

Data Protection Commission
21 Fitzwilliam Square South
Dublin 2
D02 RD28
Ireland

Also per e-mail: info@dataprotection.ie

Draft: April 7th, 2021
Our ref.: SOMI / TIKTOK
Your ref.: -

Dear Sir or Madam,

On behalf of Stichting Onderzoek Marktinformatie (translated to the 'Foundation for Market Information Research', hereinafter: '**SOMI**'), we hereby submit the following complaint letter regarding TikTok Ltd. and TikTok information Technologies UK Ltd. (hereinafter collectively referred to as: '**TikTok**'). The complaint relates to several violations of the General Data Protection Regulation (hereinafter: '**GDPR**').

SOMI

1. SOMI is a knowledge center, think tank and consumer representative foundation that focuses on data security and privacy protection for all European citizens.
2. So far, over 10,000 participants have registered with SOMI to be informed about their digital rights and have their interests represented. They have authorized SOMI to act against the violation of their privacy rights by TikTok and to exercise the rights granted to them by the GDPR and other European laws.

TikTok

3. TikTok is a popular yet controversial video-sharing social network, owned by ByteDance Ltd. It is mainly aimed at its users uploading short videos of themselves, showing events, dances, performing various challenges etc.
4. Below, SOMI will describe multiple violations of the GDPR by TikTok and the risks associated with such violations.

Use by children

5. The official age limit of TikTok users is 13. The network has no instruments to verify the age of its users. This results in many young children under the age of 13 using TikTok. The app is even primarily aimed at children and TikTok is aware that many children are using their app, but it fails to take appropriate measures to verify the age of its users.¹

¹ <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html>

6. In the Netherlands TikTok is the number one app among children.² Research by Newcom estimates that around 700.000 Dutch children between the ages of 6 and 14 use TikTok.³
7. The massive use of TikTok by children and teenagers has already lead to the Dutch Data Protection Authority, the Autoriteit Persoonsgegevens (hereinafter: 'AP'), starting an investigation into the processing by TikTok of personal data of minors.⁴ Pursuant to article 8 of the GDPR and article 5 of the Uitvoeringswet AVG (hereinafter: 'UAVG'), the processing of personal data of minors below the age of 16 requires the permission of their parents or legal guardian. After all, children are a vulnerable group that are expected to be less aware of the risks, consequences and safeguards involved as well as their legal rights with regard to the processing of personal data.
8. TikTok currently does not verify the age of its users adequately and therefore often does not ask permission from the parents or legal guardian. TikTok therefore violates article 8 of the GDPR and article 5 of the UAVG.

Recent events showing the risks of young children using TikTok

9. In addition, besides reports and warnings that TikTok content is not safe for minors, TikTok appears to be negligent in monitoring its site content accordingly. This is, in fact, not only a European, but a worldwide shared concern that puts minors at risk.⁵ The risks associated with minors using TikTok will be demonstrated below.
10. On Wednesday 20th of January 2021 in Sicily, Italy, a 10-year-old Antonella Sicomero died after attempting the blackout challenge. This challenge dares participants to choke themselves until they lose consciousness. The girl tied a belt around her neck and accidentally took her own life. This event has led to a ban on TikTok from the Italian privacy authority until TikTok is able to verify the age of its users.⁶
11. Few days later on Monday 25th January, a 9-year-old Emmanuel Poteon from Trinidad was found dead in his residence with a belt around his neck and his phone nearby. His death was also linked to TikTok blackout challenge.⁷ In February, 13-year-old Cash Anderson from Saskatoon, Canada, also died from the same challenge.⁸
12. Recently, on 22nd March 2021, a 12-year-old Joshua Haileyesus from Colorado, USA, was found unconscious in his bathroom. His family believe he was attempting to choke

² <https://www.ad.nl/tech/iedereen-aan-de-tiktok-zo-beschermt-je-kinderen-tegen-online-gevaren~a8fc3335/>

³ <https://www.rtlnieuws.nl/tech/artikel/5210376/tiktok-facebook-nederland-sociale-media-onderzoek-instagram-linkedin>

⁴ <https://autoriteitpersoonsgegevens.nl/nl/nieuws/ap-start-onderzoek-naar-tiktok>

⁵ <https://www.reuters.com/article/us-tiktok-privacy-children-exclusive/exclusive-u-s-probing-allegations-tiktok-violated-childrens-privacy-sources-idUSKBN248373>

⁶ <https://www.ad.nl/buitenland/italie-blokkeert-tiktok-na-dood-10-jarig-meisje~af20c42f/>

⁷ https://trinidadexpress.com/newsextra/boy-9-dies-in-tiktok-blackout-challenge/article_55e56a28-5ff9-11eb-8f2f-d7b76b9af295.html

⁸ <https://saskatoon.ctvnews.ca/saskatoon-mom-says-online-challenge-resulted-in-son-s-death-1.5321193>

himself with a shoelace as part of the blackout challenge. He remains in the hospital, however, the doctors announced that Joshua became brain dead and will not survive.⁹

13. TikTok has seen various other dangerous challenges, such as the skull breaker challenge, the blue whale challenge, the Benadryl challenge and various other harmful challenges.
14. The skull breaker challenge involves two people kicking the legs of a third person, making that person hit the ground with their head as they tumble backwards. This has already led to serious injuries with multiple young children.¹⁰
15. The blue whale challenge results in participants to be challenges or threatened to commit a series of assignments that become increasingly difficult. The last assignment is to commit suicide. The threat states that if the user fails to perform the tasks, they will kill the family of the user. This has already led to the death of various teenagers and allegedly to the death of a young child.¹¹
16. The Benadryl challenge involves overdosing on the anti-allergy drug Benadryl to experience hallucinating effects. Last year this has already led to the death of at least one teenager.¹²
17. Even though TikTok officially forbids dangerous challenges in their community guidelines, the examples as shown above show that TikTok does not seem capable to filter out these dangerous challenges effectively and in a timely manner before any harm is done to its users. This results in significant risks for minors, as minors are less capable of estimating the risks involved with these challenges and are especially sensitive to commit dangerous acts due to peer pressure and a desire for popularity and attention.
18. Besides the dangerous challenges as mentioned above, TikTok is harmful to minors in other ways:
 - a. Social media such as TikTok can be detrimental to the mental health of vulnerable groups such as minors, leading to an increase in depressions and depression related suicides.¹³
 - b. Minors on TikTok are often the victim of cyberbullying. TikTok appears unable to effectively counter cyberbullying. The detrimental effects of cyberbullying on the health of minors have already been researched extensively.¹⁴

⁹ <https://www.newsweek.com/tiktok-blackout-choking-challenge-leads-12-year-old-boy-becoming-brain-dead-1579927>

¹⁰ <https://www.ad.nl/tech/artsen-waarschuwen-voor-levensgevaarlijke-skull-breaker-challenge-op-tiktok~aa7500a5/> and <https://www.washingtonpost.com/nation/2020/03/04/tiktok-challenge-skull-breaker/>

¹¹ <https://www.ad.nl/tech/weer-een-waarschuwing-voor-zelfmoordspel-blue-whale-challenge~af44f331/>

¹² <https://www.dailymail.co.uk/news/article-8773315/FDA-issues-Benadryl-warning-investigates-deaths-linked-TikTok-challenge.html>

¹³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3477910/>

¹⁴ <https://www.youth.gov.sg/Peek-Show/2020/10/Cyberbullying-on-TikTok-is-a-major-issue>

- c. Child predators seem to be active on TikTok to target minors, send sexually explicit messages and content and to acquire sensitive material from the minors.¹⁵
- d. Moderation, censorship and exposure to Chinese standards, which results in the exclusion of certain political views and the LGBT community and other vulnerable groups.¹⁶

Unlawful processing of personal data

- 19. Besides the pressing issues related to minors of using TikTok, there are also more general privacy violations that affect all (European) users of TikTok.

No data minimization

- 20. By design, the users of TikTok are provided with only a severely limited choice of settings in the app with regard to advertising in, and data collection by the app. The app is designed to collect and process much more data than is essential or necessary to the services involved.
- 21. TikTok does not take appropriate technical and organizational measures to ensure that personal data is strictly collected or processed to the extent exclusively necessary for the respective goals or purposes for such data processing. The design, architecture and default settings of the TikTok app are thus in breach of the principles of the GDPR as mentioned in article 5 of the GDPR and do not result in effective data minimization as referred to in article 25 of the GDPR.
- 22. This is illustrated by the privacy policy of TikTok, in which they state that they process the user's interest, location, gender and age to personalize content (which also includes sponsored videos).

*"We infer your interests, gender and age for the purpose of personalising content. We also infer the interests of our users to better optimise advertising across our Platform. If you have consented, we will use this information for the purpose of serving personalised advertising."*¹⁷

"When you use the Platform on a mobile device, we will collect information about your location in order to customise your experience. We infer your approximate location based on your IP address. In certain jurisdictions, we may also collect Global Positioning System data."

¹⁵ <https://www.forbes.com/sites/simonchandler/2020/11/02/tiktok-still-failing-to-tackle-alleged-child-predators-bbc-panorama-claims/> and <https://www.dailymail.co.uk/news/article-8775051/TikTok-used-sex-predators-blackmail-children.html> and <https://www.dailypost.co.uk/news/paedophiles-tiktok-social-media-app-18626595>

¹⁶ <https://nltimes.nl/2020/01/28/lax-security-tiktok-puts-childrens-privacy-safety-risk-report> and <https://nl.metrotimes.be/2020/05/10/must-read/tiktok-telt-twee-miljard-gebruikers-maar-hoe-veilig-is-de-app-voor-jonge-kinderen/> and <https://www.theguardian.com/technology/2019/sep/25/revealed-how-tiktok-censors-videos-that-do-not-please-beijing>

¹⁷ <https://www.tiktok.com/legal/privacy-policy?lang=en#privacy-eea>

23. An opt-in is not provided and an opt-out is not possible. Consent is only asked insofar the data is used to provide personalized ads, but this does not include sponsored content and the data should not be processed altogether if consent is refused.
24. Another example is the processing of significant amounts of metadata about the user and its devices, combined with fingerprinting, in order to, among other purposes, improve the app. Assuming they base these processing activities on a legitimate interest, the weighing of interests is not included in the privacy policy and an option to opt-out is not provided for.

“We collect certain information from you when you use the Platform including when you are using the app without an account. Such information includes your IP address, instance IDs (which allow us to determine which devices to deliver messages to), mobile carrier, time zone settings, identifier for advertising purposes and the version of the app you are using. We will also collect information regarding the device you are using to access the Platform such as the model of your device, the device system, network type, device ID, your screen resolution and operating system, audio settings and connected audio devices. Where you log-in from multiple devices, we will be able to use your profile information to identify your activity across devices.”

25. A more concrete example of unlawful processing by TikTok is the fact that the TikTok app secretly had access to and could read the clipboard information and data of its users, thus including sensitive information such as passwords. This was discovered by a new feature in iOS 14 that informs users whenever the clipboard is being looked at.¹⁸ This implies strongly that the TikTok app is looking continuously on its users' clipboard. This has never been communicated by TikTok and has never been included in the privacy policy of TikTok. After TikTok has been caught spying on the clipboard, TikTok has admitted to the fact and says it has removed the function from the app.¹⁹ However, this has not yet been officially confirmed and it is possible that the function has only been removed on iOS as Android does not yet have such a detection feature.

No consent

26. For personalized ads, there is a large button with ‘Accept’ displayed as soon as the app is installed. If a user does not want personalized ads, it has to adjust it in its settings, which means more effort. In practice, many users will not bother to take those steps. This also means that TikTok does not ask for consent in a way that is compliant with the requirements as stated in articles 7 and 13 sub 2 c of the GDPR and the EDPB guidelines on consent.²⁰ The result is that the consent is invalid and the processing of personal information for personalized ads is thus in violation of the GDPR.
27. Another illustration of non-compliant consent settings can be found in the cookie banner on the TikTok website. Cookies can be accepted by pressing one button, but refusing cookies takes multiple actions and navigating through the cookie policy. The

¹⁸ <https://arstechnica.com/gadgets/2020/06/tiktok-and-53-other-ios-apps-still-snoop-your-sensitive-clipboard-data/>

¹⁹ <https://www.theverge.com/2020/6/26/21304228/tiktok-security-ios-clipboard-access-ios14-beta-feature>

²⁰ https://edpb.europa.eu/sites/edpb/files/files/file1/edpb_guidelines_202005_consent_en.pdf

goal is to nudge users to simply accept the cookies, in order for TikTok to use and sell the data they process. This is not in accordance with the GDPR and the EDPB guidelines on consent.

28. It is important to note that TikTok has a significant interest in nudging users to give consent for data processing. TikTok a free app, yet it is expected to have earned around \$500 million in revenue in the U.S. alone and will continue to significantly grow in the coming years.²¹ The owner of TikTok, ByteDance, earned a revenue of around \$35 billion in 2021.²² Specific financial information about Europe is not yet available to SOMI.

Lack of information and transparency

29. The information provided by TikTok prior to processing personal data and prior to granting consent is insufficient. Prior to registration they do not make sufficiently clear which data they process, whom it is shared with, from which parties they receive personal data and how long they store the data. This violates article 5, 13 and 14 of the GDPR, as the data is not processed lawful, fair and transparent.
30. Furthermore, personal data should be collected only for specified, explicitly described and justifiable purposes only. Subsequently, such data should not be processed in any way incompatible with these purposes.
31. TikTok may not even be truthful or complete in its communication on its data collection activities. It may also not honour or respect previous agreements or promises to do better in the future, as demonstrated by breaking promises and illegal processing activities in the past.²³

No adequate technical and organisational measures to protect personal data

32. In accordance with article 32 of the GDPR, the data controller must take appropriate technical and organizational measures to ensure a level of risk-appropriate security.
33. Recent research has found a number of different vulnerabilities in the app, including:
 - Web view and remote web enabled by default (that can therefore be used by external parties to gain access);
 - The app seems to take text as commands and to pipe them directly into Java as an OS command;
 - The application that uses Java reflection and shortens VM load time can be exploited by malicious users and has a CVE score of 8.8 (which corresponds to a 'high' risk);

²¹ <https://www.businessofapps.com/data/tik-tok-statistics/>

²² <https://www.bloomberg.com/news/articles/2021-01-27/tiktok-owner-s-sales-doubled-to-35-billion-despite-u-s-ban>

²³ <https://www.nu.nl/tech/6051173/kinderorganisaties-tiktok-heeft-privacybeloftes-verbroken.html> and <https://www.nu.nl/tech/6070357/tiktok-verzamelde-data-van-android-telefoons-en-overtrad-google-regels.html> and <https://arstechnica.com/gadgets/2020/06/tiktok-and-53-other-ios-apps-still-snoop-your-sensitive-clipboard-data/> and <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html> (concerning facial recognition algorithms)

- The application has allowed 3rd parties to send malicious links, respectively to obtain personal data through the companies' website;
 - An insecure http connection that would allow users' uploaded videos to be intercepted and replaced;
 - Other unexplained interruptions in service.²⁴
34. Many of the data collection settings involved may be controlled remotely. Reportedly, this may also include code that would allow the app to download, unpack and execute the contents of a remote .zip file in the background. Other sources suggest more of such malware practices in the past, such as using an http API or setting up a local proxy server on devices without authentication as also referred to above.²⁵
35. Recently a new security flaw has been discovered in the TikTok app, that allows attackers to (once again) gain access to profile data, including telephone numbers, of users.²⁶
36. These flaws lead to the conclusion that the security of TikTok is not and has not been in accordance with Article 32 GDPR, especially considering the fact that large amounts of personal data of vulnerable groups are processed (such as children).
37. Meanwhile, there are also security concerns that result from the fact that TikTok is owned by ByteDance. Various studies have been published by both (foreign) supervisors and private cybersecurity companies. For example, the American company Penetrum has researched TikTok and arrives at the following observations:
- "After extensive research, we have found that not only is TikTok a massive security flaw waiting to happen, but the ties that they have to Chinese parties and Chinese ISP's make it a very vulnerable source of data that still has more to be investigated. Data harvesting, tracking, fingerprinting, and user information occurs throughout the entire application."*²⁷
38. Mrs. Lindsay Gorman, fellow with the Alliance for Securing Democracy, lays out these risks as follows:
- "The harsh reality of how businesses operate in China means that if the CCP wants that data, it will get it" and "Leaving TikTok in Chinese ownership creates an information space vulnerability at a time leading up to an election when political communication is increasingly happening on the platform."*²⁸
39. The fact that a Chinese based company collects massive amounts of personal data about hundreds of millions of users have also led to worries across different political

²⁴ https://penetrum.com/tiktok/Penetrum_TikTok_Security_Analysis_whitepaper.pdf

²⁵ https://penetrum.com/tiktok/Penetrum_TikTok_Security_Analysis_whitepaper.pdf

²⁶ <https://nl.hardware.info/nieuws/74885/kwetsbaarheid-in-tiktok-stelde-privégegevens-van-gebruikers-bloot>

²⁷ https://penetrum.com/tiktok/Penetrum_TikTok_Security_Analysis_whitepaper.pdf

²⁸ <https://www.npr.org/2020/08/08/900394707/tiktok-to-sue-trump-administration-over-ban-as-soon-as-tuesday?t=1599121539504&t=1611845089518>

parties over the world. Especially considering the fact that the millions of uploaded videos and photos may be used to create and develop facial recognition software and biometric profiles.²⁹

Unlawful sharing of personal data

40. TikTok has and continues to share data with third-party users, including Google, Facebook, AppsFlyer and possibly others, for which no permission has been given by the users, while users of these apps were also not (sufficiently) informed of these practices.
41. These practices have been uncovered and described by a German newspaper. The paper analysed the traffic to and from TikTok's app and website and found Facebook and AppsFlyer constantly receiving information from users, for example when users open and close the app, what videos they view, which channels they subscribe to and even what search items users enter.³⁰
42. TikTok is insufficiently transparent about which data it shares with third parties and as to who these third parties are exactly. In fact, in newer versions of the app, TikTok has apparently instead made it increasingly harder to follow what the app is doing. It is unclear as to what extent TikTok shares personal data of its users with the (marketing) companies previously referred to. TikTok's statements about this are vague and ambiguous. Its privacy policy utters statements such as 'improving user experience' or 'business purposes' and equally general wording as already explained above.
43. There is ample evidence TikTok has been transferring personal data of U.S. and European citizens to China, including the fact that the Chinese government has exerted, and still is exerting, control over TikTok or its owner.³¹ The survey previously mentioned indicates that 37,7% of the IP-addresses that TikTok uses are from China and may be linked to Hangzhou-based Alibaba.³² It has also been stated that TikTok is still very much intertwined with the Chinese counterpart Douyin, for example regarding the server code and databases.³³
44. TikTok appears to be subject to Chinese jurisdiction and must comply with requests of the Chinese government.³⁴ China is considered a non-safe third country under European GDPR regulations. Accordingly, TikTok requires special authorization to process personal data of EU citizens outside the EU on this scale.

²⁹ <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html>

³⁰ <https://www.sueddeutsche.de/digital/tiktok-ueberwachung-daten-kritik-1.4709779>

³¹ <https://qz.com/1613020/tiktok-might-be-a-chinese-cambridge-analytica-scale-privacy-threat/> and <https://www.nytimes.com/2020/08/29/technology/china-tiktok-export-controls.html>

³² https://penetrum.com/tiktok/Penetrum_TikTok_Security_Analysis_whitepaper.pdf

³³ <https://www.reuters.com/article/us-usa-tiktok-cybersecurity-exclusive-idUSKCN256100?taid=5f313925d7d51b00018355a0>

³⁴ <https://www.telegraaf.nl/financieel/506798852/verkoop-amerikaanse-tak-tik-tok-niet-zonder-goedkeuring-peking> and <https://nos.nl/artikel/2340995-in-de-code-van-tiktok-alsof-het-ze-een-beetje-heet-onder-de-voeten-wordt.html>

45. In its privacy policy, TikTok only mentions that it processes personal data outside of the EEA based on standard contractual clauses as approved by the European Commission. However, TikTok does not state in which countries the data is processed.

“The personal data that we collect from you will be transferred to, and stored at, a destination outside of the European Economic Area (“EEA”). Where we transfer your personal data to countries outside the EEA, we do so under the European Commission’s model contracts for the transfer of personal data to third countries (i.e. standard contractual clauses) pursuant to Commission Decision 2004/915/EC or 2010/87/EU (as appropriate) or in line with any replacement mechanism approved under EU law.”

46. As stated above, the personal data is most likely shared with companies in the U.S. and China and the Chinese government.³⁵ In the recent Schrems II ruling however, the European Court of Justice clearly indicated that the use of standard contractual clauses on its own is not sufficient to transfer data outside of the EEA.³⁶ The data controller must make an additional assessment on (security) risks associated with a data transfer outside of the EEA. It is quite clear that such an assessment has not been made, as transferring large amounts of personal data to U.S. companies such as Facebook and Google as well as to Chinese companies and the Chinese government is not compliant with the GDPR.

Investigations into TikTok

47. Independently, the French,³⁷ Italian, British³⁸ as well as the DPC started investigations into the social media app TikTok.
48. Authorities are also examining whether the app requires parental consent for TikTok to collect and use data on its young users and if sufficient measures have been taken to verify the age of its users.
49. In Italy, TikTok is no longer allowed to create new accounts for as long as the age of the user cannot be reasonably verified. As TikTok does not yet have ways to verify the age of its users, this can be considered as a (temporary) ban on TikTok.³⁹
50. Also, The European Data Protection Board (EDPB) has announced that it will establish a task force to investigate data processing by TikTok, which investigation has been endorsed by members of the European parliament.⁴⁰
51. Investigations and bans are not only taking place in the EU, but also in other countries around the world. In the US, regulating bodies have initiated formal investigations into

³⁵ <https://www.rtlnieuws.nl/tech/artikel/5168469/tiktok-app-dataverzameling-chinees-android-ios>

³⁶ <http://curia.europa.eu/juris/document/document.jsf?text=&docid=228677&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=12312155>

³⁷ <https://techcrunch.com/2020/08/11/tiktok-is-being-investigated-by-frances-data-watchdog/>

³⁸ <https://www.cnbc.com/2019/07/03/tiktok-under-investigation-in-uk-over-childrens-data-privacy-rights.html>

³⁹ <https://www.ad.nl/buitenland/italie-blokkeert-tiktok-na-dood-10-jarig-meisje~af20c42f/>

⁴⁰ https://edpb.europa.eu/news/news/2020/thirty-first-plenary-session-establishment-taskforce-tiktok-response-meps-use_en and <https://fd.nl/weekend/1353360/tijd-dat-de-eu-wat-serieuze-vragen-stelt-aan-tiktok>

TikTok business practices, banned the app from government-issued mobile devices and the app potentially faces a nationwide ban.⁴¹ For the same reasons, it has been banned completely in India and restricted in Australia, as well as by certain commercial corporations.⁴²

52. For processing data of minors without permission from the parents or legal guardian, TikTok has already been fined in South Korea.⁴³ Also, in the United States, TikTok is accused of wrongful collection of biometric information from minors.⁴⁴ This provides motivation to investigate and ascertain that TikTok will not have used comparable methods, or methods with comparable outcomes, within the EU.

Disclosure: actions against TikTok by SOMI

53. SOMI has already filed a complaint with TikTok on the 8th of September 2020. TikTok rejected the complaints of SOMI and stated that the European version of TikTok is fully compliant with the GDPR. The complaint as filed by SOMI and the response of TikTok have been published on the website of SOMI.
54. Currently SOMI is engaged in a data access request on behalf of its participants, to further investigate the data processing by TikTok. SOMI also considers starting a civil procedure on behalf of its participants against TikTok for the numerous GDPR violations by TikTok.

Concluding

55. In the light of the above, SOMI concludes that TikTok violated and continues to violate various rights and obligations as stated in the GDPR and the UAVG.
56. SOMI requests the Data Protection Commission to thoroughly and effectively investigate the activities of TikTok, especially regarding said GDPR-violations. SOMI requests the Data Protection Commission to do so in a swift manner due to the risks associated with young users using TikTok, the continuously increasing amount of users of TikTok and the risks associated with the transfer of substantial quantities of personal data outside the EEA.

Your sincerely,

Drs. H.J.M.G. Franke LL.M
Stichting Onderzoek Marktinformatie

Dr. C.A.M. Wijtvliet
Stichting Onderzoek Marktinformatie

⁴¹ <https://www.forbes.com/sites/rachelsandler/2019/11/01/tiktok-under-us-national-security-investigation-according-to-reports/> and <https://edition.cnn.com/2020/10/05/tech/tiktok-what-next-intl-hnk/index.html>

⁴² <https://www.abc.net.au/news/science/2020-01-16/defence-ban-tiktok-china-security-fears/11869512> and <https://edition.cnn.com/2020/07/13/tech/tiktok-wells-fargo/index.html>

⁴³ <https://www.bbc.com/news/technology-53418077>

⁴⁴ <https://www.hollywoodreporter.com/amp/thr-esg/tiktok-hit-multiple-complaints-alleged-childrens-privacy-violations-1294604> and <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html>