

Centre for  
Defence  
Strategies



CRIMEA  
PLATFORM

# Energy Aspects of the Occupation of Crimea

## and the Strategy for Overcoming Its Effects

February 2022





This publication was prepared to provide analytical support to the Crimea Platform, the initiative of the Ukrainian Government on the de-occupation and reintegration of Crimea.

This publication was funded by UK aid from the UK government as part of the project "Solidifying the Crimean Platform to Enhance Ukraine's and International Policy Framework for the De-Occupation of Crimea (Phase II)" implemented by the Centre for Defence Strategies (CDS). The views expressed in this publication are those of the author(s) and may not coincide with the official position of the UK Government.

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This publication is available in two languages: Ukrainian and English. Both are available on the CDS website.

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Published by the Centre for Defence Strategies, Kyiv, Ukraine  
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# 1. PREHISTORY

The occupation of the Crimean peninsula has an essential energy dimension and exerts a certain impact on the energy security of Ukraine and the Black Sea region. The occupation of the peninsula and the adjacent shelf has hampered the development of the Black Sea shelf, which has significant natural gas reserves. Russia has strengthened its dominance in the European gas market with all the ensuing adverse effects and threats. This overview aims to conceptually rethink the consequences and the necessary measures to be taken by Ukraine and the international community to prevent further losses, nullify perils to energy security and reinstate the status quo ante, whilst also reactivating international law.

Geologically wise, Ukraine's territory includes three oil and gas regions with different volumes of forecast resources and proven reserves: Eastern, Western and Southern regions. The majority of resources in the Western region have been depleted over the course of their use since the late 19th century. The proven reserves of the Eastern region are the largest in Ukraine. In 2012, they were estimated at 1,602 billion cubic meters, which is 46% of the total amount (Fig. 1).

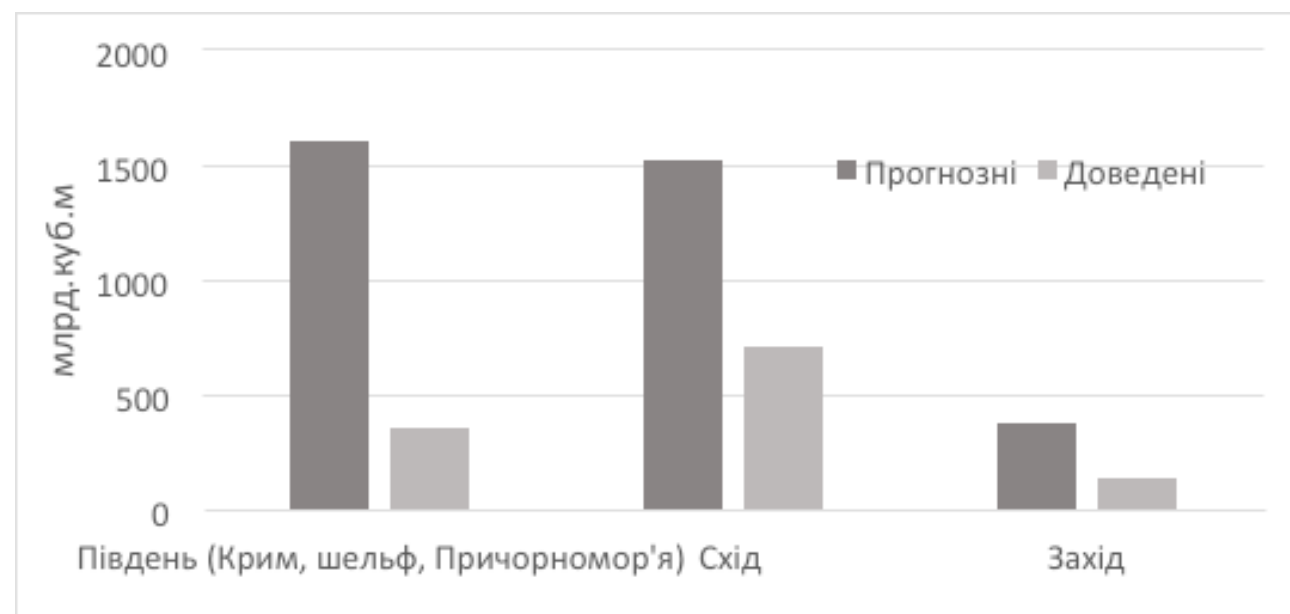
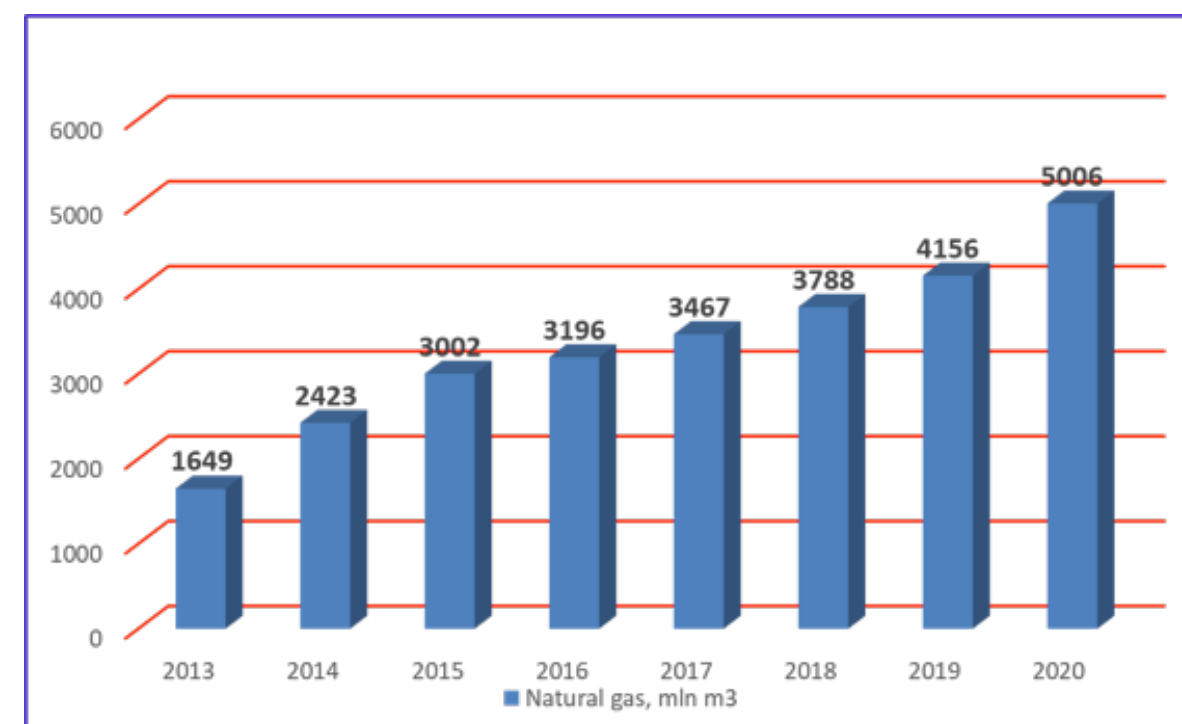


Figure. Forecast natural gas resources, billion m<sup>3</sup> (2012 estimate).

Source: compiled by the authors based on the database [www.razumkov.org.ua](http://www.razumkov.org.ua)

The Crimean Peninsula of Ukraine, the shelf of the Black and Azov Seas within the exclusive economic zone (EEZ) belongs to the Southern oil and gas region of Ukraine, which contains the largest volume of forecast resources.

Ukraine has gained a wealth of experience in gas production on the shelf of the Black and Azov Seas. Since 1978, the state-owned company Chornomornaftogaz has been developing the shallow shelf, extracting small gas volumes (1.0–1.1 billion cubic meters) annually for the needs of the Crimean Peninsula. It was predicted that through the development of shallow Black Sea shelf deposits alone Ukraine would be able to increase gas production up to 10 billion cubic meters per annum.<sup>1</sup> According to the plans of state-owned Chornomornaftogaz JSC, after the purchase of two jackup rigs in Singapore in 2011–2012, it was planned to increase production drilling on the shallow shelf of the Black Sea in order to gradually boost gas production in 2020 to more than 5 billion cubic meters (see diagram below).



Over the period from 2014 to 2020, according to the approved program,<sup>2</sup> more than 25 billion cubic meters of gas were to be extracted.



# 1.1 PRE-OCCUPATION ENERGY SECTOR OF THE CRIMEAN PENINSULA. NATIONAL GAS PRODUCTION ON THE BLACK SEA SHELF

The Crimean Peninsula has always been energy-deficient. The energy resources necessary for the functioning of the economy and peoples' lives were only partially provided by local capacities. Crimea's energy deficit has traditionally stood at around 83% for electricity, 100% for coal and 100% for oil products. The basic energy cluster of the Crimean Peninsula – the gas cluster represented by a subsidiary of Naftogaz of Ukraine – did not fully cover the needs of the peninsula. In practical terms, Ukraine ensured all the needed gas supply to Crimea thanks to the investment of Naftogaz of Ukraine in expanding production drilling on the shallow shelf of the Black Sea in 2011–2013.

At the outset of 2014, there were 17 deposits on the balance sheet of state-owned Chornomornaftogaz JSC (a subsidiary of Naftogaz of Ukraine), which produced gas and oil both onshore and on the Black Sea shelf at eleven gas, four gas condensate and two oil deposits.<sup>3</sup> Their total balance reserves are quite significant in terms of meeting the needs of the region's economy: 58.56 billion cubic meters of natural gas, 1.221 million tons of gas condensate and 2.53 million tons of oil. The annual production in 2013 amounted to almost 1.7 billion cubic meters of natural gas, which fully met the demands of the Crimean peninsula and came from shelf deposits.

The most promising ones were Odesa and Bezimenne. The Odesa deposit with an initial balance reserve of 21.1 billion cubic meters of gas is located between the Crimean Peninsula and Odesa region in the exclusive economic zone of Ukraine. The deposit is 75 km away from the coast of the Odesa region perpendicularly and 125 km away from the city of Odesa itself. At the same time, the distance to the nearest settlement on the Crimean coast (Black Sea) is 185 km. A total of 11 wells were drilled and operated at the Odesa deposit at the time of its seizure. Daily gas production there amounted to about 2.68 million cubic meters per day.



Figure. Location of the main deposits and jackup rigs of Chornomornaftogaz on the shallow shelf of the Black Sea.

Two modern jackup rigs, Petro Hodovanets and Nezalezhnist, were important assets, whose usage considerably increased gas production on the shelf.

The Ukrainian state company Chornomornaftogaz produced gas (1978–2014) with a single technological complex and carried out a full range of works (exploration and prospecting of hydrocarbons, drilling of wells, development of oil and gas deposits, production and transportation of hydrocarbons). Active drilling on the Black Sea shelf in 2012–2013 made Chornomornaftogaz one of the region's leaders in drilling. The company drilled more than all the companies operating in the Black Sea combined (Ukraine – 16,595 m, Turkey – 3,650 m, Romania – 7,500 m).

In the Autonomous Republic of Crimea, the main energy assets of Ukrainian state-owned companies, in addition to Chornomornaftogaz and the Hlibivske underground gas storage facility (UGS), were the local gas transportation infrastructure of Ukrtransgaz (including the Dzhankoi-Feodosiia-Kerch gas pipeline built by Naftogaz of Ukraine in the 1990s) and the oil transfer terminal of state-owned Feodosiia Petroleum Products Supply Company.

The gas transport infrastructure in the territory of the Crimean Peninsula has 1,800 km of gas pipelines, including 950 km of main and 410 km of industrial pipes from shelf deposits to the peninsula. **These main gas pipelines are:**

- **Black Sea shelf - Hlibivske UGS - Simferopol - Sevastopol;**
- **Perekop - Dzhankoi - Simferopol - Sevastopol (Yalta, Alushta);**
- **Dzhankoi - Feodosiia - Kerch;**
- **Perekop - Hlibivske UGS.**

The Crimean power grid is designed to supply electricity to the peninsula on four overhead lines from Ukraine's United Energy System. The system can transmit 1,250 MW of power, which corresponds to the maximum possible energy consumption on the peninsula. Crimea had its own heat generation capacity of about 205.5 MW, including Sevastopol. Basic local generation comprised 100 MW at Simfero-

pol combined heat and power plant (CHP) (with design capacity of 100 MW), 6 MW at Kamysh-Burunskaya CHP (with design capacity of 30 MW), 14.5 MW at Saki CHP (design capacity 14.5 MW) and Sevastopol CHP with a capacity of 60 MW.

The Feodosiia Petroleum Products Supply Company owned an underwater technological complex, a land plot within the Feodosiia Bay, oil reservoirs and technological units for pumping oil products. The company's assets were appropriated by the occupation authorities through so-called "nationalization" in March 2014, and the company was re-registered on the mainland of Ukraine as the State Enterprise for Petroleum Products under the management of the Ministry of Fuel and Energy of Ukraine.<sup>4</sup>

## 1.2 GAS PRODUCTION MEGAPROJECTS IN UKRAINE IN THE EARLY 2010S

The early 2010s brought a breakthrough in US-Ukrainian energy cooperation. During the third meeting of the Ukraine-US Strategic Partnership Commission in Washington on February 15, 2011, agreements were reached on assistance from the United States in examining natural gas deposits from unconventional sources in Ukraine. The joint statement of the meeting contained a clear intention of both parties to develop projects for the extraction of energy resources in Ukraine, including unconventional gas.

A Memorandum of Understanding between the Government of the United States of America and the Government of Ukraine on Unconventional Gas Resources was also signed, which provided for re-

source assessment, technical studies to determine commercial production potential, economic performance and investment required for unconventional gas production.

During the pre-war period, the Government of Ukraine concluded production sharing agreements (PSAs) with the world's 10 leading multinational energy corporations. Two PSAs concerned unconventional onshore gas projects, while the third one concerned the development of the Black Sea deepwater shelf.

Natural gas from offshore fields and unconventional sources was to become the key to success. According to the forecast of IHS CERA experts in 2012, gas production in Ukraine after 2030 may exceed 73 billion cubic meters per year (see Fig. 3).

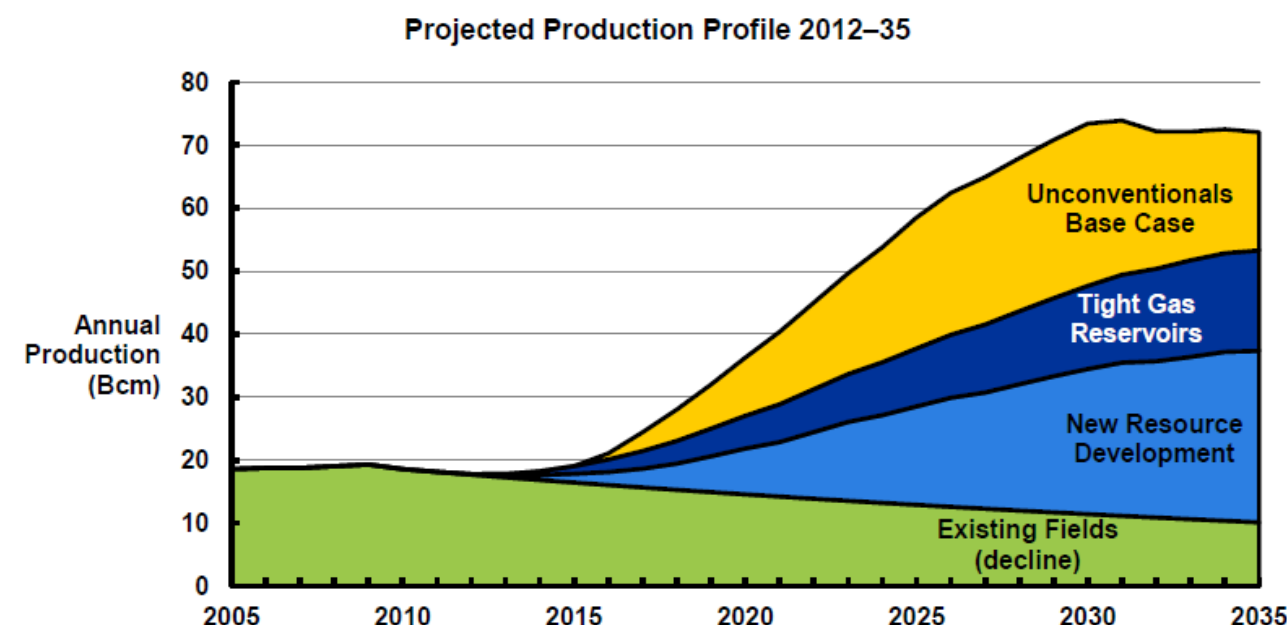


Figure 3. IHS CERA forecast on gas production prospects in Ukraine.

Source: Natural Gas and the Energy Future of Ukraine, 2012

The Ukrainian Black Sea sector could have fully met the country's hydrocarbon needs. According to the State Geological Survey of Ukraine, potential energy reserves (oil, natural gas) on the Ukrainian Black Sea shelf were estimated at 2.3 billion tons of conventional fuel (2.3 trillion cubic meters in gas equivalent), which accounted for 40% of all energy resources of Ukraine. Moreover, in contrast to onshore areas with unconventional gas deposits, where large-scale exploration work was yet to be

carried out, shelf development was more promising, since geological exploration in the adjacent Romanian Black Sea sector confirmed the presence of commercially available natural gas reserves. A consortium of international companies led by the world's leader American company Exxon-Mobil won the tender for the development of the Scythian section of the shelf.

According to the forecast model of 2012,<sup>5</sup> Ukraine could reach the mid-1970s lev-





Figure. Layout of promising gas-bearing areas in the Black Sea.

Source: <http://real-economy.com.ua/print/60690.html>

el of gas production in 2030. Under such circumstances, domestically produced gas would not only meet all the country's needs but would also be exported to Central and Eastern European countries, thus displacing Russian gas.

The main prospect was related to the development of deposits in the northwest sector of the Black Sea – between Crimea and Odesa region on the deepwater part of the shelf. In August 2012, a competition was successfully held for the conclusion of a PSA for the Scythian area. The winner was a consortium led by Exxon Mobil, whose competitor at the time was the

Russian Lukoil Overseas Ukraine B.V. However, the signing of the agreement with the consortium of winners took place neither in 2012 nor in 2013. On February 13, 2014, the deadline for signing the production sharing agreement, defined by law (Article 7 of the Law on PSA), formally expired.<sup>6</sup> Although in September 2013 in New York then Minister of Energy E. Stavytskyi signed an agreement<sup>7</sup> on sharing hydrocarbons with representatives of Exxon Mobil, Royal Dutch Shell, OMV Petrom, the beginning of Russian aggression against Ukraine, the occupation of Crimea and the seizure of marine deposits put paid to this promising international project.

### 1.3. RUSSIA'S ENERGY MOTIVE IN ITS AGGRESSION AGAINST UKRAINE

In Russia, American forecasts of Ukraine's growing gas production, both for conventional and unconventional natural gas, did not go unnoticed. Given this and Russia's traditional propensity to create anti-competitive and monopoly schemes, one of the motives for occupying Crimea was energy. Under such circumstances, considering the proximity of Ukrainian gas deposits to the EU, domestically produced gas would not only meet all Ukraine's needs, but would also be exported to Central and Eastern Europe, supplanting Russian gas. Thus, Moscow considered that in such a scenario Gazprom not only loses the Ukrainian market, but may also be somewhat sidelined in the markets of Central and Eastern Europe.

Therefore, the occupation of the Crimean Peninsula and the adjacent shelf zone enabled Russia to resolve a number of strategic issues:

- eliminating promising gas exploration and production projects in the Black Sea, initiated by Ukraine with the involvement of European and American companies, which had become a challenge for Russian state-owned companies;
- ousting the leading American and European oil and gas companies from the northern sector of the Black Sea, which are traditional competitors of Russian state-owned companies;
- complicating Ukraine's access to the main part of shelf gas deposits and promising hydrocarbon reserves in the Black Sea.

## 2. SEIZURE OF ENERGY ASSETS IN CRIMEA AND UKRAINE'S EEZ<sup>8</sup>

### 2.1 SEIZURE OF SHELF ASSETS OF CHORNOMORNAFTOGAZ

During the operation to overtake Crimea in 2014, the priority was to establish control over the energy assets of the Ukrainian peninsula. The key asset was Chornomornaftogaz with its shelf deposits outside the Autonomous Republic of Crimea. Thus, the armed aggression against Ukraine went far beyond the administrative borders of the Autonomous Republic of Crimea and Sevastopol.

On March 4, 2014, the occupiers seized the headquarters of Chornomornaftogaz in Simferopol and over the next ten days established their control within the corporate structure, including the appointment of the head of the company on behalf of Sergei Aksyonov, the self-proclaimed head of Crimea.

On March 14, servicemen of the 104th Assault Regiment from the 76th Air Assault Division of the Russian Airborne Forces landed at the Petro Hodovanets and Nezalezhnist jackup rigs.<sup>9</sup> On March 15, 2014, a landing operation was conducted on the

Arabat Spit in the Sea of Azov. A group of Russian paratroopers landed there to establish control over the Strilkove gas distribution station and deposit and remained there until December 11, 2014. The operation was then halted as the deposit was found to be of no strategic importance to Crimea's gas supply.

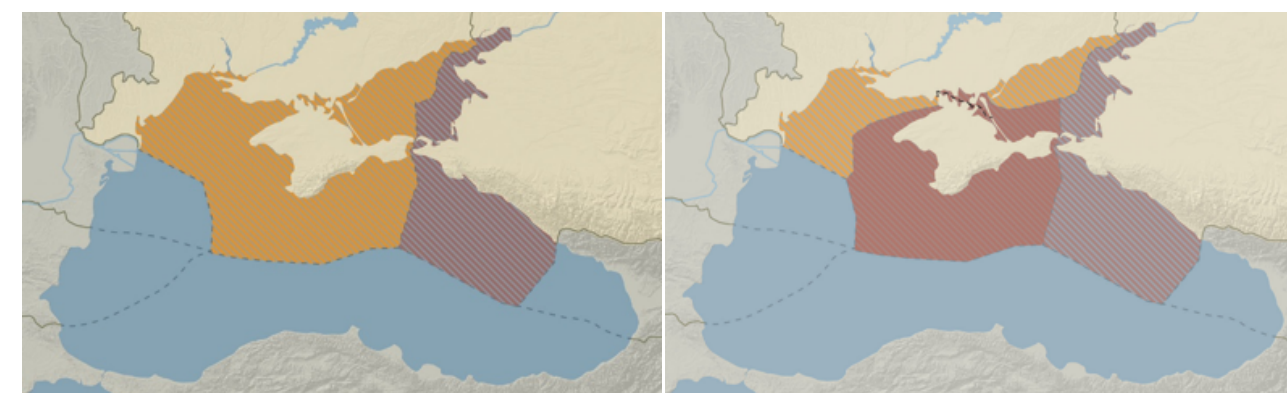
In addition to the newest jackup rig B-319 Nezalezhnist and B-312 Petro Hodovanets, the old Syvash and Tavryda jackup rigs and ships of the technical fleet located at the base of Chornomornaftogaz in the Black Sea port were also captured.

## 2.2 CONFIGURATION OF UKRAINE'S EEZ IN THE BLACK SEA: DE JURE AND DE FACTO

The exclusive economic zone of Ukraine before the occupation of the Crimean peninsula de jure and de facto looked the way it is shown in Map 1. After the occupation of the Crimean peninsula, the de facto configuration changed (see Map 2), which narrowed Ukraine's capacity to ensure its maritime security and conduct maritime activities in its EEZ.

Along with the loss of a significant part of the navy in Crimea, the occupation of most

of the sea area around Ukraine implies the need to build up defense capabilities.



Source: <https://www.blackseanews.net/read/183464>

In the temporarily uncontrolled marine areas, there are both operating gas and gas condensate deposits of the shallow shelf (up to 200 m deep) and prospective areas

for development in deep water (over 200 m), namely Scythian, Foros, Prykerchensk and Tavriia zones.



Strategy for developing the energy potential of the Black and Azov Seas. Analytical report.  
National Institute for Strategic Studies. Regional branch in Odessa. 2012



## 2.3 ILLICIT GAS PRODUCTION AND RUSSIA'S POLICY OF FORCE IN THE COASTAL PROTECTIVE STRIP (CPS) OF THE BLACK SEA

Russia's aggression in the northwest part of the Black Sea has led to the loss of Ukraine's valuable assets and control over shelf resources. In addition, Russia's increased naval presence off the coast of Odesa region poses a threat to shipping and requires the continued readiness of Ukraine's armed forces in the region.

Ukrainian mining platforms and jackup rigs are still under Russian control. During 2014–2020, the occupiers illegally drilled nine more wells at the Odesa gas condensate deposit. Illegal economic activity on the Ukrainian shelf is covered by ships of the Russian Black Sea Fleet and missile boats of the Coast Guard of the Russian Federal Security Service. Soldiers of the Russian special forces and marines are constantly on duty at the facilities themselves.

Over the time of the occupation, natural gas production at the gas and gas condensate deposits captured by the Russian Federation in Ukraine on the shallow shelf of the Black Sea and in occupied Crimea has decreased to pre-occupation levels. The reason is the lack of investment by Russian companies in the oil and gas sector, which are afraid of sanctions – an inevitable consequence in case of the corporate integration of assets of the fake

**Table 1. Statistics of illegal production of natural gas, gas condensate and oil, 2014–2021**

Year	Natural gas production, billion cubic meters	Oil and gas condensate production, thousands of tons
2014	2,10	67
2015	1,84	61
2016	1,67	53
2017	1,62	51
2018	1,60	48
2019	1,57	39
2020	1,60	37,8
2021	1,59	~38

State Unitary Enterprise of the “Republic of Crimea” “Chernomorneftegaz” in one of Russia's companies: Gazprom, Rosneft or even private firms.

During 2014–2020, the occupiers illegally drilled nine more wells at the Odesa gas condensate deposit.<sup>10</sup>

In total, over the period from March 2014 to December 2021 inclusive, illegal mining amounted to **14.7 billion cubic meters** of natural gas and... .. **thousand tons** of oil and gas condensate.<sup>11</sup> Comparatively, it can be noted that production is not growing but decreasing to the pre-occupation level with subsequent stagnation.



Figure. Pre-war planning of Ukrainian gas production Chornomornaftogaz vs. actual illegal production.  
Based on the data of the state-owned company Chornomornaftogaz JSC



### 3. POST-OCCUPATION RECONFIGURATION OF CRIMEA'S ENERGY SECTOR

After occupying Crimea, Russia faced serious problems with the energy supply on the peninsula, which had traditionally been energy-deficient.

The way out of the catastrophic situation was found in utilizing mobile gas turbine power plants (MGTPP). In the spring of 2014, 13 stations were installed (nine from the post-Olympic Sochi, four from Moscow region). In 2017, the number of mobile GTPPs in Crimea rose to 18 units with a total capacity of 405 MW. They were located near the substations 330/220/110 kV Simferopolska (Denisivka village), Sevastopolska (Shturmove village), Zakhidno-Krymska (Carienne village, Saky district). Most likely, the installations of the American company PW Power System were used.<sup>12</sup>

The general scheme of energy supply to Crimea by Russia was later approved by Moscow as follows: transfer of electricity from Russia through the Kerch power bridge and construction of additional generating capacity on the peninsula, which will use Russian gas to be transferred to Crimea through a new pipeline.



#### 3.1 TAMAN – CRIMEA ENERGY BRIDGE

Russia has proved technologically incapable of building the Kerch power bridge. It turned out that high-voltage submarine cables are not manufactured in Russia, just as there are no companies able to lay such cables. Chinese suppliers and contractors, including Jiangsu Hengtong HV Power System and Shanghai Foundation Engineering Group Co., Ltd., were to have been involved in the construction of the power bridge. As a result, four power cables with a total capacity of 800 MW from the Taman Peninsula of the Russian Federation were laid. However, this did not significantly improve the energy supply situation due to the low transmission capacity of power lines connecting the Kerch peninsula with central Crimea.

All Russian projects to transfer capacity to Crimea via the power bridge and create additional local generation will amount to a total of 2,225 MW, which is 1.8 times more than traditional supplies to Crimea from mainland Ukraine before 2016. It is clear that the capacity higher compared to the pre-occupation level is connected with the needs of the Russian armed forces on the peninsula and long-term plans to further amass them. This indirectly confirms large-scale plans for the deployment of additional military infrastructure, which will require significant amounts of energy consumption.

#### 3.2 TAMAN – CRIMEA GAS PIPELINE

Russia desperately needs to keep the stolen jackup rigs under its control. For Crimea, this modern and valuable equipment is one of the tools to ensure the gas self-sufficiency of the occupied Crimea. However, the extracted gas is not enough to meet the needs that have grown due to the introduction of new thermal generation facilities.

In December 2016, a 250-km gas pipeline with branches to the Simferopol and Sevastopol TPPs was put into operation. The gas pipeline from mainland Russia to Crimea is designed to cover gas shortages for all categories of consumers on the peninsula.

### 3.3 BYPASSING SANCTIONS: SIEMENS TURBINES IN CRIMEA

Efficient power generation in Crimea was enabled by the use of gas turbines from Siemens (Germany), which were supplied in circumvention of sanctions. This made it possible to put into operation new (March 2019) power units at Balaklavsk TPP and Tavriia TPP with a capacity of 470 MW each. Two turbines of 235 MW each are installed at both sites.<sup>13</sup>

Prior to that, a special operation was carried out for the purchase of turbines from

the German concern Siemens through a joint Russian-German enterprise with their subsequent covert relocation to Crimea. In so doing, the supreme authorities of the Russian Federation assured the German government that the turbines purchased from Siemens will not be transported to Crimea. Siemens has filed a lawsuit in Moscow, so the outcome was predictable. It turns out that a leading German company assisted the occupation authorities of Russia, a violator of international law.

### 3.4 MISUSE OF GAS INFRASTRUCTURE FOR MILITARY PURPOSES

The mining and drilling platforms of the Ukrainian state company Chornomornaftogaz captured by the Russian special forces in March 2014 during the operation to occupy Crimea became convenient platforms for developing forms and methods of conducting radio and radio technical reconnaissance of the Russian Black Sea Fleet using civilian maritime infrastructure in the northwest part of the Black Sea.

Russia has developed a comprehensive system for monitoring surface and underwater conditions in order to detect surface, underwater and low-flying air targets. During the third and fourth quarters of

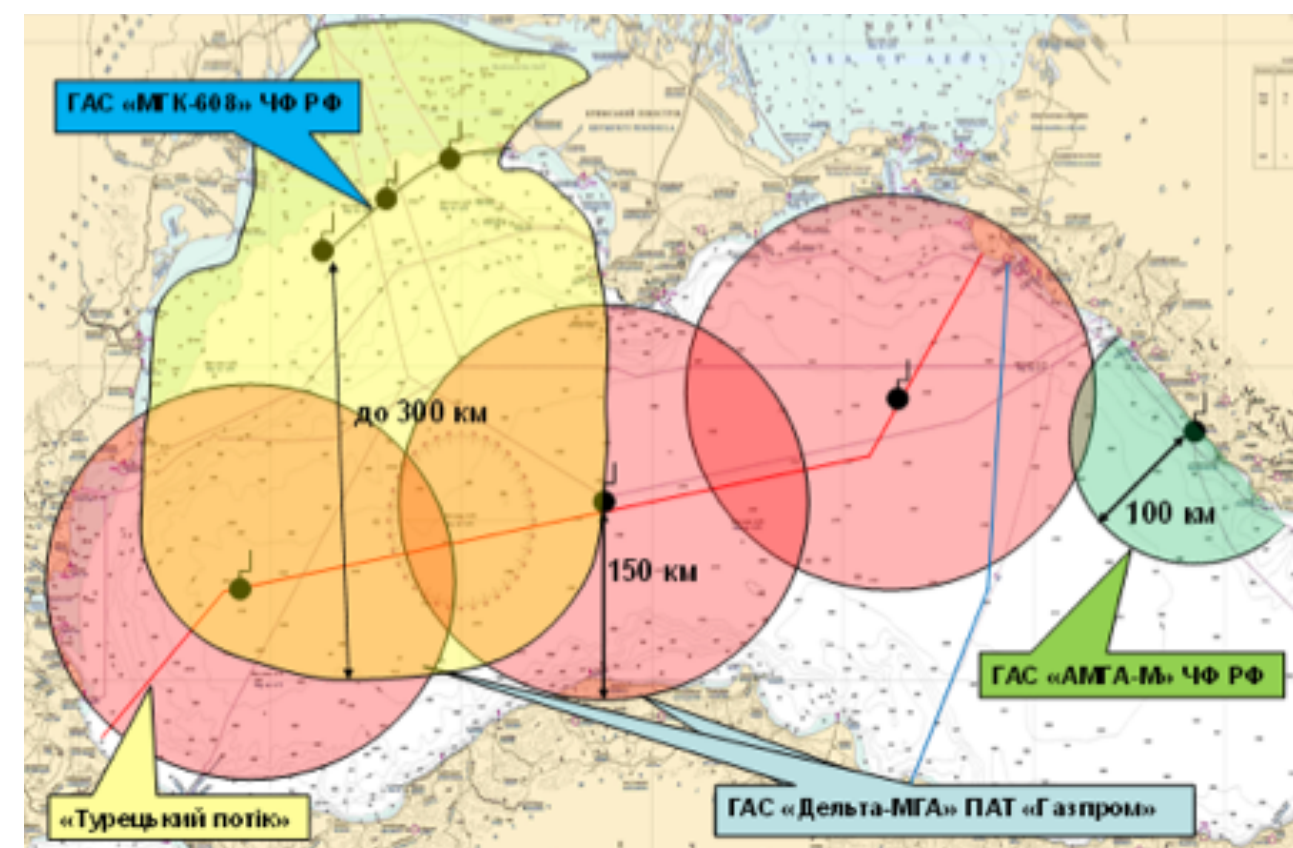
2016, the State Unitary Enterprise of the "Republic of Crimea" "Chernomorneftogaz" purchased and installed surface monitoring systems at the jackup rigs and offshore fixed platforms.

The system of monitoring the surface situation, particularly in the form of a radar station of centimeter range of the Neva BS type was deployed at the Tavryda jack-up rig, the offshore fixed platform 17 of the Shtormove deposit and the offshore fixed platform 4 of the Holitsynske deposit (three sets). The Neva-BS radar automatically captures and tracks up to 200 targets simultaneously. The range of their detec-

tion, depending on the size and conditions of radio waves, is up to 30 nautical miles (55.5 km) for large (cruisers, tankers), up to 15–20 miles (28–37 km) for medium (missile and patrol boats, pilot vessels) and up to 8 miles (15 km) for ultra-small targets, such as boats. In addition, a millimeter-range Neva-B radar kit and a television-optical system kit were installed at the Tavryda jackup rig. The said radar has the following target detection ranges: a combat diver's head – up to 0.5 miles (1 km), ultra-small targets – up to 4.3 miles (8 km), small targets – up to 8 miles (15 km), medium targets – up to 13.5 miles (25 km), large targets – up to 24.3 miles (45 km). The radar operates based on the data obtained through the channels of the international Automatic Identification System (AIS), a target selection mode and an automatic audible alarm, which goes off when the

border of the controlled area is crossed. The radar has the ability to communicate with optoelectronic systems.

Real-time information is provided to the Border Directorate of the Federal Security Service of the Russian Federation in Crimea and also enters the intelligence system of the Black Sea Fleet of the Southern Military District of the Russian Federation. Thus, the deployment of surface surveillance systems at Chornomornaftogaz's facilities in the exclusive economic zone of Ukraine provides Russia with an almost complete control over the traffic of commercial vessels and warships bound for Ukrainian ports and back. Given the fact that passive hydroacoustic stations are located in the corridor of the Turkish Stream gas pipeline, this provides the Black Sea Fleet with control over the Black Sea.





## 4. OVERCOMING THE CONSEQUENCES. HOW TO PREVENT FURTHER DAMAGE AND LOSSES

### 4.1 LITIGATION IN INTERNATIONAL COURTS

After the occupation of the Crimean Peninsula, state-owned Chornomornaftogaz JSC as a subsidiary of Naftogaz of Ukraine was re-registered in mainland Ukraine to continue its activities and work on the return of assets through international lawsuits.

In May 2017, a special law “On Amendments to Certain Legislative Acts of Ukraine on Stabilizing the Activities of the State-Owned Joint-Stock Company Chornomornaftogaz in Connection with the Temporary Occupation of Ukraine” was approved to guarantee the company’s activities and protect it from bankruptcy. The Prymorskyi District Court of Odesa ruled to arrest 27 vessels, four jackup rigs and 33 non-residential premises of Chornomornaftogaz,<sup>14</sup> which were illegally appropriated in the temporarily occupied territory of Crimea. In November 2018, the Verkhovna Rada adopted the Law of Ukraine No. 8338 “On Amendments to Certain Legislative Acts Relating to the Resumption of Activities of the

State-Owned Joint-Stock Company Chornomornaftogaz,”<sup>15</sup> whereby the procedure for resuming the company’s activities, opening and maintaining bank accounts, repaying debts and working with service providers was regulated.

The actions against **the captured jackup rigs** were challenged by the Ministry of Foreign Affairs of Ukraine, which sent a corresponding “Note of Protest.”<sup>16</sup> The Ukrainian side reminded of the damage to the state and the desire to restore justice through the court. However, the main problem with such litigation is the lack of precedent, since no one in Russia dared to engage in piracy on such a scale. In addition, this

marked the first time that the whole country was engaged in piracy. It will be difficult to find a court that has sufficient competence, political will and independence to consider such a high-profile case.

**For reference:** *The only more or less similar case is the one of the shareholders of the Yukos oil production company against Russia (Yukos Universal v. Russia). The first lawsuits in Russian courts against Yukos leaders began in 2003. Shareholders, including foreign ones, brought a case to the European Court of Human Rights (ECHR) and the Arbitration Institute of the Stockholm Chamber of Commerce in 2007, and the decision on the possible compensation was made by the Permanent Court of Arbitration in The Hague in 2014. All this time, well-known international courts first recognized shareholders' rights and then reversed their decisions due to lack of competence. The same happened with the decision of the Permanent Court of Arbitration: in just two years, it overturned its decision to pay \$50 billion to the affected shareholders. Most importantly, in January 2017, the Constitutional Court of the Russian Federation decided not to comply*

*with the decision of the European Court of Human Rights on the payment of fines as violating the norms of the Russian constitution. That is, legally speaking, Russia set a precedent for abandoning the decisions of international bodies. It is safe to predict that it will use this precedent in any subsequent lawsuit against Russia.*

The legal return of the illegally appropriated jackup rigs is quite challenging. The issues of the occupation of the Autonomous Republic of Crimea with the property of Ukrainian companies and the theft of property located in the EEZ of Ukraine outside the peninsula, albeit interrelated, are isolated cases. The issue of the occupation and the attempted illegal annexation is more complex and requires much more time to gather and examine materials in the international court. The jackup rigs, unlike the property on the peninsula, has an official owner represented by Naftogaz (as an investor in the purchase of equipment for state-owned Chornomornaftogaz JSC) and was located in the exclusive economic zone of Ukraine, not in the occupied peninsula.

#### What can be done:

1. The first step should probably be arrest in absentia, which was imposed on the seized drilling rigs on January 27, 2017. The decision was made by the Prymorskyi District Court of Odesa in the framework of criminal proceedings initiated on December 14, 2015 into the illegal movement and seizure of these rigs. (Regarding arrest – see source).
2. Another possible option is for Ukraine to lease the drilling rigs to large international companies on preferential terms only so that they would bear the legal burden. Unfortunately, even in conducive economic conditions, one should not expect a long queue to start disputes with Russia, which periodically ignores any international obligations or agreements.



The Petro Hodovanets and Nezalezhnist jackup rigs were arrested<sup>17</sup> due to the illegal seizure of property of Ukrainian state-owned enterprises. Both drills were towed on December 8–9, 2015 closer to the territory of occupied Crimea (near the Holitsynske deposit), where they were under cover of the Russian Coast Guard forces deployed on the peninsula. The operation to withdraw the drilling rigs from the Odesa deposit was carried out under the control of the Federal Security Service of the Russian Federation, whose border service had earlier sent the Amethyst patrol ship to the area where the platforms were located. The operation to move the platforms was probably covered by servicemen of the 25<sup>th</sup> separate special-purpose regiment of the General Staff of the Russian Armed Forces.

In addition to legal work, however, the case requires constant diplomatic activity. It is necessary to continuously remind the international community about the theft of installations. Silence around the incident is all Russia needs.

**In 2016, the state-owned Ukrenergo National Power Company initiated a lawsuit against Russia** over assets lost by the company due to the occupation and annexation of the Autonomous Republic of Crimea. Ukrenergo<sup>18</sup> is represented by the Swiss law firm Lalive, which has successful experience in supporting Ukrainian companies' claims against Russia in connection with the expropriation of assets. In October 2018, the Swiss Supreme Court ruled in favor of Ukrnafta (represented by Lalive) on compensation of \$50 million for 16 gas stations of the company.

Ukraine initiated arbitration proceedings against Russia in September 2016 in order to protect its rights as a coastal state in the waters adjacent to Crimea in the Black and Azov Seas and the Kerch Strait. On July 16, 2020, the Arbitration Court in Paris began considering a case concerning the illegal seizure by the Russian Federation of Ukrenergo's infrastructure facilities in the territory of the Autonomous Republic of Crimea.

## 4.2 SANCTIONS AND QUASI-SANCTIONS REGIMES

The imposition of sanctions against Russia for the occupation of the Autonomous Republic of Crimea led to Russia's Gazprom refusal to officially include Chernomorneftegaz<sup>19</sup> in the company's assets and hampered the large-scale expansion of hydrocarbon reserves in Russian-occupied deposits.<sup>20</sup> International sanctions have prevented the direct transfer of seized assets of energy companies to Russian companies.

**At the same time, Russia has achieved a strategic goal: blocking research and development of hydrocarbons on the Black Sea shelf of Ukraine with the participation of large foreign investors.**

The rupture of Ukraine's energy connections with the occupied peninsula has significantly increased the price of the occupation for the Kremlin. Russia uses the energy of occupied Crimea as a foundation to raise the latter's dependence on Russian infrastructure and resources.

At the same time, Russia's import of foreign-made energy equipment subject to international sanctions (as in the case of

Siemens) is being used by the Kremlin both to address the energy problems of occupied Crimea and to test the strength of the international sanctions regime by challenging its monitoring system.

Energy infrastructure, like transport (the Kerch bridge), is presented by Russia as strategic facilities in need of comprehensive protection, which justifies the Kremlin's further militarization of the occupied Crimea and tightening control of the Black Sea. Thus, the aggressor country is using the development of the energy complex of the occupied peninsula to increase the negative impact, which worsens the security of the Black Sea region.

### 4.3 SHELF DEVELOPMENT IN THE BLACK SEA IN THE RISK ENVIRONMENT

Despite the difficult security situation in the northwest sector of the Black Sea, the threat of Russia's naval blockade of Ukraine, the government is trying to resume prospecting and exploration and involve investors in shelf development. In conditions of high military and political risks, there is little hope for a large inflow of foreign investments.

By Resolution No. 1172 of November 25, 2020, the Cabinet of Ministers of Ukraine<sup>21</sup> granted Naftogaz of Ukraine the right to explore and extract oil and gas on the Black Sea shelf without holding an auction. Later, the Ukrainian Geological Survey<sup>22</sup> issued special permits to Naftogaz for 30 years for geological exploration with subsequent extraction of hydrocarbons in the Scythian and Dolphin zones located on the Black Sea shelf.

This was done in accordance with paragraph 8 of the Procedure for Granting Special Permits for Subsoil Usage, approved by the Cabinet of Ministers of Ukraine from May 30, 2011 No. 615 (as amended by the Resolution of the Cabinet of Ministers of Ukraine dated February 19, 2020 No. 124). Geographically speaking, it comprises the slope and the northern part of the Western Black Sea Basin within the EEZ of Ukraine.

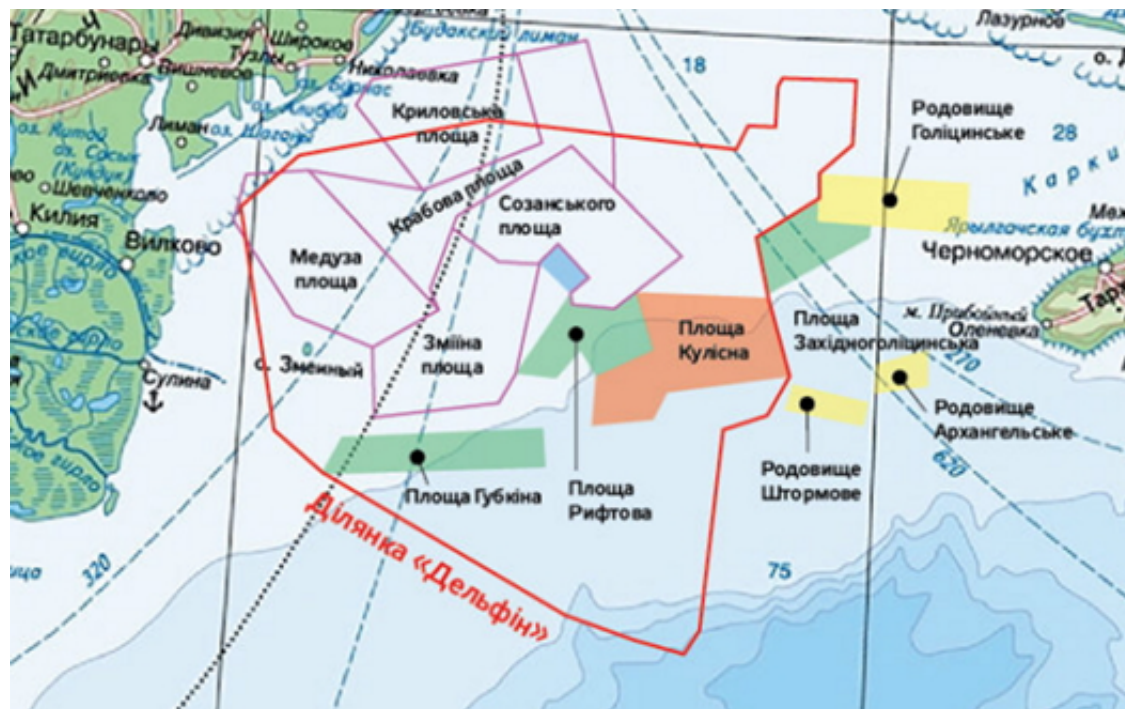


Figure. The map of the Dolphin zone. Source: [https://biz.censor.net/resonance/3136287/chomu\\_shelfov\\_rodovischa\\_delfnu\\_mojut\\_vdyiti\\_vrtualnim\\_nvestoram](https://biz.censor.net/resonance/3136287/chomu_shelfov_rodovischa_delfnu_mojut_vdyiti_vrtualnim_nvestoram)

Neighbors of Naftogaz of Ukraine here are Romanian OMV Petrom, Turkish TPAO and its partners. The Russian Black Sea Fleet and the Coast Guard of the Russian Federal Security Service, whose actions go unchecked in the Black Sea, control the captured neighboring deposits:

Odesa, Holitsynske, Arkhanhelske and Shtormove.

In August 2020, Turkey announced the discovery of the largest ever deposit in the Black Sea in the Tuna-1 zone bordering the Ukrainian section.



Source: <https://www.forbes.com/sites/arielcohen/2020/09/18/turkeys-new-natural-gas-find-in-the-black-sea-exciting-but-tricky-process-ahead/?sh=16616dd25a86>

If Turkey manages to put it into operation in 2023, as promised by President Recep Tayyip Erdogan, the country will be able to partly stop its gas imports from Russia and partially wean itself off Moscow's political influence.

its impunity? There is no clear answer to this question. There are risks. They can be minimized only by involving international partners. The first steps in this direction have already been taken. Naftogaz of Ukraine signed a number of documents:

Therefore, the Russian Federation will spare no effort both to prevent the success of Ukrainian shelf development projects and complicate the development of shelf gas production in Turkey and Romania.

Any investor, domestic or foreign, is faced with the logical question of whether Russia will interfere with geological exploration and drilling in shelf areas, relying on

- In February 2021, the Memorandum of Cooperation in the implementation of joint projects for gas exploration and production in Ukraine was signed with OMV Petrom (Romania). In particular, it is planned to analyze the possibilities for cooperation in promising oil and gas deposits in the Ukrainian part of the Black Sea.



- A Memorandum of Understanding on potential geological exploration of hydrocarbons in the Ukrainian part of the Black Sea was signed with the Israeli company Naphtha Petroleum Corp.

Both companies can become important partners, have technological experience on the Black Sea shelf and financial resources needed to implement such a large-scale project. The latter would also benefit significantly if the American oil and gas giant were to return to the Black Sea. It is commendable if Naftogaz of Ukraine is working in this direction, but only the synergy of corporate and government efforts can ensure success.

In addition, in the summer of 2021, the Norwegian company Petroleum Geo-Services (PGS) began geological research<sup>23</sup> in the Dolphin zone. However, modern re-

search vessels did not stay on the site for long. PGS Exploration suspended seismic surveys on the Ukrainian Black Sea shelf. According to A. Kobolev, former head of Naftogaz of Ukraine, “a serious failure has occurred in one of the most promising areas – at sea. A month or two ago, the Norwegian company PGS stopped seismic surveys and took its ships away from the Black Sea. Therefore, prospects of any discoveries in the Black Sea are extremely deplorable,” he said in an interview to Forbes Ukraine.

Although the possible reasons for this decision of the Norwegian company are not specified, it is easy to guess that in order to work on the development of the Black Sea shelf Ukraine and corporate structures should find ways to minimize the risks associated with the presence of the Russian Black Sea Fleet.<sup>24</sup>

## What to do?

According to experts of the Maritime Expert Platform, the Russian Federation is implementing a strategy to transform the Black Sea into a “Russian lake.” The occupation and the attempted illegal annexation of the Crimean Peninsula became the next stage of Russian expansion after the establishment of control over the Black Sea coast of Georgia in Abkhazia. The technology of establishing control over the Black Sea is carried out through the introduction of navigation restrictions and is being utilized by Russia for blockading the northwest sector and is directed against Ukraine and Romania for some H-Hour.

## Threats to Ukraine.

**Military threat-1** – a naval blockade of Ukraine by the Russian Black Sea Fleet, which will paralyze Ukraine's foreign trade and lead to an infrastructural collapse.

**Military threat-2** – seizure of Zmiinyi (Serpent) Island, control of the Danube Delta. The hybrid threat is the creation of obstacles through the projection of force for the development of new promising gas deposits on the Black Sea shelf, the obstruction of Ukraine and NATO in conducting the Sea Breeze naval exercises and the usage of the quasi-legal anti-access and area-denial (A2 / AD) zones.

# PROPOSALS

## 1.1. Closure of the territorial sea (12-mile zone) around the Crimean Peninsula.



## 1.2. Establishment of a restricted area in the northwest sector of the Black Sea from Constanta (Romania) to Skadovsk (Ukraine).

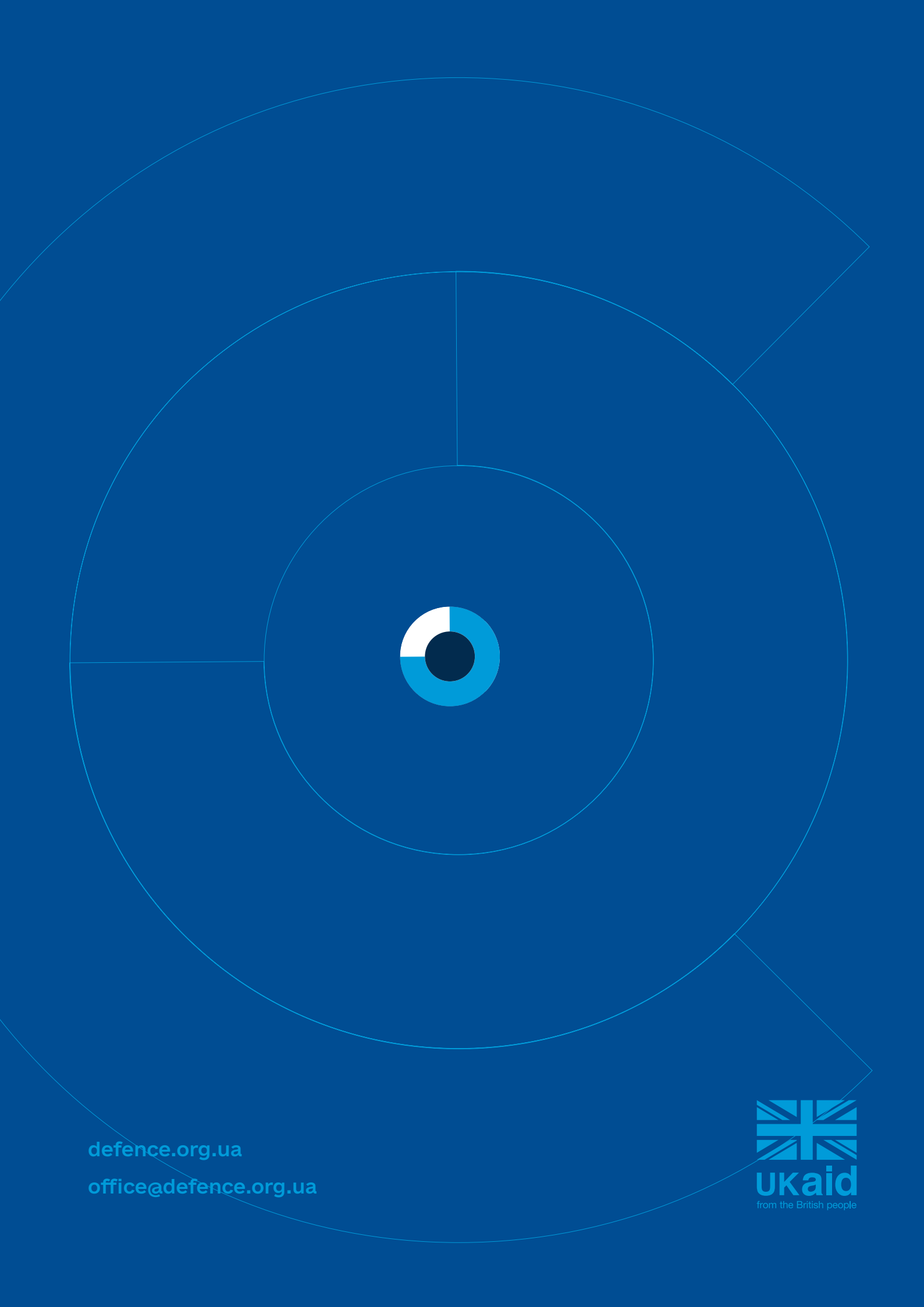


- 1.3. Promotion of NATO's military presence in the Black Sea, particularly the United States. Initiating and implementing naval and air patrols of the main route of merchant ships in the Black Sea from the Bosphorus in the general direction of Odesa, including the Black Sea from the Dnipro-Buh estuary (Ochakiv) to the Danube Delta (Vilkovo) and the Russian-occupied gas and gas condensate deposits in EEZ of Ukraine.
- 1.4. Deployment, together with the United States, of underwater sonar systems in the northwest sector of the Black Sea to monitor the activities of the Russian Black Sea Fleet and the Coast Guard of the Russian Federal Security Service.
- 1.5. Development and implementation, together with the United States, of a set of electronic warfare measures against sonar stations installed by Russia on the Black Sea bottom in the EEZ of Ukraine and in the corridor of the Turkish Stream gas pipeline.



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