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TANKS FOR UKRAINE: HOW THE EUROPEAN MEMBERS OF NATO HAVE RESPONDED



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Abstract

The North Atlantic Treaty Organisation's (NATO) allies have been leading providers of security assistance to Ukraine since Russia's invasion of Ukraine on 24 February 2022. The alliance's members have worked "to provide Ukraine with unprecedented levels of support, helping to uphold its fundamental right to self-defence" (North Atlantic Treaty Organisation, 2023, para. 1). This support has come in the form of billions of euros of humanitarian aid and military equipment, including howitzers, drones, and anti-tank and air defence systems.

While the United States is the leading NATO provider of security assistance to Ukraine, much of the critical security aid that has reached Kyiv has come from the European members of the NATO alliance. [i] Ukraine has welcomed this aid from its European counterparts. Still, the nation's president, Volodymyr Zelensky, has continuously pressed European leaders to allow the transfer of their main battle tanks (MBTs) to help push back Russian forces. This request has ignited debates among policymakers and analysts about whether MBTs would make a difference for Ukraine on the battlefield and whether states should grant Zelensky's request for tanks.

The policies of European NATO members regarding MBT transfers have been mixed since February 2022. Some European NATO members quickly supplied Ukraine with MBTs, while others have only recently given the green light to transfer MBT units. This Info Flash will address questions surrounding MBT transfers to Ukraine amongst NATO's European members: How could MBTs help Ukraine on the battlefield? Who in Europe has provided Ukraine MBTs? What are the policies of those who have yet to give MBTs? What should European NATO members consider before procuring new MBTs to replace those they have transferred?

Main Battle Tanks

MBTs are heavily armoured, powerful military vehicles renowned for providing modern militaries with a unique “combination of mobility, firepower, and protection” (European Defence Matters, 2017, p. 38). During the Cold War, MBTs became the primary tank models for militaries to use on the modern battlefield, replacing the medium and heavy tanks from World War II (Tucker, 2004, p. 357). For a formal definition, the International Institute for Strategic Studies (IISS) classifies MBTs as “armoured, tracked combat vehicles, armed with a turret-mounted gun of at least 100mm calibre and with a combat weight between 35 and 75 metric tonnes” (IISS, 2023, p. 494).

Pre-invasion analysis of military equipment showed that Russia maintained the most extensive stocks of MBTs in the world (Axe, 2020). However, Russia has not been able to equate firepower with success. Analysts at Oryx, an open-source intelligence analysis outlet, have estimated that Russia has likely lost nearly half of its tank stocks in the year since the start of the invasion (Fidler, 2023). Of these losses, more than half occurred in the first 50 days of the invasion (Mitzer & Janovsky, 2022). These heavy MBT losses led some observers to claim that the age of tanks was “being pushed into obsolescence” and that “the tank of the future will not be the tank as we know it” (O’Brien, 2022, para. 4; Cumming, 2022, para. 20). Even non-military figures have offered their opinions, such as Elon Musk claiming tanks are nothing more than a “deathtrap” (Musk, 2023).

Others have pushed back against writing off tanks because of Russia’s military performance. Rob Lee (2022, para. 6) argues that Russia has lost so many tanks due to a “lack of warning and preparation, poor strategy that exacerbated logistics issues, and insufficient infantry to protect them.” Lee believes that equating Russian tank losses with the end of the tank is very much a “mistake” and that “tanks are still very relevant in modern warfare” (Lee, 2022, para. 20). Sergio Miller (2022, Conclusion section, para. 2) also advises that analysts “should be cautious [about] using the war in Ukraine” to argue that tanks no longer serve a purpose on the modern battlefield.

When moving beyond Russia’s ongoing strategic pitfalls, there remains reason to believe that MBTs remain critical for militaries on the battlefield. According to a report on tanks from The Economist (2022, para. 15), ground forces need “something that can move quickly, break through enemy lines, lead the way for infantry, and destroy the other side’s armoured vehicles.” As American Major General Skip Davis attests, MBTs are ideal for providing that necessary support. He argues that “[t]anks are the ultimate platform for manoeuvre in high-intensity combat,” supporting “the ability to defend or attack, hold ground, or take back territory” (Davis, Jr., 2023, para. 1).

It is precisely for the ability of MBTs to carry out complex manoeuvres that Ukraine has been pressing Western leaders for tanks. The acquisition of new tanks would help Ukraine launch critical offensives “to break through Russian defences – potentially delivering a shattering blow” to Russian forces (Herbst et al., 2023, para. 2). According to one American official, Western tanks will allow Ukraine to create an armoured brigade that could serve as “the spearhead of a force that could break through those Russian defences down towards Mariupol” (Sullivan, 2023, How Might? section, para. 4). In the West’s push to support Ukraine’s effort to retake Ukrainian territory under Russian occupation, supplying tanks would be necessary to break the current stalemate.

Who Has Donated What?

Ukrainian President Volodymyr Zelensky began to ask for Western tanks in March 2022, claiming he needed one percent of NATO's tanks to defeat Russia (Kozhukhar & Karazy, 2022). The following month, NATO tank deliveries to Ukraine began in waves from nations in central and eastern Europe. The Czech Republic, Slovenia, Poland, and North Macedonia have made the following transfers from their respective fleets of Soviet-manufactured tanks. This list does not include equipment transfers from defence company stocks:

- 5 April 2022: The Czech Republic became the first country to donate MBTs, sending Kyiv tanks of the T-72 variety (Reuters, 2022a). According to Oryx, the Czech Republic does not “disclose details of its arms deliveries,” but some believe Prague sent 40 units at this time (Mitzer & Oliemans, 2022, para. 2; Roblin, 2022). In February 2023, Czech Prime Minister Petr Fiala stated that the nation had supplied 89 tanks from its stocks and the stocks of private companies over the past year, but did not stipulate how many were directly from the nation's military stocks (Ukrainian Military Center, 2023; Reuters, 2023c)
- 25 April 2022: Poland reported its first MBT delivery to Ukraine, providing a reported 200 T-72 tanks (Reuters, 2022b; Army Recognition, 2022b). To date, Poland has confirmed that Ukraine has received 250 units of the T-72 tank (Axe, 2023).
- 29 July 2022: North Macedonia announced the delivery of an unknown number of T-72 MBTs (Reuters, 2022c). Later reports confirmed that the nation transferred its entire stock of 31 T-72s while also disbanding its tank battalion (Army Recognition, 2022c; Technology.org, 2023).
- 19 September 2022: Slovenia coordinated the delivery of 28 M-55S tanks to Ukraine in exchange for 40 modern military trucks from Germany (Ukrainian Military Centre, 2022; AP News, 2022).

The United Kingdom became the first nation to provide Western tanks to Ukraine in early January 2023. Prime Minister Rishi Sunak's decision on 14 January to send fourteen of its Challenger 2 tanks represented a reversal in the nation's policy (Colchester & Hinshaw, 2023). Despite continuously providing the most aid to Ukraine among European countries, tanks represented a move that “wouldn't be appropriate,” according to the former prime minister Boris Johnson (Gallardo, 2022, para. 4).

In contrast, other European NATO nations with Western MBT stocks were slow to begin their equipment transfers. A key factor in this delay was due to the model of the most popular type of Western MBT in Europe – the German-manufactured Leopard. Of the twenty European NATO nations with MBT reserves, six have arsenals entirely comprised of Leopard variants, with three others having arsenals partially comprised of Leopards.[i] As such, these nations were unable to transfer any Leopard tanks to Ukraine without Berlin's approval given the German ownership of the Leopard's export license (Reuters, 2023a).

Berlin initially rejected the idea of sending any of its Leopards to Ukraine or granting permission to European allies to send their own tanks (Ellyatt, 2023). Various reasons contributed to German Chancellor Olaf Scholz's stance, ranging from his Social Democratic Party's historical pacifist leaning to the German policy of not sending weapons to war zones (Kinkartz, 2023; Adler, 2023). However, pressure grew on Scholz in the Autumn and Winter of 2022 from his coalition partners and allies who demanded that he give the green light for tank transfers (Von Der Burchard, 2022).

Finally, on 24 January 2023, Scholz approved German Leopard shipments to Ukraine (Reuters, 2023b). The transfer of Leopard-type MBTs being as follows:

- 24 January 2023: Germany announced it would send fourteen Leopard 2A6 tanks to Ukraine (Rinke, 2023). Germany later reported it would add four additional Leopard 2A6s, totalling eighteen (Verteidigungsministerium, 2023).
- 27 January 2023: Poland stated it would send 30 PT-91 Twardy tanks, along with additional T-72s and 14 Leopard 2A4s (CTVNews.ca, 2023).
- 30 January 2023: Spain announced the transfer of six Leopard 2A4s (Reuters, 2023d). Spain later stated it might add four additional 2A4s, totalling ten units (Reuters, 2023f).
- 8 February 2023: Portugal confirmed reports that it would send three Leopard 2A6s (Defesa Nacional, 2023).
- 14 February 2023: Norway announced it would send eight Leopard 2A4NOKs (Reuters Staff, 2023b).
- 23 February 2023: Finland declared it would transfer three Leopard 2A4s (Reuters, 2023e). A month later, Finland agreed to send three Leopard 2 de-mining MBTs, totalling six units (Kaikkonen, 2023).
- 24 February 2023: Sweden joined the coalition of nations sending Leopards, stating it would send ten Leopard 2A5s (Reuters, 2023g).

Policies of Non-Senders

The policies of the remaining states who possess tanks but have yet to supply any to Ukraine remain mixed. Some governments have explicitly stated their opposition to delivering tanks, while others continue to mull over whether they will send any units. The following is an overview of the remaining eight nation's policies:

Bulgaria: Bulgaria has not openly provided Ukraine with military aid. However, one source from foreign minister Teodora Genchovska's office commented: "Bulgaria is not flaunting its military aid to Ukraine, but that aid is nevertheless a fact" (Marchenko, 2022, Austria section, para. 1). Investigations from various news outlets and policy institutes have highlighted that Sofia has delivered T-72 tanks to Ukraine via third countries in an unknown quantity (Kotseva & Nikolov, 2023; Marchenko, 2022). The Austrian military has also commented on this fact. In a video posted to YouTube, Austrian Colonel Markus Reisner stated that Kyiv had received "a certain number [of T-72s] from Bulgaria" (Österreichs Bundesheer, 2022, 3:41). Bulgaria has 90 T-72 units, according to the 2023 assessment of The Military Balance that it could send to Ukraine (p. 77).

Croatia: Croatia provided weapons assistance in the form of rifles, machine guns, and protective equipment in February 2022 (Kranjec, 2022). Nonetheless, Croatian President Zoran Milanović has criticised Western tank deliveries and rejected the prospect of sending any of its 74 M-84 tanks to Ukraine (Associated Press, 2023; IISS, 2023, p. 79).

France: The French ambassador to Ukraine, Étienne de Poncins, confirmed in November 2022 that Kyiv had requested a transfer of Leclerc tanks from Paris (de Poncins, 2022). France, maintaining an operational Leclerc fleet of 215 units (IISS, 2023, p. 91), has yet to grant Ukraine's request.

Part of the issue for France moving forward is that the arms manufacturer Nexter Systems ceased production of the Leclerc in 2008, meaning the military could not procure new Leclercs to replace any sent to Ukraine (Pietralunga, 2023). President Emmanuel Macron maintains “nothing is excluded” regarding the possible delivery of these tanks but has not elaborated his position further at this time (Reuters Staff, 2023a, para. 2).

Greece: Greece has the largest stockpile of tanks among NATO’s European members, with 1,228 units, 853 of which are of the Leopard variety (IISS, 2023, p. 98). Despite this, Greece has confirmed that it will not provide any of its tanks to Ukraine. The nation’s prime minister Kyriakos Mitsotakis commented that the nation “will not provide Leopard 2 tanks for the simple reason that they are absolutely necessary for our defence posture” (Gencturk, 2023, para. 2).

Hungary: The Hungarian government has rejected the idea of sending any weapons to Ukraine, choosing to remain neutral to avoid further escalation in the war (Swaton, 2023). The government also issued a decree making “it clear that no weapons shipments can be transported from the territory of Hungary to the territory of Ukraine” (Orbán, 2022, 0:07).

Italy: According to the Kiel Institute, Italy has pledged nearly 700 million euros in military aid to Ukraine (Kiel Institute for the World Economy, 2023). Italy keeps the specifics of its aid packages classified for state security reasons, but Italian officials have confirmed the nation has not sent tanks (Borsari, 2022). While meeting with the press in Brussels, Antonio Tajani stated: “Italy is not part of the debate on sending tanks to Ukraine. Italy has now committed itself together with the French to deliver anti-missile defence systems, and work continues in that direction” (Il Sole 24 ORE, 2023, para. 1).

Romania: Reports emerged in April 2022 that Romania would provide Ukraine with a supply of T-72 tanks (Army Recognition, 2022a). However, it was only in mid-June 2022 that the Romanian government passed a legal amendment enabling them to deliver weapons from its military stockpile to allied and partner countries (Guvernul României, 2022). Reports indicate that Romania has possibly donated 28 T-72 tanks, of which only five are fully operational (Całus, 2022). The government in Bucharest has yet to confirm or deny these rumours (Całus, 2022).

Slovakia: According to defence minister Jaroslav Nad, Slovakia is ready to send its cache of 30 T-72 tanks to Ukraine “immediately” on the condition it receives German-made Leopard 2 tanks in return (Jenčová, 2023). Slovakia has previously reached a deal with Germany in which it sent 30 BVP-1 vehicles to Ukraine in return for 15 units of Leopard 2A4 tanks (Majer, 2022).

Moving Forward

Since the end of the Cold War, the supply of operational MBTs in Europe has fallen considerably. Many European capitals considered large-scale combat on the European continent a thing of the past, choosing to focus more on nonconventional threats such as terrorism, migration, and failed states (Meijer & Brooks, 2021, p. 15). As a result, governments began to reduce their MBT stockpiles as defence strategies shifted gears. In 2000, NATO’s European members had 11,871 operational MBTs between them.

By 2020, that number fell to a total of 4,109, a drop of 65 percent (Figure 2).[i] Moreover, nine European NATO members do not maintain an operational stock of MBTs (see endnote 2).

[Between the shrinking number of MBTs on the European continent and the ongoing delivery of units to Ukraine, European NATO members should have a sense of urgency to replenish their MBT stocks. Joseph Borrell, the European Union's high representative for foreign affairs and security policy, has warned that the "military stocks of most [European NATO] member states have been... depleted in a high proportion" (Turak, 2022, para 5.). Policymakers in NATO states should consider the following three points moving forward.

First, as European policymakers begin to acquire additional MBTs, they should avoid policies that restrict themselves to only buying European MBTs. The current production time for the German-manufactured Leopard tank is around three years, with deliveries then occurring at a rate of two per month (Gressel et al., 2022). Remaining open to purchasing the American-made Abrams alongside the German-made Leopard can help prevent strains to production efficiency and ensure MBTs arrive on time.

Second, NATO's Support and Procurement Agency should help its European members prioritise cooperation for the joint procurement of new Leopard and Abrams tanks. Despite the war in Ukraine and the need to procure new equipment, European nations have continued to "lack a truly cooperative mindset when it comes to developing, acquiring, and operating defence capabilities together" (Bond & Scazzieri, 2022, p. 12). However, the joint procurement of MBTs will offer NATO members a wide array of potential benefits, including strengthening the transatlantic relationship, improving equipment efficiency through interoperability and standardisation, and increasing production capacities (Ford, 2016, p. 8).

Third, the United States and Germany should strive to incorporate their NATO allies more in the production of Abrams and Leopard MBTs. Poland recently signed a contract with the United States for the procurement of new Abrams. However, the principal contractors for this sale are all based in the United States (DoD Security Cooperation Agency, 2022). Expanding MBT production to the industries of other NATO allies will not only speed up production times and supply chain resiliency, but it will also provide a much-needed boost to allied defence industries in Europe (US Department of Defense, 2022, pp. 19-21).

Conclusion

While many European NATO members quickly delivered humanitarian aid and military equipment to Ukraine after the Russian invasion, the delivery of MBTs has been a different story. Eastern and Central European NATO members were the first to supply Ukraine with MBTs, with Kyiv receiving Soviet-era models from the Czech Republic, Slovenia, Poland, and North Macedonia.

In contrast, European NATO members with Western MBT stocks remained holdouts about potentially sending their tanks to Ukraine throughout 2022. However, in 2023, these holdouts began to shift policies and started delivering MBTs. As the Spring thaw approaches and weather conditions improve, Ukraine will have their long-awaited MBTs to launch offensive manoeuvres, aiming to take back territory. For the European NATO members who have delivered MBTs, their challenge will be to replace their stocks as quickly as possible. In order to do so effectively and efficiently, officials across NATO members will have to prioritise industry cooperation and opt for the joint procurement of new equipment.

Footnotes

[1] European NATO members for this Info Flash include Albania, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. On 31 March 2023, Finland's application for membership was approved by Türkiye, ensuring the nation will be formally admitted into NATO at its next summit in July 2023 in Lithuania (Atlantic Council Experts, 2023). Sweden remains an applicant for NATO accession. As of 31 March 2023, Sweden awaits Hungary's and Türkiye's approval for membership (Atlantic Council Experts, 2023).

[1] Albania, Belgium, Estonia, Iceland, Lithuania, Luxembourg, and Montenegro do not have MBT reserves (IISS, 2023, pp. 50-149). North Macedonia no longer has MBTs after delivering its entire arsenal to Ukraine. The Netherlands does not own MBTs but leases units from Germany. Denmark, Germany, Norway, Portugal, Spain, and Sweden only have Leopard variant tanks. Greece, Hungary, and Poland have Leopard variant tanks and other Western/Soviet models.

[1] The 2023 total is 4,086 MBTs, including both Finland and Sweden (IISS, 2023).

References

Adler, K. (2023, January 25). Why Germany delayed sending Leopard 2 tanks to Ukraine. BBC News. Retrieved 11 March 2023, from <https://www.bbc.com/news/world-europe-64402928>.

AP News. (2022, September 20). Germany in Deal for Slovenia to Send Tanks to Ukraine. AP News. Retrieved 12 March 2023, from <https://apnews.com/article/russia-ukraine-nato-kyiv-berlin-slovenia-cbbd361f88dae3dede5eeca2bfddc74d>.

Army Recognition. (2022a, April 22). Romania to donate T-72 main battle tanks and spare parts to Ukraine. Army Recognition. Retrieved 11 March 2023, from https://www.armyrecognition.com/defense_news_april_2022_global_security_army_industry/romania_to_donate_t-72_main_battle_tanks_and_spare_parts_to_ukraine.html.

Army Recognition. (2022b, April 29). Poland provides Ukraine with more than 200 T-72 main battle tanks. Army Recognition. Retrieved 11 March 2023, from https://www.armyrecognition.com/defense_news_april_2022_global_security_army_industry/poland_provides_ukraine_with_more_than_200_t-72_main_battle_tanks.html.

Army Recognition. (2022c, July 30). North Macedonia donates its T-72A main battle tanks to Ukraine in exchange for Western tanks. Army Recognition. Retrieved 13 March 2023, from https://www.armyrecognition.com/defense_news_july_2022_global_security_army_industry/north_macedonia_donates_its_t-72_main_battle_tanks_to_ukraine_in_exchange_of_western_tanks.html

Associated Press. (2023, January 30). Croatian President Zoran Milanovic criticizes tank deliveries to Ukraine. NPR. Retrieved 15 March 2023, from <https://www.pbs.org/newshour/world/croatian-president-zoran-milanovic-criticizes-tank-deliveries-to-ukraine>.

Atlantic Council Experts. (2023, March 31). When will Sweden and Finland join NATO? Tracking the ratification process across the Alliance. Atlantic Council. Retrieved 31 March 2023, from <https://www.atlanticcouncil.org/commentary/trackers-and-data-visualizations/when-will-sweden-and-finland-join-nato-tracking-the-ratification-process-across-the-alliance/>.

Axe, D. (2020, June 16). There Are 73,000 Tanks In The World—Which Are The Best? Forbes. Retrieved 11 March 2023, from <https://www.forbes.com/sites/davidaxe/2020/06/16/there-are-73000-tanks-in-the-world-which-are-the-best/?sh=380037e55324>.

Axe, D. (2022, November 4). Czech Tanks, U.S. And Dutch Money: Three Countries Team Up To Send A Whole Brigade Of T-72s To Ukraine. Forbes. Retrieved 16 March 2023, from <https://www.forbes.com/sites/davidaxe/2022/11/04/czech-tanks-american-and-dutch-money-three-countries-teamed-up-to-send-a-whole-brigade-of-t-72s-to-ukraine/?sh=6cb3795a6677>.

Axe, D. (2023, February 14). Poland Made A Better Russian-Style Tank—And Gave It To Ukraine. Forbes. Retrieved 13 March 2023, from <https://www.forbes.com/sites/davidaxe/2023/02/14/poland-made-a-better-russian-style-tank-and-gave-it-to-ukraine/?sh=89d8ac8422e5>.

Bond, I., & Scazzieri, L. (2022). The EU, NATO, and European Security in a Time of War. Centre for European Reform. Retrieved 12 March 2023, from https://www.cer.eu/sites/default/files/pbrief_IB_LS_nato_5aug22.pdf.

Borsari, F. (2022, June 22). Italy's Unwavering Support for Ukraine. Center for European Policy Analysis. Retrieved 12 March 2023, from <https://cepa.org/article/italys-unwavering-support-for-ukraine/>.

Całus, K. (2022, October 14). Extremely cautious. Romania's approach to the Russian invasion of Ukraine. Centre for Eastern Studies. Retrieved 11 March 2023, from <https://www.osw.waw.pl/en/publikacje/analyses/2022-10-14/extremely-cautious-romania-s-approach-to-russian-invasion-ukraine>.

Colchester, M., & Hinshaw, D. (2023, January 14). UK Is First Country to Agree to Send Western Battle Tanks to Ukraine. The Wall Street Journal. Retrieved 11 March 2023, from <https://www.wsj.com/articles/u-k-becomes-first-country-to-pledge-western-battle-tanks-to-ukraine-11673712045>.

CTVNews.ca. (2023, January 27). "Better late than never": Polish PM applauds West for sending tanks to Ukraine. CTV News. Retrieved 15 March 2023, from <https://www.ctvnews.ca/canada/better-late-than-never-polish-pm-applauds-canada-and-the-west-for-sending-tanks-to-ukraine-1.6248472>.

Cumming, E. (2022, March 14). Is This the End of the Tank? The Telegraph. Retrieved 16 March 2023, from <https://www.telegraph.co.uk/news/2022/03/14/end-tank/>.

Davis, Jr, G. B. "Skip." (2023, January 26). How Western Tanks Will Make a Difference in Ukraine. Center for European Policy Analysis. Retrieved 12 March 2023, from <https://cepa.org/article/how-western-tanks-will-make-a-difference-in-ukraine/>.

de Poncins, É. (2022, November 9). Compte rendu: Commission de la défense nationale et des forces armées. Assemblée Nationale. Retrieved 11 March 2023, from <https://www.assemblee-nationale.fr/dyn/opendata/CRCANR5L16S2023PO59046N020.html>.

Defesa Nacional. (2023, February 8). Portugal está em condições de enviar à Ucrânia três Carros de Combate Leopard 2 A6, no próximo mês de março [Tweet]. Twitter. Retrieved 14 March 2023, from https://twitter.com/defesa_pt/status/1623409481693405187?s=20.

DoD Security Cooperation Agency. (2022, December 6). Poland—M1A1 Abrams Main Battle Tanks. DoD Security Cooperation Agency. Retrieved 13 March 2023, from <https://www.dsca.mil/sites/default/files/mas/Press%20Release%20-%20Poland%2022-71%20CN.pdf>.

DoD Ukraine Security Assistance Initiative. (2022, November 4). Joint Statement by the United States Department of Defense, the Ministry of Defence of the Netherlands, and the Ministry of Defence of the Czech Republic. Department of Defense. Retrieved 15 March 2023, from <https://media.defense.gov/2022/Nov/04/2003108893/-1/-1/0/USAI-7-CZE-TANKS-US-NLD-CZE-PRESS-STATEMENT.PDF>.

Ellyatt, H. (2023, January 24). Germany resists intense pressure over tanks for Ukraine, saying 'the situation has not changed.' CNBC. Retrieved 13 March 2023, from <https://www.cnbc.com/2023/01/24/germany-refuses-to-shift-position-on-tanks-for-ukraine-despite-pressure.html#:~:text=Germany%20has%20again%20refused%20to,German%20tank%20supplies%20to%20Ukraine>.

European Defence Matters. (2017). Optimizing Europe's Main Battle Tank Capabilities. European Defence Matters, 14, 38–39. Retrieved 12 March 2023, from https://eda.europa.eu/docs/default-source/eda-magazine/edm-issue-14_web.pdf.

Fidler, S. (2023, February 15). Russia Likely Lost More Than Half of Its Tanks in Ukraine, Estimates Show. The Wall Street Journal. Retrieved 11 March 2023, from <https://www.wsj.com/articles/russia-likely-lost-more-than-half-of-its-tanks-in-ukraine-estimates-show-c23dabc2>.

Ford, R. (2016). Defence Acquisition Cooperation Benefits. *Défense & Industries*, 6, 8–11.

Gallardo, C. (2022, April 8). UK and Germany won't send tanks to Ukraine. Politico. Retrieved 16 March 2023, from <https://www.politico.eu/article/uk-germany-rule-out-send-tanks-ukraine/>.

Gencturk, A. (2023, January 31). Greece will not provide Ukraine with Leopard 2 tanks: Premier. Anadolu Agency. Retrieved 12 March 2023, from <https://www.aa.com.tr/en/politics/greece-will-not-provide-ukraine-with-leopard-2-tanks-premier/2802701>.

Gressel, G., Loss, R., & Puglierin, J. (2022, February 13). Repair, replace, reimburse: Sustaining a European tank coalition for Ukraine. European Council on Foreign Relations. Retrieved 17 March 2023, from <https://ecfr.eu/article/repair-replace-reimburse-sustaining-a-european-tank-coalition-for-ukraine/>.

Guvernul României. (2022, June 17). EMERGENCY ORDINANCE no. 81 of June 16, 2022. Guvernul României. Retrieved 12 March 2023, from <https://legislatie.just.ro/Public/DetaliiDocument/256514>.

Herbst, J., Kramer, D. J., & Taylor, W. (2023, February 24). Give Ukraine What It Wants. Foreign Affairs. Retrieved 13 March 2023, from <https://www.foreignaffairs.com/ukraine/give-ukraine-what-it-wants-military-aid>.

IISS. (2000). The Military Balance (1st ed., Vol. 100). International Institute for Strategic Studies.

IISS. (2005). The Military Balance (1st ed., Vol. 105). International Institute for Strategic Studies.

IISS. (2010). The Military Balance (1st ed., Vol. 110). International Institute for Strategic Studies.

IISS. (2015). The Military Balance (1st ed., Vol. 115). International Institute for Strategic Studies.

IISS. (2020). The Military Balance (1st ed., Vol. 120). International Institute for Strategic Studies.

IISS. (2023). The Military Balance (1st ed., Vol. 123). International Institute for Strategic Studies.

Il Sole 24 ORE. (2023, January 23). Guerra Ucraina, Tajani: "Italia non fa parte del dibattito su invio tank." Il Sole 24 ORE. Retrieved 14 March 2023, from https://stream24.ilssole24ore.com/video/mondo/guerra-ucraina-tajani-italia-non-fa-parte-dibattito-invio-tank/AEN8wOZC?refresh_ce=1.

Jenčová, I. (2023, January 30). Slovak Defence Minister wants weapons platform deal with Germany to help Ukraine. Euroactiv. Retrieved 13 March 2023, from <https://www.euractiv.com/section/politics/news/slovak-defence-minister-wants-weapons-platform-deal-with-germany-to-help-ukraine/>.

Kaikkonen, A. (2023, March 23). Vähän kaikenlaista tässä tänään [Tweet]. Twitter. Retrieved 25 March 2023, from <https://twitter.com/anttikaikkonen/status/1638897244295536642?s=20>.

Kiel Institute for the World Economy. (2023, February 21). Ukraine Support Tracker. Kiel Institute for the World Economy. Retrieved 13 March 2023, from <https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>.

Kinkartz, S. (2023, January 23). Why Germany hesitates on sending battle tanks to Ukraine. Deutsche Well. Retrieved 13 March 2023, from <https://www.dw.com/en/why-german-chancellor-olaf-scholz-is-hesitant-about-delivering-battle-tanks-to-ukraine/a-64493249>.

Kotseva, A., & Nikolov, K. (2023, March 6). Investigation: Bulgaria 'indirectly' sent weapons to Ukraine. Euroactiv. Retrieved 17 March 2023, from <https://www.euractiv.com/section/politics/news/investigation-bulgaria-indirectly-sent-weapons-to-ukraine/>.

Kozhukhar, O., & Karazy, S. (2022, March 27). Zelenskiy demands Western nations give arms to Ukraine, asks if they're afraid of Moscow. Reuters. Retrieved 30 March 2023, from <https://www.reuters.com/world/europe/ukraine-leader-demands-western-nations-give-arms-asks-if-theyre-afraid-moscow-2022-03-26/>.

Lee, R. (2022, September 6). The Tank is not Obsolete, and Other Observations About the Future of Combat. War on the Rocks. Retrieved 13 March 2023, from <https://warontherocks.com/2022/09/the-tank-is-not-obsolete-and-other-observations-about-the-future-of-combat/>.

Majer, M. (2022, November 15). W/ the @BMVg_Bundeswehr & @RheinmetallAG we signed the agreements on the exchange of #military equipment [Tweet]. Twitter. Retrieved 13 March 2023, from <https://twitter.com/MajerMarian/status/1592565798417346560?s=20>.

Marchenko, N. (2022, July 19). Sofia Secretly Selling Old Weapons Meant for Ukraine via Romania and Poland. Bivol. Retrieved 18 March 2023, from <https://bivol.bg/en/sofia-secretly-selling-old-weapons-meant-for-ukraine-via-romania-and-poland.html>.

Meijer, H., & Brooks, S. G. (2021). Illusions of Autonomy: Why Europe Cannot Provide for Its Security If the United States Pulls Back. *International Security*, 45(4), 7–43. https://doi.org/10.1162/isec_a_00405.

Miller, S. (2022, September 22). The Graveyard of Russian Tanks. Wavell Room. Retrieved 13 March 2023, from <https://wavellroom.com/2022/09/22/russian-tank-graveyard/>.

Mitzer, S., & Janovsky, J. (2022, February 24). Attack On Europe: Documenting Russian Equipment Losses During The 2022 Russian Invasion Of Ukraine. Oryx. Retrieved 13 March 2023, from <https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-equipment.html>.

Mitzer, S., & Oliemans, J. (2022, July 10). Bohemian Brotherhood: List Of Czech Military Aid To Ukraine. Oryx. Retrieved 18 March 2023, from <https://www.oryxspioenkop.com/2022/07/bohemian-brotherhood-list-of-czech.html>.

Musk, E. (2023, January 7). Tanks Are a Deathtrap Now [Tweet]. Twitter. Retrieved 21 March 2023, from <https://twitter.com/elonmusk/status/1611669863097069569?s=20>.

North Atlantic Treaty Organisation. (2023, February 24). NATO's response to Russia's invasion of Ukraine. North Atlantic Treaty Organisation. Retrieved 17 March 2023, from https://www.nato.int/cps/en/natohq/topics_192648.htm.

O'Brien, P. P. (2022, May 26). War Will Never Be This Bulky Again. The Atlantic. Retrieved 13 March 2023, from <https://www.theatlantic.com/ideas/archive/2022/05/ukraine-russia-putin-war/638423/>.

Orbán, V. (2022, March 7). Magyarország nem szállít fegyvereket [Post]. Facebook. Retrieved 14 March 2023, from <https://www.facebook.com/orbanviktor/videos/1298730303980969>.

Österreichs Bundesheer. (2022, June 17). Schwere Waffen für die Ukraine: Heavy Metal & Rock “n” Roll [Video]. YouTube. Retrieved 13 March 2023, from https://www.youtube.com/watch?v=JlIFj8AEbOY&t=2s&ab_channel=%C3%96sterreichsBundesheer.

Pietralunga, C. (2023, January 26). Pourquoi la France hésite à livrer des chars Leclerc à l'Ukraine. Le Monde. Retrieved 20 March 2023, from https://www.lemonde.fr/international/article/2023/01/26/guerre-en-ukraine-pourquoi-la-france-hesite-a-livrer-des-chars-leclerc-a-kiev_6159355_3210.html.

Reuters. (2022a, April 5). Czech Republic sends tanks, infantry fighting vehicles to Ukraine. Reuters. Retrieved 17 March 2023, from <https://www.reuters.com/world/europe/czech-republic-sends-tanks-ukraine-czech-tv-reports-2022-04-05/>.

Reuters. (2022b, April 25). Poland has delivered tanks to Ukraine, says Polish PM. Reuters. Retrieved 15 March 2023, from <https://www.reuters.com/world/europe/poland-has-delivered-tanks-ukraine-says-polish-pm-2022-04-25/>.

Reuters. (2022c, July 29). North Macedonia donates tanks to Ukraine as it modernises own military. Reuters. Retrieved 16 March 2023, from <https://www.reuters.com/world/europe/nmacedonia-donates-tanks-ukraine-it-modernises-own-military-2022-07-29/>.

Reuters. (2023a, January 23). Explainer: How to Correctly Re-Export German Tanks. Reuters. Retrieved 17 March 2023, from <https://www.reuters.com/world/europe/how-correctly-re-export-german-tanks-2023-01-23/>.

Reuters. (2023b, January 24). Germany to send Leopard tanks to Kyiv, allow others to do so—Sources. Reuters. Retrieved 19 March 2023, from <https://www.reuters.com/world/europe/germany-send-leopard-tanks-kyiv-allow-others-do-so-spiegel-2023-01-24/>.

Reuters. (2023c, February 22). Czechs have sent 89 tanks, hundreds of pieces of heavy machinery to Ukraine -PM. Reuters. Retrieved 20 March 2023, from <https://www.reuters.com/world/europe/czechs-have-sent-89-tanks-hundreds-pieces-heavy-machinery-ukraine-pm-2023-02-22/>.

Reuters. (2023d, February 22). Spain to send six 2A4 Leopard tanks to Ukraine -defence minister. Reuters. Retrieved 14 March 2023, from <https://www.reuters.com/world/europe/spain-send-six-2a4-leopard-tanks-ukraine-defence-minister-2023-02-22/>.

Reuters. (2023e, February 23). Finland to send three Leopard tanks to Ukraine. Reuters. Retrieved 13 March 2023, from <https://www.reuters.com/world/europe/finland-send-three-leopard-tanks-ukraine-2023-02-23/>.

Reuters. (2023f, February 23). Spain eyes up to 10 Leopard tanks for Ukraine, PM says. Reuters. Retrieved 13 March 2023, from <https://www.reuters.com/world/europe/spain-eyes-up-10-leopard-tanks-ukraine-pm-says-2023-02-23/>.

Reuters. (2023g, February 24). Sweden to send up to 10 Leopard tanks to Ukraine. Reuters. Retrieved 15 March 2023, from <https://www.reuters.com/world/europe/sweden-send-up-10-leopard-tanks-ukraine-2023-02-24/>.

Reuters Staff. (2023a, January 30). Rien n'est exclu pour l'aide militaire à l'Ukraine, dit Macron. Reuters. Retrieved 15 March 2023, from <https://www.reuters.com/article/ukraine-crise-france-macron-idFRKBN2U91M4>.

Reuters Staff. (2023b, February 14). Norway to send 8 Leopard 2 tanks to Ukraine. Reuters. Retrieved 15 March 2023, from <https://www.reuters.com/article/ukraine-crisis-norway-idUSKBN2U00W6>.

Rinke, A. (2023, January 25). Germany to send Leopard tanks to Ukraine, allies to follow. Reuters. Retrieved 15 March 2023, from <https://www.reuters.com/world/europe/germany approves-sending-heavy-leopard-tanks-ukraine-2023-01-25/>.

Roblin, S. (2022, October 28). Czech Super T-72M4 Tanks Seen Headed To Poland-Ukraine Border. Forbes. Retrieved 15 March 2023, from <https://www.forbes.com/sites/sebastienroblin/2022/10/28/czech-super-t-72m4-tanks-seen-headed-towards-ukraine/?sh=266352523ce7>.

Sullivan, B. (2023, January 25). What is the Leopard 2 tank, and Why Does Ukraine Want It? NPR. Retrieved 14 March 2023, from <https://www.npr.org/2023/01/20/1150416982/leopard-2-tank-ukraine>.

Swaton, C. (2023, January 31). Austria, Hungary agree on not sending weapons to Ukraine. Euroactiv. Retrieved 13 March 2023, from <https://www.euractiv.com/section/politics/news/austria-hungary-agree-on-not-sending-weapons-to-ukraine/>.

Technology.org. (2023, February 6). North Macedonia: Country That Donated All of its Tanks to Ukraine. What Was the Reason for This Decision? Technology.Org. Retrieved 16 March 2023, from <https://www.technology.org/2023/02/06/north-macedonia-country-that-donated-all-its-tanks-to-ukraine-what-was-the-reason-for-this-decision/>.

The Economist. (2022, June 15). Does the Tank Have a Future? The Economist. Retrieved 13 March 2023, from <https://www.economist.com/interactive/international/2022/06/15/does-the-tank-have-a-future>.

Trkanjec, Z. (2022, March 1). Croatia to send weapons to Ukraine, provide health care to refugees. Euroactiv. Retrieved 13 March 2023, from https://www.euractiv.com/section/politics/short_news/croatia-to-send-weapons-to-ukraine-provide-health-care-to-refugees/.

Tucker, S. (2004). Tanks: An Illustrated History of Their Impact. ABC-CLIO, Inc.

Turak, N. (2022, September 28). The US and Europe are running out of weapons to send to Ukraine. CNBC. Retrieved 14 March 2023, from <https://www.cnbc.com/2022/09/28/the-us-and-europe-are-running-out-of-weapons-to-send-to-ukraine.html>.

Ukrainian Military Center. (2022, October 29). Slovenia sends 28 tanks M-55S to Ukraine. Ukrainian Military Center. Retrieved 14 March 2023, from <https://mil.in.ua/en/news/slovenia-sends-28-tanks-m-55s-to-ukraine/#:~:text=Slovenia%20promised%20Ukraine%2028%20%D0%9C,8%C3%978%20water%20tanks.&text=An%20exchange%20agreement%20between%20Prime,Scholz%20was%20signed%20in%20September>.

Ukrainian Military Center. (2023, February 23). The Czech Republic revealed how many armored vehicles and weapons it provided to Ukraine. Ukrainian Military Center. Retrieved 13 March 2023, from <https://mil.in.ua/en/news/the-czech-republic-revealed-how-many-armored-vehicles-and-weapons-it-provided-to-ukraine/>.

US Department of Defense. (2022). 2022 National Defense Strategy of the United States of America. Retrieved 21 March 2023, from <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

Verteidigungsministerium. (2023, February 24). Verteidigungsminister Pistorius hat entschieden, weitere vier #Kampfpanzer #Leopard2 A6 aus Beständen der Bundeswehr an die #Ukraine abzugeben [Tweet]. Twitter. Retrieved 18 March 2023, from https://twitter.com/BMVG_Bundeswehr/status/1629136976505892865?s=20.

Von Der Burchard, H. (2022, September 22). Pressure mounts on Germany's Scholz to send tanks to Ukraine. Politico. Retrieved 14 March 2023, from <https://www.politico.eu/article/german-government-faces-domestic-pressure-to-send-tanks-to-ukraine/>.