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IRAN'S MISSILE PROGRAM AS A THREAT FOR THE EUROPEAN SECURITY

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The article analyses the Iranian missile program and its potential to challenge the national security of the European countries. The article stresses that the missile program of Iran could be even more dangerous than its nuclear activities, because unlike the nuclear program, Iran's missile industry was never limited by any international agreements. The article reminds that the nuclear deal with Iran or Joint Comprehensive Plan of Action (JCPOA) decreased concerns over the Iranian capabilities to produce fissile materials only, but this agreement did not mention dangerous activities of Iran in developing its missile industry. The article considers the research questions related to the challenges for the European security that are created by the Iranian missile program and the possible reaction of the European countries on these challenges. It is noted that the objective of the article is to define the scope of threat of the Iranian missile program for the security of the European countries. The methods of comparative analysis, content analysis, and system analysis were applied in the research paper. It is mentioned in the paper that the Iranian ballistic missiles can potentially serve as means of delivery for the nuclear warheads and that they can reach the territory of the East-European countries. The article discusses the possible Iranian actions to increase the range of its missiles and their accuracy and the consequences for the European security. The article also analyses the development of the Iranian space program that contributes to the missile industry development. The article analyses Iran's perception of the European countries and tries to define whether Iran would have a political will to challenge the security of the European countries by its ballistic missiles. The position of the European countries regarding the Iranian missile program is also considered in the paper. The article concludes that the European countries are worried about the Iranian nuclear and missile programs and try to reduce tensions around these programs by reviving the nuclear deal with Iran. The article confirms its hypothesis that the Iranian missile program can be potentially dangerous for the European countries due to the technological development of this program and Iran's internal and foreign policy plans.

Key words: Iranian missile program, JCPOA, non-proliferation, long-range ballistic missiles, European security.

Introduction. Iran's nuclear program has been a serious international problem during the last two decades. In 2015, the tension around Iran's nuclear program significantly decreased after signing the nuclear deal with Iran or Joint Comprehensive Plan of Action (JCPOA). During presidency of Donald Trump, the United States withdrew from JCPOA, but in 2021 the revival of the nuclear deal has become possible due to efforts of US president Joe Biden to solve the problem of Iran's nuclear program. Nevertheless, JCPOA of 2015 did not mention another important problem related to Iran's nuclear program – its missile and space program. The negotiations to restore the JCPOA in 2021 unlikely would solve the issue of the Iranian missiles because Iran stated many times that issue was not negotiable. Thus, the international community appears to be focused on solving the problem of producing nuclear fissile materials by Iran, which was limited by JCPOA. Meanwhile, the missile production is also an important element of any military nuclear program. Even after signing JCPOA, Iran continued to actively develop its ballistic missiles that can deliver nuclear warheads [1]. Recent successes of Iran in launching space satellites

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raise concerns about Iran's potential capability to create the long-range missiles that would be able to reach the territory of all the European countries [2].

Thus, the problem of the Iranian missile program is connected with the following **research questions**: what challenges for the European security may be created by the Iranian missile program, how the European countries react on these challenges and how these threats could be overcome.

The **objective** of the article is to define the scope of threat of the Iranian missile program for the security of the European countries.

The article used the following research **methods**: method of comparative analysis to compare the threats of the Iranian missile program for the different European countries; method of content analysis of the official documents and statements of the European Union and separate EU and non-EU countries of Europe to reveal the scope of their concern about Iran's missiles; method of system analysis to assess the European security as a system that responds on threats of the Iranian missile program.

Literature review. The problem of the Iranian missile program was studied in the research papers of Michael Elleman who proposed to negotiate an international agreement with Iran to fix the maximum range of its missiles by 2.000 km [3]. Mark Fitzpatrick is another prominent US scientist who analyses the Iranian missile and nuclear program in numerous publications. For example, in one of his most recent publications, M. Fitzpatrick considered Iran's cooperation with North Korea to develop missile technologies [4]. A profound analysis of the Iranian missile capabilities was also done in the report of Anthony Cordesman [5]. Ellie Geranmayeh and Julien Barnes-Dancey are European analysts who study the implications of the Iranian missile and nuclear programs' development for the European security [6]. The Iranian nuclear and missile program as a challenge for the European security was also analysed in the publications of the Ukrainian researchers Yaryna Zavada [7], Polina Sinovets and Valeria Gergiieva [8].

Main part. During last two decades, there were different views about the Iranian missile program. During 2000s, Russian and many western specialists believed that the Iranian missile program could not be a threat because it was too primitive and rudimentary [9, p. 8]. Even after Iran managed to launch several satellites into space, some specialists state that the technological achievements of the Iranian missile industry are often exaggerated [10].

According to another view, the Iranian missile program is rather developed and could be dangerous for all the European countries [11]. And finally, one can express another opinion that the Iranian missile program is technologically developed, but it presents a threat for the United States and Middle East countries but not for Europe because Iran is not going to attack Europe.

This paper is based on the hypothesis that the Iranian missile program could be dangerous for all the European countries, even if Iran is not going to obtain nuclear weapons. It appears that even if Iran is not going to attack the European members of NATO, they would still be involved into potential US-Iran conflict because they host the US anti-ballistic systems and some US bases, and for this reason, the Iranian missile program would be dangerous for the European countries too.

The German journal Spiegel names the late scientist Hassan Moghaddam as a father of the Iranian missile program [12]. Mr. Moghaddam died in 2011 during the failed missile test. Some other key missile scientists of Iran (Mohammed Reza Mehdipur, Reza Ebrahimi) are mentioned in a published press-release of the US government in 2019 [13].

Iran's missile and space programs have rather long story. In 1980s, during the war with Iraq, Iran purchased missile technologies from China and North Korea. North Korean "Scud-B" missiles that were bought by Iran in 1980s were later transformed in "Shehab" missiles. In 2003, Iran created the Iranian Space Agency, and as many analysts believed, under its cover Iran tried

to develop the long-range missiles [14]. In 2005, Iran launched its first satellite together with Russia from Russian territory [15]. By the end of 2000s, Russia suspended its cooperation with Iran due to the international pressure and sanctions imposed on Tehran by United Nation Security Council [16].

Nevertheless, even without foreign support Iran managed to launch its home-made satellite from its own territory in 2009 [17]. Iran is one of the few countries that managed to produce and launch from its own territory the space satellites, and that could mean that Iran has a real potential to produce long-range missiles in the future [18].

During 2010s, Iran launched several space satellites, including those with the monkey onboard. Iran had even ambitions to send humans into the space, but in 2017, Tehran refused from the corresponding project due to its high costs [19].

In 2020, Iran launched into space its first military satellite and pushed its missile program to the new level [20]. In February 2021, Iran declared launching another satellite-carrying rocket, and this was its first space launch on the solid fuel [21].

Iran has to rely more on ballistic missiles because it does not have modern air force. Iran missile strategy first was based on threat of punishing the potential enemies by acquiring capability to strike against the cities and other important targets. Thus, one of the elements of Iran's strategy is "deterrence by punishment" [22, p. 7]. Now Iran's strategy of using missiles is also focused on increasing their accuracy, and that was probably one of the reasons why Iran self-imposed on itself a 2.000 km maximum limit of the range of its missiles. Some analysts believe that Iran refused to develop the longer-range missiles to focus more on increasing their accuracy [23].

For the shorter-range missiles, Iran achieved its goal to increase their accuracy as the missile attacks on Saudi missile facilities in 2019 and on US military bases in Iraq in 2020 clearly demonstrated. Therefore, some analysts expect that after increasing accuracy, Iran will try to exceed its self-imposed limit of 2.000 km soon [24].

Nevertheless, some experts express doubts regarding the technological developments of the Iranian missile program. For example, the Iranian medium-range missiles are still not accurate enough [25]. Experts also doubt that the Iranian military satellite can really collect valuable intelligence information because it does not have a good camera and lacks some other important technical characteristics [26]. In addition, there are doubts that Iran had really managed to send monkeys into space as it proclaimed [27]. It is also a worrisome news for the Iranian missile technological development that Iran has the second largest brain drain in the world [28].

The US sanctions during Trump administrations had also a general destructive impact on the research activities in Iran, because the Iranian scientists could not obtain necessary materials or equipment for their research, and also, they always lacked funds for doing scientific experiments [29].

Moreover, Iran has already experiencing numerous sabotages at its nuclear facilities, and some of its missile tests also failed probably because of the diversion [30], and this again raises questions about the efficiency of the further Iranian technological developments that could be affected by lack of loyalty among the Iranian scientists and other people involved into secret nuclear and missile programs.

Nevertheless, these technical and security problems of the development of its nuclear and missile programs Iran managed to outbalance by purchasing or stealing the related technologies from abroad. For example, in 2021 the German, Dutch and the Swedish intelligence authorities [31] reported that Iran tried to steal sensitive technologies from those countries even after signing JCPOA [32]. Thus, the technological development of the Iranian missile program despite some problems may give it a theoretical possibility to hit the territory of the European countries in the future. Already now some of the Iranian missiles (Shekhab-3, Ghadr) have a range, which is long enough to reach the territory of the European countries, if Iran uses less heavy warheads for these missiles [33].

Iran's missile program is also dangerous because Iran proliferates its missile technologies to its proxies in the Middle East [34]. This missile proliferation can also have indirect consequences for the European and Euro-Atlantic security, because after receiving the Iranian missiles, the proxy groups in Yemen, Iraq, and Syria get a possibility to further destabilize the situation in the Middle East, and that could potentially lead to increasing the number of refugees to Europe and emerging the new refugee crisis in the EU.

The Iranian Supreme Leader ayatollah Ali Khamenei expressed very sceptical views about the E3 countries (UK, Germany and France), called them "American lackeys" and even compared them with the terrorists [35]. Another provocative statement regarding Europe was proclaimed in 2017 by another hardliner politician Hossein Salami, Islamic Revolution Guards Corp (IRGC) deputy commander, who said that Iran could increase the range of its missiles beyond self-proclaimed limit of 2.000 km if Tehran feels threatened by Europe [36].

Thus, already now Iran has all the technological characteristics and perhaps, a political will to challenge the European security.

Conclusion. The Iranian missile program could challenge the security of most European countries because Iran has already obtained a theoretical capability to reach the territory of the East-European countries and soon could be able to target the territory of other European countries. Such technological developments cause negative reaction from the European countries and complicates their relations with Iran. The strengthening positions of the hardliners in Iran could also lead to the hostile relations with Europe and political will to challenge the European security by ballistic missiles during the crisis. It could be also concluded that even if Iran is not going to attack the European countries, Europe could be involved in a potential US-Iran conflict anyway because it hosts US military bases and US ABM systems. Thus, after achieving the objective of this article it could be concluded that the Iranian missile program presents a serious danger for the European security, and the scope of this danger could further increase if Iran manages to develop its space technologies and if the problem of its enrichment activities is not solved. Finally, we can also draw a conclusion that the hypothesis of this article about the increasing danger of the Iranian missile program is confirmed by the research findings of the paper.

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ІРАНСЬКА РАКЕТНА ПРОГРАМА ЯК ВИКЛИК ДЛЯ ЄВРОПЕЙСЬКОЇ БЕЗПЕКИ

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У статті проаналізовано іранську ракетну програму та її потенціал кинути виклик національній безпеці європейських країн. У статті наголошується, що ракетна програма Ірану може бути навіть більш небезпечною, ніж його ядерна діяльність, оскільки, на відміну від ядерної програми, ракетна промисловість Ірану ніколи не обмежувалась якимись міжнародними угодами. Стаття нагадує, що ядерна угода з Іраном або Спільний всеосяжний план дій (СВПД) зменшили стурбованість з приводу можливостей Ірану виробляти лише матеріали, що розщеплюються, але в цій угоді не згадується про небезпечну діяльність Ірану у розвитку його ракетної промисловості. У статті розглядаються питання дослідження, що пов'язані з викликами європейській безпеці, які створюються іранською ракетною програмою, та можлива реакція європейських країн на ці виклики. Зазначається, що метою статті є визначення масштабів загрози іранської ракетної програми для безпеки європейських країн. У роботі були застосовані методи порівняльного аналізу, контент-аналізу та системного аналізу. У статті зазначається, що іранські балістичні ракети потенційно можуть служити засобом доставки ядерних боєголовок і що вони можуть досягти території європейських країн. У статті розглядаються можливі дії Ірану щодо збільшення дальності дії ракет, їх точності та наслідків для європейської безпеки. У статті також аналізується розвиток іранської космічної програми, яка сприяє розвитку ракетної промисловості. У статті аналізується сприйняття Іраном європейських країн та здійснена спроба визначити, чи має Іран політичну волю кинути виклик безпеці європейських країн своїми балістичними ракетами. Позиція європейських країн щодо розвитку іранської ракетної програми також розглядається у статті. У статті зроблено висновок, що європейські країни занепокоєні розвитком іранських ракетної та ядерної програм і намагаються зменшити напругу довкола цих програм шляхом відновлення ядерної угоди з Іраном. Стаття підтверджує свою гіпотезу про те, що іранська ракетна програма може бути потенційно небезпечною для європейських країн через технологічний розвиток цієї програми та внутрішні та зовнішньополітичні плани Ірану.

Ключові слова: іранська ракетна програма, JCPOA, нерозповсюдження, балістичні ракети великої дальності, європейська безпека.