



The disinformative ecosystem

Link sharing practices on Telegram as evidence of cross-platform amplification

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Introduction

Previous research conducted in the context of the EDMO BELUX project has demonstrated that Telegram harbours an extensive and growing network of antagonistic, Dutch-speaking public channels. These channels have been shown to propagate a range of conspiracy theories and far-right narratives around the time of the coronavirus pandemic ([Willaert et al., 2022](#)). A subsequent investigation ([Willaert and Sessa, 2022](#)) has identified traces of pro-Russian propaganda within this network, thus providing evidence for a dynamic of narrative evolution in which communities flexibly interpret and reinterpret current events.

Previous investigations have thus mainly addressed some of Telegram's internal dynamics. However, it should be acknowledged that Telegram is not a walled garden. This becomes apparent when we examine the links to other websites and platforms shared within the communities populating the platform. To grasp the ecosystem of websites in which antagonistic Telegram channels position themselves, the present investigation will examine the link-sharing behaviour of a subset of 30 Dutch-speaking Telegram channels sourced from the previous EDMO BELUX investigative report ("From Infodemic to Information War"). These channels were identified as the largest by the number of posts around the summer of 2021, and a number of them have been characterised as so-called 'content aggregators' or 'influencers' because of their high degree of connectedness to other Telegram channels in our original dataset.

Studying the links shared in Telegram channel messages allows us to further our understanding of this platform and its contents in a two-fold manner. For one thing, mapping these links enables us to build a clearer picture of the information-sharing habits of channels that gather thousands of members and gain insight into the wider media sphere they pertain and on which they feed. For another, our observations aim to shed light on the complexity and interconnectedness of the disinformation ecosystem, which rests on a combination of mainstream and alt-tech social media platforms, as well as mainstream press and far-right disinformative outlets.

A picture of cross-platform interaction and contamination emerges, emphasising the need to develop and strengthen content moderation and counter-disinformation mechanisms. On the one hand, messaging services such as Telegram fall outside the scope of the new legislative framework defined by the Digital Services Act (DSA)¹, as long as they are interpersonal communication between a finite number of persons to guarantee privacy for one on one interactions. On the other hand, the DSA may apply to Telegram for what concerns its public groups and channels.

¹ The authors would like to thank Rita Jonusaite, Advocacy Coordinator at EU DisinfoLab, for her support around the parts of this report that discuss the Digital Services Act.

Case study

Data and Methodology

Our analysis further explores a subset of antagonistic Telegram channels identified in the summer of 2021 and discussed in the previous EDMO BELUX investigation. These channels were originally collected through a ‘snowballing’ method for Telegram research ([Peeters and Willaert, 2022](#)). Following this method, an initial seed list of Dutch-speaking channels, known for sharing disinformation and otherwise antagonistic content, was expanded by tracing messages forwarded from other channels. It was thereby assumed that if a channel shares a message from another channel, there is a relevant connection between both, and they can be said to pertain to the same sphere.

The subset of channels under investigation concerns the 30 largest channels by the number of posts as identified in the summer of 2021 when the dataset was first collected. The whole message histories of these channels were subsequently scrapped again in September 2022, collecting a dataset that spans the period from August 2018-September 2022. For a detailed description, see Willaert et al., 2022.

After collecting the text messages for these channels, we extracted the domain names shared in the message texts using [Ural Python library for URL-related heuristics](#). As will follow from the discussions below, the most frequently shared domains were then plotted over time, building a typology of domains by means of a further qualitative examination of their contents.

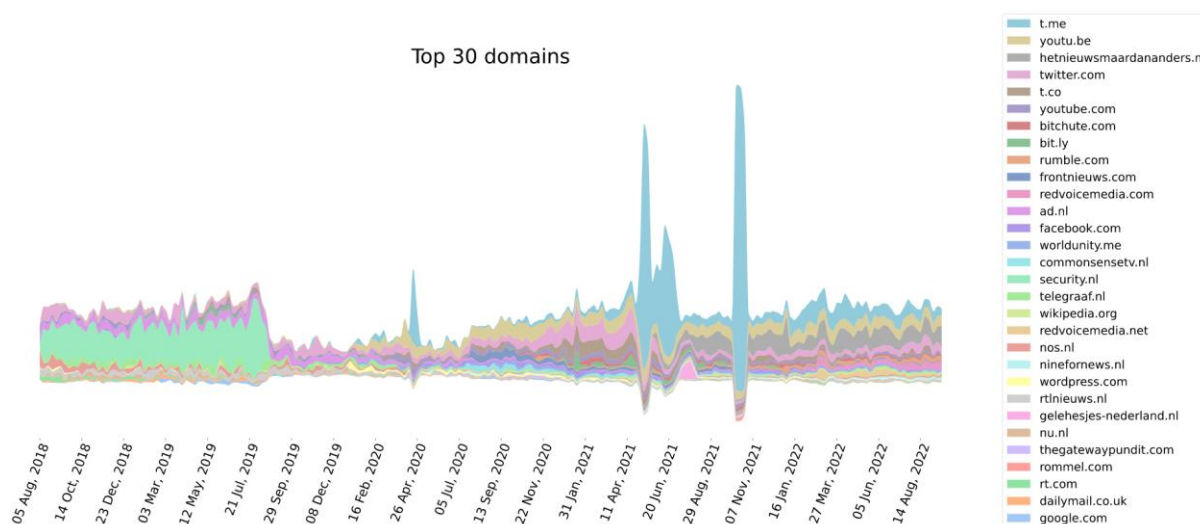


Figure 1. Ratio of shared domains per message for the 30 most frequently shared domains over time (August 2018–September 2022).

Findings and discussion

Over the four years considered, the observed sample of 30 Telegram channels shared 626.644 external links from thousands of domains. In Figure 1, we plot the 30 most frequently shared domains, normalised by the number of messages, for every week in the dataset. In Figure 2, we report the top 50 outlets that the links in our dataset refer to, merging different domains that redirect to the same website (e.g., telegram.org and t.me for Telegram). These belong mainly (but not exclusively) to four typologies: news websites and social media platforms, either mainstream or fringe.

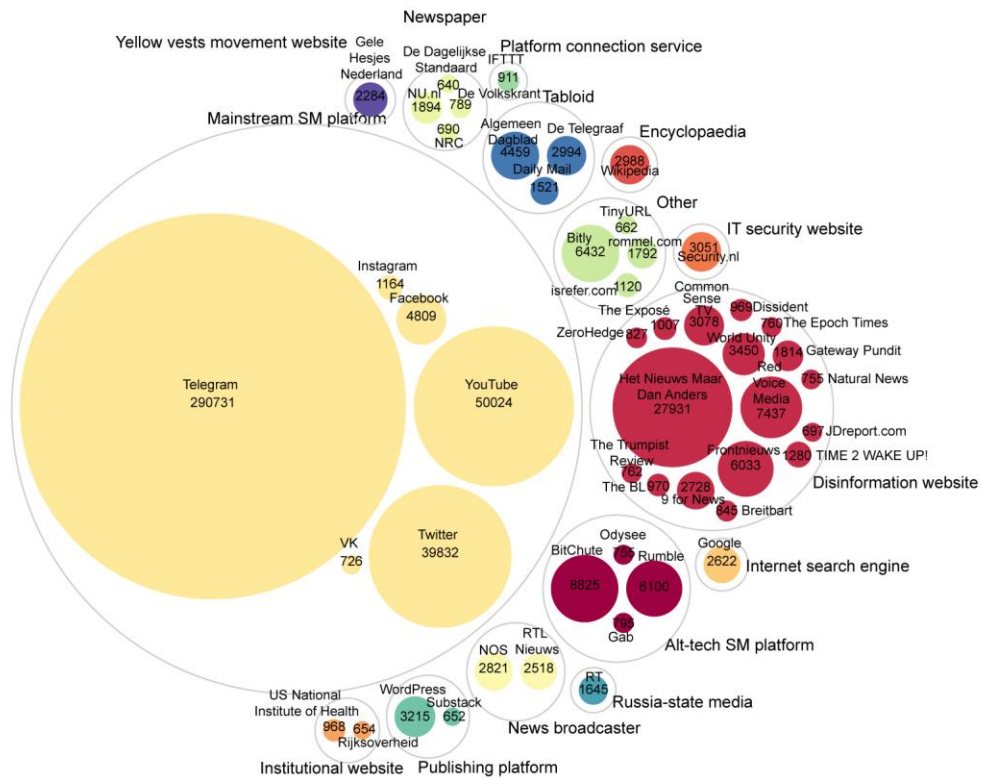


Figure 2. Typology of the 50 most recurrent domains shared by the sampled channels (August 2018–September 2022).

1. Mainstream social media platforms

Mainstream social media that enter the top 50 most shared domains include very large online platforms (VLOPs) such as YouTube (50.024 links), Twitter (39.832), and Facebook (4.809). In addition, the selected channels also shared 312 TikTok links and 244 Twitch links. We included Telegram in this category, an instant messaging service like WhatsApp (from which 92 links were shared), but it has the additional feature of allowing channels with an unlimited number of subscribers, making them a powerful tool for broadcasting messages to large audiences.

Most of the external links shared come from Telegram, accounting alone for almost half the entire sample of shared links (290.731 precisely). This is attributed to the fact that the channels in our sample can be classified as ‘content aggregators’ or ‘influencers’, sharing messages with lists of other Telegram channels (and their URLs) that might be relevant to their followers.² Compared to other platforms, Telegram is a fundamental tool for sharing and spreading disinformation thanks to its lax moderation policies. To illustrate this, following the US Capitol attack of 2021, Telegram gained [25 million new users](#) in just 72 hours.

Yet, in the lack of a clear list of VLOPs – which will be defined in the first quarter of 2023 – it remains unclear how Telegram and other messaging services will be affected by the DSA’s requirements. As mentioned above, some Telegram services as public groups and channels will be in the scope of the DSA, whether or not the platform can be considered a VLOP.

2. Alt-tech social media platforms

Alt-tech platforms are social media platforms and Internet service providers that position themselves as alternatives to mainstream web and social networking platforms. They gained popularity among the far- and alt-right, and communities with fringe opinions, particularly due to the perception of less stringent content moderation policies. For these reasons, they attract users who were deplatformed from ‘traditional’ social media platforms due to the content shared and beliefs professed. Instead, they describe themselves as defenders of [free speech](#), ensuring minimal content oversight.

Understandably, alt-tech platforms play an important role among our sample of extremist and conspiracy Telegram channels, and in fact, BitChute (8.025 links), Rumble (6.100), Gab (795), and Odysee are among the 50 most shared domains. Comparing [Wikipedia](#)’s list of alt-tech platforms, we found that many others were widely present in our data. These are Truth Social (428 links), MeWe (383), SafeChat (296), Gettr (272), DLive (203), Parler (171), 4chan (82), Minds (44), Discord (25), Locals (25), Voat (6), Wimkin (3), and Freedom Phone (1).

Consensus exists that VLOPs count over 45 million users, meaning that only BitChute, Discord, and Rumble could be considered as such. However, other platforms also have millions of users; for instance, 4chan has 22 million, MeWe gathers 20 million, and Parler counts 16 million approximately – who often choose these outlets to share deceptive, harmful, and hateful content. Under the DSA, some obligations (e.g., transparency reporting and others) will apply to all platforms. However, certain obligations are attributed only to VLOPs, specifically risk assessment (i.e., looking specifically at systemic risks such as disinformation) and risk mitigation measures, which we believe should apply to other platforms too, including those discussed.

² This practice differs from forwarding messages from other channels. The URL of the channel from which a message was forwarded is part of the metadata of that message.

3. Mainstream press

These include Dutch- and English-speaking newspapers, broadcasters, and tabloids. Selected articles are amplified to push a specific agenda, for example, doubting the existence of [new Covid-19 variables](#) and [rejecting the vaccine](#). They usually echo [corruption](#) and [child abuse](#) cases, or make conspiracy claims – like the allegedly suspicious circumstances surrounding the [death of a climate denialist public figure](#). Finally, link-sharing activities are regularly accompanied by attacks against journalists – even calling them “fascists” – and mainstream media, said to spread “fake news under state supervision”.

4. Disinformation websites

We classified a website as disinformative if it showed more than one case of blatant disinformation, usually referring to New World Order conspiracies or Covid-19 vaccine-related hoaxes. In line with the sample’s orientation, they all reflected far-right ideals – such as praising Trump or local right-wing politicians and expressing pro-Russian and anti-NATO positions concerning the ongoing Russo-Ukraine conflict. Besides Dutch-speaking media, famous anglophone websites like Breitbart, ZeroHedge, or The Epoch Times, which have been at the centre of controversies, are also popular.

Moreover, some of these websites echo one another. For example, Het Nieuws Maar Dan Anders [extensively reports content](#) from Frontnieuws. On a further note, the domain “rommel.com” is for sale at the time of our writing. Still, we hypothesise that it might have had something to do with a certain Rommel, “who runs that horrific far-right Islamophobic, homophobic, anti-Semitic blog Frontnieuws”, as Frontnieuws’ [contact page](#) reports. Although reconstructing a network of extremist websites lies beyond the scope of this report, it surely highlights the coordination among these actors. To further corroborate this, various websites offer the possibility to access content in different languages, suggesting a multi-country audience.

Overall, these far-right disinformative websites pride themselves on participating in the anti-mainstream information ecosystem and powering anti-establishment sentiments. They identify as “[alternative](#)” news sources that “[provide free and independent news](#)” and “[don’t despite readers like the mainstream media do](#)”, or claim to be “[telling the truth](#)”, unlike “[big tech tyrants](#)”. One of these outlets, which is peculiarly focused on attacking the Chinese regime, even has its own [fact-checking verification standards](#) and promises to get its news “[from trusted and official sources](#)”. Nonetheless, they all instigate conspiracies and hoaxes.

In addition, many ask for donations through online payment systems, [crowdfunding](#), and [crypto-currencies](#). As pointed out in a [previous study](#), the latter resonates with the need for confidentiality and anonymity, as well as fighting the perceived censorship, as various outlets lament being [demonetised](#) from mainstream social media.

5. Other relevant domain types

The observed Telegram channels also shared other kinds of domains that are worth a few words:

- **Russian platforms**

In our sample, there were 1.645 links from Russian state-controlled international news television network RT, 445 from Sputnik News, and 73 from TASS, which are both Russian state-owned news agencies. Another consideration regards the difficulty categorising Russian social media VK or VKontakte (726 links). Being a VLOP, we considered it a mainstream platform. However, outside of the Russian-speaking world, VK attracts right-wingers as a sort of alt-tech social media, thanks to its permissive content moderation.

- **Institutional websites**

Government websites providing trustworthy information are mostly exploited to perpetuate dissatisfaction towards authorities (e.g., against [migration policies](#) or the decision to [reduce CO2 emissions](#)). This is similar to how mainstream press content is used.

- **Publishing platforms**

In the top 50 shared links, we find 3.215 WordPress links, the well-known free and open-source Content Management System (CSM). This is not the only case: for instance, 164 links come from decentralised content sharing and publishing platform LBRY, from the same creators of the alt-tech platform Odysee. Back to WordPress, which hosts approximately [455 million websites](#) as of 2022, allows virtually anyone to easily open a website, whether they call out a [plot to decrease the world population](#) or accuse the Clinton Foundation of running a [pornography network](#). The [Terms of Services](#) of WordPress forbid “any unlawful purposes, to publish illegal content, or in furtherance of illegal activities”. Content can be [reported](#) if it is spam, abusive, promoting self-harm/suicide, infringing copyright, or adult content unsuitable for general audiences. Nevertheless, we could not find any reference to disinformation and harmful content.

- **Crowdfunding**

Last but not least, we identified many domains that belong to crowdfunding platforms. In particular: Patreon (209 links), GoFundMe (162), GoFundFreely (121, inaccessible at the time of our writing), Buy Me a Coffee (96), Change.org (65), GiveSendGo (33), DonorBox (21), CrowdJustice (14), GetFunded (12), Crowdfunder (5), FundRazr (3), Kickstarter (2), and Prizeo (1). In 2020, [EU DisinfoLab](#) wrote about how COVID-19 conspiracists looked for funding for their activities through these services, whose definitions of prohibited content differ widely. We can only acknowledge that crowdfunding is still a popular way to finance disinformation, especially when other platforms demonetise malign actors.

Conclusion

This investigation set out to map the link-sharing practices of 30 antagonistic, Dutch-speaking Telegram channels to assess what sources sustain their news sharing practices. These communities had previously caught our attention for their extremist and conspiracy orientation, changing their niche in early 2022 from COVID-19 anti-vaxxers to Russian supporters in the Russo-Ukrainian war.

Prone to spreading disinformation, the study of these communities' link-sharing behaviour showed an articulate ecosystem that engages a plurality of media, ranging from mainstream to fringe outlets. The main learning outcome is that hoaxes and conspiracy theories spread across the internet, thus emphasising the urge for cross-platform counter-disinformation initiatives. So far, service providers have mostly self-regulated about the content that is allowed or not, acting voluntarily and with huge differences across them. This will change in the EU with the introduction of the Digital Services Act, a game-changer for platform accountability.

Nonetheless, the ground-breaking DSA has some key points to observe. Member States will need to enforce it on digital services so that it does not remain good legislation only on paper. The European Commission must ensure they can enforce it specifically on VLOPs and VLOSEs. Another element to remember is that the package primarily tackles illegal content, while disinformation is more often harmful than illegal or "awful but lawful". Moreover, systemic risk assessment and mitigation of risks, including disinformation, will only apply to VLOPs and VLOSEs, which leaves out a macrocosm of alt-tech platforms that users specifically choose for their tepid content moderation policies. On a more positive note, Article 14 of the DSA on terms and conditions will apply to all platforms. Thus, while many of them do, we think that all platforms should clearly state that disinformation is not allowed and constitutes a violation of their terms and conditions. This is the first step to real cross-platform content moderation on disinformation.

In our analysis, Telegram is the main domain shared by these interconnected channels. Often the stage of inaccurate content, it is not entirely clear how the messaging service will be affected by the new regulation. Yet, disinformation is far from being exclusively a social media problem, as the diversity of domains suggests. The number of alternative news outlets regularly shared within these communities evidences their abundance and potential outreach. For this reason, the rejection of any form of [media exception](#) in any current or future tech or media legislation that would allow the media to escape online content moderation is crucial. The media must be held accountable when it fails to abide by strict fact-checking principles.

Disinformation proliferates across narratives, communities, and platforms. It adapts to the context and finds strategic ways to use different media. Therefore, responses need to be moved beyond a single-thread and single-medium perspective and be systematic so that false news does not slip through the cracks anymore and feed the information disorder.