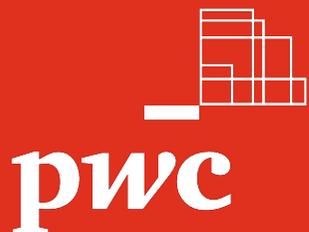


War in Ukraine

— Situational Awareness Briefing

20 December 2022



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Situational Awareness – Briefing as of 20 December 2022 (Summary)

Ukraine Crisis

The current geopolitical developments in Eastern Europe and the unprecedented attack on Ukraine are also an attack on our way of living and doing business together.

At the moment, no one can foresee all the consequences of this aggression. This is why urgent questions are now being asked in all areas of our social life. Also for companies this means far-reaching cuts and changes.

This Situation Awareness Briefing is provided for information purposes only by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft and will be updated regularly.

The overview to the right represents a summary of points along the following five dimensions:

- Overall Geopolitical Assessment
- Industry Special
- Forecast
- People
- Operations
- Finance



Overall Geopolitical Assessment

Winter has impacted the scale of military operations in Ukraine. Tactical attacks still occur but the cold temperatures have strained the strength of attackers and defenders as well as that of equipment. Russia still attempts to use the winter months to its advantage by attacking critical infrastructure across Ukraine to demoralize the population. // Meanwhile, the G7 price cap on Russian oil was officially launched early December and European governments seek alternative sources of oil and gas.



Forecast

Ending Zero Covid policies is expected to cause new a wave of the Pandemic in China. // G7 countries announced that they will establish a Donor Coordination Platform in order to better coordinate the international support for Ukraine. // The European Union agreed to a EUR 18bn aid package for Ukraine.



Operations (Focus: Cyber)

A cyber lab for the Ukrainian military was opened under the European Peace Facility. // The EBRD has approved a EUR 4.5mn grant to maintain internet connection across Ukraine. // Estonia is said to be one of Ukraine's top cyber security partners. // The EU is upgrading its cybersecurity law.



Industry Special: Metals and Chemicals

Exits of Western companies from the Russian market are causing delays in Russian chemical projects. // The Japanese government is seeking buyers for crude oil from the Russian Sakhalin-2 plant. // German chemicals producer BASF launches new factory in China.



People

The Council of the European Union adopted a decision on the non-acceptance of Russian travel documents issued in Ukrainian and Georgian territories occupied by Russia. // The EU will donate 30mn light bulbs and 800 generators to Ukraine.



Finance (Focus: Sanctions)

The European Union adopted the ninth sanctions package targeting Russia. // According to the media Turkey is emerging as a hub for evasion of Russia- related sanctions. // A number of Russian oligarchs filed lawsuits against the EU for the sanctions imposed on them.

For questions, comments or details, please contact Joint Crisis Center team: de_ukraine-crisis@pwc.com



Key takeaways

- Russian efforts around Bakhmut aim at improving the starting positions for an anticipated spring offensive
- Russia might be able to launch a large spring offensive once the 300,000 reservists are available
- Russian President Putin and his Minister of Defence, Sergei Shoigu, visited Belarus. Talks were held about military cooperation, and observers believe, Putin could pressure his Belarussian counterpart into supporting the Russia's invasion of Ukraine
- The G7 countries set the USD 60 price cap on Russian oil in early December
- Third countries that violate the embargo may be sanctioned
- A review of this mechanism is set for February 2023

Current topics

Current situation in the Russo-Ukrainian War

At the Kherson front Russian and Ukrainian forces continued with extensive artillery exchanges harassing identified positions, whereas at the Zaporizhzhia front no notable engagements occurred in the last weeks. Both sides concentrated their efforts in the Donbas. At Marinka, a small Ukrainian town west of Donetsk that is under attack since February 2022, Russian forces advanced into the center. Further north, west of Horlivka, Russian forces succeeded to occupy Novoselivka with a southern pincer move. A northern Horlivka pincer occupied Kurdiumivka and Osarjanivka. These attacks are threatening a group of settlements west of Horlivka (most notably Salisne, Druzhba and Derschynsk) with encirclement and seek to break through Ukrainian defenses that were set up in the aftermath of the 2014 Ukraine conflict. Even further north at Bakhmut both sides are engaged in an attritional battle over the approaches to the city. Russian army and Wagner forces are pushing into the city from the east, while Russian army units attempt to breakthrough north and south of the city. Particularly, Russian advances north of Bakhmut cut the road connection to Soledar. Soledar itself, a cornerstone position in the defense of Bakhmut, is currently also being outflanked from the north after Russian forces occupied Yakovlivka. Russian forces seem set to improve their positions or attempt to achieve a similar success like the Popasna breakout in May to set the stage for a spring offensive with the aim of unhinging the Ukrainian defensive front along the central Donbas. To counter this threat, Ukrainian reserves have been moved to the area, while Ukrainian artillery is attacking Russian deployment zones to hamper their movements. At the junction between the Kharkiv and Luhansk Oblasts Ukrainian forces continued their attacks south of Svatove and are attempting to cut the vital P66 highway in the area of Chervonopopivka. Russian artillery and missile strike campaign against critical infrastructures across Ukraine have also continued, seriously damaging the energy, water and road networks. In the coming months Russia will have about 300.000 troops available for offensive operations. It is likely that a large spring offensive will commence in the Donbas and the area of Kharkiv once those forces have completed training. The Russian arms industry is continuing to produce modern T-90M and upgraded T-72B3M variants to replace equipment losses. These are likely being massed for a larger spring offensive.

Oil price cap economic implications

On December 3, 2022, G7 members formally set the highly anticipated price cap on Russian oil at 60 USD per barrel. This price cap applies to oil which originates in or is exported from Russia. The embargo does not seek to prevent Russia exporting oil to third countries. Secondary sanctions that would target states besides the US and EU that circumvent the price cap are considered as an escalation tool in case the price cap fails to cause economic losses to Russia. A review if the 60 USD per barrel price cap is adequate and if secondary sanctions should be implemented is set to occur in February 2023. The EU's own oil embargo bans the import of seaborne crude oil from Russia, whereas in 2021, 45% of Russian crude oil exports flowed to the EU. The immediate effect of this embargo is to lower demand for Russian oil therefore reduce its the relative price. However, as oil markets are interconnected and as the EU enters global markets to find new sources for oil imports, it is likely that alternative buyers, such as India and China, will be found for Russian oil. For the global oil market, a price cap does not mean lower demand or larger supply. Russia may have to offer its oil at a discounted rate to developing countries that are likely to resell it to the global market in case of demand increases. The US has announced that it will sanction states that violate the price cap on Russian oil. Russia as a response announced that it will stop exports to those states applying it. As the US will have to restock its strategic oil reserve that it has reduced to fight inflation in the near future and with China opening-up earlier than planned to ease domestic protests in the wake of its zero-COVID policies it is likely that global demand for oil will increase. In December 2022, OPEC reduced the forecast to 380.000 barrels per day while keeping its 2 million barrel production reduction in place, citing geopolitical uncertainties. Meanwhile, European governments are scrambling to find alternative sources of oil and gas. According to a German banker, German diplomats were holding secret talks with Venezuela, Algeria, and, controversially, Iran.



Key takeaways

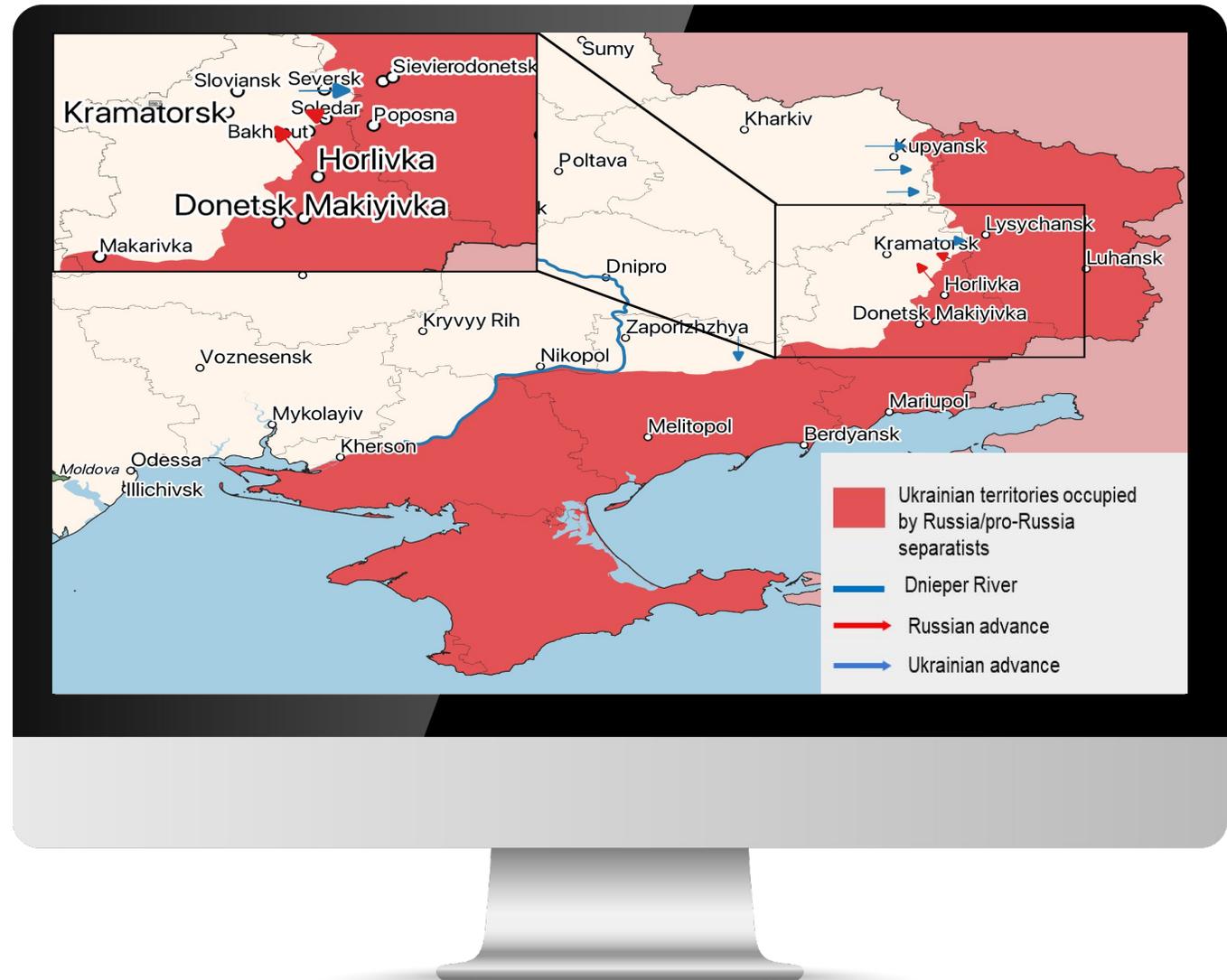
- Minor Russian territorial gains were made west of Donetsk, Horlivka and in the vicinity of Bakhmut and Soledar.

Selected upcoming events

- 17 January 2023: Economic and Financial Affairs Council of the EU
- 25-27 January 2023: Informal meeting of justice and home affairs ministers of European Council
- 17-19 February 2023: Munich Security Conference

Current Military Situation in Ukraine

(arrows indicate potential future Russian operations in the coming weeks)





General context

Russia's invasion in Ukraine impacts the global chemicals and metals markets, particularly in Central Europe. Both countries export steel and other metallurgical products and are significant suppliers of steel, iron ore concentrates, iron ore pellets, coal, merchant crude iron, merchant hot briquetted iron HBI, and direct reduced iron DRI. While China accounted for more than half (53%) of the world's steel production in 2021, Russia and Ukraine produced 5%, or 97mn tonnes of steel.

90% of steel plants in Ukraine have suspended operations: many are damaged or destroyed. For example, Azovstal and Illich Steel, both controlled by Metinvest, in Mariupol, are severely damaged and account for about 41% of Ukrainian steel production.

In addition to Central Europe, the Middle East, North Africa, Turkey, and the U.S. are affected, particularly by a lack of crude iron, DRI, and HBI. Russia accounts for 5.5% of world aluminium production and a similar share of world aluminium exports, making it the world's third largest producer after China and India.

Current topics

Exits of Western companies are causing delays in Russian chemical projects

According to a Russian central bank report which was obtained by Reuters, several projects in the chemical industry in the country are facing delays due to the exit of Western companies. When these enterprises left Russia in the wake of the invasion of Ukraine, they took with them the necessary expertise to finish several industrial projects. In addition to that, the economic isolation make it increasingly difficult to finish projects on time in Russia, as crucial equipment is hard to obtain. Among such projects is a complex for the processing of ethane-containing gas in the Leningrad region or, for example, the Amur Gas Chemical Complex in Russia's far east which had attracted USD 11bn and was scheduled to produce 2.3 million tonnes of polyethylene and 400,000 tonnes of polypropylene per year beginning in 2024-2025. Due to the sanctions the project is now postponed by at least one year.

Japan is seeking buyers of Russian oil to keep essential refinery running

The Japanese government is seeking buyers for ultra light crude oil from the Russian Sakhalin-2 plant. As demand for Russian oil has significantly decreased due to sanctions, the Japanese government seeks to stir demand for the Sakhalin- 2 plant, so that the plant can keep operating. The LNG coming from Sakhalin-2 is essential for the Japanese economy, but in order for the continued operation of the plant, by-products like ultra light crude need to be cleared from the plant's stocks. In the G7 price cap negotiations, Japan was able to convince its partners to exempt the Sakhalin-2 plant from the newly imposed price cap. The plant produces oil and gas and provides 9% of Japan's LNG imports. In order for Japan to have its energy needs covered, it needs buyers to step in and take the mixture of light oil and condensate called Sakhalin Blend off of the producer, hence Japan's initiative.

German chemicals giant BASF launches new China factory

With its EUR 10bn investment in China, Germany's biggest chemicals company, BASF, earlier this year announced the single biggest German investment in mainland China. The decision to make such a large-scale commitment in China had drawn criticism as major companies like Apple had begun to reverse course, reorienting their operations away from China. In early December, sections of the BASF plant in Pinghu were officially opened. There the company will produce automotive coatings made from renewable materials that will reduce the product's carbon footprint by 20%.

Preliminary Assessment

- According to the central bank of Russia, from January to September, investments in oil and gas production increased by 10.9%.
- Additionally, it stated that the realization of projects in Russia was unaffected significantly by the withdrawal of foreign investors and the suspension of activities of oil servicing firms.
- According to the industry minister, Japan chose to keep its interest in the new Russian operator of the Sakhalin-1 oil and gas project and requested the other members of the Japanese consortium to stay in order to maintain the country's energy security in November.
- The company plans to start operating a plant for the production of thermoplastic polyurethanes at the same complex in 2023.



General context

Considerations on implications for businesses along the PESTEL framework

| | |
|----------------------------|--|
| P Political | New wave of pandemic in China due to no covid restrictions. |
| E Economic | Donor multi-agency platform to assist Ukraine. Ukraine aid package from the EU. |
| S Social | Social related implications: e.g. refugee streams, labour market developments |
| T Techno-logical | Technology related implication: e.g. cyber threats and disinformation, IT infrastructure disruptions |
| E Environ-mental | Environment related implications: e.g. Resource scarcity, energy embargo |
| L Legal | Legal implications: Compliance with changing regulations, contractual obligations, etc. |

Current topics

Ending Zero Covid policies may cause new a wave of the Pandemic in China

China could be facing a new wave of Corona infections in the coming weeks. After intense protests over the past month, the Chinese government abandoned its long-held Zero Covid policy practically overnight. For the past two years, the Chinese leadership had refused to import foreign vaccines, and instead used domestically produced products that proved to be less potent. Further, vaccination rates especially among the elderly remained low, with only about 40% of the over 80-year olds having received booster shots. The Chinese healthcare system would have struggled to tend to the millions of patients that could have emerged and the government would have the citizen's trust if millions of elderly people were to die. Hence, absent potent vaccinations and sufficient medical care, Zero Covid policies and extended lockdowns were the next best option. However, as the country-wide protests led the government to abandon Zero Covid policies, a surge in Corona infections can already be seen. The country was not ready for an overnight re-opening and is already seeing shortages of PCR tests and medication.

G7 states will set up multi-agency platform to coordinate aid to Ukraine

At a conference on December 12, representatives of the G7 countries announced that they will establish a Donor Coordination Platform in order to better coordinate the international support for Ukraine. Since the war in Ukraine started in February this year, governments and international organisations have contributed billions of dollars in grants and financial support for Ukraine. The money is being used to alleviate immediate humanitarian needs as well as to rebuild the country's infrastructure. The new platform is intended to streamline the relevant processes and make it easier and quicker to disburse necessary funds. The platform is to be headed by a senior government official. Representatives from relevant nations are set to meet in January to drive the initiative forward.

EU agreed to a EUR 18bn Ukraine aid package

The European Union agreed on a EUR 18bn aid package for Ukraine. Previously, the Hungarian government had blocked the project because it was barred from accessing Corona relief funds due to rule-of-law violations. Hungary also dropped its opposition to a minimum effective corporate tax within the EU. In return, Brussels will unlock EUR 5.8bn from the Covid relief plan.

Preliminary Assessment

- In the next 83 days alone, relaxing the Zero Covid regulations is expected to result in between 167 mn and 279 mn additional cases and between 1.3 mn and 2.1 mn deaths, according to a British health data analytics firm.
- The G7 leaders committed to assist Ukraine in meeting its needs for winter preparation and support for civilian resilience. They agreed to maintain enlisting international assistance for Ukraine's critical short-term finance need.
- Additionally, leaders declared that they will call a meeting of the G7 finance ministers soon to talk about a coordinated budget assistance strategy for 2023, with a focus on the International Monetary Fund.



Key Considerations

Response measures may include the following:

- Scenario planning sessions to explore how the escalating situation could impact the organization and identify the risks and mitigating actions.
- “Table-top exercising” can be used to validate response structures if they are not already in operation.
- Ensuring that playbooks are in place for extreme but plausible scenarios such as loss of IT for an extended period and disruption to critical suppliers.
- Ensuring the ability to locate all personnel based in, or travelling to, regions of conflict and ensure appropriate steps are taken for their protection.

Current topics

Council of the EU will not accept Russian documents issued in Ukraine and Georgia

The Council of the European Union adopted a decision on the non-acceptance of Russian travel documents issued in Ukrainian and Georgian territories occupied by Russia. The decision comes as a reaction to Russia’s attempt to incorporate annexed territories and, by issuing Russian passports to local citizens, cause precedents that amount to de facto acceptance of the annexations. Reportedly this so-called “passportisation” is one of the tools by which Russia seeks to govern the post-Soviet space in what researchers have called “controlled instability”.

Visa-free travel for Georgia, Moldova and Ukraine: further steps needed to bring visa policy in line with EU policy

The EU Commission published its fifth report on its visa-free regime with Georgia, Moldova and Ukraine and the countries of the Western Balkans. According to the report, all countries concerned continue to meet the visa liberalisation requirements and made progress in addressing last year’s recommendations. The individual points for improvement for the respective countries refer to the fight against organised crime, money-laundering, corruption, and illegal migration. The report’s scope ended with the year 2021, hence the extraordinary migrational patterns due to the war in Ukraine are not reflected in the report.

EU to donate 30mn light bulbs and 800 generators to Ukraine

According to the president of the European Commission, Ursula von der Leyen, the European Commission is ready to allocate EUR 30mn, which will cover the purchase of almost 30mn LED lamps, “for energy savings”. It was also reported that the EU provided 14 large generators so that there was a constant power supply in the hospitals of the Donetsk, Zaporizhzhya, Dnipropetrovsk, and Mykolaiv regions. In addition, another 800 generators to other regions of the country.

Preliminary Assessment

- The EU’s decision refers to annexed territories in Ukraine as well as the Georgian regions of Abkhazia and South Ossetia, which had been annexed already in 2008.
- “Pasportisation” has been applied in the Moldovan region of Transnistria as well since 2002. As of 2020, 44% of the people in Transnistria held Russian passports.
- According to the EU Commission, all 3 nations need to continue to take more efforts to address diverse problems relating to the fight against organised crime, financial fraud and money laundering, as well as tackling high-level corruption and irregular migration.
- On December 13, the International Conference "Solidarity with the Ukrainian People", or the energy "Ramstein", took place in Paris. Representatives of 46 countries and 24 international organizations participated in it.
- The purpose of the energy "Ramstein" is to create a coordination mechanism for the energy recovery of Ukraine after Russia's attacks on critical infrastructure and civilian objects.



The EU is upgrading its cybersecurity law

The Digital Operational Resilience Act (DORA), which consists of a rule and a directive and aims to prevent and mitigate against cyber attacks, has been adopted by the Council of Ministers end of November. The law requires financial institutions to make sure they have reliable systems in place for business continuity, disaster recovery, and reporting significant technology security events.

As part of a system that allows European supervisory agencies to designate certain third-party service providers for regulation and subsequently monitor their compliance, DORA also extends direct regulation of big technology businesses to financial institutions.

Under new operational resilience requirements adopted by the EU, financial services businesses and the IT behemoths that supply them must demonstrate how swiftly they can recover from a cyber assault.

Observers noted that DORA's effects will extend beyond of the EU. According to Yvonne Dunn, who specializes in technology contracts for financial services, "Even though DORA will not apply directly in the UK, UK companies with business in Europe will be subject to its requirements."

Current topics

EU sets up a cyber lab for Ukrainian military

Early December, a cyber lab for the Ukrainian military was opened under the European Peace Facility. The EU has provided financing, as well as hardware and software. The lab will help enhance Ukrainian capabilities in the cyber domain and will equip the country's security forces to detect intrusions into information systems and fend off cyber attacks. According to the service, this lab will provide a platform for military cyber security training, improving skills using realistic scenarios and real-time simulations that will enable them to identify, track and defend against future cyber attacks faster and more effectively.

EBRD to support Ukrainian postal service to maintain internet connectivity in remote areas

The European Bank for Reconstruction and Development (EBRD) has approved a EUR 4.5mn grant to maintain internet connectivity across Ukraine. With the money, Ukrposhta, the Ukrainian national postal service will be able to buy satellite internet devices and power generators which will provide internet access and mobile charging points across the country. The project will cover 1,700 post offices in more than 450 cities and towns. Since much of Ukraine's power grid has been destroyed during the war, the new service will not rely on the national power grid.

This EBRD grant is an addition to the previous EBRD project signed in November 2020, which provided for Ukrposhta to receive a EUR 63Mn loan from the EBRD for the modernization of logistics infrastructure.

Estonia is one of Ukraine's top cyber security partners

Estonia has been one of Ukraine's most active allies during the ongoing Russian invasion, and has helped the country in multiple domains, ranking second as the biggest financial supporter of Ukraine measured by its share of GDP. The country has also been playing an integral role in Ukraine's cyber defense, helping the Ukraine to fend off Russian attacks on critical civilian infrastructure, among others. Estonia also heads a EUR 10.7mn initiative that was launched in March 2022 and is aimed at supporting Ukrainian cyber capabilities. Estonia has been a leading player in cyber defence with numerous successful companies in the industry.

Preliminary Assessment

- The lab will enable Ukraine to build and develop capabilities for effective cyber defense of the Armed Forces, identification of external interference in information systems, prevention and repulsion of cyber attacks, as well as general strengthening of capabilities in the field of cyber security.
- In October, during a visit to Kyiv, EBRD President Odile Renaud-Basso told President Volodymyr Zelenskyy that the EBRD will allocate up to EUR 3bn during 2022-2023 to support business in Ukraine and the functioning of its economy.



Key Considerations

Sanctions Screening Activities

- Screening solutions generate increasing number of alerts (especially banks must deal with the increased workload)
- Appropriateness and effectiveness of sanctions screening measures in identifying sanctioned parties and activities must be ensured. Complex ownership structures complicate the proper identification of involved parties (OFAC 50% rule)
- Trade transactions with Russia and Belarus must be reviewed

Sanctions Compliance Governance

- Sanctions Compliance Governance as a key requirement increasingly in the focus of regulatory authorities
- Robustness of Sanctions Compliance Management System and sanctions controls to counter the current and new sanctions regulations
- Adequateness of internal safeguards to prevent sanctions circumvention activities

Current topics

European Commission adopts 9th package of sanctions against Russia

On December 16, The European Union adopted the ninth sanctions package targeting Russia. The new sanctions seek to further limit the export of dual-use technology. According to the Council of the EU, this means that “key chemicals, nerve agents, night-vision and radio-navigation equipment, electronics and IT components” will no longer be traded freely, so Russia cannot use such goods in its war against Ukraine. In addition to that, the export ban on aviation components, aircraft engines and parts will be further implemented. This will go for manned as well as unmanned aircraft so as to limit Russia’s ability to conduct drone strikes. Further measures are directed at Russia’s banking system, its broadcasting industry and large media outlets, the energy and mining industry as well as consulting services.

Reportedly Turkey is emerging as a hub for evasion of Russia-sanctions

According to a Reuters investigation, Turkey plays an important role in the evasion of Russia-related sanctions. Formerly Russia-bound exports from the EU are now being redirected to Turkey, from where the goods are then further transported to Russia. This is possible because Turkey does not enforce many of the sanctions levied against Russia after its invasion of Ukraine. According to the investigation, USD 2.6bn worth of electronic components and computers flowed into Russia between the February and October 31, despite Western sanctions aimed at stopping the export of advanced technology to Russia. Many such goods, like US-manufactured chips, were found in Russian weapons systems used in Ukraine.

Russian oligarchs reportedly sue the EU over sanctions

According to several media reports, a number of Russian oligarchs filed lawsuits against the EU for the sanctions imposed on them. 61 lawsuits have already been filed in this context at the European Court of Justice in Luxembourg. The plaintiffs claim they have been falsely linked to Russian President Putin. Two prominent oligarchs, Grigorij Bereskin and Gennadij Timtschenko, reportedly sue over an alleged reputational damage as they had no connection to the ongoing war in Russia.

Preliminary Assessment

- In particular, sanctions will be applied to 168 additional subjects related to the Russian defense-industrial complex.
- To avoid the circumvention of the sanctions, the list also includes some Russian-controlled organizations based in annexed Crimea or Sevastopol.
- However, it is said that in view of the EU’s position on the fight against food insecurity around the world, as well as in order to avoid disruptions in the payment channels for agricultural products, it was decided to introduce new relaxations that allow the unfreezing of assets and the provision of funds and economic resources to certain individuals, which play a significant role in international trade in agricultural and food products, including wheat and fertilizers, prior to their listing.
- The list of plaintiffs includes the former owner of the London football club “Chelsea” Roman Abramovich, as well as the head of “Alfa Group” Mykhail Fridman. Abramovich demands EUR 1mn “as compensation for non-material damage”, claiming he would donate the compensation to victims of the war in Ukraine.

General remarks



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