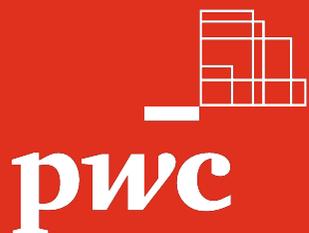


War in Ukraine

— Situational Awareness Briefing

9 August 2022



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Situational Awareness – Briefing as of 9 August 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

Ukraine attacked the Izyum salient to thwart the risk posed to Sloviansk. At Kherson, multiple successive minor Ukrainian counterattacks have secured the northern approaches to the city, but massive Russian reinforcements in the south and southeast indicate that any UAF offensive will be met with strong opposition or that a major offensive by Russia is likely.



Forecast

According to Leibniz Institute for Economic Research a trade war with China might cost Germany at least a 0.81% decline in GDP as the two countries exchanged goods worth 245 billion EUR in 2021. Whilst some sectors could profit such as the textile sector. However, most sectors would suffer: especially the car industry, with potential value-chain losses of approx. 8.4 billion USD.



Operations (Focus: Cyber)

Ukrainian officials claim that intensified Russian hacker attacks prior to the start of the open war gave Ukrainian authorities time to adapt the IT infrastructure which would already be paying off. The argument goes that as Russia anticipated a fast military victory there was no need for having backup options in the cyberspace but use most available means in advance to make the military intervention more smooth. This would now manifest itself in declining retaliatory strikes to Ukrainian IT attacks.



Industry Special: Automotive - update

Reportedly Chinese company Contemporary Amperex Technology (CATL) puts on hold its plan to build a plant in the US. CATL is the world's largest maker of batteries for electric vehicles. CATL had been looking at potential sites in the US states of South Carolina and Kentucky to build an EV battery plant to supply Ford and BMW.



People

Amnesty International said that the Ukrainian military is endangering the civilian population by creating bases and placing weapons in schools and hospitals. On July 29, 53 Ukrainian prisoners were killed in the colony in Olenivka. On June 28, Bulgaria declared 70 Russian diplomats undesirable persons due espionage activities. On August 4, Latvia has suspended the issuance of visas to Russians.



Finance (Focus: Sanctions)

The European Union has decided to renew its sanctions against Russia for another six months until end of January 2023. With the formally taken decision the sanctions introduced 2014 during the Crimean crisis and significantly expanded after Russia's invasion of Ukraine remain effective.

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



Key takeaways

- Russian forces continue to push along the entire Seversk-Soledar-Bakhmut line in the direction of Sloviansk. Ukrainian forces pushed into the Izyum salient to stall the northern threat to Sloviansk. Massive Russian troop concentrations are recorded in the southeastern sector.

Current topics

Current situation in the Russo-Ukrainian War

The Kharkiv front has remained static with limited exchange of territory. Despite few major clashes being reported, losses along the front of Ukraine's second largest city remain high for both sides. The Ukrainian army pushed into the salient towards Pasika and penetrated the staging area of Russian forces that were preparing for a push to the south towards Sloviansk. As a result, extremely difficult and complex tactical engagements have developed, transforming the area into another meat grinder. This move has stalled Russian preparations for an attack toward Sloviansk from the north for now. In the east, along the entire Donbas front area, Russian forces continue to push along the entire Seversk-Soledar-Bakhmut line. Major engagements are currently being waged in the outskirts of Bakhmut and in Soledar. Once occupied, the Russian forces are likely to swiftly advance west towards Sloviansk and Kramatorsk. The attacks to encircle the city of Avdiivka continue. In the Russian narrative, such operations are politically relevant as Ukrainian forces can bombard civic centers, supply dumps and critical infrastructure in the two breakaway republics from these areas. Russia's inability to prevent such attacks increases the pressure on Moscow and strains the loyalty of its satellites. In the southeastern and southern area of operations minor Russian and Ukrainian attacks have led to exchange of territory. The situation is similar along most of the front line in the Zaporizhzhia and Kherson Oblasts. However, recent reports indicate massive Russian troop movements in the Zaporizhzhia Oblast that either indicate the initiation of a large-scale offensive operation towards Pavlohrad to support the attacks towards Sloviansk and Kramatorsk or to thwart the anticipated Ukrainian counterattack in the Zaporizhzhia and Kherson Oblasts. The current focus of Ukrainian efforts is directed towards Kherson, but no success was achieved in the last two weeks. It appears that the Ukrainian forces lack the reserves and materiel to conduct a strategic counter push. Major operations are still expected to commence at the end of the summer campaign season.

Escalation of US-Chinese relations over Taiwan

A visit of speaker of the US House of Representatives Nancy Pelosi to Taiwan, the highest-level U.S. official to visit the island since 1997, has enraged China. After landing Pelosi reaffirmed US solidarity and support for Taiwan as the island. Pelosi reaffirmed the US view on the One China Policy, guided by the Taiwan Relations Act. China has reacted aggressively to the visit, conducted large-scale military drills in the Taiwan Strait and a demonstration of force along the maritime and airspace borders. The US recognized the People's Republic of China (PRC) as the sole government of China and de-recognized the Republic of China (ROC) in 1979. However, the US did not recognize Chinese sovereignty over Taiwan. The US and the PRC were willing to go forward with diplomatic recognition despite their differences on this matter. To this day the US recognizes the PRC as the sole legal government of China but only acknowledges the Chinese position that Taiwan is part of China. Thus, the United States maintains formal relations with the PRC and has unofficial relations with Taiwan. The "one China" policy has subsequently been reaffirmed by every new incoming U.S. administration. Congress passed the Taiwan Relations Act in 1979 to protect the significant US security and commercial interest in Taiwan. In a secret communiqué the US also gave six assurances to Taiwan. Those are: (1) The US has not set a date for ending arms sales to the ROC; (2) The US has not agreed to hold prior consultations with the PRC regarding arms sales to the ROC; (3) The US would not play a mediation role between the PRC and the ROC; (4) The US will not revise the Taiwan Relations Act; (5) The US will not alter its position regarding sovereignty over Taiwan and; (6) The US will not exert pressure on the ROC to enter negotiations with the PRC. In the coming weeks intensive rhetoric, claims and counterclaims by China and the US, and violations of airspace boundaries as well as maritime borders are to be expected. Incidents between US and Chinese vessels while the former are conducting freedom of navigation operations in the South China Sea, Taiwan Strait and other disputed waters as well as power demonstrations of China with large-scale military drills and maneuvers that include amphibious assets to showcase its determination and underline its demands are likely. As Taiwan is a fortress island arming and training to repel an amphibious landing for decades, an invasion or larger military incident is unlikely due to the non-existent time for preparation. However, further deterioration of Chinese-Western Relations and trade is to be expected.



Key takeaways

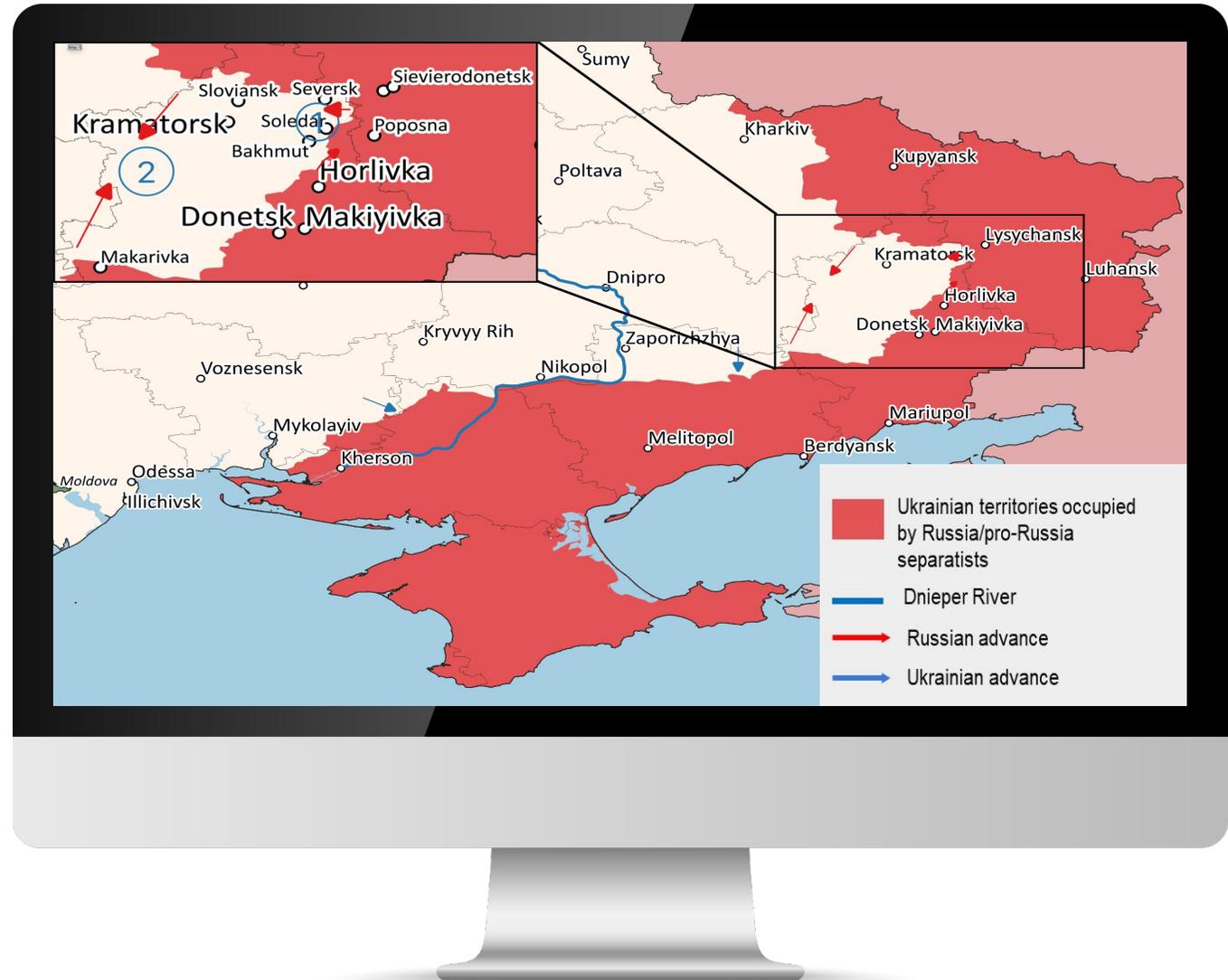
- Ukrainian forces pushed into the Izyum salient, while Russian forces continue their steady advance along the entire northern Donbas.

Selected upcoming events

- 20 August:** Deadline for Greece to Make USD 3.5 bln payment to European Central Bank
- 29-30 August:** (EU) Informal meeting of defence ministers
- 31 August:** (EU) Informal meeting of foreign affairs ministers
- 9-10 September:** (EU) Informal meeting of economic and financial affairs ministers

Current Military Situation in Ukraine

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





General context

The automobile industry is highly dependent on complex global supply chains and access to global markets. Risks thus emanate from supply chain disruptions and trade barriers. Both factors are shaped by geopolitical developments. Supply chain and trade disruptions and may limit growth prospects and thus also inhibit the potential for technological innovation (i.e., regarding sustainable drivetrain technologies or autonomous driving).

A lack of progress regarding sustainable drivetrain technology may affect political decisions in regard to the promotion of public vs. private mobility, affecting car manufacturers' business opportunities.

Current topics

Volkswagen allegedly plans to sell Russian Kaluga plant

Reportedly Volkswagen is looking to sell its car assembly plant in the Russian city of Kaluga. A Kazakh automaker Asia Auto could be a potential purchaser according to a publication in Russia's newspaper Vedomosti end of July (with reference to an unnamed source familiar with the company's intentions). Allegedly Volkswagen would finalize its plans for the facility by the end of the year. In an emailed response to Reuters, Volkswagen spokesman Nicolai Laude said: "We are constantly monitoring current developments and are considering various future scenarios. However, no decision has been made."

Leading Chinese electricity battery producer puts on hold its plan to build a plant in the USA

Reportedly Chinese company Contemporary Amperex Technology (CATL) puts on hold its plan to build a plant in the US until September - October this year. CATL is the world's largest maker of batteries for electric vehicles (EVs) and the owner of a leading battery technology. Vehicles using its battery pack can go more than 900 kilometers per charge. As of May this year, CATL had the largest market share in China's EV battery market of approx. 45%, and as of 2021, it had a global market share of 32.6%.

As reported by media CATL had been looking at potential sites in the US states of South Carolina and Kentucky to build an EV battery plant to allegedly supply Ford and BMW.

China's ban on natural sand export to Taiwan

China halted natural sand exports to Taiwan citing excessive pesticide residue which was detected "multiple times" on products since last year. This suspension might have an impact on the latter's chip manufacturing industry. Taiwan currently consumes around 90 MMT of natural sand in a year, among which one-third are from China as the transportation costs are low. Quartz sand – a type of natural sand – is an important raw material for chip manufacturing. However, according to CNN Taiwan officials said China's sand export suspension would have a "limited" effect and that Chinese sand accounts for "less than one percent" of its total demand.

Preliminary Assessment

- In June 2021, Volkswagen was Russia's fifth most popular car brand, selling tens of thousands of new vehicles a month.
- Along with most other major carmakers, Volkswagen announced that production at its Russian sites would be suspended in March 2022 (Kaluga and Nizhny Novgorod)
- Reportedly, by May, only two of Russia's 20 car plants were still working, (at reduced capacity). For instance, as reported by media, satellite images of the lot behind the Ford car plant in St Petersburg where new cars are stored allegedly showed it to be empty in July.



General context

Considerations on implications for businesses along the PESTEL framework

P Political	Companies in China distance themselves from geopolitical tensions over Taiwan
E Economic	Mixed economic outlook for China; Turkish metals exports growth amid Russian requests
S Social	Social related implications: e.g. refugee streams, labour market developments
T Technological	Technology related implications: e.g. cyber threats and disinformation, IT infrastructure disruptions
E Environmental	Environment related implications: e.g. Resource scarcity, energy embargo
L Legal	Legal implications: Compliance with changing regulations, contractual obligations, etc.

Current topics

China trade surplus buffers domestic softened demand

China's trade surplus was on a all time high in July 2022 of USD 101 bln, the same month in 2021 that number was USD 56.6 bln. Normalizing production activity Yangtze River Delta, a major Chinese foreign trade club, has been identified as a main driver after the Omicron lockdown had been stopped. The weakened Chinese currency is also reported to have pushed foreign demand for Chinese productions and services which was mainly driven by Southeast Asia, Europe, and Russia. In 2022, the trade accounted for a third of Chinese GDP growth until now and had employed a quarter of Chinese labor force last year. These characteristics and developments soften the impact of weak domestic demand so far. Rising interest rates and inflation may impede international demand which puts this buffer under threat.

Reportedly companies in China are distancing themselves from geopolitical tensions over Taiwan

Reportedly companies in China are distancing themselves from geopolitical tensions over Taiwan following last week's visit to the island by the speaker of the US House of Representatives Nancy Pelosi. For instance, Foshan Haitian Flavoring and Food Co, China's largest soy sauce maker by sales, issued an apology, stating it had fired an unidentified employee who attracted social media attention with a private post that allegedly celebrated Pelosi's visit. In a parallel development, Taiwanese chip maker United Microelectronics Corp (UMC), distanced itself from its founder Robert Tsao, who last week reportedly pledged to donate USD 100 mln to help Taiwan bolster its defences, after his comments were pilloried by Chinese social media users. Chinese state media have reportedly issued warnings, that companies should consider their access China with respect to the Taiwan situation and visit of Nancy Pelosi.

Turkish metals exports grow amid interest from Russian companies and from EU companies seeking to sell to Russia via Turkey

As reported by Reuters, Cetin Tecdelioglu, head of the Istanbul Ferrous and Non-Ferrous Metals Exporters' Association (IDDMIB), said that Russian demand for Turkish products had significantly increased in the last months. Amid Western sanctions Russia could no longer source from European companies and Turkish companies had received enquiries from European businesses about supplying Russia via Turkey. He did not name the mentioned European businesses. "What they (Russia) cannot buy from Germany, Italy and France, they are buying from us. Separately, a lot of EU companies are planning to sell their products to Russia via Turkey," he told reporters last week. Turkey's ferrous and non-ferrous exports totalled approx. USD 500 mln in the first seven months of 2022, according to IDDMIB data. This represents a rise of 33% from a year ago.

Preliminary Assessment

- According to Leibniz Institute for Economic Research a trade war with China might cost Germany at least a 0.81% decline in GDP as the two countries exchanged goods worth EUR 245 bln in 2021. Whilst some sectors could profit such as the textile sector. However, most sectors would suffer: especially the car industry, with potential value-chain losses of approx. USD 8.4. Further, manufacturing industry might have losses amounting to USD 5.2 bln and transport equipment producers might lose around USD 1.5 bln.
- Authors of the study point out that extensive relocation of production sites to Germany might cost up to 10% of GDP. It is recommended to build up alternative supply chains in order to reduce dependency on business partnerships in countries with authoritarian regimes.



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

53 killed Ukrainian prisoners

On July 29, the Russian media reported on the shelling of the colony in Olenivka, Donetsk region, where Ukrainian Azov prisoners were kept. Russian media claimed shelling by the Ukrainian military. The Ukrainian side denies the accusations, stressing that the strikes were carried out by the Russian Federation to cover up mass torture of prisoners. In their turn, specialists of the International Intelligence Community InformNapalm note: "Probably, the Russian Federation committed a grave war crime - the mass murder of prisoners. The information needs to be carefully checked and can be a cover for other criminal actions of the Russian Federation." According to preliminary estimates, at least 53 soldiers were killed in the colony.

Latvia has suspended the issuance of visas to Russians

Latvia has suspended the issuance of visas to Russian citizens. This was reported on August 4, at the Latvian Embassy in the Russian Federation and at the Latvian visa center. "The Latvian Embassy in Russia has suspended the acceptance of visa applications for citizens of the Russian Federation for an indefinite period," the diplomatic mission said on Twitter.

The embassy's website specified that the decision was made "in connection with the international situation." The only exception is the need to attend the funeral of a close relative

China's wealthy are losing an escape way to Europe

As the country's Covid-Zero policy has hampered economic development, more affluent Chinese are seeking to emigrate or at least have backup plans. 10,000 high-net-worth individuals, according to investment migration consultant Henley & Partners, are attempting to withdraw USD 48 bln from China this year. Some people have previously utilized the golden visa scheme as a means of emigration. Currently provided in some form by 10 member states, residency and citizenship by investment schemes have come under growing fire from the EU, which has previously forced Cyprus and Malta to abandon their golden passport projects. Portugal's application procedure necessitates a face-to-face interview, which has become impossible due to Covid travel restrictions in China.

The once-popular programs are under pressure from both directions, and 2022 looks to be the first year in which Chinese investors aren't the largest group receiving Portugal's golden visas.

Preliminary Assessment

- The UN is creating a fact-finding mission to investigate the murder of dozens of prisoners of war in the Olenivka prison. The mission was created in response to requests from Russia and Ukraine.



Key considerations

Detecting a cyber attack:

- Ensure centralized log collection and monitoring capability to boost the ability to promptly detect the threats and investigate incidents
- Implement monitoring for behavioral evidence or network and host-based artifacts from known state-sponsored actors in Russia

Responding to an incident:

- Immediately isolate breached systems
- Secure backups
- Collect and review relevant logs, data, and artifacts
- Consider soliciting support from qualified specialists to provide subject matter expertise
- Report incidents to authorities (if applicable)

Mitigating risk of incident occurrence:

- Ensure proper training for staff regarding incident detection, reporting and response
- Ensure appropriate number of IT security personnel
- Prepare a Cyber Incident Response and Resilience Plan, as well as a Continuity of Operations Plan

Current topics

Ukrainian government claims declining threat of Russian-affiliated cyber attacks in the short to mid-term

Ukrainian officials claim that intensified Russian hacker attacks prior to the start of the open war gave Ukrainian authorities time to adapt the IT infrastructure which would already be paying off. The argument goes that as Russia anticipated a fast military victory there was no need for having backup options in the cyberspace but use most available means in advance to make the military intervention more smooth. This would now manifest itself in declining retaliatory strikes to Ukrainian IT attacks. Ukraine maintains alert with special focus on government operations, energy companies, financial services and telecom providers.

Cyber threats may undermine work of US election workers – Taiwan experiences increased cyber attacks in light of Pelosi visit

The US State department is pushing to increase its contribution to international technology and cybersecurity policy. It would connect agencies, help allies integrate secure infrastructures, and educate diplomats.

Speaker of the US House of Representatives Pelosi's visit in Taiwan was accompanied with increased cyber attacks. Taiwan's presidential office website was offline, the National Taiwan University website has been hacked and increased "suspected inauthentic news sites" and social media personas criticize the US and promote China.

A senior adviser for the Cyber and Infrastructure Security Agency argues US states might not have enough election workers as more than 1000 threats have been reported over the past year which have led to one conviction as of now.

UK parliament closes TikTok account

The UK parliament closed its TikTok account a week after its launch as Members of Parliament raised concerns the app was used for spyware. The UK has been increasingly pushing social media as a means to promote governmental content – e.g. the secret service used twitter for Ukraine insights.

Preliminary Assessment

- Despite indicators on how cyber security may develop in countries such as Ukraine and Taiwan the developments may change fast which gives affected parties little room for dedicating less resources to respective IT security. Reversely it may indicate a change in strategy or target of the attackers.
- Whether US electoral workers can be successfully protected against cyber threats may have strong implications for how similar organized international efforts can be sustained.
- Social Media platforms are increasingly leveraged by security sensitive infrastructures. These infrastructures may require additional transparency and security measures but also give respective organizations that are allowed to offer the service additional public legitimacy for its business.



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

New Russia-related sanctions taken by the West

The European Union has decided to renew its sanctions against Russia for another six months until end of January 2023. With the formally taken decision the sanctions introduced 2014 during the Crimean crisis and significantly expanded after Russia's invasion of Ukraine remain effective.

In line with the EU's latest measures, Switzerland sanctioned Russian gold and gold products or related services. Transactions linked to agricultural products and oil supply to third countries remain however excepted. Equally to the EU's proceeding, the assets of Russia's largest bank Sberbank have been frozen and the entity banned from providing funds or technical services.

Last week, Britain added 42 new targets under its regime in a new wave of sanctions, now comprising more than 1,100 individuals and more than 100 entities. The listed individuals entail regional governors across Russia as well as officials imposed by the Kremlin in the Luhansk and Donetsk provinces. Likewise two former board members of the Russian oil company Rosneft have been added again on the list, as the British government had gathered sufficient evidence for a relisting. The affected individuals are now subject to travel bans and asset freezings.

Canada also updated and extended its sanctions listings by adding another 43 military officials and 17 entities to a total of now more than 1,150 individuals and entities affected.

Also the United States announced in their latest round of sanctions, restrictions on 893 Russian officials and members of the military as well as 24 Russian defense and technology companies. Among the targets is also one of Russia's largest steel producers, MKK, and former Olympic gymnast and the current head of a pro-Kremlin group of media organisations, Alina Kabaeva. According to the U.S. Treasury Kabaeva is allegedly having a close relationship with Russian President Vladimir Putin.

Western sanctions to allegedly hinder delivery of Nord Stream 1 gas turbine

In the escalating energy standoff, German Chancellor Olaf Scholz stated mid of last week that there is no reason to hold up the return of the turbine being fully operational after its servicing in Canada. Russia is accused by European governments to throttle the gas supply through Nord Stream 1 to 20% of capacity on the basis of spurious pretexts as a countermeasure for Western sanctions. Moscow denied all allegations, blaming a lack of documentation and pointing to the prospect of supplying Europe through the Nord Stream 2 pipeline, a Moscow led project which had been blocked by Western countries in face of Russia's invasion of Ukraine.

Preliminary Assessment

- H&M, the Sweden based world's second largest fashion retailer announced to sell its assets in Russia. The potential buyer is supposedly to be a Russian company or an entity from a country which has not yet imposed sanctions on Russia and is deemed "friendly" by the Kremlin.
- Packaging company Tetra Pak also declared to exit after 62 years in Russia its remaining business. After suspending all new investments in March after Russia's invasion, operations will be run by local management under a new brand.
- Norwegian based multinational chemicals company Jotun reported to exit the Russian market with immediate effect after selling its assets to a Russian industrial group. Jotun is one of the world's largest manufacturers of paints and coating products for marine and industrial purposes.

General remarks



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