

Sanctions on the Russian digital sector: How effective are they?

The heavy sanctions imposed by the West on Russia over its war against Ukraine have had a considerable impact on the Russian digital sector. Russia has made efforts to circumvent the sanctions; counteracting these efforts requires consistent implementation and enforcement. Further coordination in this regard would increase the impact of existing sanctions and form a step towards ending the war.

Background

Since the outbreak of Russia's war on Ukraine, the European Union (EU) and its Western allies have imposed [nine](#) consecutive [sanctions packages](#) on Russia, all aimed at curtailing its ability to continue waging the war. The sanctions – [unprecedented](#) in EU history – include [dual-use](#) technologies that can be used for civilian and military purposes. [Export controls](#) have been imposed on semiconductors, aircraft components and military equipment. Aside from sanctions on goods, over a thousand [individuals and entities](#) have been subject to sanctions. Notably, the [eighth](#) package also placed a full ban on crypto-asset wallets and sanctions on the provision of information technology (IT) and IT consultancy. The [ninth package](#), adopted in December 2022, placed [additional](#) export bans on drones, drone engines, laptops and generators to prevent them from being used by the Russian military.

Sanctions and their effect on the Russian economy

Western sanctions are intended to [weaken](#) the Russian economy, which was the world's [11th largest](#) in 2021. Initial [analysis](#) predicted that Russia would face enormous economic challenges in 2022 due to the sanctions. While the country's oil and gas profits allowed it to demonstrate a certain degree of [resilience](#) in the short term, it has also been [argued](#) – despite the absence of definitive data – that sanctions have indeed had a [crippling effect](#) on its economy. At present, Russia is entering a recession; this situation is expected to [deteriorate](#) in the future.

Russia's failed technological autonomy

Russia has long worked towards becoming technologically [autonomous](#); to this end, the use of foreign components in [weapons](#) production is strictly regulated at national level. Nevertheless, the fact that Russia's [semiconductor](#) imports have been increasing since 2014 means that technological autonomy is a distant prospect. The impact of Western sanctions arguably has the potential to set Russia's technological progress back by [decades](#).

Digital scarcity in Russian daily life

Due to the shortage of semiconductors, banks are [cannibalising](#) old credit cards, and cars are produced [without](#) important components. Smartphones are not functioning properly, due to disruptions linked to Nokia and Ericsson [exiting](#) the market. Cellular networks are slower and the coverage and quality of communication have declined. More recently, senior executives at [Yandex](#) (the Russian Google), have been hit by individual EU sanctions. In [August](#) 2022, the company's news platform was sold to the state, a clear sign of Putin gaining further control of the internet. To limit free communication on the internet, in March that year Russia had [banned](#) Twitter and Facebook. Yet again, Putin has weaponised [censorship](#) to shape public opinion and achieve an internet that is [separate](#) from the rest of the world.

Tech brain drain

The war and the sanctions have affected the Russian digital economy severely; one of their effects has been a brain drain. During the first six months of the war, an estimated 250 000-500 000 qualified [workers](#) left Russia to continue their careers elsewhere. In a similar fashion, many Western [companies](#) with digital business have been leaving Russia and pulling out their digital expertise. According to the Russian deputy



EPRS Sanctions on the Russian digital sector: How effective are they?

minister of the interior, the country was already experiencing a shortage of [170 000](#) IT specialists in June 2022. The Russian minister for digital development is [quoted](#) as saying that 100 000 IT specialists have left Russia since the war broke out. War mobilisation has reduced the Russian tech [workforce](#) even further.

Lack of semiconductors for the Russian military

Semiconductors are essential to military equipment such as drones, missiles and military communication systems. Due to their shortage, Russia is struggling to supply its army and military [aviation](#) sector with such equipment and is turning to third countries, such as China, which often supply less [advanced](#) semiconductors. Chinese semiconductor producers are strategically positioned on the US market; the US is their top trade [partner](#). These producers are therefore [hesitant](#) to deepen their ties with Russia, at the price of potentially being driven away from Western [markets](#) and targeted by US [secondary sanctions](#).

Russian efforts to circumvent sanctions

Technological isolation has forced Russia to look for ways to circumvent sanctions. It has built a [network](#) to acquire technology under sanctions through front companies and false [documents](#). For instance, Iran has [supplied](#) Russia with Shahed-36 drones to use in its war on Ukraine. A recently created US [taskforce](#) is investigating the presence of US technology in these drones, which were likely smuggled or [cannibalised](#) from kitchen appliances. The [repurposing](#) of low-technology goods allows Russia to circumvent the sanctions to some extent.

Recent [research](#) has found that at least one of the Russian Kh-101 cruise missiles used in recent attacks on Kyiv had been produced by Russia only months before, suggesting Russia's [stockpiles](#) are low. This research showed that Russia is still able to produce missiles despite the sanctions; it also noted that advanced military gear used by Russia contained semiconductors from the West. In sum, Russia is still able to circumvent sanctions; better enforcement is therefore necessary.

Implementation and enforcement

Coherent [implementation](#) is key but also time-consuming. A [time lag](#) is inevitable, and new technologies, such as [crypto-assets](#), bring an extra risk of circumvention. The EU Member States are implementing the sanctions by appointing, at their own [discretion](#), national competent authorities to oversee the process. In some cases, this role is played by the Ministry of Foreign Affairs, in others by up to 10 different public bodies. The [Commission](#) oversees the implementation of sanctions and monitors their enforcement.

Member States' practices regarding enforcement vary. Some regard violation of sanctions as a criminal offence, others as an [administrative](#) one. To overcome this disparity, the [Commission](#) has proposed adding such violations to the [list](#) of serious crimes under Article 83(1) of the Treaty on the Functioning of the EU. Harmonising sanctions may help counter legal loopholes while also serving as a deterrent.

Member States can contribute to a uniform [approach](#) by increasing engagement in self-reporting and information-sharing with each other. Additionally, better coordination can be achieved at the national level if Member States start appointing fewer competent authorities or appoint a [coordinating](#) authority.

[International coordination](#) is essential to the success of Western sanctions. In December 2022, the EU-US Trade and Technology Council agreed to further cooperation on export controls, especially in the field of [information-sharing](#). The EU has also created the role of [International Special Envoy](#) for the implementation of EU sanctions. Furthermore, international [cooperation](#) may also foster implementation.

European Parliament position

In a [resolution](#) of 6 October 2022, the Parliament condemned the violations of human rights and war crimes committed by the Russian armed forces. It called on the Member States to actively prevent and prosecute circumvention of sanctions. In another [resolution](#) of 23 November 2022, Parliament recognised Russia as a state sponsor of terrorism.