

Assessing the Risk of Foreign Influence in UK Search Results

Prepared for Ofcom by

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Executive Summary

As the de facto gateway to the vast troves of information available online, search services play a critical role in the modern information ecosystem. They are often the starting points for people’s questions about the world around them, from the innocuous to the deeply consequential. The results generated by search algorithms can therefore influence everything from consumer behaviour to people’s political and social preferences,¹ often in ways that are imperceptible to users of those systems.

Given this significant power, search services are also targets of those who seek to manipulate information to advance a particular, and at times malign, agenda. This includes those working for or on behalf of autocratic foreign governments, who can attempt to leverage search results to whitewash human rights abuses, attack opponents, or interfere in the internal affairs of other countries. The threat is particularly acute with well-resourced states that operate global state-backed media outlets, troll farms, and other state-aligned information outlets that allow them to exploit search services through strategic content production, search engine optimisation, or intentional manipulation.

To evaluate this potential risk, we analysed data over a 30-day period across six search products on four search services (Google Search, Google News, Microsoft Bing, Bing News, Yandex Search, and Baidu Search) to assess the prominence of foreign state-linked websites², or those that reproduce content from those websites, in search returns for queries related to topics of national importance to the United Kingdom. Importantly, we could not assess, nor was it our intention to assess, whether the prominence of any state-linked sources in search results was the result of deliberate manipulation by those states or merely the product of search algorithms determining that the content produced by those sites was relevant to a given query. We also did not assess the relative quality of any individual state media outlets. We recognize that state-backed information sources exist on a broad spectrum in terms of their authoritativeness and journalistic standards, and that a connection to a foreign state is not necessarily problematic and should not be viewed by search services as an inherent risk. In short, our efforts to understand the prominence of state-linked sources in search results should not be viewed as an attempt to document wrongdoing, either by the sources themselves or by the search services that surfaced those sources.

In addition, although we attempted to select topics that were important to UK interests instead of those that favoured the interests of any one foreign government, some of the chosen queries—notably those related to the war against Ukraine—were more likely to be the focus of messaging from certain countries. Results from this study should therefore not be used as comparative datapoints to suggest that any one state is more influential in UK search results than any other. Instead, the goal of this research was simply to gain a better understanding of how and how often content from websites with direct or indirect links to foreign states—primarily state-backed media outlets³ but also websites directly

¹ See, for example, Chun, J. & Larrick, R. (2021) ‘The Power of Rank Information.’ *American Psychological Association*. Available at: [The Power of Rank Information \(apa.org\)](#) and Yang, S. & Ghose, A. (2010) ‘Analyzing the relationship between organic and sponsored search advertising: Positive, negative, or zero interdependence?’ *Marketing Science*. Available at: [Analyzing the Relationship Between Organic and Sponsored Search Advertising: Positive, Negative, or Zero Interdependence? on JSTOR](#).

² In our study, we defined “foreign” as any government entity not based in one of the four constituent countries of the United Kingdom and “state-linked” as a website with direct or indirect links to a foreign government or a state-backed media outlet. See the “Glossary of Terms” section for a detailed description of each term.

³ We use the catchall term “state-backed” to include both state-controlled and state-captured outlets. Refer to the “Glossary of Terms” section or the “Categorizing Sources” section for more details.

or indirectly linked to foreign governments or foreign intelligence services—surfaced in search results in the four constituent countries of the UK.

Though we offer several illustrative examples highlighting specific vulnerabilities uncovered by our research, the bulk of this report is focused on assessing a potential risk of foreign interference by identifying the types of variables—from the topic searched for to the language used—that regularly generated search results from state-linked websites, without assessing whether the content of those search results is potentially illegal under the UK’s newly created Foreign Interference Offence included in the National Security Act 2023.⁴ We did, however, pay particular attention to the presence of content produced by media outlets currently sanctioned by the UK government, namely Russian state media outlets that were sanctioned after Russia’s full-scale invasion of Ukraine in 2022.⁵

Key Findings

- On Google Search, Google News, Microsoft Bing, and Bing News, there were 23,756 observations of websites that we determined were directly or indirectly linked to a foreign state during the studied period, representing 7.6% of all search results relating to the queries assessed in this study on Google and Microsoft search products. Results from government websites were more common, with links to state-backed media representing just 2.7% of all results. Qatari state-backed media—due almost entirely to Al-Jazeera English—had the greatest penetration, followed by Russian, Saudi Arabian, and Belarusian state-backed media. As noted, this does not suggest any intent by those states to manipulate search results, nor should the outlets connected to those states be viewed as monolithic, despite their linkages with foreign governments.
- Yandex, the Russian-owned search service, generated the largest number of state-backed media results.⁶ Close to 27% of all search results on Yandex Search came from state-backed media outlets, with 97% of those results coming from Russian state-backed media outlets. By comparison, foreign state-backed media outlets accounted for 6% of results for the selected queries on Baidu Search, 4.2% on Google News, 3.2% on Bing News, 2.4% on Google Search, and 1.2% on Microsoft Bing. While it is unsurprising that Russian-language searches generated more links to Russian government-linked websites than searches conducted in English, this finding speaks to the disparate search environments encountered by users in the UK depending on the language of the query and the search service used.
- Sanctioned Russian state-backed media outlets were largely not present in search results on studied search products from Google and Microsoft. While there were over 1,100 search returns (representing roughly 0.37% of total results) on search products owned by Microsoft or Google from outlets we categorized as Russian state-backed media, most of those returns were from outlets, like Tass, that are not sanctioned by the UK government.
- Despite the near absence of domains directly affiliated with sanctioned Russian outlets in search results on studied Google and Microsoft search products, a sizeable amount of content produced

⁴ Legislation.gov.uk (2023) *National Security Act 2023*. Available at: <https://www.legislation.gov.uk/ukpga/2023/32/part/1/crossheading/foreign-interference/enacted>.

⁵ Foreign, Commonwealth & Development Office et al. (2022) *Foreign secretary announces sanctions on Putin’s propaganda*. Available at: [Foreign Secretary announces sanctions on Putin’s propaganda - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/foreign-secretary-announces-sanctions-on-putin-s-propaganda).

⁶ As discussed in the “Search Service” and “Search Term Selection” sections, we translated the studied English-language search queries into Russian before querying them on Yandex.

by those outlets appeared in search results via reposts on unaffiliated websites. RT content, for example, was more than three times as likely during our study to appear in search results on websites with no affiliation to the Russian government than on RT itself. While this again does not suggest any intentional exploitation of search services, it does highlight issues around transparency and the challenges of attribution, such as understanding where information comes from, in digital information environments.

- The single largest source for RT-produced content in our dataset was not RT but the Big News Network, a news distributor headquartered in Dubai with offices in Sydney. Of the 740 total observations of Big News Network properties in our dataset, 724 featured reposts of RT articles, and over 90% (25 of 27) of the unique URLs from the Big News Network in our dataset were sourced from RT.com. We also found multiple instances, mostly on Bing News, of RT and Sputnik content laundered through state-backed media outlets backed by Russia's allies, including outlets funded by the Belarusian, Venezuelan, Syrian, and Iranian governments. When including Russian state-backed media content found on other domains, searches on Bing News were approximately 16 times more likely to generate returns from Russian state-backed sources than searches on Google News.
- Consistent with prior research, we found that differences in the spelling, language, and framing used in search queries had an enormous impact on search results. Using the Russian spelling of Ukraine's capital city (Kiev), for example, produced ten times more results on Google and Microsoft search products from state-backed sources than the Ukrainian spelling (Kyiv). On Bing News, the Big News Network was the most observed domain in search results for "Kiev" during our study. Considering that all collected results on the Big News Network related to searches for "Kiev" came from RT, this effectively meant that users in the UK who searched for Kiev during the studied period encountered more RT content than any other source. This, of course, does not mean that the use of "Kiev" was a deliberate attempt by RT to exploit search services, but it does highlight how different constructions of similar concepts in search queries can lead people to different ecosystems of information.

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Glossary of Terms

Baidu: A Chinese multinational technology company specializing in internet-related services and products, and artificial intelligence. It is China's leading search service.

Bing News: A feature within the Microsoft Bing search engine ecosystem that provides news-related search results and news topics in response to user queries.

Brookings Institution: A nonprofit public policy organization based in Washington, D.C., which conducts research and education in the social sciences and foreign policy.

Covert and malign activities: Hidden, harmful actions typically conducted with the intent to undermine a nation's interests or stability.

Cybersecurity and Infrastructure Security Agency (CISA): A U.S. federal agency responsible for ensuring the security and resilience of the nation's critical infrastructure against physical and cyber threats.

Data voids: Situations where results are limited, non-existent, or deeply problematic due to missing data, algorithmic logic, or intentional manipulation.

Department for Digital, Culture, Media, and Sport (DCMS): A department of the UK Government responsible for culture, media, and sport. DCMS oversaw the legislation at the point the Foreign Interference Offence was included in the Online Safety Bill.

Disinformation: False information spread with the deliberate intent to mislead.

East Stratcom Task Force (EEAS): The department of the European Union's External Action Service responsible for countering foreign disinformation campaigns.

Foreign interference: Coercive or corruptive behaviour carried out for, or on behalf of, or intended to benefit, a foreign power with the intent to sow discord, manipulate public discourse, discredit the political system, bias the development of policy, and undermine the safety or interests of the state.

Foreign Interference Offence: An offence introduced in the National Security Act 2023 that makes it illegal for a person to engage in conduct for, on behalf of or with intent to benefit a foreign power in a way that interferes in UK rights, democratic institutions, or undermines the safety or interests of the UK.

Foreign malign influence: Harmful actions by a foreign power, typically involving attempts to manipulate public discourse, elections, or policy.

Fragmented concept: A term to describe how distinct framings or phrasings of similar concepts can lead to different search results.

Generative AI: An artificial intelligence system capable of creating new content, such as text, images, or music.

Geolocations: Specific geographical locations which can be used by search engines to personalize search results based on the searcher's location.

Google News: A news aggregation and curation service developed and operated by Google, it is designed to provide users with a centralized platform for accessing news articles, headlines, and information from a wide range of news sources from around the world

Google Search: A web search engine developed by Google in 1997, it is the most widely used search engine globally.

Hamilton 2.0 dashboard: A tool developed by the Alliance for Securing Democracy at the German Marshall Fund (ASD at GMF) to track, analyse, and report on the messages and narratives being promoted by Russian, Chinese, and Iranian government officials and state-controlled media on Twitter, YouTube, state-sponsored news websites, and via official diplomatic statements.

Informational intent: The intention of a user to find specific information when conducting a search.

Interference effect: A term used in the National Security Act 2023 to describe actions that interfere with public functions, political processes, or the interests of the UK.

Microsoft Bing: A web search engine developed and operated by Microsoft. It was launched in 2009 as a successor to Microsoft's earlier search engines, including MSN Search and Live Search.

National Security Act 2023: A piece of legislation in the UK related to national security matters, including foreign interference, that was passed in July 2023.

Navigational intent: The intention of a user to find a particular website or page when conducting a search.

Ofcom: Ofcom is the UK's independent regulator for the communications services that are used and relied on each day. Once the Online Safety Bill becomes law, Ofcom will be the regulator for Online Safety in the UK.

Online Safety Bill: The Online Safety Bill is a proposed UK law which will require certain online services such as social media sites, messaging apps, and search engines to identify risks to people and have measures in place for protecting them from certain types of harm online. Ofcom will set out guidance and codes of practice on how companies can comply with their duties. Websites and apps that are in-scope will have to protect all their users in the UK from illegal content and, where applicable, protect children from certain online harms.

Overt influence: Visible, non-covert activities conducted by states to advance their strategic interests.

Propaganda: The systematic dissemination of information, ideas, or messages, often through various forms of media and communication channels, with the intent to influence or manipulate the beliefs, attitudes, opinions, and behaviors of a target audience

RT (formerly Russia Today): A Russian state-controlled international news agency that was sanctioned by several governments, including the UK, in response to Russia's full-scale invasion of Ukraine in 2022.

Search algorithm: A set of rules and processes used by search engines to determine the relevancy of web pages and rank them in response to a user's query.

Search engine: A service or functionality which enables a person to search some websites or databases (as well as a service or functionality which enables a person to search (in principle) all websites or databases).

Search environments: The digital landscapes within which search engine queries are made and results are displayed.

Search framing: The way in which a query is formulated, which can influence the results that are returned by a search engine.

Search products: Products provided by search services that include search functionality, including but not limited to news aggregators.

Search service: An internet service that is or includes a search engine.

Sputnik News: A Russian state-controlled news agency and international multimedia platform.

State-backed media: A catchall term to describe media outlets that meet the definition of either a state-controlled or state-captured (independent and public) media outlet.

State-linked websites: Websites that are either controlled by a foreign state or under its significant influence. These websites could be used to disseminate propaganda or to influence public opinion or political outcomes in a target country.

State-captured independent media: A media outlet whose ownership and governance structure are not state controlled, but that nonetheless lacks editorial independence due to persistent, systemic control by entities (individuals or institutions) linked to state authorities.

State-captured public media: A media outlet that is not predominantly state-funded but whose ownership structure and editorial decisions are controlled by a state.

State-controlled media: A media outlet funded, owned, and editorially controlled by a state.

The Alliance for Securing Democracy at the German Marshall Fund (ASD at GMF): An initiative that aims to publicly document and expose efforts by authoritarian regimes to subvert democratic institutions.

Wedge issues: Politically divisive matters that are used by foreign powers to create discord, amplify extremism, influence political outcomes, or undermine social cohesion in a target country.

Yandex: A Russian multinational corporation whose products include a search engine and web portal. It is the most used search service in Russia.

Introduction

The National Security Act 2023 created a new criminal offence of foreign interference (“the Foreign Interference Offence”). According to the UK Government, this offence is intended to make it “illegal for

a person to engage in conduct for, on behalf of or with intent to benefit a foreign power in a way which interferes in UK rights, discredits [the UK's] democratic institutions, manipulates people's participation in them and undermines the safety or interests of the UK".⁷ The offence has been included in the list of so-called "priority offences" in the UK's Online Safety Bill, which at the time of writing is still being debated in Parliament.

The Online Safety Bill will (amongst other things) require in-scope services to carry out a risk assessment relating to illegal content on their service, including the risk of their service being used for the commission or facilitation of priority offences. Services will also be required to take proportionate measures to mitigate and manage these risks.

The inclusion of the Foreign Interference Offence as a priority offence in the Online Safety Bill is a response to the threat from hostile state actors to a digital information environment that has proven vulnerable to manipulation. This is perhaps most clearly evidenced by Russia's continued use of disinformation to justify its war of aggression in Ukraine, but over the past decade, state-sponsored and state-linked online information operations have also regularly attempted to subvert political processes, promote extremism, increase polarisation, and undermine faith in institutions in the UK and other democracies.⁸ At a minimum, these efforts may have the potential to weaken confidence in the integrity of democratic debates; in more extreme cases, foreign interference can lead to physical violence and other lasting and significant harms.⁹

While Russia is the largest state sponsor of online manipulation campaigns based on available evidence,¹⁰ it is not alone. An Oxford University study published in 2021 found evidence of more than 80 countries engaged in state-backed propaganda or disinformation.¹¹ These state-backed campaigns have been waged on a variety of digital channels, from large online services to messaging apps and niche community forums. With the advent of generative AI and other readily accessible digital technologies, there will likely be an even greater "democratization of disinformation",¹² providing opportunities for both state and non-state threat actors to use online tools to attempt to undermine the safety and interests of the UK.

This report focuses on a specific risk of foreign interference in the United Kingdom on an understudied yet important vector for foreign malign influence: search services. Search is a particularly important

⁷ Department for Digital, Culture, Media & Sport (2022) *Internet Safety Laws Strengthened to Fight Russian and Hostile State Disinformation*. Available at: www.gov.uk/government/news/internet-safety-laws-strengthened-to-fight-russian-and-hostile-state-disinformation.

⁸ See, for example, Karlsen, G. H. (2019) 'Divide and rule: ten lessons about Russian political influence activities in Europe'. *Palgrave communications*. [Online] 5 (1), 19–. And

Ellehuus, R. (2020) *Mind the Gaps: Russian Information Manipulation in the United Kingdom*. Available at: www.csis.org/analysis/mind-gaps-russian-information-manipulation-united-kingdom.

⁹ See, for example, Mozur, P. (2018) 'A Genocide Incited on Facebook, With Posts From Myanmar's Military'. *The New York Times*. Available at: <https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html>.

¹⁰ See, for example, Lardieri, A. (2021) *Russia Still Largest Driver of Disinformation on Social Media, Facebook Report Finds*. Available at: www.usnews.com/news/politics/articles/2021-05-26/russia-still-largest-driver-of-disinformation-on-social-media-facebook-report-finds.

¹¹ Bradshaw, S. et al. (2020) *Industrialized Disinformation 2020 Global Inventory of Organized Social Media Manipulation*. Available at: <https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/12/2021/02/CyberTroop-Report20-Draft9.pdf>.

¹² Meserole, C. & Polyakova, A. (2018) 'The West Is Ill-Prepared for the Wave of "Deep Fakes" That Artificial Intelligence Could Unleash'. *Brookings*. Available at: www.brookings.edu/articles/the-west-is-ill-prepared-for-the-wave-of-deep-fakes-that-artificial-intelligence-could-unleash/.

arena for influence given that studies have shown that people tend to believe that search engines and other search products are simply neutral retrievers of information,¹³ leading to greater trust in search results than information encountered on social or even traditional media.¹⁴ This, in turn, creates an incentive for hostile foreign states, or those acting at their behest, to exploit search algorithms either through intentional manipulation or strategic content production; for example, the use of state-backed media to consistently produce new, state-aligned content to drown out other search results.

We analysed search results generated by queries related to topics of national importance to the United Kingdom to assess the prominence of foreign state-linked websites¹⁵, or those that reproduced content from those websites, in search results. Because this survey collected roughly 350,000 individual observations from more than 5,000 websites, it was not possible nor was it our intent to individually analyse each search result to assess the nature of the content or its source. Instead, we focused on mapping out the universe of websites that appeared in search results that met, or might possibly meet, the foreign power condition as detailed in the Foreign Interference Offence,¹⁶ without analysing whether the content produced by those websites was potentially illegal under the offence. This report also could not assess whether individual websites appeared in search results due to any direct action—legitimate or otherwise—taken by the publisher, or whether they appeared simply because complex search algorithms interpreted the content produced by those websites to be relevant to an inputted query.

This study adds to a small but growing body of research highlighting the use of search services as a vector for foreign malign influence and a range of other mis- and disinformation threats. The Alliance for Securing Democracy at the German Marshall Fund’s (ASD at GMF) past research has noted the effectiveness of Chinese and Russian state media at exploiting search environments to advance beneficial narratives or depress critical ones, particularly on topics of key strategic importance to each country.¹⁷ For example, in a 2022 report co-authored with the Brookings Institution, we found that Chinese state-controlled media outlets regularly appeared at the top of search results in queries for “Fort Detrick”—a U.S. Army research facility in the U.S. state of Maryland that Chinese officials alleged was responsible for the outbreak of the COVID-19 virus.¹⁸ This followed ASD’s earlier research showing the regularity of Kremlin-controlled media outlets in Google’s “top stories” when searching for information about sensitive topics, including Sergei and Yuliya Skripal, the former Russian intelligence agent and his daughter who were poisoned by suspected Russian agents in Salisbury, UK in 2018.¹⁹

¹³ Haider, J. & Sundin, O. (2019) ‘Invisible Search and Online Search Engines: The Ubiquity of Search in Everyday Life’. *Routledge* [Online].

¹⁴ Edelman (2021) *2021 Edelman Trust Barometer*. Available at: <https://www.edelman.com/trust/2021-trust-barometer>.

¹⁵ See the “Glossary of Terms” section for a detailed description of each term.

¹⁶ See the “Glossary of Terms” or the “Understanding foreign interference and the Foreign Interference Offence” sections for more background on the offence and the foreign power condition.

¹⁷ See, for example, Schafer, B. & Aghekyan, E. (2022). ‘Winning the Web: How Beijing Exploits Search Results to Shape Views of Xinjiang and COVID-19’, *Alliance for Securing Democracy*, May 27. Available at: <https://securingdemocracy.gmfus.org/winning-the-web-how-beijing-exploits-search-results-to-shape-views-of-xinjiang-and-covid-19/>.

¹⁸ Schafer, B. & Aghekyan, E. (2021). ‘Deep in the Data Void: China’s COVID-19 Disinformation Dominates Search Engine Results’, *Alliance for Securing Democracy*, October 5. Available at: <https://securingdemocracy.gmfus.org/data-void-china-covid-disinformation/>.

¹⁹ Hanlon, B. (2018). ‘From Nord Stream to Novichok: Kremlin Propaganda on Google’s Front Page’ *Alliance for Securing Democracy*, June 14. Available at: <https://securingdemocracy.gmfus.org/from-nord-stream-to-novichok-kremlin-propaganda-on-googles-front-page/>.

While this report builds on that prior research, it differs in two key ways: 1) it largely focuses on topics of relevance to a domestic audience (in this case, audiences in the United Kingdom) and 2) it assesses the prominence of all foreign state-linked information sources in search results, not just those associated with specific, typically hostile, foreign state-backed media outlets. By design, most of the tested search queries focus on domestic issues and do not touch upon the specific interests of any one foreign government. One of the challenges of this project, given its global scope, was the difficulty, if not the impossibility, of selecting themes and search queries that are country agnostic and not biased towards certain foreign actors. Although the specific topics in this study were selected based on their relevance to current domestic policy debates in the UK, certain search queries directly or indirectly refer to geopolitical events, most commonly the war against Ukraine. Those queries clearly are more relevant to Russia, Ukraine, and other states involved in the conflict, and are thus more likely to be the focus of messaging from websites affiliated with those states. This research is therefore not meant to evaluate the relative risks posed by specific websites or foreign governments, nor is it meant to systematically test the performance of search services at mitigating those risks. Instead, it is meant to broaden our understanding of the potential for and the mechanics of foreign interference on search services available in the UK.

Understanding Foreign Interference and the Foreign Interference Offence

Foreign interference is defined by the UK's Home Office as "malign activity carried out for, or on behalf of, or intended to benefit, a foreign power" that is "intended to sow discord, manipulate public discourse, discredit the political system, bias the development of policy, and undermine the safety or interests of the UK".²⁰ This definition is largely consistent with those provided by other democratic governments and institutions. The Australian government, for example, defines foreign interference as activities carried out by or on behalf of foreign powers that are "coercive, corrupting, deceptive or clandestine, and contrary to Australia's sovereignty, values and national interests".²¹ The European Union's External Action Service, whose East Stratcom Task Force is responsible for countering foreign information threats, defines foreign malign influence and interference (FIMI) as a "pattern of behaviour that threatens or has the potential to negatively impact values, procedures and political processes" and that is both "intentional" and "manipulative in character".²² Similarly, the U.S. Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA), the U.S. agency responsible for combatting, among other things, foreign interference in elections, categorizes foreign interference as "malign actions taken by foreign governments or foreign actors designed to sow discord, manipulate

²⁰ GOV.UK (2023) *Foreign interference: National Security Bill factsheet*. Available at: <https://www.gov.uk/government/publications/national-security-bill-factsheets/foreign-interference-national-security-bill-factsheet>.

²¹ Australian Government Department of Home Affairs (2023) *Defining foreign interference*. Available at: [Defining foreign interference \(homeaffairs.gov.au\)](https://www.homeaffairs.gov.au/defining-foreign-interference).

²² European External Action Service (2023) *1st EEAS Report on Foreign Information Manipulation and Interference Threats*. Available at: <https://www.eeas.europa.eu/sites/default/files/documents/2023/EEAS-DataTeam-ThreatReport-2023..pdf>.

public discourse, discredit the electoral system, bias the development of policy, or disrupt markets for the purpose of undermining the interests of the United States and its allies”.²³

In both academic and government literature, there is often an effort to clearly articulate the difference between acceptable foreign influence and malign foreign influence or interference.²⁴ All states, to varying degrees, attempt to influence debates outside their respective borders. The UK government, for example, spends considerable money each year on the BBC World Service, the British Council, and other traditional and public diplomacy initiatives with the implicit if not explicit intent²⁵ to positively influence perceptions about the UK in support of the government’s “overseas objectives”.²⁶ It is therefore generally considered acceptable for foreign governments to use traditional or public diplomacy activities to advance their strategic interests within the UK, so long as those activities are conducted openly and are not intended to undermine UK interests.

In communicating the need for a Foreign Interference Offence, the UK government has repeatedly stressed the difference between “overt political influence” activities conducted by states to bolster their own interests and “covert and malign” activities used to undermine the interests of the United Kingdom.²⁷ However, transparency, or lack thereof, is not a determining factor in assessing whether an activity constitutes an interference offence. Instead, the National Security Act 2023 offers a framework with three conditions, all of which must be met to categorize an activity as an offence:

1. the person engages in prohibited conduct
2. the foreign power condition is met in relation to the prohibited conduct, and
3. the person intends the prohibited conduct, or a course of conduct of which it forms part, to have an interference effect or the person is reckless as to whether the prohibited conduct, or a course of conduct of which it forms part, will have an interference effect²⁸

“Prohibited conduct” is defined in the act as conduct that threatens violence, physical injury, or damages a person’s reputation. Importantly, it also includes misrepresentation, including misrepresentation as to a person’s identity or purpose, or presenting information—even factually accurate information—in a way that amounts to misrepresentation. An “interference effect” may refer to a specific instance or the matter in general, and includes, among other effects, interfering with public functions or the ability to participate in political processes, or prejudicing the interests of the UK.

²³ Department of Homeland Security (2018) *Foreign Interference Taxonomy*. Available at:

https://www.cisa.gov/sites/default/files/publications/19_0717_cisa_foreign-influence-taxonomy.pdf.

²⁴ See, for example, Mansted, K. (2021) *National Security College, The Australian National University*. ‘The Domestic Security Grey Zone: Navigating the Space Between Foreign Influence and Foreign Interference’ Available at:

https://nsc.crawford.anu.edu.au/sites/default/files/uploads/nsc_crawford_anu_edu_au/2021-02/nsc_foreign_interference_op_2021.pdf.

²⁵ Cabinet Office, UK Government (2021) *Global Britain in a competitive age The Integrated Review of Security, Defence, Development and Foreign Policy*. Available at: <https://www.gov.uk/government/publications/global-britain-in-a-competitive-age-the-integrated-review-of-security-defence-development-and-foreign-policy>.

²⁶ House of Commons Foreign Affairs Committee (2006) *Public Diplomacy Third Report of Session 2005–06*. Available at: <https://publications.parliament.uk/pa/cm200506/cmselect/cmfa/903/903.pdf>.

²⁷ See, for example, Home Office, UK Government (2023) *Foreign Interference: National Security Bill factsheet*. Available at: <https://www.gov.uk/government/publications/national-security-bill-factsheets/foreign-interference-national-security-bill-factsheet>.

²⁸ Legislation.gov.uk (2023) *National Security Act 2023*. Available at: <https://www.legislation.gov.uk/ukpga/2023/32/enacted>.

Somewhat intuitively, to commit a foreign interference offence the “prohibited conduct” and the “interference effect” must be conducted by a foreign power. The foreign power condition applies to:

- the sovereign or other head of a foreign state in their public capacity
- a foreign government, or part of a foreign government
- an agency or authority of a foreign government, or of part of a foreign government
- an authority responsible for administering the affairs of an area within a foreign country or territory, or persons exercising the functions of such an authority, or
- a political party which is a governing political party of a foreign government

The foreign power condition is also met if the conduct in question is carried out by a person who “ought reasonably to know” that they are acting for or on behalf of a foreign power. Further clarifying that point, “for or on behalf of a foreign power” is defined in the act as conduct that is instigated, directed, supported, or carried out in collaboration with a foreign power.

The presence of foreign state-backed media websites in search results clearly is not inherently problematic. Much, if not most, of the content produced by state-backed sources – even traditionally adversarial ones – is largely factual. There is also a broad range in the types of relationships between media outlets and foreign states, along with a similar range in how transparent or covert these relationships are. In addition to this complexity, the Online Safety Bill also includes exemptions for journalistic and recognised news publisher content aimed at protecting the role of a free press. Sanctioned entities, however, are not included in the exemption for recognised news publishers.

Search Service Selection

To test the vulnerability of search services to foreign interference, data was collected over a 30-day period in March and April 2023 from the following six search products on four search services:

- Google Search
- Google News
- Microsoft Bing
- Bing News
- Baidu Search
- Yandex Search

The UK’s Online Safety Bill defines a search service as an internet service that is or includes a search engine and defines a search engine as “a service or functionality which enables a person to search some websites or databases (as well as a service or functionality which enables a person to search (in principle) all websites or databases)”.²⁹ Broadly applied, this definition could include a variety of internet services that allow users to search a single or multiple databases. This report, however, focuses only on search products on search services that allow people to search for content on all indexed websites across the open internet, rather than search services that provide more limited search capabilities.

²⁹ Authority of the House of Lords (2023) *Online Safety Bill*. Available at: <https://bills.parliament.uk/publications/49376/documents/2822>

Individual search services were chosen based on their market share in the United Kingdom, their popularity with certain diaspora communities, their ties to foreign governments, or a combination of those factors. Google and Microsoft's Bing were selected due to their market share in the UK, with Google alone accounting for more than 90% of searches conducted in the country. Its closest competitor, Microsoft Bing, receives, depending on the study, between 3 and 6% of searches in the UK, with all other search service receiving less than 1.5%.³⁰ These figures are largely consistent with statistics on global search service market share.³¹ Because our previous research has identified differences in search performance between News and Search environments,³² Google News and Bing News were treated as separate search products in this study.

Yandex and Baidu, the third and fifth most used search services globally, were included in this study even though neither service is widely used in the UK.³³ However, as the largest search services in Russia (Yandex)³⁴ and China (Baidu),³⁵ both search services potentially serve as important information sources for native Russian and Chinese speakers living in the UK. Members of the UK government also have raised concerns about Yandex due to the company's ties to the Kremlin,³⁶ while scholars and intelligence officials in the West have expressed concerns about Baidu's entanglements with the Chinese government.³⁷ Additionally, both Moscow and Beijing have track records of running influence campaigns targeting their respective diaspora communities,^{38,39} making both search services relevant to the study of foreign interference.

Search Query Selection

To better understand the prevalence of websites linked to foreign governments and state-controlled and state-captured media outlets, which we refer to throughout this report as "state-backed" media, on prominent search services in the UK, this report tested 20 search queries (19 on Yandex and Baidu) that were grouped by thematic topic areas: independence and the Union; domestic and foreign policy priorities; and public health. Those themes were selected in part because of their salience in public

³⁰ Statcounter Global Stats (2023) *Search Engine Market Share United Kingdom*. Available at: <https://gs.statcounter.com/search-engine-market-share/all/united-kingdom> and

Statcounter Global Stats (2023) *Market share of leading search engines in the United Kingdom (UK) in April 2023*. Available at: <https://www.statista.com/statistics/280269/market-share-held-by-search-engines-in-the-united-kingdom/>

³¹ Statcounter Global Stats (2023) *Search Engine Market Share Worldwide*. Available at: <https://gs.statcounter.com/search-engine-market-share>.

³² Brandt, J., Schafer, B., Aghekyan, E., Wirtschafter, V., and Danaditya, A. (2022) 'Winning the Web: How Beijing exploits search results to shape views of Xinjiang and COVID-19', *Brookings*. Available at: https://www.brookings.edu/wp-content/uploads/2022/05/FP_20220525_china_seo_v2.pdf

³³ Statcounter Global Stats (2023) *Search Engine Market Share Worldwide*. Available at: <https://gs.statcounter.com/search-engine-market-share>.

³⁴ Statcounter Global Stats (2023) *Search Engine Market Share Russian Federation*. Available at: <https://gs.statcounter.com/search-engine-market-share/all/russian-federation>

³⁵ Statcounter Global Stats (2023) *Search Engine Market Share China*. Available at: <https://gs.statcounter.com/search-engine-market-share/all/china>.

³⁶ Das, S. (2022) 'Warnings raised over Russian tech giant Yandex's UK operation', *The Guardian*, March 5. Available at: <https://www.theguardian.com/world/2022/mar/05/warnings-raised-over-russian-tech-giant-yandexs-uk-operation>

³⁷ Dorfman, Z. (2020) 'Warnings raised over Russian tech giant Yandex's UK operation', *Foreign Policy*, December 23. Available at: <https://foreignpolicy.com/2020/12/23/china-tech-giants-process-stolen-data-spy-agencies/>

³⁸ European Parliament (2021) *The impact of disinformation campaigns about migrants and minority groups in the EU*. Available at: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653641/EXPO_IDA\(2021\)653641_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653641/EXPO_IDA(2021)653641_EN.pdf)

³⁹ European Parliament (2021) *The impact of disinformation campaigns about migrants and minority groups in the EU*. Available at: <https://www.cfr.org/blog/beijings-influence-tactics-chinese-diaspora-excerpt>

debates in the United Kingdom at the time the terms were selected, and in part because of their potential to be weaponized by hostile foreign powers. Though specific queries were selected because of their relevance at the time the study was commenced, we attempted to identify broader “wedge issues” that have been enduring targets of foreign states seeking to foment political extremism, influence political outcomes, or undermine social cohesion in the UK.⁴⁰

ASD at GMF created the initial list of potential search queries in February 2023 by analysing data from its Hamilton 2.0 dashboard, which tracks websites and social media accounts affiliated with Chinese, Iranian, and Russian government officials and state-controlled media outlets around the globe.⁴¹ To isolate UK-relevant data, analysts focused on accounts that specifically target audiences in the UK (for example, RT UK) and used targeted keywords to identify relevant posts across the entirety of our dataset (for example, mentions of “British”, “London”, and “Scotland”). Analysts also performed targeted searches to identify UK-related coverage on websites affiliated with other major English-language state-backed media outlets not tracked on the Hamilton dashboard, like Telesur and Al Jazeera, the latter of which has a production studio in London.⁴²

Potential topics and search queries were then identified by analysts who conducted manual reviews of the relevant content. Themes were selected to organize relevant search queries and to allow for a degree of comparative analysis across and within certain topic areas. Themes were not selected based on any relative risk assessment nor were they intended to be weighted equally, as evidenced by the fact that some thematic topic areas contain more search queries than others.

In early March 2023, representatives from Ofcom, in consultation with ASD, selected the three themes and 20 specific search queries⁴³ that subject matter experts at both ASD and Ofcom determined to be relevant to UK national interests at the time they were selected. Each chosen term was then tested throughout the project period on the following search products: (1) Google Search; (2) Google News; (3) Bing Search; and (4) Bing News. Russian and Mandarin translations of the selected search queries were tested, respectively, on Yandex Search and Baidu Search. (Refer to the end of this section for an explanation of why non-English language terms were tested on those search services).

It bears noting that despite our best efforts to use objective qualitative and quantitative data analysis to inform the selection of the themes and search queries, any selection process of this nature contains a degree of subjectivity. A similar study could have selected a partially or entirely different list of search queries, which obviously would have produced different search results and could have led to different findings. At the same time, we intentionally avoided any queries that would have suggested user intent to visit a specific site or type of site—for example, “Russian state media coverage of NATO”.

⁴⁰ Intelligence and Security Committee of Parliament (2020) *Intelligence and Security Committee of Parliament Russia*. Available at: <https://s3.documentcloud.org/documents/6998980/20200721-HC632-CCS001-CCS1019402408-001-ISC.pdf>.

⁴¹ Alliance for Securing Democracy (2023) *Hamilton 2.0 Dashboard*. Available at: <https://securingdemocracy.gmfus.org/hamilton-dashboard/>.

⁴² In April 2023, Al Jazeera announced that it would be moving its UK operations to Doha. See, Graham-Harrison, E. (2023) ‘Al Jazeera English announces plans to move from London’s Shard to Qatar’, *The Guardian*, April 12. Available at: <https://www.theguardian.com/media/2023/apr/12/al-jazeera-english-announces-plans-to-move-from-londons-shard-to-qatar>

⁴³ Certain search queries were constructed essentially as Boolean searches to capture a range of related queries. For example, “UK spied lockdown” is obviously not a natural string of text; however, it allowed us to capture a range of related queries like “Did the UK army spy on lockdown protestors?” or “Is there evidence that the UK spied on Covid lockdown critics?”

1. ***Terms related to independence and the Union.***

- **Indyref:** Refers to the Scottish independence referendum, a vote on whether Scotland should become an independent country separate from the UK.
- **Scottish referendum:** Another term for the Scottish independence referendum (indyref).
- **Northern Ireland Protocol:** A part of the Brexit agreement that aims to prevent a hard border between Northern Ireland and the Republic of Ireland.
- **Irish Sea border:** Refers to the customs border created by the Northern Ireland Protocol between Northern Ireland and Great Britain.

2. ***Terms related to domestic and foreign policy priorities.***

- **Cost of living crisis:** A situation in which the cost of basic goods and services increases significantly, making it difficult for people to maintain their standard of living.
- **Gender recognition reform bill:** A proposed legal reform in Scotland aiming to simplify the process of legally changing one's gender.
- **Inflation Ukraine aid:** The impact of providing financial aid to Ukraine on inflation in the UK.
- **Anti-Russian sanctions:** Economic measures imposed against Russia by the UK and other countries that the Russian government has framed as “anti-Russian”.
- **NATO expansion Ukraine:** The debate around Ukraine potentially joining the North Atlantic Treaty Organization (NATO).
- **Asylum seekers protest:** Demonstrations by or in support of asylum seekers in the UK.
- **UK strikes:** Work stoppages or labour strikes in the UK.
- **Kyiv:** The capital city of Ukraine, with a spelling derived from the Ukrainian-language name for the city.
- **Kiev:** The capital city of Ukraine, with a spelling derived from the Russian-language name for the city.
- **UK military spending cuts:** Reductions in the UK's defence budget.

3. ***Terms related to public health.***

- **Covid restrictions:** Measures implemented by the UK government to control the spread of COVID-19.
- **Excess deaths 2022:** The number of deaths in the UK in 2022 greater than the expected mortality rate.
- **Covid vaccine deaths:** Deaths potentially related to COVID-19 vaccination.
- **COVID-19 origins:** The investigation into the initial source of the COVID-19 virus.
- **Anti-lockdown protests:** Demonstrations against COVID-19 lockdown measures in the UK.
- **UK spied lockdown:** Instances of surveillance or monitoring of lockdown measures in the UK related to a scandal over the alleged monitoring of anti-lockdown critics' social media posts by the UK military.⁴⁴

⁴⁴ Telegraph Reporters (2023) 'Army's 'information warfare' unit monitored Covid lockdown critics', *The Telegraph*, January 29. Available at: <https://www.telegraph.co.uk/news/2023/01/29/armys-information-warfare-unit-monitored-covid-lockdown-critics/>

Though no public data exists documenting the languages used in search queries on Yandex and Baidu in the UK, it was assumed—given that both services cater to and are primarily used by non-English speakers—that most searches on those platforms would be conducted in Russian (in the case of Yandex)⁴⁵ and Mandarin (in the case of Baidu).⁴⁶ Searches on Yandex and Baidu were therefore performed in Russian and Mandarin, respectively. Though we aimed to closely replicate the English-language search queries, terms were adjusted by native speakers to reflect more natural phrasing in each language.⁴⁷

English Search Queries	Russian Search Queries	Chinese Search Queries
Indyref	Indyref	Indyref
Scottish referendum	референдум о независимости Шотландии	苏格兰独立公投
Gender recognition reform bill	законопроект о реформе признания пола	性别认同改革法
Northern Ireland Protocol	Протокол по Северной Ирландии	北爱尔兰议定书
Irish Sea border	Граница ирландского моря	北爱尔兰贸易边界
Cost of living crisis	кризис стоимости жизни	生活成本危机
Inflation Ukraine aid	Украина помощь инфляция	通胀 乌克兰 援助
Anti-Russian sanctions	санкции против России	反俄制裁
NATO expansion Ukraine	Расширение НАТО Украина	北约扩张 乌克兰/北约东扩(NATO east expansion) 乌克兰
Asylum seekers protest	просители убежища протестуют	寻求庇护者 抗议/寻求避难者 抗议
UK strikes	Забастовки в Великобритании	英国罢工
Kiev	Киев	基辅
Kyiv	N/A	N/A
UK military spending cuts	Сокращение военных расходов Великобритании	英国军费支出削减
Covid restrictions	правительство меры распространение Covid	新冠限制
Excess deaths 2022	избыточная смертность 2022	2022年超额死亡
Covid vaccine deaths	смерть + вакцина Covid-19	新冠疫苗死亡
Covid-19 origins	Covid-19 происхождение	新冠起源/新冠病毒溯源

⁴⁵ Similarweb (2023) *Yandex.ru*. Available at: [similarweb.com/website/yandex.ru/#overview](https://www.similarweb.com/website/yandex.ru/#overview)

⁴⁶ Similarweb (2023) *Baidu.com*. Available at: <https://www.similarweb.com/website/baidu.com/#overview>

⁴⁷ Because there is no equivalent in either language for “indyref”, that query was conducted in English. Additionally, “Kyiv” was not included among the tested search queries on Yandex or Baidu due to the absence of the Ukrainian language spelling of the city in either the Russian or Chinese language.

Anti-lockdown protests	протесты против карантина	反封锁抗议/ 反新冠封锁抗议 (anti covid-lockdown protests)
UK spied lockdown	Великобритания шпионила за карантина	英国 监视 封锁

Search Framing and Data Voids

Prior research has shown that small variations in the construction of search queries can influence search returns and create what Michael Golebiewski and danah boyd have referred to as “data voids”, which are search queries where results are “limited, nonexistent, or deeply problematic” due to missing data, algorithmic logic, or intentional manipulation.⁴⁸ Differences in spelling or language can create data voids or lead to distinct search environments, but so too can “fragmented concepts”—a term coined by Golebiewski and boyd to describe the segmentation of users into different search environments based on their distinct framing of similar concepts.⁴⁹ For example, a person who searches for “illegal migrants” is likely to see different results than someone who searches for “undocumented migrants”, even though both people are ostensibly searching for information about the same topic. This is also true for primed or loaded search terms—essentially, strategic terms used by certain individuals or groups that are not widely adopted by the media or public—that can be optimized to lead users to a curated, and occasionally problematic, ecosystem of content. Perhaps the most tragic example is the case of Dylan Roof, the white supremacist who murdered nine Black Americans in a church in the U.S. state of South Carolina, who told investigators he was radicalized after searching Google for “Black on white crime”.⁵⁰

For this study, most of the selected search queries were conceptualized using generic terms and phrasing to limit the introduction of bias and priming into the results. There were a few notable and intentional exceptions. Both “Kiev” and “Kyiv” were queried to test whether the use of spelling derived from the Russian language (Kiev) would produce a different ecosystem of search results than the more widely adopted spelling derived from the Ukrainian-language spelling (Kyiv). Relatedly, the search term “anti-Russian sanctions” was chosen because it is the phrasing typically used by Russian state media outlets (and outlets sympathetic to Russia’s cause) to describe the range of economic and other measures imposed on Russia after its invasion of Ukraine. It was selected to provide a point of comparison to evaluate whether primed searches introduced more state-controlled content into search results than generic Ukraine-related searches, like “inflation Ukraine aid”.

Understanding Search Performance

Though the fundamentals of search engines are well understood, in assessing search performance it is helpful to understand how the search process works. Search engines crawl the internet for pages, index those pages based on distinct characteristics such as keywords and images, sort through the index to discover the most appropriate results in response to a search query, and display those results to users.

⁴⁸ Golebiewski, M., Boyd, D., (2018) ‘Data Voids: Where Missing Data Can Easily Be Exploited’, *Data & Society*. Available at: <https://datasociety.net/wp-content/uploads/2019/11/Data-Voids-2.0-Final.pdf>

⁴⁹ Golebiewski, M., Boyd, D., (2018) ‘Data Voids: Where Missing Data Can Easily Be Exploited’, *Data & Society*. Available at: <https://datasociety.net/wp-content/uploads/2019/11/Data-Voids-2.0-Final.pdf>

⁵⁰ Hersher, R. (2017) ‘What Happened When Dylann Roof Asked Google For Information About Race?’, *NPR*, January 10. Available at: <https://www.npr.org/sections/thetwo-way/2017/01/10/508363607/what-happened-when-dylann-roof-asked-google-for-information-about-race>

Most search services also personalize results based on factors like language, location, and prior content consumption. Search engines then rank the results according to specific factors.

A critical factor in search performance is a search service's ability to understand the informational and navigational intent of users. For example, a person in London who searches for "best Thai restaurants" is probably looking for local recommendations rather than a list of the best restaurants in Thailand. Likewise, a user who searches for the name of a specific website or brand, say a restaurant review website, is likely hoping to see results from that website first, regardless of whether that site is considered the most trusted brand. In most cases, a quality search result is simply one that correctly interprets the intent of the user and returns relevant and helpful content.

This process becomes more complicated, however, when a person seeks out potentially problematic content or information. In these cases, the intent of the user may be at odds with legal or ethical considerations, and, as a result, most search algorithms are trained to not return relevant information if that information could potentially lead to real-world harms.⁵¹ For example, a user whose query suggests an interest in joining a terrorist organization would not be served the most relevant results (at least in theory), for obvious reasons. Similarly, if a person enters a query that could affect their financial stability, health, safety, or welfare—which Google refers to as "your money or your life"—search engines have shown a clear preference for pages that provide accurate information, regardless of the presumed intent of the user.⁵²

But the tension between the desire of search engines to respect user intent and their responsibility to show quality results is murkier around contested topics, especially those with social, political, or geopolitical underpinnings. Search services are generally loath to completely ignore the intent of those who search for perfectly legal but controversial topics.⁵³ This is primarily a business decision to avoid alienating customers and advertisers (and, increasingly, to avoid drawing the ire of U.S. regulators),⁵⁴ but it is also a decision rooted in the fundamentals of free thought and academic discovery; flat-earthers, after all, once represented the dominant view and not the fringe.

While debates about the philosophical and ethical implications of search algorithms is a topic that is worthy of, and has been, the focus of standalone research,⁵⁵ its relevance to this paper is limited to how search services treat state-linked sources, whether they be ministry of foreign affairs websites or state-backed media outlets. There is limited published information about whether search services apply

⁵¹ See, for example, Microsoft (2023) *How Bing delivers search results*. Available at: [How Bing delivers search results \(microsoft.com\)](https://www.microsoft.com/en-us/search/how-it-works) and Southern, M. (2017) 'Google Increases Efforts to Filter Out Offensive, Upsetting, and Inaccurate Content', *Search Engine Journal*, March 14. Available at: <https://www.searchenginejournal.com/google-increases-efforts-filter-offensive-upsetting-inaccurate-content/189959/>

⁵² A Better Legal Internet by Stanford Legal Design Lab (2022) *Legal Help Searches in the Your Money or Your Life (YMYL) framework*. Available at: <https://betterinternet.law.stanford.edu/2022/11/04/legal-help-searches-in-the-your-money-or-your-life-yfyl-framework/>

⁵³ House of Commons Digital, Culture, Media and Sport Committee (2018) *Oral evidence: Fake News – 8 February 2018* (George Washington University, Washington DC), HC 363. Available at: <https://committees.parliament.uk/oralevidence/7593/html/>

⁵⁴ Klar, R. (2023) 'House GOP subpoenas Big Tech companies over content moderation decisions', *The Hill*, February 15. Available at: <https://thehill.com/policy/technology/3859762-house-gop-subpoenas-big-tech-companies-over-content-moderation-decisions/>

⁵⁵ Tsamados, A. et al. (2022) The ethics of algorithms: key problems and solutions. *AI & society*. [Online] 37 (1), 215–230. Available at: <https://link.springer.com/article/10.1007/s00146-021-01154-8>.

different criteria to state-linked sources, apart from the restrictions and in some locations bans⁵⁶ on Russian state media outlets due to Russia’s invasion of Ukraine.⁵⁷

Absent those specific restrictions, it could be argued that a person who expresses navigational intent to view a specific state-linked website should be allowed to access that source. For example, a user who searches “Chinese state media coverage of Xinjiang” may have a compelling reason—whether it be academic interest or mere intellectual curiosity—to see results from Chinese government sources. It could also be argued that even without a user expressing specific intent to view a state-linked source, search services should provide people with a diversity of opinions, even if those opinions are at times aligned with hostile foreign states—unless, of course, the conduct is prohibited or intended to have an interference effect.

As previously noted, our selection of search queries did not include any terms that would suggest user intent to access a specific site or a preference for a state-controlled source. This means that while certain search results could be influenced by presumed informational intent, presumed navigational intent should not have influenced results.

Understanding Search Rankings

Search ranking—a value corresponding to the position of a given result on the results page—is of critical importance. Studies have consistently shown that few users even make it to the bottom of the first page of results, let alone additional pages.⁵⁸ Microsoft Bing, for example, describes its ranking process as an attempt to deliver a “comprehensive, relevant, and valuable collection of search results,”⁵⁹ while Google also emphasises the importance of “freshness” and “authoritativeness”.⁶⁰ Although each search service applies different criteria and weights to determine search rank, they all, to varying degrees, rely on hundreds if not thousands of signals and factors to determine the informational and navigational intent of the user and then work to generate the most relevant results.⁶¹ This research does not attempt to unpack the complexities of search rank; however, it is important to highlight the variables in our research design that likely influenced, or could have influenced, our findings.

The most significant search ranking variable introduced in our research, outside of the query itself, was the use of Russian and Chinese-language search queries on Yandex and Baidu. Russian and Chinese queries would signal to a search service that a user is interested in results in those languages, thereby prioritizing content published in those languages. One would therefore expect that, regardless of the search engine used, that searches in Russian and Chinese, especially using Cyrillic and Chinese characters (as was the case in this study), would result in more observations of Russian and Chinese sources than

⁵⁶ Schechner, S. (2022) ‘EU Orders Removal of Russian State-Owned Media From Search Results, Social-Media Reshares’, *The Wall Street Journal*, March 11. Available at: [EU Orders Removal of Russian State-Owned Media From Search Results, Social-Media Reshares \(wsj.com\)](#)

⁵⁷ Bond, S. (2022) ‘Tech’s crackdown on Russian propaganda is a geopolitical high-wire act’, *NPR*, March 2. Available at: <https://www.npr.org/2022/03/01/1083824030/techs-crackdown-on-russian-propaganda-is-a-geopolitical-high-wire-act>

⁵⁸ Southern, M. (2020) ‘Over 25% of People Click the First Google Search Result’, *Search Engine Journal*, July 14. Available at: <https://www.searchenginejournal.com/google-first-page-clicks/374516/>

⁵⁹ Microsoft (2023) *How Bing delivers search results*. Available at: [How Bing delivers search results \(microsoft.com\)](#)

⁶⁰ Google Search (2023) *How results are automatically generated*. Available at: <https://www.google.com/search/howsearchworks/how-search-works/ranking-results/>

⁶¹ Leaked internal documents from Yandex suggest that around 1,800 search ranking factors are used by Yandex. See, Taylor, D. (2023) ‘Yandex Data Leak: The Ranking Factors & The Myths We Found’, *Search Engine Journal*, February 1. Available at: <https://www.searchenginejournal.com/yandex-data-leak/477905/>

our English-language queries. For that reason, data from Yandex and Baidu were treated as separate and distinct from the data collected on English-language queries conducted on Google and Microsoft search products.

Location is another signal that search engines use to assess the relevance of search results. In some cases, location of is a critical signal. A person searching for “what’s the weather today?” or “police activity near me” is more than likely looking for local results. In the case of searches related to news or current events, location is less important, though search engines generally prioritize some local sources.⁶² Because this study was focused on potential foreign interference in the UK, we conducted searches using geolocations within the United Kingdom. On Yandex and Baidu, we conducted searches using a single, UK-based geolocation. On Google and Microsoft search products, we were able to geolocate our searches to the four constituent countries within the United Kingdom: England, Wales, Scotland, and Northern Ireland. In theory, those different geolocations could have produced different results; in practice, we found little to no variation—especially in terms of the amount of state-linked content—among the four tested locations.

Data Collection

Data was collected for a period of 30 days between March 17 and April 18, 2023. The days of March 25 and March 26 were excluded from the study due to a technical fault in our data collection that resulted in partial data collection for those days, which was subsequently discarded. This necessitated an extension of the project’s end date from April 16 to April 18. Although it is possible that results are slightly different because of the change in the project period, it is unlikely our main takeaways or key findings were significantly affected by the change—especially because most results stayed largely consistent day-to-day. Moreover, because the start and end dates of the project were arbitrary and not pegged to any specific event, the results from this period are just as valid as those that would have been collected during the planned project period.

Every day of the project, we searched each of the 20 English-language queries on Google Search, Google News, Microsoft Bing, and Bing News. To simulate local searches across the UK, Internet Protocol (IP) addresses were geolocated in England, Wales, Scotland, and Northern Ireland. This meant that there were 80 total search queries conducted on Google Search, Google News, Microsoft Bing, and Bing News each day.

On Yandex Search and Baidu Search, we were only able to geolocate searches to the UK in general (as opposed to the four constituent countries within the UK) due to platform restrictions on more specific data collection. This meant that we only conducted 19 searches per day on those platforms. (As noted, we did not search “Kyiv” on either platform because the Ukrainian spelling of the city does not exist in either the Russian or Chinese language).

We collected daily data from the first four pages of organic search results for each search term on all studied search services except Yandex. On search services without clearly defined “pages” (for example, services where users scroll to find additional search results), a page was defined as ten results. This meant that we collected a maximum of 40 observations per query, though the number of actual

⁶² Sullivan, D. (2020) ‘How location helps provide more relevant search results’, *Google The Keyword*, December 16. Available at: <https://blog.google/products/search/location-relevant-search-results/>

observations collected varied depending on the number of unique results generated by each query. Due to platform limitations, Yandex Search results were limited to roughly the first page, which varied from between eight and 14 results per query.

On average, we collected 10,340 observations daily across Google Search, Google News, Microsoft Bing, and Bing News, for a total of 310,210 observations of English-language searches. On Yandex Search, we collected an average of 308 observations each day, for a total of 9,253 observations. And on Baidu Search, we collected an average of 782 daily results, for a total of 23,469 observations.⁶³ For each observation, we collected the title, domain, URL, and page rank. Because Bing News has no set page ranking system,⁶⁴ page rank for Bing News was artificially derived from result ingestion order.

Categorizing Sources

At the conclusion of the data collection period, we classified the websites observed in search results, with a particular focus on identifying sites with a documented or alleged link to foreign states. To assist with this process, we developed a series of classifiers, including the country of origin, the website type, links to a foreign state, and, if applicable, the media type.

Country of Origin	Website Type	State Links	Media Type
Foreign	Media Outlet	Yes	Independent
Domestic	News Aggregator/Syndicator	No	Independent Public
Unclear	Social Media Platform	Unclear	Independent State Funded and/or Managed
	Government		State-Controlled
	International Organization		State-Captured Public
	Non-Government Org.		State-Captured Private
	Academic Institution		
	Other/Unclear		

Generative AI was used to automate the initial process of classifying the country of origin and the website type. Given the focus of this report, we did not attempt to assess the potential state links of websites beyond their country of origin if they were determined to be based in the UK.⁶⁵ We also prioritized classifying websites whose content was determined to be potentially relevant to the study of foreign interference, as opposed to e-commerce, travel, or other sites that are unlikely to be vectors for

⁶³ Baidu search result URLs were all in a baidu.com/* format and needed to be run through a link expander to follow redirects to the actual domain. This process ensured that the collected data accurately represented the destination URLs, allowing for more precise analysis and comparisons.

⁶⁴ Microsoft (2022) *How to use ranking to display Bing Web Search API results*. Available at: <https://learn.microsoft.com/en-us/azure/cognitive-services/bing-web-search/rank-results>

⁶⁵ An exception would have been UK-based websites republishing state-backed content; however, we did not identify any of those sites in our data.

malign foreign influence or interference.⁶⁶ Because of the large number of observations in this study, we limited manual reviews of websites to those with at least 20 observations in our dataset. This resulted in manual reviews of over 1200 domains. The full dataset also was checked against a list of known state-backed media outlets,⁶⁷ so some low-volume occurrences of state-backed media are present in the dataset.

Country of Origin

For the country of origin, we defaulted to the stated location (if provided) of the media outlet, organization, or other entity affiliated with the website, rather than the location where the website is hosted or the beneficial owner resides. In cases where the listed location of a page was determined to be misleading (intentionally or otherwise)—for example, a “local” news site that seemingly did not have any staff or ownership based in the stated location—we listed the location of the site’s beneficial owner, if that could be determined. If the country of origin could not be determined based on publicly available information, we categorized the site’s location as “unclear”.

Website Type

The website type was determined by reviewing the content on the website, the top-level domain (for example, .gov or .org), independent reporting about the site, or other publicly available information. A brief description and examples of each website type are provided below:

1. Media Outlet – A website affiliated with a news-gathering organization (*examples: The BBC, Reuters, The Economist*)
2. News Aggregator/Syndicator – A website that collects and organizes content published by one or more external websites or sources or that republishes content from a single source (*examples: Yahoo! News, Apple News, Flipboard*)
3. Social Media Platform – A website that hosts user generated content (*examples: Twitter, Facebook, YouTube*)
4. Government—A website affiliated with a nation-state or state entity or organization (*examples: the White House, the Russian Embassy in the United Kingdom*)
5. International Organization—A website affiliated with an international body (*examples: NATO, the United Nations, the World Health Organization*).
6. Non-Government Organization – A website affiliated with a charity, think tank, non-profit, or other organization that is independent of any government (*examples: Chatham House, Amnesty International, Doctors Without Borders*)
7. Academic Institution—A website affiliated with an institution of higher learning (*examples: Oxford University, Stanford University*)
8. Other—A website whose purpose is not captured by any of the other definitions, especially if the primary purpose is something other than the dissemination of news or analysis (*examples: Expedia, WebMD, Thrillist*)
9. Unclear—A website whose purpose is unclear

⁶⁶ Though rare, recent reporting on foreign influence campaigns has highlighted the use of review sites like Rotten Tomatoes by foreign threat actors. However, the type of foreign influence or interference conducted on those sites is outside the scope this research. See, for example, Microsoft Threat Intelligence (2023) *Sophistication, scope, and scale: Digital threats from East Asia increase in breadth and effectiveness*. Available at: <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RW1aFyW>

⁶⁷ State Media Monitor (2023) *The world's state media database*. Available at: <https://statemediamonitor.com/>

State Links

Taking into account the definition of a “foreign power” provided in the National Security Act 2023, for the purpose of our research we considered any website located outside the UK to be state linked if it was directly or indirectly supported or controlled by a foreign government. This determination was applied to all government websites. In a few isolated cases, we also designated certain civil society organizations as state-linked if they were funded by a single foreign state and were determined to be effectively controlled by that state. The most prominent example in our dataset is the Russkiy Mir Foundation, a cultural organization funded by the Russian government that the EU sanctioned in 2022 due to its role as an instrument of the Kremlin’s soft power.⁶⁸

Because media outlets that are directly or indirectly supported or governed by foreign states present a unique classification challenge, they were evaluated separately. In addition, the National Security Act 2023 exempts “recognised news publishers” from many of the provisions in the act related to the Foreign Interference Offence. A notable exception is that sanctioned media outlets are not exempt, meaning that certain sanctioned Russian state media outlets, like RT and Sputnik, would not be exempted.⁶⁹ News outlets that have documented links to foreign intelligence services would also, presumably, not be considered “recognised news publishers”. In our dataset, the most visible examples were Global Research Canada and News-Front, two websites that the U.S. State Department’s Global Engagement Center have alleged are linked to Russian intelligence.⁷⁰

Importantly, the criteria used in this report to determine state links, while guided by the foreign power condition established in the National Security Act, are the authors alone and may or may not meet the legal conditions as outlined in the act. Importantly, as noted in the National Security Bill factsheet published on 13 July 2023, “meeting the foreign power condition is not an indication of wrongdoing”.⁷¹ To be guilty of a Foreign Interference Offence, those with state links must also meet the other conditions of the offence. In short, a determination that a website is linked to a foreign power is not an indication of foreign interference.

Media Type

If a website was determined to be a newsgathering organization, we attempted to classify the type of media outlet, with a particular focus on identifying whether outlets received funding from or had other links to foreign states. We also attempted to distinguish between state-backed media outlets (including state-controlled and state-captured media outlets) and those that receive foreign state or public funding but are otherwise independent of government influence.

Because this report was not meant to provide an exhaustive investigation into the funding, management, and editorial control of individual media outlets, we relied heavily on the designations made by The

⁶⁸ EUR-Lex (2022) *Council Implementing Regulation (EU) 2022/1270 of 21 July 2022 implementing Regulation (EU) No 269/2014 concerning restrictive measures in respect of actions undermining or threatening the territorial integrity, sovereignty and independence of Ukraine*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R1270>

⁶⁹ Legislation.gov.uk (2023) *National Security Act 2023*. Available at: <https://www.legislation.gov.uk/ukpga/2023/32/enacted>. See Schedule 15 of the Act, “Exemptions”.

⁷⁰ U.S. Department of State (2020) *GEC Special Report: Pillars of Russia’s Disinformation and Propaganda Ecosystem*. Available at: https://www.state.gov/wp-content/uploads/2020/08/Pillars-of-Russia%E2%80%99s-Disinformation-and-Propaganda-Ecosystem_08-04-20.pdf

⁷¹ GOV.UK (2023) *Journalistic freedoms: National Security Bill factsheet*. Available at: <https://www.gov.uk/government/publications/national-security-bill-factsheets/journalistic-freedoms-national-security-bill-factsheet>

State Media Monitor, a project of the Media and Journalism Research Center.⁷² The State Media Monitor was chosen because it was one of the few publicly available resources that provided a comprehensive, global analysis of the editorial independence, or lack thereof, of media outlets funded by or linked to governments. ASD subject matter experts also determined their classifications and methodology to be credible and consistent with other sources. Of course, reliance on classifications made by a third party presents some risks, though we found those risks to be outweighed by the benefits of using a source solely dedicated to the analysis of state media outlets. Though we borrowed from the State Media Monitor’s taxonomy, we condensed a few categories to streamline the classification process. Our classifiers are as follows:

1. Independent Media—A newsgathering organization that does not receive government or public money and whose editorial decisions are not controlled by the state (*examples: The Guardian, Daily Mail, CNN*)
2. Independent Public Media—A media outlet that receives public funding but whose editorial decisions are independent of state control or influence (*examples: NPR, the BBC, Canadian Broadcasting Corporation*)
3. Independent State-Owned or State-Funded Media—A media outlet that is fully owned or funded by a state, but whose editorial decision-making is independent of that state (*examples: VOA, France24, Deutsche Welle*)
4. State-Controlled Media—A media outlet funded, owned, and editorially controlled by a state (*examples: RT, TeleSur, Xinhua*)
5. State-Captured Public Media—A media outlet that is not predominantly state-funded but whose ownership structure and editorial decisions are controlled by a state (*examples: RAI, Channel One Russia, Shanghai Media Group*)
6. State-Captured Independent Media—A media outlet whose ownership and governance structure are not state controlled, but that nonetheless lacks editorial independence due to persistent, systemic control by entities (individuals or institutions) linked to state authorities (*examples: Magyar Hirlap, Gazeta Polska, Hurriyet*)⁷³

Classification Challenges

A central challenge—both in this research and in evaluating foreign influence and interference more broadly—was definitively determining whether a website was linked to a foreign state. At times, connections were obvious. A government website or those connected to overt, state-backed media outlets were relatively easy to classify. Other times, connections were less evident, like media outlets whose editorial alignment with a foreign government was clear, but whose direct or indirect relationship to a state, including but not limited to funding, was not.

Though funding was a critical factor in assessing state-control of media outlets, it was not the determining factor. Outlets like the BBC and NPR, for example, both receive, to varying degrees, government funding; yet both outlets have firewalls in place that insulate editorial decision-making from government influence. Conversely, news outlets that are ostensibly independently funded or privately owned but that are directed by government loyalists or are otherwise beholden to the interests of the state cannot be considered independent, even if there is no clear state funding or ownership. Media

⁷² State Media Monitor (2023) *The world's state media database*. Available at: <https://statemediamonitor.com/>

⁷³ State Media Monitor (2023) *Typology*. Available at: <https://statemediamonitor.com/typology/>

capture exists in many forms and to varying degrees, thus making binary determinations about whether an outlet is state-backed inherently challenging and contestable—as evidenced by the controversy over Twitter’s decision in April 2023 to label U.S. outlet NPR as “state-affiliated media” alongside outlets like Xinhua from China and RT from Russia.⁷⁴

While most of this report is focused on media outlets because of their prominence in search results, foreign interference and malign influence can also occur via websites connected to government institutions, think tanks, and cultural institutions, to name but a few. Determining whether a think tank or other non-profit was linked to a foreign government was exceedingly difficult, given that many think tanks, including the one affiliated with this report, receive funding from governments. In the absence of any objective criteria used to determine state-control of those organizations, we only categorized think tanks as “state-linked” if it could be determined that the organization was fully funded by a single government. In our dataset, that meant we only categorized one think tank—Russkiy Mir—as state-linked.⁷⁵

The classification process was complicated further by intentional efforts to obfuscate the country of origin or government control of some online news sources. Covert influence campaigns often use front organizations, cutouts, or spoofed websites that intentionally conceal connections to a state actor, as is allegedly the case with News-Front.⁷⁶ Our previous research has also pointed to the phenomenon of information laundering,⁷⁷ a process by which information from one source is placed and integrated into news outlets that are unaffiliated with (or appear to be unaffiliated with) the original publisher. ASD and Brookings’ research into the prevalence of Chinese state-backed media content in search results found, for example, that Chinese state media articles were regularly republished verbatim on websites with no direct connection to China, like the Helsinki Times.⁷⁸ The publishing of articles from foreign state-backed media in third party sources, potentially including ones based in the UK, adds to the complexity of determining whether a website has direct or indirect links to a foreign power.

News aggregators,⁷⁹ syndicators, and social media sites also present unique challenges. Because aggregators include results from multiple sources, it was often difficult to determine the original publisher of articles that appeared in search results, even if attribution was provided. For example, MSN.com, Microsoft’s news aggregator, had the second most observed URLs in our dataset, all of which featured articles that were first published elsewhere. Likewise, it was not possible to identify the original

⁷⁴ Breen, K. (2023) ‘Twitter labels NPR as “state-affiliated media”’, *CBS News*, April 5. Available at: <https://www.cbsnews.com/news/twitter-labels-npr-as-u-s-state-affiliated-media-agency/>

⁷⁵ Open Sanctions (2023) *Fondation Russkiy Mir Sanctioned entity*. Available at: <https://www.opensanctions.org/entities/NK-nMFMhMZbYLfcewwfVxLB2S/>

⁷⁶ U.S. Department of State (2023) *GEC Special Report: Russia’s Pillars of Disinformation and Propaganda*. Available at: <https://www.state.gov/russias-pillars-of-disinformation-and-propaganda-report/>

⁷⁷ Meleshevich, K. & Schafer, B. (2018). ‘Online Information Laundering: The Role of Social Media’ *Alliance for Securing Democracy*, January 9. Available at: <https://securingdemocracy.gmfus.org/online-information-laundering-the-role-of-social-media/>

⁷⁸ In the “Winning the Web” report, the Helsinki Times was the top syndicator of Chinese articles in the study. The website appears to have a content sharing agreement with People’s Daily, a Chinese state-backed outlet. See page 29 for more details. Brandt, J., Schafer, B., Aghekyan, E., Wirtschafter, V., and Danaditya, A. (2022) ‘Winning the Web: How Beijing exploits search results to shape views of Xinjiang and COVID-19’, Brookings. Available at: https://www.brookings.edu/wp-content/uploads/2022/05/FP_20220525_china_seo_v2.pdf

⁷⁹ Though Google News and Bing News are news aggregators, we considered them search products for this study.

source of content that appeared in results linking to social media sites like YouTube and Twitter without investigating the hundreds of unique URLs that surfaced during our study.

In some cases, we were able to find the original source of an article by conducting near-match text searches to identify duplicate articles in our dataset. In other cases, we identified copy-paste articles by searching for duplicate articles between the dataset collected for this report and data collected by the Hamilton 2.0 dashboard. This approach identified numerous instances of state-backed media articles being republished by third party websites (some with attribution and some without), but it almost certainly missed state-backed articles if the original article did not appear in either this or the Hamilton datasets. In addition, our method could not identify a republished article if more than 30% percent of the article’s title (as defined by Levenshtein distance)⁸⁰ had been changed or altered in some way—a strategy used by some websites to circumvent plagiarism detection efforts on search services. Given those challenges and the size of our dataset, which made largescale internal pairwise checks for matches prohibitively resource intensive, we therefore assume that the total number of state-linked sources in our dataset is an undercount, though this is unlikely to change any key findings.

Google and Bing Data Analysis

Searches conducted on Google Search, Google News, Microsoft Bing, and Bing News returned a relatively small percentage of foreign state-linked content, as defined by content connected to a non-UK official government website, state-backed media outlet, or another source that would, in our estimation, meet the definition of a “foreign power”. In total, there were 8,311 observations of state-backed media and 15,054 observations of non-UK government websites, representing 2.68% and 4.9%, respectively, of total search results. In addition, there were 351 observations of a foreign state-backed think tank and 40 observations of a foreign-intelligence linked site. Combined, there were 23,756 observations of websites that we determined were directly or indirectly linked to a foreign state, representing 7.6% of all search results on Google and Bing during the studied period.

Analysis of State-Backed Media Outlets

When isolating observations to include only state-backed media, Qatari state-backed media—due almost entirely to Al-Jazeera English—had the greatest penetration, making up nearly 1% of all results and 36.5% of all state-backed media results on Google and Microsoft. Qatar was followed by state-backed media from Russia (13.8%), Saudi Arabia (8.5%), and Belarus (7.6%). It is again worth noting that outlets that the State Media Monitor classifies as state-backed are not monolithic, and that the categorization is not necessarily an indictment of the journalistic standards of a given outlet or a suggestion that they should be penalised in search results.

Table 1. State-backed Media Outlets Observed on Google and Bing Search Products by State

State	CaPr	CaPu	SC	% State	% All	Total
<i>Qatar</i>			3034	36.5%	0.98%	3034

⁸⁰ Nam, E. (2019). ‘Online Information Laundering: The Role of Social Media’ Medium, February 26. Available at: <https://medium.com/@ethannam/understanding-the-levenshtein-distance-equation-for-beginners-c4285a5604f0>

<i>Russia</i>	43	28	1084	13.8%	0.37%	1146
<i>Saudi Arabia</i>		705		8.5%	0.23%	705
<i>Belarus</i>			631	7.6%	0.20%	631
<i>Singapore</i>		175	330	6.1%	0.16%	505
<i>Iran</i>			488	5.9%	0.16%	488
<i>China</i>			445	5.4%	0.14%	445
<i>Turkey</i>	248		168	5.0%	0.13%	416
<i>Vatican City</i>			248	3.0%	0.08%	248
<i>Cuba</i>			209	2.5%	0.07%	209
<i>Venezuela</i>			135	1.6%	0.04%	135
<i>Ukraine</i>			110	1.3%	0.04%	110
<i>Syria</i>			68	0.8%	0.02%	68
<i>Malaysia</i>			66	0.8%	0.02%	66
<i>Italy</i>		33		0.4%	0.01%	33
<i>Vietnam</i>			32	0.4%	0.01%	32
<i>Japan</i>		20		0.2%	0.01%	20
<i>Pakistan</i>			16	0.2%	0.01%	16
<i>South Africa</i>			4	0.0%	0.00%	4
Total	291	961	7068	100.0%	2.68%	8311

Legend: state-captured private media (CaPr); state-captured public media (CaPu); state-captured media (SC)

Importantly, these totals do not include instances of content sourced from state-backed media outlets that appeared in search results via news aggregators, social media platforms, or other third-party domains due to the challenges of correctly identifying all instances of reposted or repurposed content in a dataset of this size. If we had included those results, the number of observations would likely be a magnitude greater, at least for some states. For example, we found more than 770 additional observations of content produced by Russian state-backed media on domains not affiliated with the Russian state. We also found multiple instances of Russian state-backed content appearing in other state-backed sources. At least 248 of the observations attributed to Iranian state-backed media,⁸¹ 16 of the observations of Venezuelan state-backed media,⁸² and 12 of the observations attributed to Syrian state-backed media⁸³ were, in fact, verbatim or near-verbatim copies of articles published by Russian state-backed media outlets. If we had included those additional observations, the total number of

⁸¹ Tasnim News Agency (2023) *UK Military Spied on Lockdown Critics: Media*. Available at:

<https://www.tasnimnews.com/en/news/2023/01/29/2844868/uk-military-spied-on-lockdown-critics-media>

⁸² teleSUR English (2023) *NATO Aircraft Supply to Kiev Is NATO's War Against Russia*. Available at:

<https://www.telesurenglish.net/news/NATO-Aircraft-Supply-to-Kiev-Is-NATO-s-War-Against-Russia-20230302-0013.html>

⁸³ Syrian Arab News Agency (2023) *Biden extends anti-Russian sanctions for one year*. Available at:

<https://www.sana.sy/en/?p=305526>

Russian state-backed media occurrences would nearly double. (Refer to the case study on Russian influence for a more comprehensive analysis of Russian state-backed sources in our data). Russia was also not alone in getting a boost from friendly state-media. At least 24 observations from Venezuelan state-backed media outlet, Telesur, were reposts of Chinese state-backed media outlet, Xinhua.



Figure 1 - A repost of an article originally published by Chinese state-backed media outlet, Xinhua, in Telesur, a Venezuelan state-backed media outlet

Except for Al Jazeera English, which was, in aggregate, the 15th most observed domain across Google and Microsoft Bing’s Search and News results, foreign state-backed outlets were largely overshadowed by independent media outlets, including independent public media outlets like the BBC. Of the 100 domains that appeared most in search results during the studied period,⁸⁴ only four were categorized as state-backed media: Al Jazeera (Qatar); Tass (Russia); Belarus Today (Belarus); and Al Arabiya (Saudi Arabia).⁸⁵ Also among the top 100 results was a website affiliated with a UAE-based news distribution agency known as the Big News Network, which ranked 68th overall. While ostensibly independent, more than 90% of the individual URLs from the Big News Network that appeared in our data were sourced directly from RT, the sanctioned Russian state-backed news outlet.⁸⁶

⁸⁴ See appendix for list of the top 100 domains.

⁸⁵ See the State Media Monitor for an explanation of their classification as state-controlled or state-captured media outlets. State Media Monitor (2023) The world's state media database. Available at: <https://statemediamonitor.com/>

⁸⁶ Refer to the section on Russian influence for a more comprehensive analysis of the Big News Network.

As noted in our methodology, we did not consider foreign independent public media, including state-funded or state-owned public media, to be state-backed. There were, however, seven foreign independent public media or independent state-funded or state-owned public media outlets among the top 100 domains: NPR (USA); Deutsche Welle (Germany); PBS (USA); France 24 (France); CBC (Canada); ABC (Australia); and RTE (Ireland). If we include results from those outlets, there were 16,833 total observations of foreign state-backed or independent public or independent state-funded outlets in search results on Google and Microsoft search products, representing just under 5.5% of all search results collected during the study. As noted, the displayed totals are almost certainly undercounts, due to the omission of search results that linked to content produced by state-backed, independent public, or independent state-funded and state-owned media outlets but not to domains affiliated with those outlets.

Table 2. The Most Observed State-Backed and Independent Public/Independent State Media Outlets by State

State	CaPr	CaPu	IP	ISFM	SC	% State	% All	Total
USA			3617	628		25.2%	1.37%	4245
Qatar					3034	18.0%	0.98%	3034
Russia	43	28			1084	6.8%	0.37%	1146
Germany				1137		6.8%	0.37%	1137
France				1073		6.4%	0.35%	1073
Saudi Arabia		705				4.2%	0.23%	705
Belarus					631	3.7%	0.20%	631
Canada				610		3.6%	0.20%	610
Australia				584		3.5%	0.19%	584
Ireland				513		3.0%	0.17%	513
Singapore		175			330	3.0%	0.16%	505
Iran					488	2.9%	0.16%	488
China					445	2.6%	0.14%	445
Turkey	248				168	2.5%	0.13%	416
Vatican City					248	1.5%	0.08%	248
EU			238			1.4%	0.08%	238
Cuba					209	1.2%	0.07%	209
Venezuela					135	0.8%	0.04%	135
Ukraine					110	0.7%	0.04%	110
Switzerland			95			0.6%	0.03%	95

State	CaPr	CaPu	IP	ISFM	SC	% State	% All	Total
Syria					68	0.4%	0.02%	68
Malaysia					66	0.4%	0.02%	66
Italy		33				0.2%	0.01%	33
Vietnam					32	0.2%	0.01%	32
Japan		20				0.1%	0.01%	20
Pakistan					16	0.1%	0.01%	16
Indonesia				15		0.1%	0.00%	15
Hong Kong				8		0.0%	0.00%	8
South Africa					4	0.0%	0.00%	4
Taiwan				4		0.0%	0.00%	4
Total	291	961	3950	4572	7068	100.0%	5.43%	16833

Legend: state-captured private media (CaPr); state-captured public media (CaPu); independent public media (IP); independent state-funded or state-owned media (ISFM); state-captured media (SC)

Table 2 - The volume and percentages of state-backed and independent public and independent state-funded media on Google and Bing during the studied period.

Analysis of State-Backed Media Outlets by Platform

Google News generated the most returns of state-backed URLs among the four studied products, though the disparity was driven almost entirely by the large number of returns for Al Jazeera. In general, News searches generated 62% more returns from state-backed media outlets than searches on Microsoft Bing or Google Search. This finding is consistent with our past research,⁸⁷ and is more than likely due to a much wider diversity of websites that could potentially surface in Search results than News results, which, at least in theory, only display results from established news agencies.

⁸⁷ Brandt, J., Schafer, B., Aghekyan, E., Wirtschafter, V., and Danaditya, A. (2022) 'Winning the Web: How Beijing exploits search results to shape views of Xinjiang and COVID-19', *Brookings*. Available at: https://www.brookings.edu/wp-content/uploads/2022/05/FP_20220525_china_seo_v2.pdf

Table 3. Observations of State-Backed News Outlets by Platform

Search Service	CaPr	CaPu	SC	Total
Google News	180	272	2424	2876
Bing News	44	300	1916	2260
Google Search	67	293	1852	2203
Microsoft Bing	0	96	876	972
Total	291	961	7068	8311

Legend: state-captured private media (CaPr); state-captured public media (CaPu); state-captured media (SC)

Table 3 - The total number of observations of state-backed outlets on Google and Bing during the studied period.

It is important to stress that the presence of more state-backed content on a given platform in no way suggests that that platform performed poorly or that it is more susceptible to foreign interference or malign influence. There are huge differences in the credibility and reliability of media outlets, even state-backed ones. Though this study was not intended to provide a comparative analysis of the relative merits of different state-backed media outlets, the individual search results collected on each platform potentially tell a different story than the aggregate results. For example, there were roughly three times more Chinese state-backed media results, 80 times more Belarusian state-backed results, and 6.5 times more Russian-state media results on Bing News compared to Google News. When including Russian state-backed media content we found on other domains, searches on Bing News were roughly 16 times more likely to generate returns from Russian state-backed sources than searches on Google News.

Table 4. The 20 Most Observed State-Backed Domains per Search Product

Domain	Microsoft Bing	Bing News	Google Search	Google News	Total
<i>aljazeera.com</i>	472	52	1074	1436	3034
<i>tass.com</i>	64	444	221		729
<i>sb.by</i>		520	7		527
<i>english.alarabiya.net</i>	20	188	127	172	507
<i>tasnimnews.com</i>	48	36	87	176	347
<i>globaltimes.cn</i>		216	12	108	336
<i>channelnewsasia.com</i>	48	172	10	52	282
<i>rt.com</i>	128		127		255
<i>dailysabah.com</i>		44	64	140	248

Domain	Microsoft Bing	Bing News	Google Search	Google News	Total
<i>vaticannews.va</i>			108	140	248
<i>plenglish.com</i>			17	192	209
<i>arabnews.com</i>			122	76	198
<i>straitstimes.com</i>	44	112	15	4	175
<i>trtworld.com</i>		76		92	168
<i>telesurenglish.net</i>	32		3	100	135
<i>uatv.ua</i>			110		110
<i>tvr.by</i>		104			104
<i>china.org.cn</i>	4	80			84
<i>tehrantimes.com</i>		16	1	60	77
<i>sana.sy</i>	12	56			68

Analysis of State-Backed Media Outlets by Search Query

Search queries directly or indirectly associated with the Russia-Ukraine war were far more likely to attract state-backed media content than search queries associated with domestic policy issues, including issues related to independence and the Union. This is unsurprising, given the presumed differences in the volume of content state-backed outlets produced about the war in Ukraine during the studied period compared to the content they likely produced about domestic UK policy issues. Because search engines favor fresh content, particularly on News searches, it is axiomatic that we would have found fewer state-backed returns in queries related to UK-specific issues where there was likely an abundance of content produced by local and national UK outlets during the studied period.

Table 5. Most State-Backed Media Outlets by Search Query and Search Service

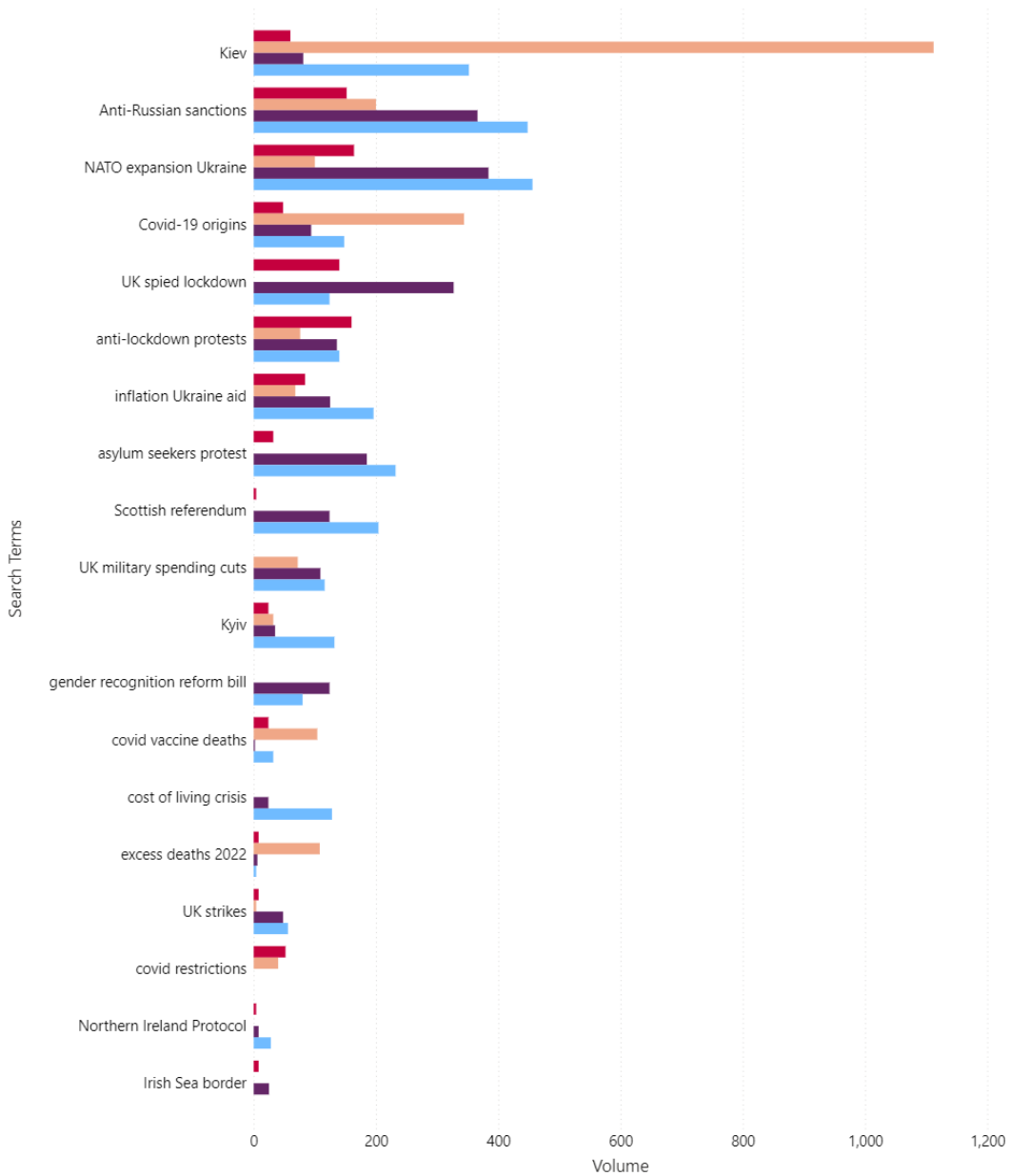


Table 5 - The search queries that generated the most state-backed content on each platform. There were no state-backed results for searches of “indyref” in our dataset. Legend: Google Search, Google News, Microsoft Bing, Bing News

As noted in the section detailing our search query selection, we attempted to use generic search terms and phrasing in our queries to avoid priming search results. There were two exceptions—the use of the Russian-language spelling of the Ukrainian capital, “Kiev”, and Russia’s preferred phrase for describing Western sanctions, “anti-Russian sanctions”. As anticipated, those two queries generated the most and the second most state-backed media results, making up more than a third of the total state-backed

media results in our study.⁸⁸ Sites linked to Russia and its close allies, namely Belarus and Cuba, accounted for the majority of the state-backed observations in searches for “Kiev” and “anti-Russian sanctions”.

The spelling of the Ukrainian capital city had an enormous impact on the proportion of state-backed content encountered on search services. When including Russian state-backed media results found on the Big News Network, searches for “Kiev” delivered ten times more results from state-backed sources than searches for “Kyiv” (the Ukrainian spelling). Results were particularly striking on some search services. On Bing News, the Big News Network, with 556 observations, was the most observed domain in search results for “Kiev” during our study. Considering that all collected results on the Big News Network in searches for “Kiev” came from RT, this effectively means that users in the UK who searched for Kiev during the studied period encountered more RT content than any other source.

The second and third most observed domains⁸⁹—Belarus Today and Tass—are linked to the Russian and Belarussian governments, respectively.⁹⁰ These results expose the power, and potential pitfalls, of “primed” language in search. Because most Western sources favor the use of the Ukrainian spelling of the capital city and are unlikely to describe Western government sanctions as “anti-Russian”, a data void was created that, at least on some search services, was filled by sources sympathetic to the Russian government.

Notably, searches related to independence and the Union generated the fewest returns of state-backed media links in our study. The term “indyref” did not generate any results on Google and Microsoft Search and News products, and “Northern Ireland Protocol” and “Irish Sea Border” each generated less than 50 observations of foreign state-backed media. While “Scottish Referendum” ranked in the middle of the pack (332 observations), the results indicate that state-backed media had trouble breaking through search results on topics that have, in the past, been targets of malign foreign influence and interference campaigns.

Analysis of Foreign Government Websites

By pure volume, there was nearly double the number of foreign government websites compared to state-backed media websites in our dataset. Over half of the foreign government websites (8689) that appeared in search results were based in the United States, including many connected to local and state governments. Among the top 100 search results, there were three websites affiliated with foreign governments, government entities, or heads of state: the Center for Disease Control (USA); the European Commission (EU); and the White House (USA). Non-UK government websites were particularly significant on Google Search, where 13% of all results were associated with non-UK governments.

Contrary to results from state-backed media, searches related to public health, namely COVID-19 responses, generated roughly 70% of observations of foreign government websites. This is somewhat unsurprising, given both the public’s need for information about government health and other services related to the virus and Microsoft and Google’s policies to prioritize trusted information during the

⁸⁸ This includes 664 results on the Big News Network sourced from RT that were collected in search results for “Kiev” and “anti-Russian sanctions”.

⁸⁹ This excludes observations from the news aggregator MSN.com and Wikipedia.

⁹⁰ Russkiy Mir is a Kremlin-funded think tank. For more analysis of Russkiy Mir, see the section on Russian Influence.

pandemic.⁹¹ Perhaps the only surprise is that so many foreign government sites surfaced in the UK. This suggests that, at least on coronavirus searches, local results were not prioritized.

Most returns of government websites were entirely non-controversial; however, “COVID-19 origins”, a potentially more politicized topic for foreign governments, generated more divisive results from foreign government sources. The most observed government website in searches for “COVID-19 origins” was the U.S. House Committee on Oversight and Accountability. The top two URLs, by total observations, alleged that the virus was caused by a leak at the Wuhan lab in China and that former director of the U.S. National Institute of Allergy and Infectious Diseases, Anthony Fauci, covered up evidence of said leak.^{92,93} While perhaps controversial, neither result is particularly relevant to UK interests.

Of the twenty foreign states with the most observed government websites during the studied period, only one, Russia (15th overall), would not be considered an ally of the United Kingdom.⁹⁴ There were no returns for websites affiliated with China and Iran. This suggests, at least on Google and Microsoft Bing, that official government websites do not pose a significant foreign interference risk, at least for people not specifically seeking out such sources.

Yandex and Baidu Data Analysis

During the studied period, Yandex had the highest concentration of state-backed media content in search results at 27.4% of results—almost exclusively from Russian state-backed media. On Baidu, 6% of results were from state-backed media, solely from Chinese sources. The numbers on Baidu, however, only account for results from official Chinese state-backed media domains, and do not include results that likely appeared on the many news aggregators and other platforms linked to the Chinese government that appeared in our results. By comparison, state-backed sources accounted for 1.2% of results on Microsoft Bing, 2.4% on Google Search, 3.2% on Bing News, and 4.2% on Google News.

Unsurprisingly, there was essentially no overlap in sources—save for the BBC, whose English and Russian services, respectively, appeared in the top ten of search results on the four U.S.-based search products and Yandex Search. Baidu and Yandex have essentially no sources in common between each other and among those services and Google and Microsoft search products. As discussed in the “understanding search ranking” section, it is not altogether surprising that searches conducted in Russian and Mandarin led users to an entirely different ecosystem of websites. It is also not surprising that searches in those languages generated more state-linked content, given that both Russia and China have restrictive media environments dominated by state-backed entities.

⁹¹ See, for example, Microsoft On the Issues (2020) *Promoting trusted information in response to COVID-19*. Available at: <https://news.microsoft.com/on-the-issues/2020/04/10/bing-linkedin-covid-19/> And Google The Keyword (2020) *Coronavirus: How we're helping*. Available at: <https://blog.google/inside-google/company-announcements/coronavirus-covid19-response/>

⁹² Committee On Oversight and Accountability (2020) *COVID Origins*. Available at: <https://oversight.house.gov/landing/covid-origins/>

⁹³ Committee On Oversight and Accountability (2023) *COVID Origins Hearing Wrap Up: Facts, Science, Evidence Point to a Wuhan Lab Leak*. Available at: <https://oversight.house.gov/release/covid-origins-hearing-wrap-up-facts-science-evidence-point-to-a-wuhan-lab-leak%E2%82%AC%80%BF%BC/>

⁹⁴ UK Parliament House of Commons (2018) *UK defence policy: from aspiration to reality? Chapter 3: The UK in the world: allies and adversaries*. Available at: <https://publications.parliament.uk/pa/ld5803/ldselect/ldintrel/124/12406.htm>

Still, the fact that Russian and Chinese speakers in the UK are encountering an entirely different information reality than their English-language compatriots is notable—especially considering so much of the state-backed content produced by both countries is hostile to the West.

Yandex: Russian state-controlled content thrives in its own ecosystem

As noted in the data analysis section, close to 27% of all search results on Yandex came from state-backed media outlets, with 97% of those results coming from Russian state-backed media outlets. Of the ten most popular domains in search results on the platform, six were connected to state-backed media outlets, led by RIA Novosti with 260 observations. The Russian-language version of RT appeared 110 times, making it the tenth most observed outlet on Yandex during our study. The most prominent RT Russian result, appearing every day of our study with an average rank of 4.45, was an article about the Scottish Referendum that claimed that the UK Supreme Court’s decision to deny a second referendum “exposes the myth of the United Kingdom as a voluntary partnership”.⁹⁵



Figure 2 - The most frequently observed RT Russian article in our dataset. Text was translated from Russian into English using Microsoft Edge's translation feature

It is important to restate that we only were able to capture the first page of search results on Yandex (as opposed to the first four pages on other platforms), meaning that occurrences of Russian RT, and other state-backed sites, in search results were likely a magnitude greater than what we found on either Google or Microsoft Bing. Unlike with those services, there appears to have been little to no effort to

⁹⁵ Карпов, А. & Медведева, А. (2022). 'Упущенный шанс: почему Шотландии отказали в праве провести новый референдум о независимости' *RT Russian*, November 24. Available at: <https://russian.rt.com/world/article/1077748-shotlandiya-referendum-nezavisimost>

downrank or remove RT from search results in the UK, as required under UK government sanctions. Consistent with results on English-language searches, we also found at least four other domains in our Yandex dataset that reposted RT content.

Yandex also was the only search service to generate results from multiple different media outlets linked to Russian intelligence services or Yevgeny Prigozhin, the recently killed former Wagner boss and founder of the Internet Research Agency, the troll factory responsible for interfering in multiple Western democracies.⁹⁶ We found 11 results from News-Front, five results from PolitNavigator, and seven results from AntiFashist, all sites the U.S. government has linked to Russian intelligence.⁹⁷ In addition, there were six observations of Politros, a site that was part of Prigozhin’s now-shuttered Patriot Media Group.⁹⁸ These sites were also not buried in the second page of results; in at least two instances, sites connected to Russian intelligence were the first search returns for queries related to Ukraine.

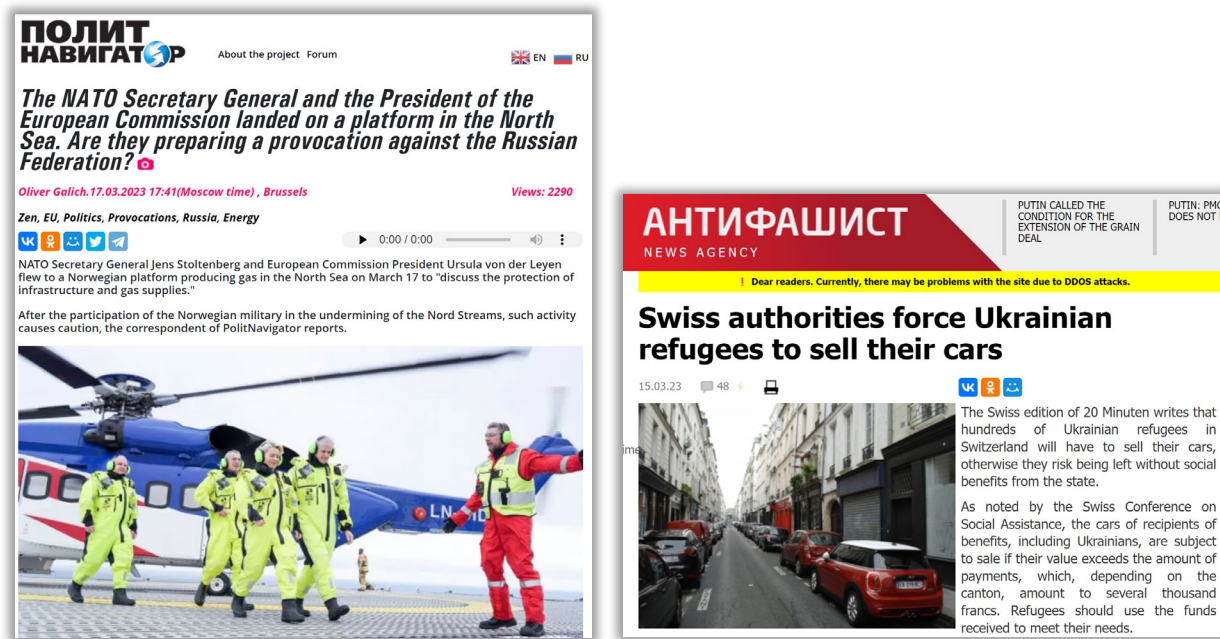


Figure 3 - Articles from two sites linked to Russian intelligence that were the first returns on Yandex on two days during the studied period. Text was translated from Russian into English using Microsoft Edge’s translation feature

Although the search query that generated the most Russian state-backed results was the Russian version of “NATO expansion Ukraine” (218 results), four of the top five queries that generated the most Russian state-backed media results were not related to the conflict. This differs from search queries conducted in English on Google and Microsoft search products, where Russian state-backed media struggled to surface in queries that were not about Ukraine.

⁹⁶ Shevchenko, V. (2023). ‘Yevgeny Prigozhin: From Putin’s chef to rebel in chief’ *BBC News*, June 25. Available at: <https://www.bbc.com/news/world-europe-64976080>

⁹⁷ Merchant, N. (2022). ‘US accuses financial website of spreading Russian propaganda’ *AP News*, February 15. Available at: <https://apnews.com/article/russia-ukraine-coronavirus-pandemic-health-moscow-media-ff4a56b7b08bcc6adaf02313a85edd9>

⁹⁸ ‘Exiled Wagner Boss Shuttters Patriot Media Group – Reports’ (2023) *The Moscow Times*, June 30. Available at: <https://www.themoscowtimes.com/2023/06/30/exiled-wagner-boss-shuttters-patriot-media-group-reports-a81707>

Table 6. Search Queries on Yandex that Returned the Most Russian State-Backed Media

Russian Search Query	English Search Query	Observations
Расширение НАТО Украина	NATO expansion Ukraine	218
протесты против карантина	Anti-lockdown protests	193
Забастовки в Великобритании	UK Strikes	177
Протокол по Северной Ирландии	Northern Ireland Protocol	160
референдум о независимости Шотландии	Scottish Referendum	150

Table 6 – English-language search queries were not tested on Yandex

There were, however, far more unique articles in search results related to Ukraine than the four search queries related to UK domestic issues, suggesting a clear difference in the amount of relevant content published in Russian on those respective topics. Among the four non-Ukraine related queries, there was very little day-to-day variation in search results, with most of the top ten returns appearing in at least 25 of the 30 days studied. In most cases, the individual search results were the same each day, with only slight variations in the search rank. This speaks to a production problem—without fresh content produced in the Russian language on these topics, search engines are forced to continuously resurface the same results.

In general, the large amount of Russian state-backed media returns on Yandex may simply reflect the prominence of state-backed media in the Russian-language news ecosystem, rather than an intentional prioritisation of state-backed sources by Yandex. Future research might investigate whether Russian-language queries on non-Russian search services, like Google and Microsoft Bing, generate fewer state-backed media results. Without that comparison, it is difficult to determine whether the search service or the language used was the variable responsible for the increase in state-backed media observations.

Case Study: Russian Sources on Search Services - A Matryoshka Doll of Influence

The UK government has consistently singled out Russia as a foreign interference risk,⁹⁹ and the Department for Digital, Culture, Media, and Sport specifically mentions the threat of Russian interference as a motivating factor for including the Foreign Interference Offence in the Online Safety Bill.¹⁰⁰ Given Russia’s many overt and covert global media outlets and trolling operations, Russia is also uniquely positioned to exploit search services—a domain where it has enjoyed considerable success in the past.¹⁰¹

⁹⁹ See the government’s response to the ISC’s Russian report on page 5 of the following report. Intelligence and Security Committee of Parliament (2020) *Intelligence and Security Committee of Parliament Russia*. Available at: <https://s3.documentcloud.org/documents/6998980/20200721-HC632-CCS001-CCS1019402408-001-ISC.pdf>.

¹⁰⁰ GOV.UK Department for Digital, Culture, Media & Sport (2022) *Press release: Internet safety laws strengthened to fight Russian and hostile state disinformation*. Available at: <https://www.gov.uk/government/news/internet-safety-laws-strengthened-to-fight-russian-and-hostile-state-disinformation>

¹⁰¹ Hanlon, B. (2018). ‘From Nord Stream to Novichok: Kremlin Propaganda on Google’s Front Page’ *Alliance for Securing Democracy*, June 14. Available at: <https://securingdemocracy.gmfus.org/from-nord-stream-to-novichok-kremlin-propaganda-on-googles-front-page/>.

After Russia's invasion of Ukraine, both Microsoft and Google announced policies to remove or restrict Russian state media outlets from search results. Google, for instance, announced in March 2022 that it was removing Russian state media from its News features.¹⁰² Microsoft Bing committed to "further de-ranking" Russian state media search results, ensuring that links would only appear if a search query showed specific intent from a user to visit those sites.¹⁰³ Those company policies were trumped in some locations by government demands, including in the UK. In May 2022, the UK government announced sanctions against Russian "strategic propaganda organisations", effectively forcing internet service companies to block content in the UK from sanctioned outlets like RT and Sputnik.¹⁰⁴ Given that those sanctions remained in effect for the duration of our study, we should have encountered few, if any, returns from websites associated with sanctioned domains—despite Russia's obvious interest in topics related to the war in Ukraine.

Results from our study indicate that, for the most part, Google and Bing effectively blocked domains linked to sanctioned Russian outlets. While there were over 1,100 returns from outlets we categorized as Russian state-backed media, most of those returns were from outlets that were not sanctioned by the UK. Tass, Russia's largest news agency, accounted for 65 percent of the state-backed Russian content in search results across Microsoft Bing (64 observations); Bing News (444); and Google Search (221). True to its policy, Google News did not return any results from Tass or any other Russia state-controlled media outlet, though it did return some results (68) from outlets like Pravda that we categorized as state-captured. In total, Russian state media accounted for far less than 1% of search returns across Google and Microsoft Bing's Search and News products.

There were, however, some returns for state-backed outlets sanctioned by the UK government. RT appeared in 255 searches, split almost evenly between Google Search (128) and Microsoft Bing (127). Most of those returns (219) were related to the search term "UK spied lockdown", which surfaced the same 28 January 2023 article titled "UK military spied on lockdown critics – media".¹⁰⁵ The other queries that generated results from RT were "Kiev" and "anti-Russia sanctions". There were also 12 observations of Sputnik India and eight observations of links to RT's channel on RuTube (Russia's YouTube) in Microsoft Bing returns for "anti-Russia sanctions". There were an additional eight links to Russian RT in Google search returns for "Kiev". The appearance of Sputnik India in search results could be because the outlet is relatively new and its domain may not have been blocked at the time of the search, while RuTube, a user generated platform, is not a sanctioned domain (though RuTube is state linked).¹⁰⁶ It is not clear why or how the links directly to RT.com evaded both search engines' block lists.

¹⁰² Dave, P. (2022). 'Google drops RT, other Russian state media from its news features' *Reuters*, March 1. Available at: <https://www.reuters.com/technology/exclusive-google-drops-rt-other-russian-state-media-its-news-features-2022-03-01/>

¹⁰³ Microsoft (2022) *How to use ranking to display Bing Web Search API results*. Available at: <https://learn.microsoft.com/en-us/azure/cognitive-services/bing-web-search/rank-results> and

Fingas, J. (2022). 'Microsoft is the latest to ban Russian state media from its platforms' *Engadget*, February 28. Available at: <https://www.engadget.com/microsoft-bans-russia-state-media-193720376.html>

¹⁰⁴ GOV.UK Foreign, Commonwealth & Development Office (2022) *Press release: Russia cut off from UK services*. Available at: <https://www.gov.uk/government/news/russia-cut-off-from-uk-services>

¹⁰⁵ 'UK military spied on lockdown critics – media' (2023) *RT*, January 28. Available at: <https://www.engadget.com/microsoft-bans-russia-state-media-193720376.html>

¹⁰⁶ Needleman, S. & Gershkovich, E. (2022). 'From YouTube to Rutube. Inside Russia's Influence Campaign' *The Wall Street Journal*, April 20. Available at: <https://www.wsj.com/articles/from-youtube-to-rutube-inside-russias-influence-campaign-11650447002>

For the most part, though, RT and Sputnik search returns did not rank highly in search results. With an average rank of around 16, they typically appeared halfway down the second page of results. The one exception was the article covering allegations that the UK military spied on lockdown protestors, which was the first result on Microsoft Bing on 17 March in each of the four studied geolocations.



Figure 4 - A 28 January 2023 RT article that appeared in 219 searches during our study and was the top search results for the query "UK spied lockdown" conducted on Microsoft Bing on 17 March 2023.

Bing News and Google Search also returned 351 links (336 observations on Bing News and 15 on Google Search) to the Russkiy Mir Foundation, a Kremlin-funded think tank that was sanctioned by the European Union in 2022.¹⁰⁷ Searches for "Kiev" and "anti-Russia sanctions" generated all returns of Russkiy Mir content. In searches for "anti-Russia sanctions", the two most observed Russkiy Mir links were articles highlighting supposed opposition in Europe to Western sanctions against Russia. Though the foundation is not currently sanctioned by the UK and thus would not be blocked by either search company, it would, presumably, meet the foreign power condition, thus making it a potential vector for foreign interference.

¹⁰⁷ EU Neighbours East (2022) *EU expands list of sanctions against individuals and entities supporting Russian aggression against Ukraine*. Available at: <https://euneighbourseast.eu/news/latest-news/eu-expands-list-of-sanctions-against-individuals-and-entities-supporting-russian-aggression-against-ukraine/>

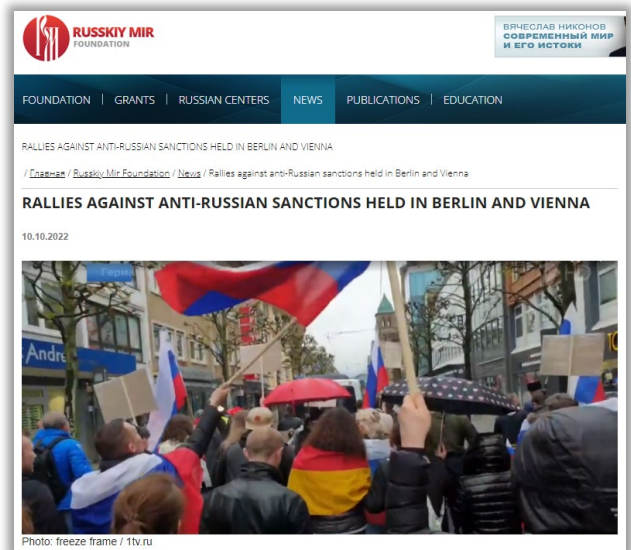
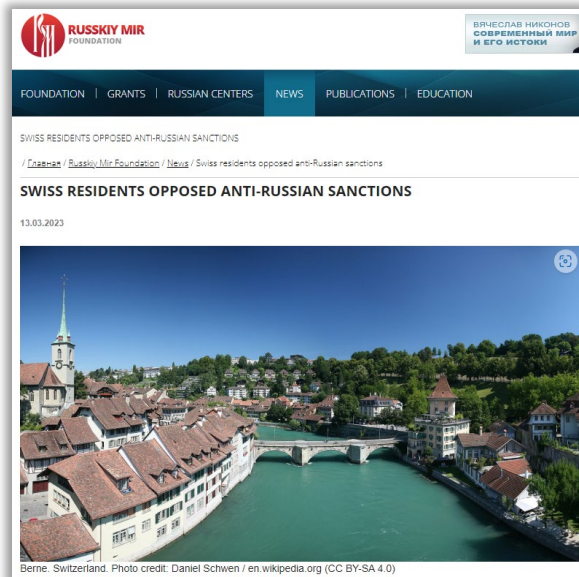


Figure 5 - Two articles from the Kremlin-funded Russkiy Mir Foundation that appeared, respectively, 44 times on Bing News (result on the left) and 18 times on Google Search (result on the right)

Another website in our dataset that possibly meets the foreign power condition is Global Research Canada, a Canadian-based geopolitical outlet that the U.S. State Department’s Global Engagement Center has alleged is linked to Russian intelligence.¹⁰⁸ Global Research appeared in 40 search results on Microsoft Bing for “excess deaths”, “Covid deaths”, and “NATO expansion Ukraine” during the studied period.

Links to Russian government websites were extremely scarce in our study: studied Microsoft and Google products only returned 33 links to Russian government websites. As noted in the previous section, there were more than 8000 links to U.S. government websites, and Indonesia, the Netherlands, and Japan all had more government websites appear in search results than Russia. Given that most of the content produced by Russian government websites is published in Russian and targeted at Russian citizens, the lack of penetration is not altogether surprising for search queries conducted in English.

Of the 33 Russian government links that appeared on Google and Microsoft search products during our study, 21 appeared in search results for “anti-Russia sanctions” and 12 were connected to queries for “covid restrictions”. The latter search query returned an innocuous recap, in English, of Russia’s public health measures. The results from “anti-Russian sanctions” featured statements from the State Duma, one of the chambers of Russia’s parliament, and Russia’s Permanent Mission to the EU criticising Western sanctions, which the mission to the EU claimed were “trampling on such fundamental values as freedom of expression and the rights of journalists”.¹⁰⁹

¹⁰⁸ U.S. Department of State (2020) *GEC Special Report: Pillars of Russia’s Disinformation and Propaganda Ecosystem*. Available at: https://www.state.gov/wp-content/uploads/2020/08/Pillars-of-Russia%E2%80%99s-Disinformation-and-Propaganda-Ecosystem_08-04-20.pdf

¹⁰⁹ Permanent Mission of the Russian Federation to the European Union *Comment by the Russian Permanent Mission to the EU on the Ninth Package of Anti-Russian Sanctions Adopted by the European Union*. <https://russiaeu.ru/en/comment-russian-permanent-mission-eu-ninth-package-anti-russian-sanctions-adopted-european-union-0>

Trojan Horses: RT content hiding in (not so) plain sight

While the previous section highlights the relative scarcity of websites directly linked to the Russian government in search results on Google and Microsoft Bing's Search and News products, Russian state-backed content—particularly from sanctioned outlets—regularly appeared in search results on outlets that had no clear links to Russia. In fact, people in the UK who entered one of our search queries during the studied period would have been at least three times as likely to encounter RT content on sites that are not linked to the Russian government than on those that are. And the single largest source for RT-produced content in our dataset was not RT but the aforementioned Big News Network, a news distributor headquartered in Dubai with offices in Sydney.

The Big News Network operates a titular website, as well as over 500 websites that present themselves as local, national, or regional outlets, like “The London Mercury” and “The UK News”.¹¹⁰ The Big News Network distributes content from dozens of sources, including several state-backed outlets. In ASD and Brookings' “Winning the Web” report, the network was identified as one of the largest syndicators of Chinese state media content.¹¹¹ The Big News Network was also the subject of an EU DisinfoLab investigation into a disinformation campaign tied to India that targeted the European Union and the United Nations.¹¹²

The Big News Network's main website appeared 668 times during our study, with all observations appearing in searches on Microsoft Bing (12) or Bing News (656). Malaysia Sun, a part of the network, had 72 additional links on Bing News. Combined, the Big News Network's 728 observations made it the 16th most observed domain on Bing News during our study, appearing there more than three times as often as the New York Times.

¹¹⁰ Big News Network (2023) *A Global Conglomerate of News Distribution*

News Agency Networking News to all Nations. Available at: <http://www.bignewsnetwork.net/>

¹¹¹ Brandt, J., Schafer, B., Aghekyan, E., Wirtschafter, V., and Danaditya, A. (2022) ‘Winning the Web: How Beijing exploits search results to shape views of Xinjiang and COVID-19’, *Brookings*. Page 28. Available at: https://www.brookings.edu/wp-content/uploads/2022/05/FP_20220525_china_seo_v2.pdf

¹¹² Alaphilippe, G., Adamczyk R., & Grégoire, A. (2020). ‘Indian Chronicles: deep dive into a 15-year operation targeting the EU and UN to serve Indian interests’ *EU Disinfo Lab*, December 9. Available at: <https://www.disinfo.eu/publications/indian-chronicles-deep-dive-into-a-15-year-operation-targeting-the-eu-and-un-to-serve-indian-interests/>



Figure 6 - Example of a RT article that appeared in the Malaysia Sun, part of the Big News Network.

Of the 740 total observations of Big News Network properties in our dataset, 724 featured reposts of RT articles, and over 90% (25 of 27) of the unique links from the Big News Network in our dataset came from RT.com.¹¹³ (Somewhat ironically, the other two links featured reposted content from Voice of America, a U.S. independent state-funded media outlet). Given that there were only 255 observations of RT in our dataset, this means that the Big News Network was by far the largest source of RT articles during the studied period, serving as the “source” of RT content roughly 2.8 times more often than RT itself. Consistent with our other findings, the searches that generated the most returns of Big News Network content featuring RT links were “Kiev” and “anti-Russia sanctions”, once again highlighting the effects of primed search language.

¹¹³ Articles where there were slight variations in the URL were captured as unique URLs. For example, “Mastermind behind military blogger’s murder identified” and “Alleged mastermind behind military blogger’s murder identified” were each counted as unique articles.

Table 7. RT Articles on the Big News Network

Site	Headline	# of Observations	Avg. Rank
Big News Network	Kiev's top diplomat slams German pacifists	60	9.47
Big News Network	Killed Russian war-blogger posed danger to Kiev regime—Zakharova	60	15.13
Big News Network	Tensions soar in Kiev over iconic Christian monastery	52	11
Big News Network	Biden extends anti-Russian sanctions for one year	48	10.25
Big News Network	Kiev's losses will be a horrible number—Ukrainian diplomat	44	7.91
Big News Network	Details of Kiev's botched assault on nuclear plant emerge—The Times	44	11.27
Big News Network	Kiev skeptical about fighter jets promised by NATO country	44	18.09
Big News Network	Slain Russian blogger posed threat to Kiev Regime—Zakharova	44	14.36
Big News Network	Biden extends anti-Russian sanctions for one year	48	10.25
Big News Network	Kiev behind drone attack deep inside Russia—MOD	40	16.60
Big News Network	Kiev labels EU bank sponsor of war	36	22.78
Big News Network	Kiev issues update on mooted talks with Xi	36	20.89
Malaysia Sun	Kiev demands cut of Western 'war profits'—Politico	32	19
Big News Network	Citizens of EU state tiring of anti-Russia sanctions—poll	28	16.29
Malaysia Sun	Slain Russian blogger posed threat to Kiev regime—Moscow	28	20.29
Big News Network	Kiev considers renaming Russia	24	27.17
Big News Network	US reveals new anti-Russia sanctions	20	2.20
Big News Network	Kiev slams Wimbledon for handing Putin a win	20	11.40
Big News Network	Kiev's security chief names dangerous tendency among Ukrainians	16	23
Big News Network	Russia to make three times more ammo than West promised Kiev—Putin	12	14
Big News Network	Kiev security chief names dangerous tendency among Ukrainians	8	28.50
Big News Network	EU teases 11th-round of Russia sanctions	8	8.50
Big News Network	Zelensky's government a force of evil priest	4	17
Big News Network	Ukraine struggles with Starlink troubles	4	14
Big News Network	Mastermind behind military blogger's murder identified	4	20
Big News Network	Alleged mastermind behind military blogger's murder identified	4	12
Big News Network	Hidden sanctions on Russian grain could spark global famine—official	4	3

The Big News Network, while in a class of its own, was not the only distributor of RT content to appear in our data. Using pairwise checks to attempt to find RT and RT Russian headlines that appeared in other outlets in our dataset (including data collected on Yandex and Baidu), we found 51 other occurrences of identical or nearly identical articles on 12 different domains. While most of those websites cited RT (some more prominently than others) as the source, it would not have been immediately apparent to most readers that the articles were produced by a sanctioned Russian state-backed outlet.

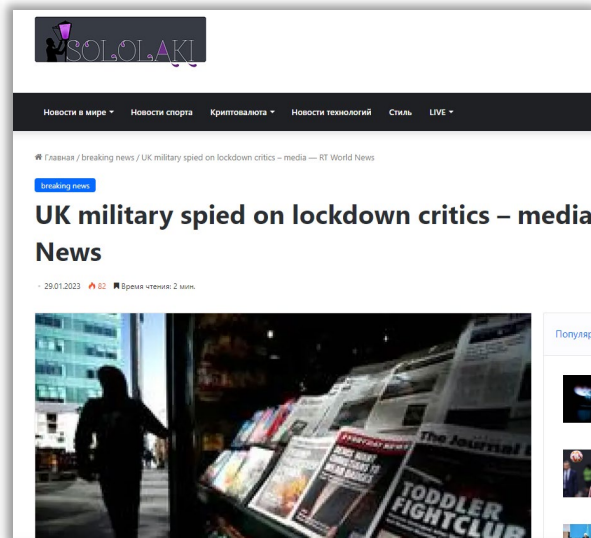


Figure 7 - Examples of one RT article from our dataset republished on several different outlets, all of which appeared in search results on at least one day of our study.

Friends with Benefits: Observations of Russian state-backed content in other state media outlets

As noted in the analysis section, we also found multiple instances of other state-backed media outlets repurposing articles from RT, Sputnik, and Tass, at times without providing clear attribution. On Microsoft Bing, Google Search, and Google News, we found 248 occurrences of an article from the Iranian state-backed Tasnim News Agency that was a near-verbatim copy of the RT article alleging that the UK military spied on lockdown critics. That article appeared on Google News every day of our study, with an average page rank of 2.8, meaning it surfaced near the top of results. This means that Google News did, in fact, return RT content to users during our study, despite its largely successful efforts to block the RT domain from results.

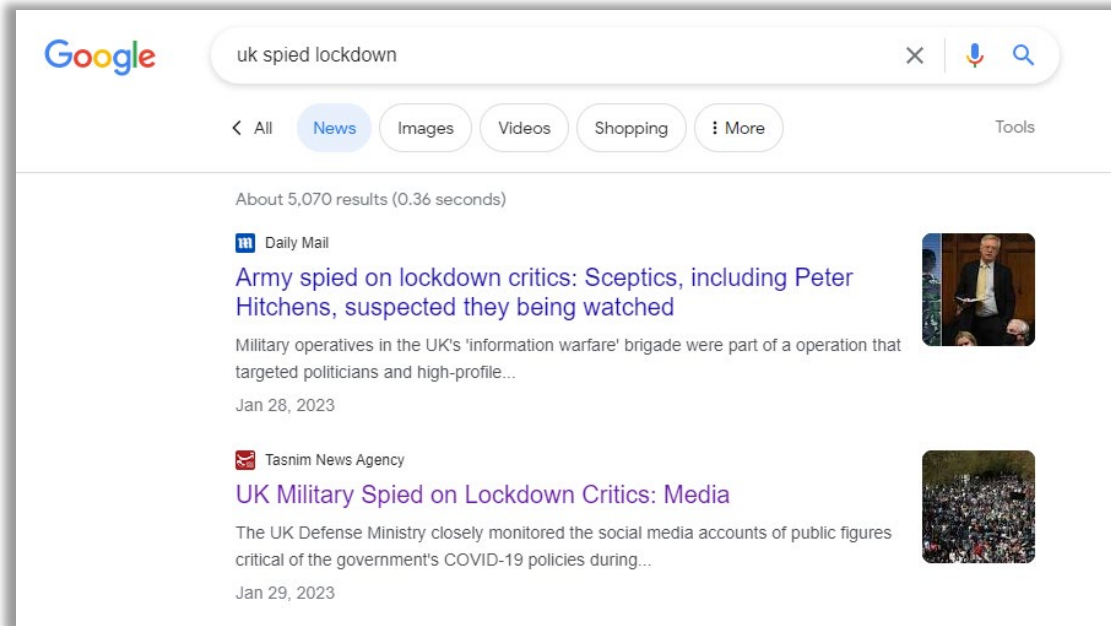


Figure 8 - Recreated Google News search result showing the Tasnim News Agency repost of a RT article among top results. Google search was conducted from the United States on 25 July 2023, and is meant for illustrative purposes only

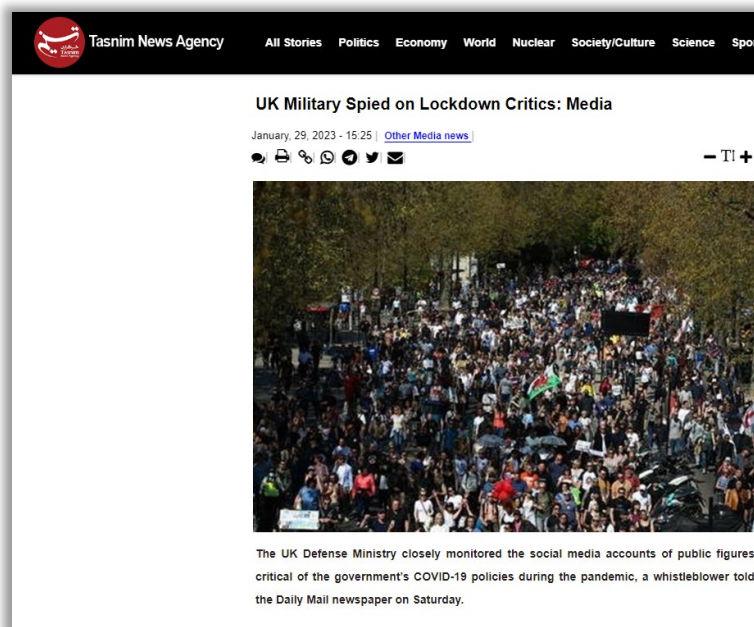


Figure 9 - A Tasnim News Agency article that is a near-verbatim copy of a RT article with the same headline

Additional Sputnik and RT content also was found in search results on websites affiliated with Syrian and Venezuelan state-backed media outlets. And these findings do not include the many, many outlets that produced “original” content that was seemingly single-sourced from Russian state-backed reporting. This was particularly true of Belarussian state-media outlet Belarus Today. Though we did not find evidence of copy-pasted articles from Russian state-backed media, the top results from Belarus Today were

seemingly sourced directly from Russian state-backed media outlets. For example, a 6 April 2023 article that appeared 32 times in search results and that falsely claimed that “Kiev” was planning to create a single state with Poland cited Russian state-backed outlet RIA Novosti as its source.

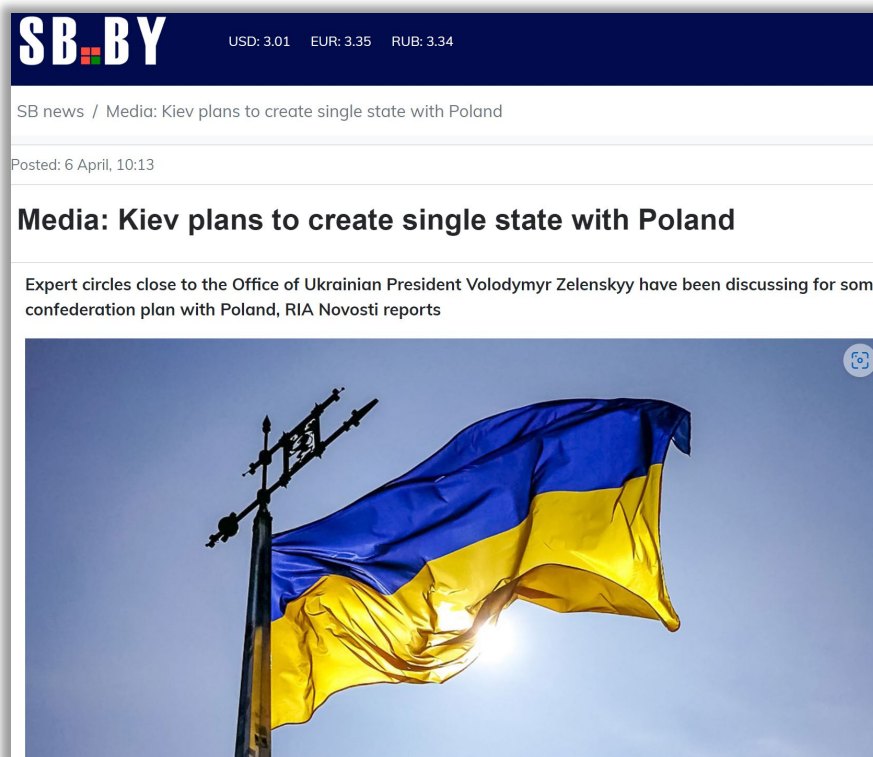


Figure 10 - Belarus Today article citing RIA Novosti as its source of a false claim that Ukraine is planning to join a single state with Poland

The laundering of Russian state-backed content through third party websites not only increases the visibility of Russian propaganda narratives on search services, but it also makes them more difficult to identify and, if applicable, remove or downrank. This is particularly important given that multiple Russian state-backed media outlets were sanctioned and geo-blocked during this study, meaning that content sharing agreements, and other republications, effectively allowed Russia to evade UK sanctions.

Conclusion

As noted throughout this report, the purpose of this study was to understand both how and how often state-linked content appears in search results, without evaluating whether the specific content produced by state-linked sites could be prohibited under the conditions outlined by the Foreign Interference Offence. While the volume of state-backed content (the “how often” question) on each studied service is easier to quantify, at least on clearly attributable sites, it tells an incomplete story. During the research period, for example, Google News had the most observations of state-backed media in search results conducted on studied Microsoft Bing and Google search products, but it did not generate any results from sanctioned Russian state media outlets or websites that regularly repurposed content from those outlets. Searches conducted on Bing News, by comparison, generated fewer state-backed links, but a

substantial number of returns from websites that reposted sanctioned Russian media content. Therefore, the question of how often state-linked content reaches people in the UK is arguably less consequential than how it reaches people, given that propaganda laundered through sites that are not transparently linked to a state is more difficult to detect, analyze, and evaluate.

For example, for regulators, it is not entirely clear how to evaluate a website that reposts content from multiple sources, including but not limited to content sourced from websites currently sanctioned by the UK government. The Big News Network, for example, was the largest source of content from sanctioned Russian outlets in our study, and thus wittingly or unwittingly played a central role in allowing sanctioned content to reach people in the UK. However, it is not clear whether the website itself would meet the foreign power condition as outlined in the National Security Act. This is of course a legal question, but it is also a technical and philosophical one—what degree of responsibility do content syndication sites have if they display content from multiple websites without exercising any editorial control over the content itself?¹¹⁴

For tech companies, syndicators and aggregators present multiple moderation challenges. Irrespective of the legal requirements under the proposed Online Safety Bill, a key question is whether search services should subject websites that routinely repost content from sources—state-linked or otherwise—that have been downranked or blocked to the same policies as those applied to the original source. It is clearly not reasonable to expect search services to catch every instance of content reproduced by other sites, but it may be feasible for search services to conduct risk assessments to identify sites that repeatedly disseminate content from outlets linked to foreign powers, especially those that have been sanctioned.

Finally, information laundering also presents massive challenges for information consumers and educators. Given that one of the fundamentals of media literacy is knowing the source of information, content that is reposted across multiple websites, often without any attribution, is exceedingly difficult to evaluate. People would obviously judge the reliability of information differently if they knew the original source was a state-backed outlet, not a supposedly independent one. Without that context, news consumers are at a profound disadvantage.

Beyond the challenges of identifying foreign links to content that surfaces in search environments, our research also highlights how state-linked actors can take advantage of data voids produced by differences in the language and framing people use in search queries. For instance, the queries that generated the most state-backed media content in our study, particularly content from Russian state media and other Kremlin-friendly state media outlets, were those that were either conceptualized using pro-Russian framing (searches for “Kiev” and “Anti-Russian sanctions”) or that were conducted in the Russian language (searches on Yandex). This is consistent with our past research, and once again suggests that the language and framing used by individuals is a significant factor, independent of the search service used, in determining whether they are exposed to more state-linked content.

It is our hope that these findings contribute to a more complete understanding of how state-linked information sources can potentially be used to conduct foreign influence or interference via search services. However, it is important to highlight the limitations of this research. Our research methods

¹¹⁴ It is not clear how the Big News Network syndicates content and whether it has any formal content sharing agreements with individual news outlets.

could not uncover content produced by state-linked or state-aligned actors that was not published by a website linked to that state, nor could we identify instances where more than 30% of the text from state-linked sources was changed or altered before being republished on another site. We also did not investigate the potential use of link schemes, cloaking, or other forms of direct manipulation of search results, sometimes referred to as black hat search engine optimisation (SEO).¹¹⁵ Still, our findings add to a growing body of research that shows both the importance of search services in the modern information ecosystem, and how those services can be used, or misused, to potentially undermine the interests of the UK.

¹¹⁵ O'Connor, P. (2022). An Introduction to Black Hat SEO. Available at: <https://blog.hubspot.com/marketing/black-hat-seo>.