project was to create a passive protection system against the action of the PG-7 anti-tank grenade, to equip the vehicles that carry out missions in the theatres of operations. Two types of vehicle protection systems

against the action of the PG-7 anti-tank grenade were made – experimental model, in six variants, on which real firings were carried out in the shooting range.

According to the verifications carried out by real firings, in the case of the grid-type protection system, its effectiveness is ≈25% and in the case of the net-type protection system it is greater than 50%.

Project name: THERMAL IMAGING SCOPE – ODIN 100 – APPROVED PROTOTYPE

The project aimed to create a sighting scope based on thermal imaging – ODIN 100. The scope is an optoelectronic system capable of ensuring the engagement of targets in difficult conditions and during day and night up to a distance of 1000 m.

Project name: THERMAL IMAGING SCOPE – ODIN.50 – APPROVED PROTOTYPE

The aim of the project was to create a sighting scope based on thermal imaging – ODIN.50. The scope is an optoelectronic system capable of ensuring the engagement of targets in difficult conditions and during the day and at night up to a distance of 500 m.

Project name: MACHINE GUN. CAL. 7.62 MM. MD. 1963 MODERNIZED

The project aimed to modernize the machine gun. cal. 7.62 mm model 1963 (PM cal. 7.62 mm) regarding the increase in performance by mounting an ambidextrous safety lever and rails according to STANAG 4694 Ed. 1 – “NATO Accessory Rail”, for mounting optical and optoelectronic equipment. The product was approved in 2020.

Project name: TARGET SYSTEM FOR GROUND-AIR, AIR-AIR AND SHIP-AIR FIRING IN THE CAPU MIDIA RANGE – ULTRA-20 V1

The aim of the project was the conception, design and realization within the CCISA of a target system for ground-to-air, air-to-air and ship-to-air firing for the Capu Midia range, intended to diversify the training possibilities of the armed forces services in the framework of real or simulated firing exercises, under conditions of increased protection of human operators.

Starting in 2016, several batches of ATM-1BB/N and ULTRA-20 V2 air targets were executed and tested by real firing in the Capu Midia range. Following the tests, the ATM-1BB/N and ULTRA-20 V2 products were approved and entered into the AFS inventory.

Project name: CLASS I TACTICAL UAS

The aim of the project was the conception, design and realization within CCISA of a class I tactical UAS for the execution of ISR (Intelligence Surveillance Reconnaissance) missions. The system allows the planning, collection, processing and exploitation of data and information collected from the sensors mounted on the air platform.

Project name: AIR SYSTEM ULTRA-20 VTOL ISR/AFG

The aim of the project was the conception, design and realization within CCISA of an aerial system without a human pilot on board for AFG (Aero-Photo-Grammetry) missions. The aerial platform has vertical take-off and landing and can be used in any terrain conditions.

Supersonic Aircraft

- Testing and evaluation for certification and approval of the upgraded aircraft MIG 21 LANCER;
- Testing and evaluation in order to certify some variants of armament with missiles and bombs for the MIG 21 LANCER aircraft;
- Testing and evaluation for certification for air-to-air firing with the on-board cannon for the MIG 21 LANCER aircraft;
- Flight testing in order to validate the armament configuration of the MIG 21 LANCER aircraft with the MAGIC 2 missile;
- Concept Study for Multirole Aircraft;
- Test and acceptance evaluation of MLU F-16 A/B M5.2 aircraft (Acceptance Assessment Test Plan, Acceptance Assessment Testing, Acceptance Assessment Test Report).

Subsonic Aircraft

- Concept Study for Short/Medium Transport Aircraft of the Air Force;
- Acceptance testing and evaluation of the C-27J Spartan aircraft delivered (Acceptance evaluation test plan, Acceptance evaluation testing, Acceptance evaluation test report);
- Concept study – Modernization of the avionics system of the C-27J aircrafts of the Ministry of National Defence;
- Concept study – Revitalization of the C-130 aircrafts from the Ministry of National Defence and modernization of their avionics system;
- Concept Study for The Management and Staff Personnel Transport Aircraft;

- Testing and evaluation for the purpose of approving IAR-93 aircraft in all equipment variants;
- Testing and evaluation for the certification and approval of IAR-99 aircraft;
- Testing and evaluation for certification and approval of IAR-99 FALCON aircraft;
- Testing and evaluation in order to certify the configuration of the IAR-99 FALCON aircraft with a ventral drift system;
- Testing and evaluation of the fuel consumption of IAR-99 FALCON aircraft;
- Instrumentation of IAR-99 FALCON aircraft;
- IAR 99 FALCON – Manual of armament configurations;
- Integration of IAR 99 airplane flight simulator in the ATN network through acts ground station;
- Flight testing in order to determine the flight operational performance of IAR-99 FALCON aircraft in various equipment configurations;
- Development testing and evaluation for IAR-99 FALCON aircraft structure status monitoring system;
- Modernization of IAR-99 ŞOIM aircraft – Technical study.

UAV

- Acceptance testing and evaluation for shadow 600 unmanned aircraft;
- Concept Study for Unmanned Aircraft Systems – UAV;
- Testing and evaluation for the certification and approval of the unmanned aircraft, the target-bearing tractor for anti-aircraft firing;
- Testing and evaluation for Mini UAV close surveillance in tactical field BOREAL 5;
- Concept study Class I MINI UAS;
- Achieving testing and evaluation capability in the field of low speeds and altitudes.

Helicopters

- Concept study for Helicopter transport staff management staff and MEDEVAC;
- Concept study for specialized helicopter attack capabilities and multi-mission helicopter;
- Concept study for Multimission Helicopters designed to establish air combat capabilities for SOF;

- Concept study – Specialized helicopter with ASW (Anti Submarine) capabilities;
- Testing and evaluation for the certification and approval of the IAR- 330 PUMA NAVAL helicopter and its qualification for operation on F22 frigates.

Missiles

- Testing and evaluation of the real technical condition of aviation missiles in order to extend the deadlines for keeping in operation;
- Realization of air-to-air school rocket with the use of the elements resulting from the completion of the programs for the extension of the technical resources.

Save Systems

- Ground and in-flight testing and evaluation for the approval of the Romanian catapult seats type HV-0;
- Integration of pilot survival equipment with the flight equipment, dash system, SCHV-0 catapult seat and the cabins of IAR-99 FALCON aircraft.

Aviation Equipment

- Technical study – Integrated system for recording flight parameters for F-16 aircraft;
- Testing and evaluation in order to approve the variant of equipment with location system based on ELT emergency radiobalise of IAR-99 STANDARD aircraft and FALCON/AN-26/30 aircraft;
- Testing and evaluation in order to approve the variant of equipping the AN-30 aircraft with digital aerial research system and use within the missions of the OpenSky Treaty;
- Realization of a system for downloading, storing and processing data from the recorder installed on board the AN-26/30 aircraft;
- Testing and evaluation for ground and in-flight approval with IAR-330 L, C-130 Hercules and C-271 Spartan aircraft of the Isolation and Transport System of personnel contaminated with biological agents.

Craftable video container – Execution, testing and evaluation, homologation

- Integrated system for determining the vibration levels at IAR-330 SOCAT helicopter by analysing the information recorded on the SAIMS system;

- Testing and evaluation for the certification and approval of the radio navigation, communications and beaconing system – ATTNA for Câmpia Turzii and Boboc aerodromes;
- Ground and flight testing and evaluation for the purpose of homologating the Trelleborg sealing solution. Substantiation by tests of the decision to reconsider the technical resource – Modernization of hydraulic servomechanism for movingtracking (SMHR-2D);
- Acquisition and processing system for calibrating the radionavigation means installed on military aerodromes – Technical study.

Ammunition Aviation

- Analysis of the possibility of using aviation bombs equipped with warheads from the AFS equipment, on F-16 aircrafts;
- Analysis of the possibility of using 20x102 mm calibre ammunition from AFS equipment on F-16 aircrafts;
- Evaluation of the real technical condition of the aviation ammunition (missiles, bombs and warheads) of the Air Force' equipment, in order to support the decision to keep it in operation;
- NATO standard cal. 20x102 mm strikes testing, developed within the national industry, designed to equip aircraft of the Air Force;
- Rectangular IR-infrared countermeasure training ammunition for all aircraft of the Air Force.

CONCLUSIONS

Looking forward

From a strategic point of view, there is some evidence that supporter states will make a decision on the delivery of combat aircraft in a timely manner. Because, especially in the event of a ceasefire, Ukraine should be supported in building up a long-term and credible deterrent capability against Russia. Since the training of flight and technical personnel is extremely time-consuming, the call for higher education internationalization is more critical than ever.

The debate about fighter jet deliveries, however, would do well to face a little more honesty. With fourth-generation fighter jets, Ukraine will not be able to attack ground targets on Russian territory, nor could the jets be delivered and put into operation in a few weeks or months. In particular, the public debate distracts from the question of when, which models, with which weapon systems could

and should be delivered to the Ukrainian Air Force. With regard to the military situation in Ukraine, the military requirements, as well as possible risks of escalation, they must be viewed in a differentiated manner. In order to limit the risk of escalation, the delivery of long-range cruise missiles could also be dispensed with.

In the short term, it should be checked whether Europe has the capability to deliver on time the necessary fleet to the Ukrainian Air Force. Ukraine would probably only be able to commission and use Western combat aircraft in a few years, however without the help of European maintenance personnel in the country. As mentioned previously, aircraft usually must be repaired where they landed after their mission – that is, in Ukraine. Depending on the level of qualification, the training of the technical staff takes several years to decades, and all the manuals would have to be translated. Furthermore, a considerable number of civilian contractors from Europe would therefore probably have to support the Ukrainian ground crew with maintenance – and this at airfields that would immediately become important targets for Russian ballistic missiles and cruise missiles. This does in fact result in risks of escalation: if a large number of Western and Eastern nationals were to die in a Russian air raid, the political pressure on the respective governments to intervene directly in the conflict could increase. Baring this is mind, no wonder Romania has not officially provided specifications on which of the resources above mentioned has been deploying to Ukraine.

ACKNOWLEDGEMENT

The current work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint). It is not under consideration for publication elsewhere, its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

BIBLIOGRAPHY:

1. Military Equipment and Technologies Research Agency, “PRAESTANTIA PER SCIENTIAM”, <https://www.acttm.ro/centrul-de-cercetare-inovare-si-incercari-in-zbor/realizari-semnificative-din-activitatea-de-cercetare-dezvoltare/>, retrieved on 12 May 2023.

2. BBC interview: Romanian FM: *What is important is to help Ukraine*, <https://www.bbc.co.uk/programmes/p0fcsxsz>, retrieved on 12 May 2023.
3. *Become a fight pilot*, Vermont National Guard, https://www.158fw.ang.af.mil/BECOME_A_FIGHTER_PILOT/#:~:text=Typical%20timeline%20to%20begin%20training,Fairchild%20Air%20Force%20Base%2C%20Washington., retrieved on 22 May 2023.
4. Bronk, J. (2020). *Modern Russian and Chinese Integrated Air Defence Systems. The Nature of the Threat, Growth Trajectory and Western Options*. Royal United Services Institute for Defence and Security Studies, RUSI Occasional Paper, January.
5. Chuter, A. (2023). *Britain to train Ukraine combat fighter pilots*. Defense News, 8 February.
6. Elstad, A., Hafnor, H. (2017). *New Window for Learning*. FFI Institute.
7. Gabor, D. (1963). *Inventing the Future*. London: Secker and Warburg.
8. Hunter, J. *This is how long it would really take Ukraine's Pilots to convert to F-16s*. The War Zone Magazine, <https://www.thedrive.com/the-war-zone/this-is-how-long-it-would-really-take-ukraines-pilots-to-convert-to-f-16s>, retrieved on 2 May 2023.
9. *Implementation of Digitalization in Defence Higher Education (DDHE)*, https://www.afahc.ro/ro/erasmus/ddhe/project_summary.pdf, retrieved on 12 May 2023.
10. Iohannis, K., *România a sprijinit Ucraina “în toate felurile în care a fost posibil”*, <https://www.mediafax.ro/politic/klaus-iohannis-romania-a-sprijinit-ucraina-in-toate-felurile-in-care-a-fost-posibil-21794712>, retrieved on 12 May 2023.
11. Larson, E.V., Savych, B. (2007). *Operation Allied Force (Kosovo, 1999)*. Misfortunes of War: Press and Public Reactions to Civilian Deaths in Wartime, RAND Corporation, pp. 63-124. JSTOR, <http://www.jstor.org/stable/10.7249/mg441af.11>, retrieved on 5 May 2023.
12. Sabbagh, D. (2023). *Ukraine fighter pilot: I could learn to fly western jet within three months*, 9 February, <https://www.theguardian.com/world/2023/feb/09/ukraine-fighter-pilot-i-could-learn-to-fly-western-jet-within-three-months-vadym-voroshylov>, retrieved on 22 May 2023.
13. Siebold, S. (2023). *Under the radar, Germany trains Ukrainians on advanced air defence weapon*. Reuters, 8 March, <https://www.reuters.com/world/europe/under-radar-germany-trains-ukrainians-advanced-air-defence-weapon-2023-03-03/>, retrieved on 22 May 2023.
14. Tegler, E. (2023). *Who Could Train Ukrainian Pilots to Fly Those F-16s They're Not Supposed to Be Getting?* Forbes Magazine, 8 March <https://www.forbes.com/sites/ericteglar/2023/03/08/who-could-train-ukrainian-pilots-to-fly-those-f-16s-theyre-not-supposed-to-be-getting/?sh=6031ce3d2087>, retrieved on 17 April 2023.
15. de Wit, H., Altbach, P.G. (2021). *Internationalization in higher education: global trends and recommendations for its future*. Policy Reviews in Higher Education, 5:1, 28- 46, DOI: 10.1080/23322969.2020.1820898, retrieved on 22 May 2023.