Taken Down

A LOOK INTO APPLE'S TRANSPARENCY REPORTS







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Freedom of expression is a fundamental human right and includes both the rights to speak freely and to listen to the speech of others. Most legal systems recognize the concept of a public forum: that speech requires space for ideas to be offered and debated: where we each have freedom to speak individually, to shop in the *marketplace of ideas*, and to choose the ideas we find most persuasive. The internet, as a neutral forum for deliberation and debate, facilitates freedom of expression and the realization of other human rights.

Speech is at the core of the democratic process. When speech is censored, those impacted begin to self-censor, which chills public discussion and debate. The correlation between censorship and tyranny is well known: "Those who [eliminate] dissent soon find themselves exterminating dissenters; compulsory unification of opinion achieves only the unanimity of the graveyard."

Who ultimately governs freedom of expression and other human rights? After the horrors of World War II, there was worldwide consensus that human rights should be protected by the international community, and not only by individual states, because national governments and domestic laws do not provide sufficiently stable safeguards. Private companies should not get to govern human rights either, but they are obligated to respect and protect international human rights, and remedy any human rights abuses caused by their business activities.

The private sector has gained unprecedented influence over individual's right to freedom of expression and access to information. Today, we find ourselves in a world where private companies act as human rights gatekeepers, government intermediaries, and even cyber-sovereigns. Private actors were never supposed to be empowered to make or adjudicate law. Private regulation invites corruption, arbitrary decisions, and blurs the lines between public and private spheres. Technology companies undertaking traditionally public functions become de facto private cyber-regulators and cyber-police.

By delegating to private actors, states are able to run-around the rule of law, and bypass established checks and balances. Conferring private individuals with the authority to regulate "the affairs of an unwilling minority" is "legislative delegation in its most obnoxious form; for it is not even delegation to an official or an official body, presumptively disinterested, but to private persons whose interests may be and often are adverse to the interests of others in the same business." Indeed, public U.S. companies have a fiduciary duty to act in the interests of their shareholders, not in the interest of the common good.

"One way the government can regulate without accountability is by passing off a government operation as an independent private concern."

- U.S. Supreme Court Justice Samuel Alito

The current regulatory structure of online speech resembles Lochner-era libertarian and laissez-faire economic policy. Laissez-faire policy promoted minimal government interference in the economic affairs of individuals and society, such as today when governments are deferring to technology companies to make market-based decisions about fundamental human rights. With secret regulations written and enforced by private actors, there is little accountability or transparency. The controls are invisible and the invasions and frustrations of human rights occur in the darkness. While a government claims some local rule and a company claims some private contract, state and private power are commingled, public and private governance collide, and the people are fortunate if they even hear a crash.

Even in cyberspace, the fundamental right to due process requires targeted restrictions are provided with a reasoned explanation, indicating what evidence was relied upon, and a way to appeal decisions. To protect against arbitrary encroachment, due process also requires some form of hearing before an individual is deprived of property or a liberty interest. Due process demands that a law be clear enough for a person to anticipate the consequences for violating it.

Legitimate restriction to freedom of information and expression requires transparency about what is restricted, that the restrictions are necessary for a legitimate purpose and established in law, are narrowly tailored and proportional to the purpose, and contain accountability to the people the restriction seeks to protect.

Apple is known to censor: applications, music, podcasts, books, movies, television, flag emojis, political terms (digital and physical), and inclusive design. As AppleCensorship wrote last year, "Despite its claim of practicing transparency in its management of users' data and the App Store, Apple does not always inform developers when it removes their apps, and when it does provide notice, it typically uses vague accusations of illegality or violation of Apple policies. Apple must become more transparent about its actions. Whenever Apple removes an app from one of its App Stores, it needs to reveal the law and/or Apple policy the app broke, and it should provide for a chance at appealing the removal. It should provide such information not only to developers, but also to the general public."

"Apple's so-called Transparency Reports do not reveal which apps have been censored, and remain questionably vague on the reasons, legal or not, behind this censorship. The resulting opacity has become Apple's true trademark: from how it curates content on the App Store; to how it implements its arbitrary "*App Store Guidelines*"; to what data it communicates to governments; to the deals the company makes with even the most repressive regimes in the world. Apple conceals almost everything about its operations. In 2021, after working at Apple for nearly seven years, I went public with documents and witness statements to expose Apple's corruption, hypocrisy, and reckless disregard for human rights. While I worked with a lot of good, well-intentioned people at Apple, Apple's leadership have been shown to lie, cheat, steal, and evade the law in order to drive profit. Those at the helm of the ship are steering Apple, and us along with it, into a storm.

We need NGOs, press, and other watchdogs to report on these issues, to name and shame, and demand a better system. However, while it is a start, it will not be enough on its own. Formal national and international action will be required to ensure global transparency, accountability, due process, and the protection of human rights in cyberspace, as everywhere else. States receive legitimacy by consent of the governed. The longer we allow corporations to act as delegated, private police forces and iRegulators, the more we acquiesce and consent to their unlawful power. We must resist.



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INTRODUCTION

Transparency is an ideal which Apple promotes extensively in its public relations and advertising. With respect to business practices and protocol, transparency means allowing third-parties and the public to scrutinize internal corporate decisions, and challenge those decisions where they seem to violate the rules companies lay out for themselves. In short, transparency is the commitment to let those outside the walls of a company understand its workings and decision-making processes just as well as those inside, and to make business decisions with the oversight of the public in mind. A large part of Apple's public image as a transparent company relies upon the publication of 'Transparency Reports': openly available details of government's interactions with Apple regarding the release of private user data to law enforcement agencies, and the removal of content from the App Store. This report focuses on this second set of Transparency reports, and their extensive shortcomings.

Transparency is meaningless if it leaves intact, or widens, the informational gap between insiders and outsiders. Transparency is of no benefit to anyone if it doesn't allow third-parties to hold companies and institutions accountable to the rules those companies and institutions have agreed to follow. Apple's purported transparency is, by these metrics, both meaningless and unhelpful, since the figures disclosed in the transparency reports are so limited in scope that they preclude an accurate assessment of Apple's collusion with governments in enforcing widespread digital censorship.

Furthermore, in a gesture wholly opposite to the spirit of transparency, Apple demands that the public and developers simply trust that apps will only be removed from the App Store where a relevant regional law has been broken, without providing evidence of these laws or clarifying what content in the app (content that might well be non-integral, and therefore easily removed) broke the law.

Apple's Transparency Reports purport to reveal the workings of the company's moderation of the app store, and to disclose Apple's interactions with governments. The Transparency Reports provide numerical information on government-issued requests for private information from users' devices, requests for the removal of apps which have broken Apple's moderation guidelines, and requests for the removal of apps from the App Store's regional storefronts. These latter reports appear in a section of Apple's website titled 'App Removal Requests Legal Violation' and have been published for each six-month period between July 2018 and December 2020. During the same period, Apple has also released figures under the heading 'App Removal Requests Platform Violation', accounting for occasions when a government requested that Apple remove an app from all storefronts due to a breach of Apple's App Store Guidelines. By regularly releasing this information under the name of 'transparency', Apple seeks to reassure the public - and especially its users - that it prioritizes honesty with its customers over government demands.

The picture that Apple presents is only skin deep, however, and AppleCensorship's findings reveal the Transparency Reports as nothing more than a façade concealing widespread, unethical, and unscrupulous business practices. False honesty is, after all, more dangerous than no honesty at all, and as Apple weaponizes the term 'transparency' to hide its single-minded focus on profit and market-share it is vital to unmask the Transparency Reports and analyze the censorship beneath.





• APPLE TRANSPARENCY REPORTS UNDER THE MICROSCOPE

What are Apple's Transparency Reports?

Apple periodically publishes 'Transparency Reports', documents that bring together information on some of Apple's internal affairs. In particular, the reports aim to bring greater transparency to Apple's dealings with national governments around the world. While much of each report is focused on government requests for personal data from Apple devices, part of each report is dedicated to information surrounding removals of apps from the App Store, and the requests that prompt these removals. Since AppleCensorship investigates censorship of content on the App Store, Apple's reports on governmental requests for app takedowns warrant close scrutiny and analysis.

Apple's Transparency reports can be found here: <u>https://www.apple.com/legal/transparency/report-pdf.html</u>

Most of Apple's public statements concerning the Transparency Reports refer to the parts of the reports dedicated to government requests for device data. However, Apple's headline statement on Transparency gives some insight into how Apple conceives of the importance of the reports:

Apple is very seriously committed to protecting your data and we work hard to deliver the most secure hardware, software and services available. We believe our customers have a right to understand how their personal data is managed and protected.¹

While Apple does publish some information on its app removal practices, what it categorically fails to provide is understanding: the very thing it claims the reports are intended to offer. The systematic omission of important data from the transparency reports leaves the information that is published as a picture so incomplete that nobody, from customers to developers, could hope to understand Apple's business practices from the Transparency Reports alone. What follows is an investigation into exactly what is missing from Apple's reports, and an attempt to piece together a more complete picture of takedowns on the App Store.

¹ https://www.apple.com/legal/transparency/pdf/requests-2020-H2-en.pdf

The "Worldwide Government App Store Takedown Requests"

Although Apple began to release transparency reports in 2013, these concerned only government requests for users' private information. Apple only began to release figures on government-requested app removals with its report for the second half (H2) of 2018. This report was not itself published until July 2, 2019, due to the approximately yearlong gap between the end of each reporting period and the release of the relevant report.² Only five out of Apple's sixteen transparency reports to date contain data on App Store takedowns.

Currently, Apple provides a minimum of information about the requests themselves, the apps governments demand the removal of, and the reasons behind the removal of these apps. The transparency reports list the number of requests made by each government which had submitted takedown requests, the total number of apps which each of these governments had requested be removed, and the numbers of these requests and individual takedowns which Apple fulfilled.

Since the first report on app removals for H2 2018, information on "Worldwide Government App Store Takedown Requests" has been presented in two tables, each of which Apple provides a brief description of. The last two tables of the report, Table 13, on "Legal Violations Takedown Requests" (hereafter abbreviated "LVTR"), and Table 14, on "Platform Policy Violations Takedown Requests" (hereafter abbreviated "PPVTR"). The information that follows gives a closer look at the information provided, with reference to the example of Vietnam's requests in H2 2018:

Country or Region 1	# of Legal Violation Takedown Requests Received	# of Apps Specified in the Requests	# of Requests Challenged in Part or Rejected in Full	# of Requests Where App Removed	# of Apps Removed
Asia Pacific					
China mainland ²	56	626	2	55	517
Vietnam ³	3	29	3	1	9
Asia Pacific Total	59	655	5	56	526
Europe, Middle East, India, Africa					
Austria ⁴	1	5	0	1	5
Kuwait ⁵	1	6	1	1	5
Lebanon ⁵	1	1	0	1	1
Netherlands 4	2	8	0	2	8
Norway 4	1	37	0	1	37
Russia ⁴	10	11	0	9	10
Saudi Arabia 5	1	25	0	1	25
Switzerland ⁴	1	19	0	1	15
Turkey ⁶	3	3	1	2	2
Europe, Middle East, India, Africa Total	21	115	2	19	108
Worldwide Total	80	770	7	75	634

¹ Only countries / regions where Apple received legal violation removal requests during the report period of July 1 - December 31, 2018, are listed.

² The vast majority relate to illegal gambling or pornography.

³ Requests relate to illegal gambling and/or unlicensed gaming app investigations.

⁴ All or vast majority of requests relate to illegal gambling investigations.

⁵ Requests relate to violations of privacy law.

⁶ Requests relate to copyright infringement, illegal content, and violation of local transportation law.

Table 13: Worldwide Government App Store Takedown Requests - Legal Violations July 1 - December 31 (H2), 2018

Country or Region

Example: Vietnam

Though Apple does not disclose precisely which government branches, agencies, or officials are able to make official takedown requests, this description seems to indicate that government agencies are able to bypass their own judiciary in making such requests to Apple. Notably, this would indicate that the executive branch of governments need not have the legality of its claim vetted by the judiciary, although this seems to be standard practice in some countries (see, for example, the matters of note section for India H2 2019). While in countries like Vietnam, where the judiciary is directly subordinate to the Communist Party of Vietnam, the fact that either can make an official request to Apple may seem unimportant, the muddying of this distinction is of great consequence in countries with a truly independent judiciary.

Apple does not specify what form the requests it receives from governments take what steps a government or agency must take in order to make one.

Number of Legal Violation Takedown Requests Received

Example: 3

Communicating on the number of requests received could be informative if Apple had also specified the number of apps detailed in each request (see below). In the current version of Apple's Transparency Reports, this figure remains impossible to deduce, immediately making it difficult to link Apple's figures with stories of individual apps being removed. Qualitative data – such as the date of request, the requesting body or agency, the content of the takedown requests, the reasons and laws invoked, and wording employed by the requesting government entity – would be necessary, in addition to the quantitative data provided, to have real insight into governments' actions.

Number of Apps Specified in the Requests

Example: 29

Since Apple does not provide a breakdown of the distribution of apps between requests, we can only guess as to whether the Vietnamese government made three requests referring to roughly ten apps each, or one specifying 27 while the other two each targeted just one app. This lack of clarity is relevant - beyond its obvious tension with the ideal of transparency - because Apple refers frequently, in justifications of its compliance with such requests, to 'the majority of requests', rather than of specified apps, leaving room for the misrepresentation of the actual numbers of contentious removals made. Furthermore, it is unclear whether a single request must specify only apps which fall under a single reason for removal, or law, or whether a request may specify apps of many different kinds and relevant to different national laws.

Number of Requests Objected³ to in Part or Rejected in Full

Example: 3

This column lists the number of the requests issued which Apple either 'rejected' (that is, removed none of the apps specified) or 'objected to' (that is, removed some of the apps specified but not all).

In this instance, Apple objects to/rejects all of the requests, rejecting two and objecting to one.

³ In H2 2018, the first transparency report dealing with app removals, this column was entitled "# of Requests Challenged in Part or Rejected in Full". The word was later changed to "objected".

Number of Requests Where App Removed

Example: 1

Two of the government requests made were rejected in full - though Apple does not disclose the ways in which these requests overstepped the bounds of Apple's legal obligations - and one was accepted at least in part.

Number of Apps Removed

Example: 9

Of the 29 apps the Vietnamese government requested be removed from the country's storefront, 20 of these remained available and nine were removed. The nine removed were, however, part of a request which specified more than nine apps, some of which remained available. Once again, Apple does not disclose details on how many apps in that request were not removed, nor does it say whether those apps were requested to be removed for the same reasons as the apps which were removed.

Relevance of Data on Takedown Requests

The information contained in this section of the Transparency Reports is necessary but insufficient for a *useful* picture of Apple's app removal procedures. Without specifying apps and laws concerned by the requests counted in the report, Apple undermines its own data, making it an empty reassurance to the public. What Apple divulges in these figures is only skin-deep, and provides no evidence that the company shows due diligence in assessing government requests.

Even short of the disclosure of specific apps and laws, Apple could easily require that requesting body specify the category of the app removed, and the category of its violation of the law or Apple's guidelines. Alternatively, Apple could readily collect this information from the requests it already receives. In either case, Apple disclosing this information would at least begin to provide a general sense of what sorts of apps are regularly removed from the App Store, and why they are removed.



Appeals

Since H2 2019, Apple's third transparency report which included data on app takedown requests, Apple added three columns to their report:

Country or Region ¹	# of Legal Violation Takedown Requests Received	# of Apps Specified in the Requests	# of Requests Objected to in Part or Rejected in Full	# of Requests Where App Removed	# of Apps Removed	# of Appeals Received	# of Appeals Granted	# of Apps Reinstated
Asia Pacific								
China mainland ²	47	203	3	45	187	0	0	0
Vietnam ³	2	33	2	0	0	0	0	0
Asia Pacific Total	49	236	5	45	187	0	0	0
Europe, Middle East, India, Africa								
Austria ⁴	1	18	0	1	18	0	0	0
Hungary ⁵	1	1	1	0	0	0	0	0
India 5	1	1	0	1	1	1	1	1
Russia 6	2	2	1	1	1	0	0	0
Europe, Middle East, India, Africa Total	5	22	2	3	20	1	1	1
Worldwide Total	54	258	7	48	207	1	1	1

In 2019, Apple added three columns to its tables. Only two appeals are listed so far, in India (H2 2019) and in Taiwan (H1 2020), which both resulted in the reinstatement of the concerned apps.

Number of Appeals Received

When a third party (that is to say: neither the originating government nor Apple – most often the developers themselves) objects to an official takedown request, and when Apple is informed of such an objection, Apple indicates it in this column. Appeals recorded here are those which are made directly to the government, court, or agency which made the request.⁴ However, it does not clarify Apple's immediate reaction to such an appeal. Although this seems to imply that Apple will systematically refrain from taking down an app should it learn of such appeal, this is not the case. In one case of appeal (India, H2 2019) the "Matters of Note" paragraph suggests that the app was kept on the App Store 'pending appeal', while in another case (Taiwan, H1 2020) the suggestion is that the app remained unavailable until the developers' appeal was approved. The position of the column, which is after the "# of Apps Removed" and the addition of the column "# of App Reinstated" both seem to indicate that Apple will in fact remove an app first and might reinstate the app later, providing the appeal is ruled favorably by the relevant institution. No indication on the timeline of such an appeals process is given, nor does Apple make clear the circumstances in which apps may be reinstated. It is possible, therefore, that an app be unavailable in one or more storefronts for months and even years before its eventual reinstatement; it is unclear if Apple makes any note of such appeals if the initial takedown and the success of an appeal occur sufficiently far apart as to fall under the timespan of different Transparency Reports.

Number of Appeals Granted

That is to say, the number of appeals granted by a court or government agency. This information does not refer to Apple's decision regarding the reinstatement of the app.

⁴ One developer interviewed by AppleCensorship described a second appeals process – not mentioned by Apple in any of the Transparency Reports, in other publicly available material, or official statements – involving appeals made directly to Apple. It is entirely unclear whether this process ever results in the rejection of takedown requests, or the reinstatement of apps, but the developer in question noted that Apple promised little chance of success.

Number of Apps Reinstated

The very existence of this column is an indication that Apple could decide not to reinstate an app for which an appeal was granted by a government agency or a country's judiciary. Although, to date, Apple has not disclosed such a case in any of its reports.

Relevance of Information on Appeals

Although information concerning judiciary appeals processes is potentially useful for understanding how state policing of the App Store operates, the aforementioned absence of specific information on apps and laws renders these additional columns redundant. The number of removed apps that have been appealed or reinstated has only a very limited significance to the public if we do not know what those apps are, or why they were removed in the first place. Ultimately, it seems as if the addition of these columns to the Transparency Reports only serves to pad out their already scant offerings with third-party information (while, at first glance, implying that Apple offers an official appeal process), and to reassure inattentive readers that it is possible for removed apps to make their way back onto the App Store. This reassurance is also largely empty, since across all five reports (three of which contain the additional 'Appeals' columns) released to date, only two apps are reported to have been reinstated following an appeal. Finally, the transparency offered by these additional columns is not really Apple's to begin with, rather, it merely reports upon legal proceedings in which Apple plays no mediating or facilitating role.

Legal Violation Takedown Requests (LVTR)

While Apple states that the apps removed following LVTRs are, unless otherwise specified, removed only in the country from where the takedown request originates, Apple omits a crucial element regarding said apps: the number of countries in which the apps were available before being removed.

Indeed, many apps in the App Store are only released in a single App Store. AppleCensorship has estimated that around 4-5% of the approximately 2 million apps that compose the App Store, according to Apple, are released in a single App Store, making an estimated 80,000 to 100,000 locally released apps.

THE SINGLE APP STORE

Apple's opacity extends even to the way the company describes its App Store. Apple publicly insists on referring to a single App Store, containing all the apps available anywhere in the world. When Apple speaks about this single App Store, we can only imagine that it has in mind the US storefront, with its relatively low rates of app unavailability.

However, what Apple refers to as the App Store's 'storefronts' (a term which implies a continuity of contents, behind different window dressing) are in fact very different App Stores, with hugely varying contents and rates of app availability. Apple's neglect of this subject in public works as a convenient cloak against scrutiny: if all the App Store's users believe their own storefront to be the single App Store, it is easier for Apple to conceal its widespread regional restrictions.

If, among the apps removed for legal violations, some are locally released apps, their removal, albeit from only one App Store (the App Store of the requesting government's country), would in fact mean the App's total disappearance from the App Store and the inability for all its users to continue to update the apps and therefore to use it in the long term (a removal does not necessarily affect an app already installed on a device). The footnote added by Apple in its 2019 reports - "App removals were limited to requesting country/ region App Store storefront" - could therefore be misleading if the apps in question were locally released.

Rather than constituting a substantially less impactful removal than a worldwide PPVTR, such LVTRs have the potential to harm millions of users, with no hope of circumventing this removal by changing device or storefront location. It is once again Apple's complete opacity regarding the specific apps they remove and their previous availability which makes it impossible to assess how common such cases are.

Platform Policy Violation Takedown Requests (PPVTR)

Apple publishes a second set of figures relating to government requests which alert the company to apps that allegedly break the App Store Guidelines, and should therefore be removed from all App Stores. These figures, organized in Table 14 of the Transparency Reports, relate exclusively to government requested takedowns on the basis of the App Store guidelines, and not to content curation decisions initiated by Apple.

The prevalence of these government requests contradicts Apple's repeated assurances about the vigilant vetting process which apps undergo before first appearing on the App Store. The apps eventually specified in government requests must either have flown beneath Apple's radar, in some cases for several years, or - more alarmingly - may have been judged to be in compliance with the App Store guidelines until reconsideration under the pressure of a national government.

Country or Region ¹	# of Platform Policy Violation Takedown Requests Received	# of Apps Specified in the Requests	# of Requests Objected to in Part or Rejected in Full	# of Requests Where App Removed	# of Apps Removed ³
Asia Pacific					
China mainland ²	22	94	0	22	94
Asia Pacific Total	22	94	0	22	94
Europe, Middle East, India, Africa					
Russia ²	3	3	0	3	3
Europe, Middle East, India, Africa Total	3	3	0	3	3
Worldwide Total	25	97	0	25	97

¹ Only countries / regions where Apple received platform violation removal requests during the report period of January 1 - June 30, 2019, are listed.

² Vast majority of requests related to apps with illegal gambling.

³ App removals were worldwide.

Table 14: Worldwide Government App Store Takedown Requests - Platform Policy Violations January 1 - June 30 (H1), 2019 to replace by H2 2019

The PPVTRs are of particular interest since they refer to the removal of apps from all regional App Stores, making an app unavailable to all Apple device users worldwide. Each app identified in Table 14 is equivalent to 155 (until H1 2020) or 175 (from H2 2020 onwards, when Apple launched the App Store in 20 additional countries) regional takedowns as they appear in the Legal Policy Violations section of the reports.

As of H2 2019, Apple includes the same three columns on appeals in Table 14 that it added to Table 13. Though Apple makes no record of any appeals in these columns in any of the three reports since their addition, their presence, and the brief explanatory section that accompanies them, is nonetheless confusing. Apple uses the same explanation as for Table 13, claiming that the columns report cases where Apple is notified of an appeal to the original requesting government or agency. However, since PPVTRs are purportedly instances where a government notifies Apple of an app it should already have removed, according to its own guidelines, there is no reason why such appeals should be heard by the requesting agency. If there is any arbiter of appeals for PPVTRs, it should be Apple, since the apps removed are removed under Apple's guidelines. The absence of any documented appeals suggests that either Apple or the developers involved are well aware that such appeals would be futile, and that the columns themselves are merely padding for the reports that offer no useful information.

Relevance of Data in Table 14

Although the data contained in Table 13 presents an occasional and government-led system for the regional removal of content from the App Store, the data published in Table 14, relating to government requests which alert the company to apps that allegedly break the App Store Guidelines, raises the issue of potential removals from all App Stores, which could originate from non-state-related entities or individuals.

In the case of apps that allegedly violate laws, Apple claims that only government agencies or official bodies, such as the judiciary, can request that Apple removes content from the App Store. However, when it comes to alleged violations of App Store Guidelines, the origin of the request for removal is not limited to governmental or legal bodies.

For example, in July 2021, the US-based corporation, Amazon, confirmed that it had asked Apple to remove an app, 'Fakespot', under App Store's guideline 5.2.2, which prohibits developers from using third-party content in an app without permission. Apple did comply with the request, but such removals will most certainly not appear in the Transparency report that Apple will publish in 2022, since the format of the transparency reports only allows for the declaration of requests from national governments. Not only do such unaccounted cases raise the possibility that Apple's often ambiguous guidelines may be exploited by corporations and individuals, but they also highlight Apple's immense power over the digital landscape as the sole arbiter of such decisions, affecting millions of users worldwide. Given the consequences of these removals, and the scale on which they operate - interfering with freedoms of expression and press in a potential 175 countries - the standards Apple is obligated to observe are shockingly low. Whereas any government of international body would be subject to both 'Right to Know' requirements and obliged to offer reasoned explanations for such far-reaching censorship decisions, the standards Apple sets for itself require no such explanations, nor any obligations to disclose all of its removal decisions.

In Tables 13 and 14, Apple acknowledges just two types of removal on the App Store: those occurring because of legal violations, and those occurring where a government or other third-party identifies an app that breaches the App Store Guidelines to Apple. As this report will continue to demonstrate, this picture is so limited as to be actively misleading. The fact that Apple's reports document only a small minority of the takedowns that actually take place – mostly instigated by Apple itself – *leaves nothing more than an empty shell of 'Transparency': a maze of obfuscation and crucial omissions, which conceals Apple's real business practices.*

Matters of Note: Apple's Deceptions Pushed to Breaking Point

At the end of each of its Transparency reports, Apple provides an extremely brief section labeled 'Matters of Note', which lists summaries of the reasons behind governments requests. These provide very limited information, and often raise more questions than the notes answer.

Matters of note in this report:	Table 13 Worldwide Government App Store Takedown Requests - Legal Violations China mainland - The majority of requests related to apps with pornography and illegal content.
Government requests	India - Request related to an app with alleged child pornography content.
related to app removals	Israel - Request related to an app harmful to children.
	Lebanon - Request related to an app harmful to children.
	Pakistan - Request related to apps operating without government license.
	Russia - Requests predominantly related to illegal gambling apps and apps operating without government license.
	Turkey - Requests related to an app operating without government license and an app with illegal content.
	United Arab Emirates - Request related to apps operating outside of government policies.
	Vietnam - Requests related to gaming apps operating without government license.
	Table 14 Worldwide Government App Store Takedown Requests - Platform Policy Violations
	China mainland - The vast majority of requests related to apps with illegal gambling.
	Russia - Requests related to apps with illegal gambling.
Matters of note for future reports	In addition to reporting on Government requests to remove Apps from the App Store in instances related to alleged violations of legal and/or policy provisions, starting with the Transparency Report period July 1 - December 31, 2019, Apple will report on appeals received pursuant to such Government requests.

Matters of note: January 1 - June 30 (H1), 2019

It should first be noted that pornography, child pornography and gambling are the only kinds of content which are identified specifically in all five transparency reports.

For example, in three out of the five reports dealing with apps takedowns, pornography is listed as one of the main reasons for app removals requests by the Chinese authorities, which ruled certain apps with pornographic content illegal. However, since Apple specifies that, unless otherwise stated, the requests listed in Table 13 are those which only resulted in the removal of an app from a single App Store, such geolocalized removal indicates that those requests have been enforcing rules even stricter than Apple's own guidelines, which do not allow any pornographic content in any App Store.

.1.4 Overtly sexual or pornographic material, defined by Webster's Dictionary as "explicit descriptions or displays of sexual organs or activities intended to stimulate erotic rather than aesthetic or emotional feelings." This includes "hookup" apps that may include pornography or be used to facilitate prostitution. The picture which results is a confusing one. In H1 2020, 'pornographic content' is invoked in the Matters of Note section for both the Legal Violation table and the Platform Policy Violation one, suggesting that contrary to Apple's guidelines some forms or instances of pornographic content are permissible by Apple but illegal in particular countries.

A more worrying possibility also presents itself. If, despite Apple's already zero tolerance stance on pornographic content, apps are removed regionally with the justification that they broke pornography laws, we are forced to wonder whether governments are able to use local pornography laws to remove content (most notably apps with LGBTQ+ content) that is undesirable for other reasons. This exploitation of pornography laws has already been <u>documented</u> in China and other countries as a cover for politically motivated censorship, an observation corroborated by AppleCensorship's <u>report</u> on the censorship of LGBTQ+ apps on the App Store.

Meanwhile, despite these cases of regional removal necessarily falling outside Apple's already broad definition of sexually explicit content, the company's reports continue to declare 'pornographic content' as the reason for regional takedowns. Similar questions arise with respect to gambling apps, also frequently cited, where it is unclear how apps which are already strictly moderated or outright banned by Apple could so often be the cause of localized removals. Since an app being removed only regionally (rather than globally) requires that the app's content be in compliance with the App Store guidelines, such apps must be deemed by Apple not to contain pornographic content. Apple's continued use, however, of 'pornographic' – with no distinction made between pornographic-according-to-Apple and pornographic-according-to-any-country's-laws – provides a rhetorical justification for censorship.

All the other descriptions of the reasons for removal requests are euphemistic, even to the point of total redundancy. Below are the reasons for removals provided in Matters of Note:

- Apps "harmful to children"
- Apps "operating without government license"
- Apps "with illegal content"
- Apps "operating outside of government policies"

Apple avoids specifying any of the politically fraught reasons why governments request to have apps removed from their territory's App Store, failing to mention the prohibition on topics such as the Dalai Lama in the Chinese App Store, or laws banning LGBTQ+ digital content in many countries. In these cases, Apple prefers to refer to merely 'illegal content', or 'apps operating without government license'.

Even though the entire section of its website hosting the transparency reports is already entitled 'legal violation', Apple provides no information beyond a restatement of this title. Apple tells us merely that apps removed because of 'legal violations' contained 'illegal content'.

Other points of ambiguity in the Matters of Note section also highlight Apple's failures to take the idea, and point, of transparency seriously. Apple frequently refers in vague terms to the 'majority' of the requests received ('The majority of requests...', 'Requests predominantly related to...', 'The vast majority relate to...'). Given the serious implications of these requests and takedowns for digital freedom, human rights, and developers' livelihoods, to offer only generalizations of the reasons for the removal of content in entire countries - in many cases permanent removals - displays a wilful denial on Apple's part of the necessary extent of transparency.

Apple is not absolved of actively censoring digital content at the behest of repressive governments if Apple's complicity in extralegal or proactive removals is only occasional. Simply put, Apple's behavior with regards to its App Store is not justified as a whole even if the 'vast majority' of removals are legally obligatory.

To return to the example of Vietnam's requests from H2 2018, despite the fact that Apple removed only nine of the 29 apps specified, and objected to or rejected all three requests made, the matters of note section for Vietnam in this period refuses to acknowledge the Vietnamese government's legally baseless attempts at censorship. Indeed, Apple's avoidance of the subject of government excesses when it comes to takedown requests goes so far that the Matters of Note section is straightforwardly untrue. Apple states: 'Requests predominantly related to illegal gambling app investigations and unlicensed gaming apps investigations.' However, since Apple specifies 'requests' - rather than, say, 'app removals' - we can clearly see that the Matters of Note section makes a false claim. If the requests had predominantly been related to illegal gambling apps (which are in turn illegal in Vietnam) then the requests would, 'predominantly' have been accepted. That the majority of the requests were predominantly unjustified attempts to limit the country's digital freedoms, a fact which Apple brushes over in suggesting that the apps specified really were illegal in Vietnam. If Apple cared about transparency, it would highlight the unjustified attempts of countries to censor, instead of obfuscating those requests and instead of discussing the legitimate requests.

The inconsistency of the language used in Apple's descriptions of violations, and particularly inconsistencies between these descriptions and the parameters of the reports they appear in, also contributes to the difficulty of using the transparency reports as reliable sources of data on which to base further research or calculations. Most confusingly, despite the separation of Tables 13 and 14 (Legal and Platform Violations respectively), Apple frequently blurs the line between the two. In both Platform Violation reports for 2019, 'illegal' apps and content is referenced, despite these purportedly being reports concerned with Apple's App Store guidelines rather than with the law in any given country. It is unclear, on Apple's own explanation, why an 'illegal gambling app' would be removed from all regional storefronts, unless it also broke the guidelines, in which case the app's illegality in a particular territory is irrelevant. It is hard to ignore the impression that Apple uses 'illegal' here to defer responsibility to lawmakers and governments rather than own up to its own policies, and to make the offenses of these apps sound more serious. The distinction is further muddied by Apple's inclusion of a point in the guidelines which prohibits apps that break the law (see text box); in such cases, how is it decided whether an app should be considered guilty of a legal or platform violation? If Apple has a clear answer to this question, it does not share it with the public.

TRANSPARENCY WITHOUT CLARITY: THE OPACITY AND VAGUENESS OF THE APP STORE GUIDELINES

While most of this report, and the research which underpins it, is focused on regionspecific removals and Apple's reluctance to explain the reasons behind, and extent of, these removals, Apple's opacity also extends to the enforcement of its own App Store policies.

As in its dealings with government requests, Apple prefers vague rules, allowing unchecked sovereignty over their digital ecosystem, to clear guidelines, which might allow Apple's observance of its own rules to be contested. The most egregious example of this appears in the introduction to the 'App Store Review Guidelines', in which Apple declares:

'What line, you ask? Well, as a Supreme Court Justice once said, "I'll know it when I see it". And we think that you will also know it when you cross it.'

Quite to the contrary, the number of app developers who do not know why their app was removed from the App Store - and who consequently do not know how it might be modified to enable its restoration - attests to the fact that people do not know when they have crossed Apple's vague line.

Given the blurred parameters of the App Store guidelines, and their susceptibility to exploitation by Apple, PPVTR requests allow governments to exploit the ambiguities of Apple's policies to remove apps not just from one App Store but across all App Stores. Not only do the frequency of these requests cast doubt upon Apple's public confidence in its own pre-publication vetting process, but by allowing governments to appeal to the App Store guidelines as well as to local laws, these guidelines become potential instruments of state-mandated censorship. The App Store guidelines are not - on account of their vagueness, their changeability, and the ease with which notions like 'offensive, insensitive, [or] upsetting' content can be broadly interpreted - fit for this purpose. If the App Store guidelines are to serve as a mechanism by which governments can restrict digital content from millions of Apple device users worldwide, their current tone and format facilitate exploitation and censorship.

This possibility is particularly sinister given the importance of social networking apps for political organization and resistance to repressive states and state violence. Contrary to Apple's self-image as a value-driven company, we begin to see a picture of ruthless pragmatism and political expediency as the driving forces behind Apple's App Store policy. Most saliently, as highlighted by the case of HKmap's removal - the guidelines include a stipulation which muddies the boundary between legal violations and platform violations: apps which 'facilitate' or 'encourage' a range of illegal activities (ranging from drug use and gambling, to the use of weapons and distribution of copyrighted content) are prohibited under the guidelines, without reference to which country's laws serve as the benchmark for this rule. As such, apps may - according to Apple's removal procedures - be removed globally despite only breaking laws locally.

An unreported but vast number of apps are removed in the App Store vetting process because of these guidelines, which are too vague and too flimsy for the purpose they serve.

WORMING THE TRUTH OUT OF APPLE'S TRANSPARENCY REPORTS

As the first section of this report has made clear, Apple's Transparency Reports are marred by omissions of key information and figures, vague terms and euphemisms as well as inconsistencies. However, to further analyze Apple's figures and establish their reliability, another approach was required.

One of the main issues with Apple's Transparency Reports lies in the fragmentation of data, some of which is inherent to the data itself (takedown requests are logically presented in order of the governments issuing them), but this fragmentation also results from Apple's own decisions regarding the presentation of the data. While it is not unreasonable to split Platform Policy Violation takedown requests from Legal Violation requests, it doesn't readily allow us to see the global picture of app removals and their sources. Furthermore, Apple's choice to split its findings in two, often very late, semiannual reports contributes the fragmentary view of app removals. Although it might be difficult to aggregate data in the digital format (PDFs) of the reports that Apple releases, this would be perfectly feasible on the reports' dedicated webpage. However, all Apple is offering to the public is a summary of legal and platform policy violation takedowns, still presented in a semiannual form.

Report Period ⊕	Request Type ⊕	Request Received ⊕	Request where App Removed ⊕	Apps Removed ⊕
2020 H2	Legal Violation	39	39	206
2020 H2	Platform Violation	5	5	18
2020 H1	Legal Violation	56	56	239
2020 H1	Platform Violation	17	17	39
2019 H2	Legal Violation	54	48	207
2019 H2	Platform Violation	17	17	37
2019 H1	Legal Violation	70	66	217
2019 H1	Platform Violation	25	25	97
2018 H2	Legal Violation	80	75	634
2018 H2	Platform Violation	0	0	0

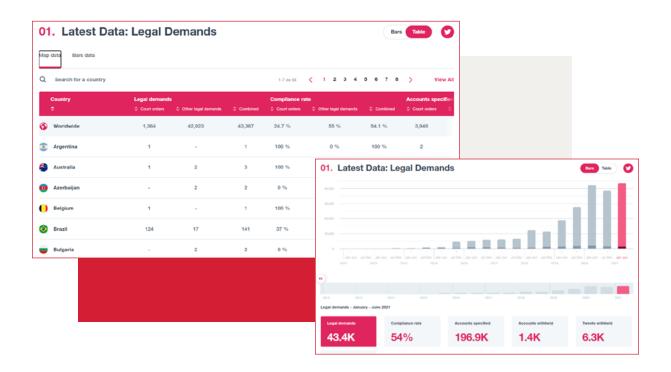
App Removal Requests - Worldwide

Apple's broadest overview of app removals. Source: <u>https://www.apple.com/legal/transparency/</u>

With such disjointed data, it is difficult to discern patterns and trends of removals in relation to particular countries or periods. Only two facts immediately present themselves amidst the Transparency Reports' data: that China is the country with the highest number of takedowns requests and that Legal Violation requests far outnumber Platform Policy violation requests. In acknowledging China's censorship of digital content, Apple only reveals what is already known, rather than showing the public the vast number of apps made unavailable in all App Stores. This façade of transparency, combined with the pretense that most app takedowns are due to government requests and legal obligations, constitutes a diversion from the actual extent of app removals and Apple's proactive role in them.

COMPARING TRANSPARENCY: APPLE, GOOGLE, AND TWITTER

Apple takes the structure of its transparency reports on app removals from its already established reports on government requests for users' device data. This structure, focusing only on government requests and offering minimal data on specific cases, makes sense in the context of government data requests, but is strikingly ill-suited to the sphere of app removals. Apple's default position on users' data is, as far as we know, to keep it private unless specifically requested by a law enforcement agency. As such, the list of requests for data describes the totality of Apple's disclosures of private data from users' devices. In the case of app removal, however, Apple does not - by default - remove no apps of its own accord, but rather constantly polices the content available on the App Store. The data disclosed in its transparency reports on app removals is therefore a long way from a full picture of App Store takedowns.



A comparison with Twitter's transparency reports reveals just how opaque Apple's 'transparency' really is. Though Apple seems to have followed Twitter's example in formulating its transparency reports, Apple's reports diverge dramatically from this example in their lack of both information and analysis. While Twitter is keen to highlight the escalation of government demands for the removal of tweets and accounts, Apple tries to occlude this trend in its own data by excluding removals which occur as a consequence of a systematic, government-mandated rule. Twitter's reports elaborate on the details of removal requests and the company's rates of response to them, noting its decreasing rates of compliance with the requests it receives. Apple's figures exhibit an opposite trend, towards greater compliance, all while revealing vanishingly few specifics of the apps that are removed. Perhaps most notably, the specifics which Twitter provides of government removal requests are directly concerned with the possibility of censorship being facilitated by the request system. Whereas Apple does not so much as release the category of the apps it removes from the App Store, Twitter discloses the number of journalists targeted by government account-removal requests.

Examining an even closer analogue - Google's transparency reports on government requests and the Play Store - demonstrate that the opacity of the information Apple provides is without doubt a deliberate choice on Apple's part. Google's reports demonstrate how much more detail can be provided about the reasons for app removals. Google's transparency reports demonstrate that there are no privacy or security reasons for Apple's failure to disclose what specific content broke what specific laws. Google is willing to detail the cases it deals with in such a way that third parties can evaluate the decisions the company makes with respect to the requests it receives, a process further eased by Google's disclosure of its own procedures for responding to requests. Among the details regularly included in Google's 'Explore Requests' section of their transparency reports are:

- specifics of the agency or person who submitted a removal request to Google;
- details of what content was removed, or requested to be removed, including what apps allegedly did (for example, a request from the Egyptian National Telecom Regulatory Agency for the removal of apps involved in *'impersonating government agencies'*);
- information on the communication between Google and the requesting party (for example: 'The [Hong Kong] police force claimed that if we failed to comply with their request, we would be in violation of Hong Kong laws');
- explicit acknowledgement of cases wherein Google is bound by law to not disclose information (for example, a request from Ministry of Electronics and Information Technology, India concerning content on Google Play, with the note: 'Due to confidentiality restrictions mandated by Section 69A, we are unable to provide any details about the content at issue or the action(s) taken by Google.')

Most notable of all is Google's disclosure of a relevant law in almost all cases where a piece of content was removed for breaking a local law. Although Google still appeals to the vague blanket of its platform guidelines in many instances, the specificity its reports offer regarding the content in question and juridical justification contrast conspicuously with Apple's opacity.

France		URLa inclusion to be differed 5,580,28	5,212	
URLs were news articles, published between 200 role. Many of the articles had published a photo- website, which had been oblieded before our evai- received death threats following a recent work re- Outcome	officer to delize 11 USLs from Google Search on the basis of the right to be forgetten 2 and 2015 on various newspapers, and which reported on the individual's evolved of the individual to accompany the toot. The final USL was a publication on a government work. The individual requested the delating of the URLs for their name, arguing the lated investigation.	specified domains	Copyright owners 287,384 Copyright owners The start inverse of onger canned an exclusion of onger canned an exclusion of onger request.	content behalf of copyright owners to ask
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Methodology: Aggregating and Cross-referencing Apple's Data

In order to better understand the extent and evolution of Apple's official app takedowns, AppleCensorship aggregated the data provided by Apple from tables 13 and 14 from four reports, covering a period of two years, from January 1st, 2019, until December 31st, 2020. To present a direct comparison, the first report addressing app takedown requests (H2 2018) was excluded, as AppleCensorship only started to monitor the App Store at the beginning of 2019.

By aggregating the data from the most recent four Transparency Reports, AppleCensorship can present changes in Apple's responses to government requests over time; differences in Apple's responses to different countries' requests (particularly differing likelihoods of request rejection); and differences in patterns of request and acceptance between LVTRs and PPVTRs.

We also measured Apple's "compliance rate", basing their calculations on the number of apps removed compared to the number of apps targeted in the requests. These figures are used, rather than the number of individual requests and rejections/objections for the sake of producing an accurate and realistic picture of Apple's behavior. In those cases where Apple rejects a higher percentage of requests than individual app removals, a higher compliance rate figure tells a more honest story of the consequences for users and developers.

As Apple's "number of apps removed" column fails to take into account the difference between geolocalized removals and worldwide removals, we also convert each figure under "# of Apps Removed" into a "# of Removals". As Apps removed following LVTRs are only removed from a single App Store (the App Store of the requesting government's country), such apps count for one removal. Meanwhile, apps removed following PPVTRs are removed from all App Stores, resulting in an effective 155 removals.

Technically, apps removed after a PPVTR (worldwide takedowns) are only removed from the App Stores in which they had initially been released, and therefore not necessarily from 155 App Stores (or 175 for H2 2020, after Apple expanded its App Store to 20 additional countries). Unfortunately, since Apple doesn't reveal the names of these apps, it is impossible to bring such level of accuracy to our analysis.

However, since the vast majority of the apps are released worldwide, we consider the margin of error to be negligible and somewhat counterbalanced by the fact that data collected by AppleCensorship for H2 2020 only concerns 155 App Stores and not all 175.

		WORLDW	IDE GOVE	RNMENT	APP STO	RE TAKE	OOWN RE	QUESTS (2019 – 20	020)		
Country or Region	Apple's Transpar- ency Report (ATR) period	Type of Violations	# of Violation Takedown Requests Received	# of Apps Specified in the Requests	# of Requests Objected to in Part or Rejected in Full	# of Requests Where App Removed	# of Apps Removed	# of Appeals Received	# of Appeals Granted	# of Apps Reinstat- ed	Compli- ance rate	# of Removals Effected
China	H1 2019	legal	56	198	2	55	194	/	1	1	97,98%	194
Vietnam	H1 2019	legal	2	46	2	0	0	/	1	1	0,00%	0
India	H1 2019	legal	1	1	0	1	1	/	1	1	100,00%	1
Israel	H1 2019	legal	1	1	0	1	1	/	1	1	100,00%	1
Lebanon	H1 2019	legal	1	1	0	1	1	/	1	/	100,00%	1
Pakistan	H1 2019	legal	1	3	0	1	3	/	1	/	100,00%	3
Russia	H1 2019	legal	5	16	0	5	15	/	1	/	93,75%	15
Turkey	H1 2019	legal	2	2	0	2	2	/	1	/	100,00%	2
United Arab Emirates	H1 2019	legal	1	275	1	0	0	/	/	1	0,00%	0
China	H1 2019	platform policy	22	94	0	22	94	1	1	1	100,00%	14570
Russia	H1 2019	platform policy	3	3	0	3	3	/	1	1	100,00%	465
China	H2 2019	legal	47	203	3	45	187	0	0	0	92,12%	187
Vietnam	H2 2019	legal	2	33	2	0	0	0	0	0	0,00%	0
Austria	H2 2019	legal	1	18	0	1	18	0	0	0	100,00%	18
Hungary	H2 2019	legal	1	1	1	0	0	0	0	0	0,00%	0
India	H2 2019	legal	1	1	0	1	1	1	1	1	100,00%	1**
Russia	H2 2019	legal	2	2	1	1	1	0	0	0	50,00%	1
China	H2 2019	platform policy	15	35	0	15	35	0	0	0	100,00%	5425
Brazil	H2 2019	platform policy	1	1	0	1	1	0	0	0	100,00%	155
Canada	H2 2019	platform policy	1	1	0	1	1	0	0	0	100,00%	155
China	H1 2020	legal	46	152	0	46	152	0	0	0	100,00%	152
Sri Lanka	H1 2020	legal	1	1	0	1	1	0	0	0	100,00%	1
Taiwan	H1 2020	legal	1	1	0	1	1	1	1	1	100,00%	1**
Germany	H1 2020	legal	1	1 38	0	1	1 38	0	0	0	100,00% 100,00%	28 38
India	H1 2020 H1 2020	legal	2	30	0	2	36	0	0	0	100,00%	30
Norway Russia	H1 2020	legal legal	3	4	0	3	4	0	0	0	100,00%	4
Switzerland	H1 2020	legal	1	4	0	1	8	0	0	0	100,00%	8
China	H1 2020	platform	16	38	0	16	38	0	0	0	100,00%	5890
Kuwait	H1 2020	platform	1	1	0	1	1	0	0	0	100,00%	155
China	H2 2020	legal	26	90	0	26	90	0	0	0	100,00%	90
Vietnam	H2 2020	legal	1	2	0	1	2	0	0	0	100,00%	2
Germany	H2 2020	legal	2	2	0	2	2	0	0	0	100,00%	54
India	H2 2020	legal	6	102	0	6	102	0	0	0	100,00%	102
Kuwait	H2 2020	legal	1	2	0	1	2	0	0	0	100,00%	2
Portugal	H2 2020	legal	1	1	0	1	1	0	0	0	100,00%	1
Russia	H2 2020	legal	1	1	0	1	1	0	0	0	100,00%	1
United Arab Emirates	H2 2020	legal	1	6	0	1	6	0	0	0	100,00%	6
Netherlands	H2 2020	platform policy	1	1	0	1	1	0	0	0	100,00%	155*
Russia	H2 2020	platform policy	3	16	0	3	16	0	0	0	100,00%	2480*
Saudi Arabia	H2 2020	platform policy	1	1	0	1	1	0	0	0	100,00%	155*
Total			283	1437	12	273	1060	2	2	2	73,76%	30553

Source: Apple Inc (except the last 2 columns). You can also view the table here.

* These figures are lower than in reality, since 20 regional App Stores were added in 2020. Any worldwide removal since then is in fact the equivalent of 175 removals (or rather: a number of removals equal to the number of stores the app was released in). For methodology purposes, we did not include the additional 20 App Stores in the main dataset (see page 34 for more information on this subject).

did not include the additional 20 App Stores in the main dataset (see page 34 for more information on this subject). ** The apps were eventually restored, but removals - of an unknown duration - did occur. Therefore, these cases are still taken into account as takedowns.

Apps Removed vs. Removals

Confronting Apple's "# apps removed" with "# removals generated" reveals a radically different picture of the extent of Apple's policing of the App Store. Although Apple discloses the 1060 apps removed over two years, those are not the equivalent of 1060 removals. In fact, more than 30,000 removals occurred following both LVTR and PPVTR. Such way of presenting app removals helps visualizing the true impact of PPVTR-led removals, and – in at least one documented case – the impact of LVTRs, too.⁶

The reason that removals constitute a more relevant metric than the number of unique apps removed for assessing the impact of takedowns is the App Store's very structure. Since each device is constrained to access a single, local "storefront", requests affecting multiple App Stores are no less impactful than the same number of removals distributed between different apps.

Counting removals also helps to emphasize the prevalence of collateral censorship on the App Store: cases whereby one government's request, motivated in some cases by local laws (at least according to the Matters of Note section), result in removals in other countries, and frequently across the entire world. The frequency with which such removals occur is neglected in Apple's presentation of its own policies, an omission which serves to further occlude the seriousness of these takedown requests and the extent of their consequences.

	APP STORE TAKEDOWN REQUESTS & REMOVALS – COUNTRY BREAKDOWN (2019 - 2020)									
Country	Total # mentions (out of 8 tables)	Total # requests made	Total # apps targeted	Total # apps removed	Apple's Refusal (# apps)	Apple's Compliance Rate				
Austria	1	1	18	18	0	100,00%				
Brazil	1	1	1	1	0	100,00%				
Canada	1	1	1	1	0	100,00%				
China	7	228	810	790	20	97,53%				
Germany	2	3	3	3	0	100,00%				
Hungary	1	1	1	0	1	0,00%				
India	4	10	142	142	0	100,00%				
Israel	1	1	1	1	0	100,00%				
Kuwait	2	2	3	3	0	100,00%				
Lebanon	1	1	1	1	0	100,00%				
Netherlands	1	1	1	1	0	100,00%				
Norway	1	1	34	34	0	100,00%				
Pakistan	1	1	3	3	0	100,00%				
Portugal	1	1	1	1	0	100,00%				
Russia	6	17	42	40	2	95,24%				
Saudi Arabia	1	1	1	1	0	100,00%				
Sri Lanka	1	1	1	1	0	100,00%				
Switzerland	1	1	8	8	0	100,00%				
Taiwan	1	1	1	1	0	100,00%				
Turkey	1	2	2	2	0	100,00%				
United Arab Emirates	2	2	281	6	275	2,14%				
Vietnam	3	5	81	2	79	2,47%				
Total 22 Countries		283	1437	1060	377	73,76%				

⁶ In the LVTR report for H2 2020, Apple's Matters of Note section documents two requests from the German government regarding apps failing to meet medical device law requirements. Following these requests, the apps in question were removed not only from Germany's storefront, but rather from the App Stores of all 27 EU member states.

The key observations that can be made from these two tables are:

- China, the United Arab Emirates, and India are the top three countries for number of app takedown requests made to Apple in 2019 and 2020. China requested the takedown of 56.37% of all requested apps during the studied period and is the origin of an even larger share (74.53%) of all removals.
- China, Russia, and India are the only countries which continually requested that Apple remove apps over the studied period, appearing in every semiannual report compiled by Apple.
- According to Apple, only 22 countries requested app removals during this two-year period. Five countries (China, India, Russia, United Arab Emirates and Vietnam) made requests in both 2019 and 2020. Seventeen other countries made requests either in 2019 or 2020.
- Apple received 283 requests concerning 1437 apps over two years, the equivalent of one request every 2 and a half days.
- Apple removed 1060 apps during the studied period, the equivalent of one app being removed by Apple every 16 hours.
- Apple's global compliance rate, measured in % of removals of apps targeted by governmental requests, is 73.76%.
- Apple has a 100% compliance rate with 17 countries out of the 22 that made takedown requests.
- Apple has not rejected any takedown request from any government since at least January 2020.
- Apple complied with the vast majority of apps takedown requests made by China and Russia, respectively refusing only 20 removals out of 810 requested by China and 2 out of 42 removals requested by Russia over two years.

	APP STORE TAKEDOWN REQUESTS & REMOVALS – COUNTRY BREAKDOWN (2019)										
Country	Total # mentions (out of 4 tables)	Total # requests made	Total # apps targeted	Total # apps removed	Apple's refusal (# apps)	Compliance Rate					
Austria	1	1	18	18	0	100,00%					
Brazil	1	1	1	1	0	100,00%					
Canada	1	1	1	1	0	100,00%					
China	4	140	530	510	20	96,23%					
Hungary	1	1	1	0	1	0,00%					
India	2	2	2	2	0	100,00%					
Israel	1	1	1	1	0	100,00%					
Lebanon	1	1	1	1	0	100,00%					
Pakistan	1	1	3	3	0	100,00%					
Russia	3	10	21	19	2	90,48%					
Turkey	1	2	2	2	0	100,00%					
United Arab Emirates	1	1	275	0	275	0,00%					
Vietnam	2	4	79	0	79	0,00%					
Total 13 Countries		166	935	558	367	59,68%					

	APP STORE TAKEDOWN REQUESTS & REMOVALS – COUNTRY BREAKDOWN (2020)									
Country	Total # mentions (out of 4 tables)	Total # requests made	Total # apps targeted	Total # apps removed	Apple's refusal (# apps)	Compliance Rate				
China	3	88	280	280	0	100,00%				
Germany	2	3	3	3	0	100,00%				
India	2	8	140	140	0	100,00%				
Kuwait	2	2	3	3	0	100,00%				
Netherlands	1	1	1	1	0	100,00%				
Norway	1	1	34	34	0	100,00%				
Portugal	1	1	1	1	0	100,00%				
Russia	3	7	21	21	0	100,00%				
Saudi Arabia	1	1	1	1	0	100,00%				
Sri Lanka	1	1	1	1	0	100,00%				
Switzerland	1	1	8	8	0	100,00%				
Taiwan	1	1	1	1	0	100,00%				
United Arab Emirates	1	1	6	6	0	100,00%				
Vietnam	1	1	2	2	0	100,00%				
Total 14 Countries		117	502	502	0	100,00%				

Looking at the figures of each year separately, we can now observe trends in countries requesting takedowns and in Apple's response to such requests. The main observations are:

- The number of takedown requests and the number of apps specified by those requests decreased significantly from 2019 to 2020, with 166 requests concerning 935 apps in 2019 and 117 requests (29% decrease) concerning 502 apps (46% decrease) in 2020.
- With a compliance rate of 100% in 2020, the total number of apps removed by Apple in 2020 (502 apps removed) is almost equal to the number of apps removed in 2019 (568 apps removed) despite the significant decrease in requests.
- Apple offers no explanation for this universal compliance to takedown requests, including requests from authoritarian regimes.
- The United Arab Emirates (UAE) and Vietnam made considerably less requests (two requests made by Vietnam in 2020 versus 79 in 2019 and six made by the UAE in 2020 versus 275 in 2019). However, while Apple complied to none of their requests in 2019, the company answered favorably in 2020, removing a total of 8 apps.
- Compliance with China's and Russia's requests although already high in 2019 increased to the maximum, despite both regimes' notoriety for censoring information and cracking down on digital freedoms during the studied period.

Platform Violations Takedowns vs. Legal Violations Takedowns

By splitting the data between "Legal Violations Takedowns" and "Platform Policy Violations Takedowns", we can see the driving-force behind apps removals and their effect on the App Store globally.

# Countries or Regions	ATR period	Type of Violations	# of Violation Takedown Requests Received	# of Apps Specified in the Requests	# of Requests Objected to in Part or Rejected in Full	# of Requests Where App Removed	# of Apps Removed	# of Appeals Received	# of Appeals Granted	# of Apps Reinstated	Compli- ance rate	# of Removals
			F	Platform Po	licy and Le	gal Violati	ons Takedo	owns 2019				
11	2019	Legal	124	801	12	114	424	1	1	1	52,93%	424
4	2019	Platform Policy	42	134	0	42	134	0	0	0	100,00%	20770
Total			166	935	12	156	558	1	1	1	59,68%	21194
			F	Platform Po	licy and Le	gal Violatio	ons Takedo	wns 2020				
12	2020	Legal	95	445	0	95	445	1	1	1	100,00%	524
5	2020	Platform Policy	22	57	0	22	57	0	0	0	100,00%	8835*
Total			117	502	0	117	502	1	1	1	100,00%	9359
	Platform Policy and Legal Violations Takedowns 2019-2020											
18	2019- 2020	Legal	219	1246	12	209	869	2	2	2	69,74%	948
7	2019- 2020	Platform Policy	64	191	0	64	191	0	0	0	100,00%	29605
Total			283	1437	12	273	1060	2	2	2	73,76%	30553

* See footnote under "Worldwide Government App Store Takedown Requests (2019 - 2020)" for details

The following observations and calculations can be made:

- A similar number of apps were removed for legal violations in 2019 (424 apps) and 2020 (445 apps), while fewer than half of the apps removed in 2019 for Platform Policy violations (134 apps) were removed in 2020 (57 apps). Of 1060 apps removed in two years, 81.98% (869 apps) were removed following LVTRs while 18.02% (191 apps) were removed following PPVTRs.
- In 2019, LVTRs represented 74.70% of all requests while PPVTRs represented 25.30%. In 2020, LVTRs represented 81,20% of all requests and PPVTRs 18.80%. Over two years, LVTRs represent 77,39% of all requests and PPVTRs 22.61%.
- In terms of number of apps specified by governments, the percentage of apps targeted by LVTRs increases, accounting for 85.67% of all apps specified in 2019 (14.33% for apps under PPVTRs), and for 88.65% in 2020 (11.35% for apps under PPVTR). Over the two year period, the number of apps specified in LVTRs amount to 86.71% versus 13.29% in PPVTRs.

This means two things. First that Apple has been intentionally simplifying the situation each time it has justified its App Store curation policies by saying the company has to "comply with local laws" wherever it operates, when in fact more than 20% of the requests it received over the last two years (more than 25% in 2019) concern Platform Policy violations and therefore do not have anything to do with legal compliance.

Second, the higher percentage gap between LVTRs and PPVTRs when it comes to the number of apps specified in takedown requests (86.71% vs 13.29%) compared to the number of requests (77.39% vs 22.61%) highlights the fact that LVTRs are more often requests which deal with a larger number of apps, while PPVTRs more often concern a smaller number. This indicates that PPVTRs are more targeted requests and could therefore point to cases of targeted censorship while LVTR could point to takedown requests addressing groups or categories of apps (categories that might have been defined in local legislation). However, without information on the nature of the apps targeted by governments, it is still impossible to determine if those removals are bans on certain groups or categories of apps.

- In the two years period, Apple removed 69.74% of all apps specified in LVTRs, while it removed 100.00% of all apps target by PPVTRs.
- In terms of number of requests, Apple's compliance rate is almost always at 100% (LVTR in 2020, PPVTR 2019 and PPVTR 2020).
- One notable exception is LVTR in 2019, when Apple only complied with 91.94% of the LVTRS but removed only 52.93% of apps specified, a percentage explained by Apple's refusals in just five

requests of massive removals by UAE and Vietnam.

Over two years, Apple complied with 96.47% of all requests, with 95.43% of all LVTRs and 100.00% of all PPVTRs.

This is significant, as despite Apple's justification for app removals being that it must comply with local laws everywhere it operates, the rare cases where the company decided to refuse to remove apps were in fact cases of LVTR and not PPVTR. Apple never rejected any requests based on Platform Violations, where the company is at liberty to ignore and dismiss those requests.

Even more important:

- PPVTRs trigger many more removals despite accounting for far fewer 'Apps Removed'. Over two years, the 869 apps removed following LVTRs generated 948 removals worldwide, while the 191 apps removed for PPVTRs generated 29605 removals worldwide.
- In other words, 18.02% of all apps removed by Apple were removed for breaching Apple's own policies, but these takedowns generated 96.90% of all cases of app removal worldwide while 81.98% of all apps removed, which were deleted due to alleged legal violations, only triggered 3.10% of all cases of app removal worldwide.

The extent of PPVTR-triggered removals is one of the most glaring absences in Apple's Transparency Reports. Having calculated the total number removals generated by the 1060 apps that were removed over two years (30,553), we can now see the distribution of these instances of removal.

Contrary to what Apple tells the public, most of the changes in the App Store worldwide occur due to Apple's decision to enforce its own policies in a manner that only Apple understands because only Apple knows which apps are removed and how it enforces its vague App Store Guidelines.

Apple has based its communication on the idea that app takedowns are a phenomenon mostly prompted by states and that the company is legally bound to remove apps at those states' behest. We now know that this PR exercise helps to obscure a different reality, in which Apple, according to its own reports, is solely responsible for the vast majority of app removals occurring in the App Store globally.

The Real Damage: What Happens on the App Store After a Takedown Request

In the end, and only by using the figures provided by Apple in its Transparency Reports are we able to present the actual changes that occurred in all App Stores in 2019 and 2020.

App Store	Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self-affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed
Albania	191	0	0	0	191
Algeria	191	0	0	0	191
Angola	191	0	0	0	191
Anguilla	191	0	0	0	191
Antigua & Barbuda	191	0	0	0	191
Argentina	191	0	0	0	191
Armenia	191	0	0	0	191
Australia	191	0	0	0	191
Austria	191	3	0	18	212
Azerbaijan	191	0	0	0	191
Bahamas	191	0	0	0	191
Bahrain	191	0	0	0	191
Barbados	191	0	0	0	191
Belarus	191	0	0	0	191
Belgium	191	3	0	0	194
Belize	191	0	0	0	191
Benin	191	0	0	0	191
Bermuda	191	0	0	0	191
Bhutan	191	0	0	0	191
Bolivia	191	0	0	0	191
Botswana	191	0	0	0	191
Brazil	190	0	1	0	191
British Virgin Islands	191	0	0	0	191
Brunei	191	0	0	0	191
Bulgaria	191	3	0	0	194
Burkina Faso	191	0	0	0	191
Cambodia	191	0	0	0	191
Canada	190	0	1	0	191
Cape Verde	191	0	0	0	191
Cayman Islands	191	0	0	0	191
Chad	191	0	0	0	191
Chile	191	0	0	0	191
China (mainland)	24	0	167	623	814
Colombia	191	0	0	0	191
Congo - Brazzaville	191	0	0	0	191
Costa Rica	191	0	0	0	191
Croatia	191	3	0	0	194
Cyprus	191	3	0	0	194
Czechia	191	3	0	0	194

App Store	Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self-affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed
Denmark	191	3	0	0	194
Dominica	191	0	0	0	191
Dominican Republic	191	0	0	0	191
Ecuador	191	0	0	0	191
Egypt	191	0	0	0	191
El Salvador	191	0	0	0	191
Estonia	191	3	0	0	194
Eswatini	191	0	0	0	191
Fiji	191	0	0	0	191
Finland	191	3	0	0	194
France	191	3	0	0	194
Gambia	191	0	0	0	191
Germany	191	0	0	3	194
Ghana	191	0	0	0	191
Greece	191	3	0	0	194
Grenada	191	0	0	0	191
Guatemala	191	0	0	0	191
Guinea-Bissau	191	0	0	0	191
Guyana	191	0	0	0	191
Honduras	191	0	0	0	191
Hong Kong SAR China	191	0	0	0	191
Hungary	191	3	0	0	194
Iceland	191	0	0	0	191
India	191	0	0	142	333
Indonesia	191	0	0	0	191
Ireland	191	3	0	0	194
Israel	191	0	0	1	192
Italy	191	3	0	0	194
Jamaica	191	0	0	0	191
Japan	191	0	0	0	191
Jordan	191	0	0	0	191
Kazakhstan	191	0	0	0	191
Kenya	191	0	0	0	191
Kuwait	190	0	1	2	193
Kyrgyzstan	191	0	0	0	191
Laos	191	0	0	0	191
Latvia	191	3	0	0	194
Lebanon	191	0	0	1	192
Liberia	191	0	0	0	191
Lithuania	191	3	0	0	194
Luxembourg	191	3	0	0	194
Macao SAR China	191	0	0	0	191
Madagascar	191	0	0	0	191
Malawi	191	0	0	0	191
Malaysia	191	0	0	0	191
Mali	191	0	0	0	191
Malta	191	3	0	0	194
Mauritania	191	0	0	0	191

App Store	Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self-affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed
Mauritius	191	0	0	0	191
Mexico	191	0	0	0	191
Micronesia	191	0	0	0	191
Moldova	191	0	0	0	191
Mongolia	191	0	0	0	191
Montserrat	191	0	0	0	191
Mozambique	191	0	0	0	191
Namibia	191	0	0	0	191
Nepal	191	0	0	0	191
Netherlands	190	3	1	0	194
New Zealand	191	0	0	0	191
Nicaragua	191	0	0	0	191
Niger	191	0	0	0	191
Nigeria	191	0	0	0	191
North Macedonia	191	0	0	0	191
Norway	191	0	0	34	225
Oman	191	0	0	0	191
Pakistan	191	0	0	3	194
Palau	191	0	0	0	191
Panama	191	0	0	0	191
Papua New Guinea	191	0	0	0	191
Paraguay	191	0	0	0	191
Peru	191	0	0	0	191
Philippines	191	0	0	0	191
Poland	191	3	0	0	194
Portugal	191	3	0	1	195
Qatar	191	0	0	0	191
Romania	191 172	3	0	0	194 212
São Tomé & Príncipe	172	0	0	0	191
Saudi Arabia	191	0	1	0	191
Senegal	190	0	0	0	191
Seychelles	191	0	0	0	191
Sierra Leone	191	0	0	0	191
Singapore	191	0	0	0	191
Slovakia	191	3	0	0	194
Slovenia	191	3	0	0	194
Solomon Islands	191	0	0	0	191
South Africa	191	0	0	0	191
South Korea	191	0	0	0	191
Spain	191	3	0	0	194
Sri Lanka	191	0	0	1	192
St. Kitts & Nevis	191	0	0	0	191
St. Lucia	191	0	0	0	191
St. Vincent & Grenadines	191	0	0	0	191
Suriname	191	0	0	0	191
Sweden	191	3	0	0	194
Switzerland	191	0	0	8	199

App Store	Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self-affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed
Taiwan	191	0	0	1	192
Tajikistan	191	0	0	0	191
Tanzania	191	0	0	0	191
Thailand	191	0	0	0	191
Trinidad & Tobago	191	0	0	0	191
Tunisia	191	0	0	0	191
Turkey	191	0	0	2	193
Turkmenistan	191	0	0	0	191
Turks & Caicos Islands	191	0	0	0	191
Uganda	191	0	0	0	191
Ukraine	191	0	0	0	191
United Arab Emirates	191	0	0	6	197
United Kingdom	191	1	0	0	192
United States	191	0	0	0	191
Uruguay	191	0	0	0	191
Uzbekistan	191	0	0	0	191
Venezuela	191	0	0	0	191
Vietnam	191	0	0	2	193
Yemen	191	0	0	0	191
Zimbabwe	191	0	0	0	191
Total # removals	29414	79	191	869	30553

With this table, we can clearly see which governments initiated app takedowns most often and which App Stores were subsequently affected by those removals. The main observations can be made:

- A large majority of countries (133) never made a single app takedown request to Apple but saw between 191 and 194 apps removed in their App Store.
- China comes first in terms of app removals with 814 apps removed during the two year period, followed by India (333), Norway (225), Russia and Austria (212 for both).
- Although China is the App Store that saw the highest number of apps removed, it is also the App Store which was, by far, the least affected by "collateral" removals. China initiated 167 "Platform Policy" removals while it was affected by only 24 other such removals.
- Russia initiated 19 "Platform Policy" removals, while Brazil, Canada, Kuwait, Netherlands and Saudi Arabia each initiated one removal.
- "Collateral removals" constitute 96.53% (29,493) of all removals worldwide while self-imposed removals constitute only 3.47% (1060) of all app removals.

This table exposes the real dynamics behind App Takedown Requests and reveals which countries impact the App Store's ecosystem the most. The idea that China's or Russia's Internet policies only affect their own citizens is demonstrated to be false. While India, (which triggered more removals than Russia) Norway, and Austria also have their fair share of apps removed following takedown requests, their impact on the App Store globally cannot be compared to that of China or Russia, as they only removed apps in their own country's App Store. Over the last two years, 186 unknown apps were removed by Apple from 155/175 App Stores at the request of China and Russia, without any legal justification, while users worldwide are left with no option but to trust that Apple "knows [the line] when [it] sees it".

The 20 "Missing" App Stores

In 2020, Apple expanded its services, including the App Store, in 20 countries. Due to AppleCensorship's research and data focus on 155 App Stores, and due to the fact that apps removed in 2019 cannot be counted as removals in those App Stores, since they did not exist at the time, we chose not to include them at all in order to maintain consistency across the twoyear data-set and to make a more accurate comparison between our figures and figures reported by Apple.

However, since these 20 additional App Stores were launched in the course of 2020, all app removals resulting from PPVTRs presented in Apple Transparency Report of H2 2020 should include the following countries. It must be noted that prior Platform Policy removals still indirectly affect those App Stores, as the apps removed in 2019 would obviously not be present in those recently added App Stores.

'Missing' App Store	# Apps removed (H2, 2020)
Afghanistan	18
Gabon	18
Cote d'Ivoire	18
Georgia	18
Maldives	18
Serbia	18
Bosnia and Herzegovina	18
Cameroon	18
Iraq	18
Kosovo	18
Libya	18
Montenegro	18
Могоссо	18
Mozambique	18
Myanmar	18
Nauru	18
Rwanda	18
Tonga	18
Zambia	18
Vanuatu	18
Total	360



CONTRADICTING APPLE'S FIGURES

Now that we have extracted as much data as we can from Apple's woefully limited reports, we are able to compare the data in, and deduced from, the Transparency reports with the data collected by the AppleCensorship's App Store Monitor (ASM).

But even before demonstrating that the ASM data puts Apple's figures at odds with reality of the App Store, it is already possible to demonstrate the ambiguity and contradictions of Apple's Transparency Reports by comparing them to individual cases of app removals that occurred and were made public in 2019 and 2020. Indeed, it is not merely speculation that Apple's brief, vague summaries of the reasons for its removals obscure acts of explicit censorship and that -while Apple maintains its claim that regional takedowns are an unfortunate, if inescapable, obligation - a number of high-profile app removals from China's and India's App Store conflict with this narrative, and with Apple's figures.

Censored Apps Absent from the Transparency Reports

China's "Invisible" Censorship

In October 2019, two apps made the news after being removed by Apple at the request of Chinese authorities. The first, HKmap.live, constitutes a particularly salient example of Apple's misleading self-reporting and willingness to enable repressive governance.⁷



HKmap.live allowed users to report and view the locations and crowd control measures of police across Hong Kong. Although the app does not appear in the transparency report relevant to the period - indeed Hong Kong appears in no transparency report since their first publication - Apple did acknowledge its removal of the app from Hong Kong's App Store. In a statement sent to the press, Apple wrote:

"We have verified with the Hong Kong Cybersecurity and Technology Crime Bureau (CSTCB) that the app has been used to target and ambush police, threaten public safety, and criminals have used it to victimize residents in areas where they know there is no law enforcement," said the Apple statement. "This app violates our guidelines and local laws, and we have removed it from the App Store." Apple's comment on the removal is characteristically ambiguous, appealing to the app breaching both the App Store guidelines (based on unsubstantiated claims that HKmap.live had been used to attack police and commit crimes in unpoliced areas) and local laws.

The local laws in question remained unspecified and neither Apple nor the Hong Kong authorities offered any evidence of the attacks which purportedly meant that the app broke the law. Nonetheless, Apple kept the app off the Hong Kong App Store, apparently in response to pressure from Chinese state newspaper Global Times which accused the company of enabling protesters by publishing the app on the Hong Kong App Store. The removal is also absent from Apple's 'platform violation' report for the period, meaning that despite the pressure from local authorities (as well as from the mainland Chinese government) Apple elected to treat the removal as its own unprompted action. The app's removal was undoubtedly complicit in enabling the repressive and frequently violent policing of the Hong Kong protests, and yet despite the political weight of Apple's decision to comply with Hong Kong and mainland China's governments, no record of the removal appears in either of Apple's transparency reports for the relevant period.

A week after the removal of Hkmap.live, another high-profile app's removal was reported by the press. News organization Quartz's iOS app was removed following a request from the Chinese Cyber Administration (CAC) which, according to Quartz at the time, resulted from its coverage of the Hong Kong protests.



Quartz, like most publishers whose apps are targeted by the Chinese authorities, were not directly contacted by the CAC but received a notice from Apple on the 30th September 2019 saying the app included "content that is illegal in China" and announcing the imminent removal of the app.

In Apple's Transparency Report covering the July-December 2019 period (H2), Apple mentions 187 apps being removed following LVTR made by the Chinese government and describes those removals in the vaguest way possible:

"Requests predominantly related to apps with pornography, illegal content, and apps operating without government license."

Unlike Hkmap.live, which is straightforwardly omitted from the relevant Transparency Report(s), Quartz's removal may have been included in the Transparency Report figures for the relevant period and may even have been referred to in the brief description of the 187 removals under the umbrella "illegal content". Even if that was the case, it would only illustrate the hypocrisy of Apple's reporting efforts and the company's attempt to conceal its participation to Chinese state censorship of foreign press.



In the period January-June 2020 (H1), Apple's 'Matters of Note' section for mainland China states: *"Requests predominantly related to apps with pornography or other illegal content."* However, during this period, two podcast apps, Pocket Casts and Castro Podcasts were removed in response to requests from Chinese authorities.

Both apps' Twitter accounts reported the block from Chinese authorities, with Pocket Casts indicating it had been contacted by the CAC through Apple, but refused to comply to censorship request. The app was removed two days later, and the press <u>reported</u> both removals.

In the period July-December 2020 (H2), two RSS feed readers apps were also removed from the Chinese App Store. Reeder and Fiery Feeds tweeted having received a message from Apple notifying the removal of their app on September 28 and 29, 2020, over content deemed "illegal" by the CAC.

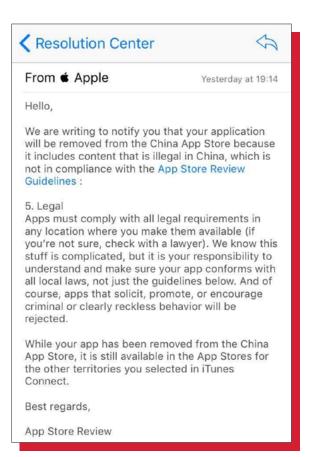
Meanwhile, Apple's Transparency Report covering the H2, 2020 period which mentions 90 app removals following LVTR from China, doesn't provide any details on the reasons for those removals:

"Requests predominantly related to apps with illegal content."

It is, of course, impossible to know whether these two apps, and the request which prompted their removal, are included in the 46 requests and 152 removed apps that Apple's reports for the relevant period. Nevertheless, Apple has therefore either directly lied in its transparency report, or has again misled the public with euphemisms like 'illegal content' to distract from its function as an extension of the very censorship laws it purports to disagree with. Apple sanitizes its complicity in the behavior of repressive governments by concealing the most politically fraught instances of censorship it enables.



Without the possibility of public scrutiny, it is impossible to verify whether all the apps removed because of government requests have actually broken pre-existing local laws, or merely fallen foul of the extralegal wishes of those governments. Apple's failure to disclose any part of its interactions with governments, or any explanation of how it vets and assesses takedown requests, leaves substantial doubts about whether the company exercises appropriate care in determining the validity of the legal basis for app removals. Without the pressure of public accountability, it is all too plausible that Apple consistently chooses to appease governments and maintain business relations rather than defend the rights of its users and app developers where they are undermined by censorship.



Indian Government's Unreported Bans of Chinese Apps

Apple's reporting on India's takedown requests is particularly interesting. In the period January-June 2020 (H1), Apple reports 38 LVTR from the Indian government while in the period July-December 2020 (H2), it reports 102 LVTR. In both cases, Apple says those are *"Request(s) related to apps identified as state security/sovereignty violations"*, although for H1 2020, the word *"predominantly"* was added in the description, implying that one request out of the two received by Apple, was not invoking state security as the reason for requesting apps to be removed.

A <u>press release</u> published on June 29, 2020 by the Indian Ministry of Electronics and Information Technology (MEITY) announced a government ban on 59 Chinese mobile apps on both Android and Apple's platforms. The first of a series of bans decided in 2020 by Indian authorities following growing military tensions and clashes between China and India in border areas, already contradicts Apple's reporting on 38 apps removed for the period.

On September 2, 2020, MEITY issued a <u>second ban</u> on 118 apps shortly before a <u>third ban</u> was issued in November, this time banning 43 apps from both Android and Apple's platforms, making a total of 220 apps removed from the App Store.

In an exercise of transparency that is yet to be seen in Apple's Transparency Reports, the Indian government invoked, in each of its statements, the Information and Technology Act to justify the bans and listed all the apps targeted by the bans.

"The Ministry of Information Technology, invoking it's power under section 69A of the Information Technology Act read with the relevant provisions of the Information Technology (Procedure and Safeguards for Blocking of Access of Information by Public) Rules 2009 and in view of the emergent nature of threats has decided to block [59] [118] [43] apps (see Appendix) since in view of information available they are engaged in activities which is prejudicial to sovereignty and integrity of India, defence of India, security of state and public order."

Yet, Apple only acknowledged the removal of a total of 140 apps during the period, and did not direct readers to Indian government's statements and lists of apps despite them being the official and publicly available sources on these removals.

Evidence of Other Unexplained Takedowns: 85,000 Apps Removed in China

A number of high-profile app removals also appear to directly conflict with Apple's transparency report data, even if we account for the possibility of Apple proactively removing content deemed to be in violation of a region's laws. In these cases, we must conclude either that Apple's figures are simply a fabrication, or that Apple has defined its terms in deliberately misleading ways. Since Apple offers no transparency as to the actual nature or process of official government takedown requests, it is difficult to know why the company might refuse to count removals at the behest of states as legal violation requests in its reports.

In December 2020, 39,000 games and 46,000 other apps were <u>removed</u> from the Chinese App Store by Apple. These removals were a direct consequence of a law passed in China requiring all apps with in-app purchases to be approved by the country's regulator. Meanwhile, Apple's transparency report for the period July-December 2020 lists the removal of just 90 apps from China's App Store. This enormous discrepancy is a clear example of Apple's opacity. There can be no doubt as to the fact that Apple's mass-removal of these apps was a result of the Chinese government's request that the companies moderating digital platforms enforce their new legal requirements. If there is a good reason why 'official' legal requests from governments should be counted separately from cases such as this, Apple does not provide this reason in any of the material surrounding the transparency reports. Since Apple presently declares figures for official requests - and not for its own, unprompted removals - it is difficult to ignore the possibility that Apple uses narrow, undisclosed definitions to avoid such vast numbers of takedowns appearing in its published data. In short, Apple tries to reap the public relations benefits of 'transparency' while avoiding the serious and extensive implications of genuine transparency for Apple's image.

Policing the App Store: Apple's Proactive Removals

While Apple presents a picture of occasional and government-led removals, another picture emerges from the data available from the App Store Monitor (ASM) - particularly information concerning worldwide removals. The scale of these removals seriously undermines Apple's attempt to pose as a passive, or reluctant, overseer of legal obligations which compel the company to remove a few hundred apps per year, and presents a picture of continual - and frequently far-reaching - interventions in the App Store.

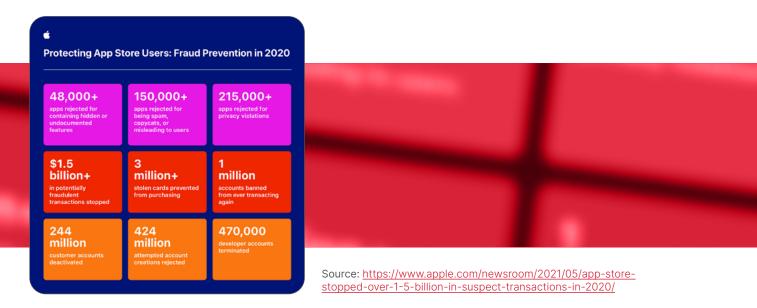
The most striking gap between Apple's Transparency Reports and the reality of the App Store is found between the number of apps which Apple acknowledges as having been removed from all App Stores - 191 - and the number detected by the ASM – 6458 (see the <u>ASM: DISAPPEARED table.</u>)

This discrepancy emerges because the ASM records all kinds of removals, whether they result from government requests, developers' choice or from Apple's own decisions, while Apple's Transparency Reports only focus on government-led removals. The line between outright falsehoods and convenient omissions is often blurred in Apple's reports, but it is clear that the company is at pains to publicly report as few takedowns as it can. Apple makes no mention in any official report of the takedowns it performs without a direct government request. It is therefore necessary to look further into these Apple-led removals before looking at the ASM's data and the details of the removals it recorded.

Contradictions and Omissions in Apple's Own Figures

While the Transparency Reports avoid autonomous removals entirely, Apple's public relations teams have actually communicated on a number of occasions on the topic. In fact, Apple is proud of the global takedowns effected under its App Store guidelines, stating that the review process will always reject or remove 'content or behavior that we believe is over the line'.

However, the review process itself is scarcely spoken about by Apple or its employees. Apple's opacity extends to discussions of its internal content curation process, where lines between removals of existing apps and pre-publication rejections (i.e. apps prevented from being offered on the App Store) are blurred and the company commingled its own guidelines with government interests. While Apple tries to emphasize the protection of users, and especially children, when discussing its content moderation practices, the vague estimates Apple provides of its app review process indicate a large number of unaccounted rejections and removals.



On May 11, 2021, Apple communicated on the number of apps it removed and rejected unilaterally in order to protect its users:

"In 2020, nearly 1 million problematic new apps, and an additional nearly 1 million app updates, were rejected or removed for a range of reasons like those."

A smaller but significant set of these rejections was for egregious violations that could harm users or deeply diminish their experience. In 2020 alone, the App Review team rejected more than 48,000 apps for containing hidden or undocumented features, and more than 150,000 apps were rejected because they were found to be spam, copycats, or misleading to users in ways such as manipulating them into making a purchase.

Some developers perform a bait and switch: fundamentally changing how the app works after review to evade guidelines and commit forbidden and even criminal actions. When such apps are discovered, they're rejected or removed immediately from the store, and developers are notified of a 14-day appeals process before their accounts are permanently terminated. In 2020, about 95,000 apps were removed from the App Store for fraudulent violations, predominantly for these kind of bait-and-switch maneuvers.

(...)

Another common reason apps are rejected is they simply ask for more user data than they need, or mishandle the data they do collect. In 2020, the App Review team rejected over 215,000 apps for those sorts of privacy violations."

According to this statement, Apple removed a number of apps somewhere between 500,000 and 950 000 (since the 1 million figure includes both removals, and rejections of proposed updates of apps which may have remained in the App Store in their pre-update form).

According to this statement this is the breakdown of removals per reason:

App removals figures from Apple's Statement (S1)						
# of apps removed in 2020 Reason invoked						
Almost 2 million (1,900,000)	Unfinished, not working properly					
48,000	Hidden features					
150,000	Spam, copycats, misleading					
95,000	Bait and switch					
215,000	Privacy violations					
Total: 2,408,000						

The distinction between rejections and removals communicated by this statement is complicated by the fact that Apple identifies many removals which occur after an app has been released on the App Store as retroactive rejections of apps which have slipped through its net. It is therefore impossible to say if those numbers are predominantly pulled from the 1 million new apps rejected or from the 1 million updates of existing apps. Or if they constitute additional removals to the already near 2 million removals/rejections the company reports.

If we assume that the vast majority of the apps rejected for being "unfinished" are, by definition, new apps, it follows that Apple is, at most, explaining the removal of 508,000 apps, and that almost another half million apps being updated are rejected every year for unstated reasons. If the categories invoked to explain this 508,000 also sometimes refer to new apps, the number of unexplained removals is even larger.

In a <u>letter</u> penned by Apple's Timothy Powderly on 19 April 2021 to Senator Mike Lee and Congressman Ken Buck, Powderly provides some approximate figures on the App Store review process, but these figures raise more questions than they answer.

Powderly claims that Apple reviews over 100,000 submissions a week, a figure which - unhelpfully - conflates the submission of new, unique apps with updates to existing apps. Updates must constitute a substantial fraction of this total, given that the App Store contains a total of approximately 1.96 million unique apps, while a figure of 100,000 submissions a week with an approximately 40% rejection rate would suggest that at least 3 million apps are added to the App Store each year.

Despite the difficulties involved in making estimations based on such opaque - and indeed misleading - data, it is nonetheless possible to generate a picture of the sheer number of apps which are rejected without a reason being given. Apple claims that of the 40% of apps rejected during the review process (a statistic amounting to a staggering 2 million apps a year at least) 'most' are rejected for quality issues (bugs and crashes primarily), and that of these approximately 80% are later returned to the App Store after fixing these quality issues. These figures leave two tranches of rejected apps unaccounted for: first, there are those 20% of apps removed for quality issues which are definitively rejected, presumably for failing to fix their quality issues; secondly, there are those apps which do not fall under the hopelessly vague umbrella of 'most'.

Apple's Letter -L2)	# apps (Inferred or calculated figures)
100,000 submissions / week	= 5,200,000 apps submitted / year
Apple rejects 40%	= 2,080,000 apps removed / rejected
Of those rejections, 'most' are due to 'quality issues'	=~ 1,664,000 apps rejected for quality issues
Of those rejected apps, 80% make the required changes and are approved for release on the App Store	= 1,331,200 updates accepted
	20% do not, or cannot make the required changes: = 332,800 remain unavailable for quality issues
A remaining minority (~20%) of total rejections are for reasons other than quality issues	= 416,000
In 2020, approximately 30,000 apps were rejected from the App Store because of issues with Guidelines 1.1.1 or 1.2, Of those apps, the majority were ultimately approved for distribution on the App Store.	416,000 – 30,000 = 386,000 apps removed / rejected for reasons other than 1.1.1 or 1.2.

It is bemusing, and somewhat suspicious, that Powderly uses 'most' for this figure when in all other cases at least an approximate number or percentage is provided. It is clear that Apple has a number for this proportion, since Powderly is able to supply a percentage within the category of 'most'. Why Apple refuses to disclose just how many apps it rejects for reasons other than quality is unclear, but it is difficult to ignore the possibility that this reticence follows from the damning extent of such rejections. If we conservatively take most to mean approximately 80%, we are left with 416,000 app rejections each year that are not a consequence of quality issues, and a further 332,800 apps removed for quality issues which are not, or cannot be, resolved.

Powderly acknowledges 30,000 apps - which we presume to be a subset of the approximately 416,000 rejected for reasons other than quality issues - rejected under App Store Guidelines 1.1.1 and 1.2 (respectively concerning objectionable content in the app itself, and prohibited user generated content). This leaves approximately 386,000 apps per year removed with no explanation from Apple, many of which - we might imagine - are rejected for reasons like those in the case of Guo Wengui: undisclosed, politically motivated censorship.

Apple's figures in these two statements are straightforwardly contradictory, as demonstrated below:

App store's size	Number of annual submissions (L2)	Total number of "explained" removals (S1)	Missing information	Hypothesis: # apps in App Store remains stable	Hypothesis: # apps in App Store changes
1.8 million apps	5.2 million	2,408,000	2,792,000 apps with unknown status	App Store size still 1,800,000. between 992,000 and 2,792,000 apps are removed without explanation	App Store size now between 2,792,000 and 4,592,000

Since Apple's figures make no distinction between updates to existing apps, and new app submissions, it is difficult to narrow this enormous range for the size of the App Store. No doubt a substantial portion of Apple's 5.2 million figure is updates, and therefore acceptance and rejection numbers for these make no change to the size of the App Store. However, without a breakdown of both the initial submissions and the rejections/removals, the true scale of unexplained removals remains impossible to estimate.

App store	Number of annual submissions (L2)	Total number of removals (L2)	Hypothesis: # apps in App Store remains stable	Hypothesis: # apps in App Store changes	Hypothesis: # apps in App Store changes (including second round of reviews)
1.8 million apps	5.2 million	40% are initially rejected = 2,080,000 60% are approved = 3,120,000	Impossible according to figures given by Apple	App Store size is now 3,120,000 apps	+ 1,664,000 apps (80% eventually accepted) App Store size is now 4,784,000 apps

Examining these figures, Apple's statements are corroborated by neither each other, nor the other information we have about the App Store. While some discrepancies between statements regarding numbers of rejections/removals and the size of the App Store can be explained by Apple's inconsistency in distinguishing removals from rejections, and updates from new apps, the fact remains that no solid numerical picture emerges. Instead, we are left with wildly differing estimates of the App Store's size and rate of expansion, the number of new app submissions processed by Apple, and the number of apps either rejected or later removed. The discrepancy between the number of rejections/removals mentioned in L2 (40% of 5.2M) and S1 (2,408,000) makes it clear that Apple's public statements do not refer to a common set of statistics. It is once again apparent that opacity in Apple's communications is not only a product of omissions of information, but rather a product of active occlusion of the facts. Similarly, while it is unlikely (given the huge number of submissions Apple claims to process) that the App Store is not rapidly growing in size, Apple's reiteration of its ~1.8m figure is either woefully out of date, complete fabrication, or a telltale sign of a massive covert process of app rejection and removal.

ASM FIGURES: DOCUMENTING THE REMOVALS APPLE DOES NOT

In addition to the takedowns which made the news, and Apple's own contradictory and incomplete declarations, data obtained by constant monitoring of the App Store suggests a large set of removals which go unacknowledged in Apple's transparency reports. These findings present a snapshot of the regional removals which occur daily on the App Store. The ASM's data draws attention to countries which never appear in Table 13 of the Transparency Reports.

Though the information that the ASM has access to is limited by Apple's opacity, the picture that emerges from the tool is a much more transparent representation of app takedowns than anything released by Apple itself. The ASM works by monitoring the regional App Stores and recording any changes in availability of a given app in a given country. These changes, both removals and reinstatements, are recorded under the heading 'Detected Changes'

Detected Changes

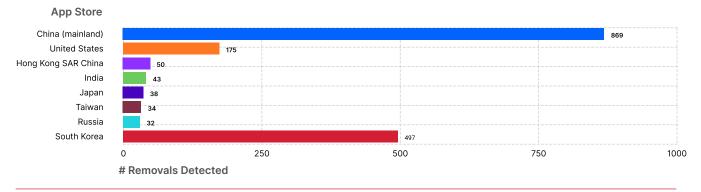
To see the full list of removals detected by the App Store Monitor click here: <u>ASM:</u> <u>DETECTED CHANGES table</u>. Reinstatements were not included in the table but remain available on AppleCensorship.com <u>"Detected Changes"</u> page.

Although only monitoring a fraction of the nearly 2 million apps populating the App Store, AppleCensorship's App Store Monitor (ASM) was able to record 2933 removals between January 1st 2019 and December 31st 2020.

Out of a total of 2933 detected removals in 2019 and 2020, only 691 removals were detected in 2019 while the ASM found 2242 app removals in 2020. This is mostly due to the ASM's monitoring capabilities increasing after the first year of functioning.

Those removals concern 1159 unique apps, as the same app can be either removed from different App Stores or removed, restored and removed again from the same App Store.

However, those cases are a minority, as 930 apps were found to have been removed from one App Store only, with the remaining 229 apps being removed from 2 to 73 App Stores during this period.



App Stores with highest number of removals detected by the ASM (2019 – 2020) Source: ASM: DETECTED CHANGES

Those removals occurred in 106 App Stores out of the 155 monitored by the ASM. Ten App Stores recorded fewer than ten removals, 88 App Stores recorded between 10 and 27 removals and 6 App Stores saw between 32 and 50 removals. China and the United States, which were included in almost all availability tests run by the ASM, registered 869 and 175 removals respectively.

Detected changes collected by the App Store Monitor are the equivalent of partial app removals. In other words, when an app is removed from one or several App Stores, for any reason, but remains in others, the change of its availability status in specific App Stores can be detected by the App Store Monitor.

It should be remembered, in the data that follows, that the 2933 removals that the ASM detected in 2019 and 2020 constitute only a tiny fraction of all changes that occurred in that period. The dates indicated in the table indicate when the detection of the removal occurred and not when the removal itself occurred. Tests history of every app (available on the website) allows to determine a time window for the removal, using the last date when the app was tested available.

"Disappeared" Apps and Platform Policy Removals

To see the full list of "Disappeared apps" detected by the App Store Monitor, click here: ASM: DISAPPEARED

The ASM also records, in a separate table (called "Disappeared Apps"), apps that are removed from all App Stores operated by Apple. Such global removals could only be interpreted as follows:

- Either the app's owner / developer decided to pull the app from all App Stores or,
- Apple decided to remove the app from all its App Stores, either because of a Platform Policy violation, or for other reasons.

As it emphasizes in its reports, Apple could receive "Platform Policy Violation Takedown Requests" (PPVTR) from governments and their agencies. What Apple does not explain, however, is that such Platform Policy violations requests can also come from private actors and, more importantly, that the vast majority of removals following alleged breaches of Platform Policy are instigated by Apple itself. However, Apple's Transparency Reports do not report worldwide removals when the takedown requests originate from private entities or when these removals are made autonomously by Apple.

In the studied period, the ASM recorded no fewer than 6458 apps that were removed from all 155 regional App Stores (175 in H2 2020, although the ASM does not monitor the 20 App stores added that year). That's the equivalent of 1 million removals if we assume that all apps were originally available in all App Stores.

ASM Data vs. Apple's Transparency Reports

By aggregating the number of regional removals (Detected Changes) with the number of worldwide removals (Disappeared Apps), we can now compare AppleCensorship's data with Apple's own figures in terms of "number of app removals" instead of using the misleading figures for "number of apps removed" that are used in Apple's Transparency Reports.

The following table does not imply that all removals detected by the ASM are arbitrary removals or instances of censorship. However, it highlights the gap that exists between the figures Apple publishes and the figures which, even as just a partial sample, reflect the actual conditions of the App Store. Given the size of the discrepancy between Apple's reports and the ASM's discoveries, it is clear that Apple conceals not only some of its content-curation decisions, but an enormous majority of them. While Apple communicates on just over one thousand apps removed in 2019-2020 - accounting for 30,000 individual removals, the ASM recorded more than thirty times this number: a staggering one million removals in just two years. Given the limits of the ASM's monitoring, we must assume that this figure is itself only a glimpse of the total picture.

The following data from the ASM also reveals that Apple is able to conduct removals en masse, including apparently arbitrary takedowns, without anyone noticing. These removals appear to occur both in the form of simultaneous mass-takedowns, and persistent **categorical bans** requested by governments. These deliberate and involuntary app takedowns remain hidden amongst all the apps removed from the App Store for any reason, including developer choice: a deliberate conflation on Apple's part that makes public scrutiny more difficult.

	APPLE TRA	NSPARENCY R	EPORTS		2019 -2020		SORSHIP'S API DNITOR (ASM)	P STORE
Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self- affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed	App Store	total # apps removed according to AppleCensorship	"Detected Changes" → total # of "Deleted"	Total # of "Disappeared Apps"
191	0	0	0	191	Albania	6481	23	6458
191	0	0	0	191	Algeria	6477	19	6458
191	0	0	0	191	Angola	6484	26	6458
191	0	0	0	191	Anguilla	6476	18	6458
191	0	0	0	191	Antigua & Barbuda	6475	17	6458
191	0	0	0	191	Argentina	6482	24	6458
191	0	0	0	191	Armenia	6480	22	6458
191	0	0	0	191	Australia	6482	24	6458
191	3	0	18	212	Austria	6483	25	6458
191	0	0	0	191	Azerbaijan	6469	11	6458
191	0	0	0	191	Bahamas	6473	15	6458
191	0	0	0	191	Bahrain	6482	24	6458
191	0	0	0	191	Barbados	6473	15	6458
191	0	0	0	191	Belarus	6480	22	6458
191	3	0	0	194	Belgium	6476	18	6458
191	0	0	0	191	Belize	6483	25	6458
191	0	0	0	191	Benin	6475	17	6458
191	0	0	0	191	Bermuda	6470	12	6458
191	0	0	0	191	Bhutan	6470	12	6458
191	0	0	0	191	Bolivia	6476	18	6458

	APPLE TRA	NSPARENCY R	EPORTS		2019 -2020		SORSHIP'S API DNITOR (ASM)	P STORE
Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self- affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed	App Store	total # apps removed according to AppleCensorship	"Detected Changes" → total # of "Deleted"	Total # of "Disappeared Apps"
191	0	0	0	191	Botswana	6469	11	6458
190	0	1	0	191	Brazil	6476	18	6458
191	0	0	0	191	British Virgin Islands	6472	14	6458
191	0	0	0	191	Brunei	6458	0	6458
191	3	0	0	194	Bulgaria	6466	8	6458
191	0	0	0	191	Burkina Faso	6458	0	6458
191	0	0	0	191	Cambodia	6478	20	6458
190	0	1	0	191	Canada	6480	22	6458
191	0	0	0	191	Cape Verde	6458	0	6458
191	0	0	0	191	Cayman Islands	6475	17	6458
191	0	0	0	191	Chad	6475	17	6458
191	0	0	0	191	Chile	6479	21	6458
24	0	167	623	814	China (mainland)	7327	869	6458
191	0	0	0	191	Colombia	6479	21	6458
191	0	0	0	191	Congo - Brazzaville	6458	0	6458
191	0	0	0	191	Costa Rica	6485	27	6458
191	3	0	0	194	Croatia	6473	15	6458
191	3	0	0	194	Cyprus	6459	1	6458
191	3	0	0	194	Czechia	6478	20	6458
191	3	0	0	194	Denmark	6473	15	6458
191	0	0	0	191	Dominica	6474	16	6458
191	0	0	0	191	Dominican Republic	6468	10	6458
191	0	0	0	191	Ecuador	6467	9	6458
191	0	0	0	191	Egypt	6484	26	6458
191	0	0	0	191	El Salvador	6458	0	6458
191	3	0	0	194	Estonia	6458	0	6458
191 191	0	0	0	191 191	Eswatini Fiji	6462 6458	4	6458 6458
191	3	0	0	191	Finland	6470	12	6458
191	3	0	0	194	France	6484	26	6458
191	0	0	0	191	Gambia	6479	21	6458
191	0	0	3	194	Germany	6474	16	6458
191	0	0	0	191	Ghana	6458	0	6458
191	3	0	0	194	Greece	6481	23	6458
191	0	0	0	191	Grenada	6458	0	6458
191	0	0	0	191	Guatemala	6458	0	6458
191	0	0	0	191	Guinea- Bissau	6480	22	6458
191	0	0	0	191	Guyana	6458	0	6458
191	0	0	0	191	Honduras	6471	13	6458
191	0	0	0	191	Hong Kong SAR China	6508	50	6458
191	3	0	0	194	Hungary	6473	15	6458

	APPLE TRA	NSPARENCY R	EPORTS		2019 -2020 APPLECENSORSHIP'S APP STORE MONITOR (ASM)			
Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self- affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed	App Store	total # apps removed according to AppleCensorship	"Detected Changes" → total # of "Deleted"	Total # of "Disappeared Apps"
191	0	0	0	191	Iceland	6477	19	6458
191	0	0	142	333	India	6501	43	6458
191	0	0	0	191	Indonesia	6470	12	6458
191	3	0	0	194	Ireland	6479	21	6458
191	0	0	1	192	Israel	6474	16	6458
191	3	0	0	194	Italy	6475	17	6458
191	0	0	0	191	Jamaica	6458	0	6458
191	0	0	0	191	Japan	6496	38	6458
191	0	0	0	191	Jordan	6458	0	6458
191	0	0	0	191	Kazakhstan	6458	0	6458
191	0	0	0	191	Kenya	6476	18	6458
190	0	1	2	193	Kuwait	6475	17	6458
191	0	0	0	191 191	Kyrgyzstan Laos	6472 6458	14 0	6458 6458
191	3	0	0	191	Laos	6458	0	6458
191	0	0	1	194	Lebanon	6475	17	6458
191	0	0	0	192	Liberia	6458	0	6458
191	3	0	0	194	Lithuania	6480	22	6458
191	3	0	0	194	Luxembourg	6458	0	6458
191	0	0	0	191	Macao SAR	6475	17	6458
	-				China			
191	0	0	0	191	Madagascar	6458	0	6458
191 191	0	0	0	191 191	Malawi Malaysia	6473 6471	15 13	6458 6458
191	0	0	0	191	Mali	6458	0	6458
191	3	0	0	194	Malta	6458	0	6458
191	0	0	0	194	Mauritania	6458	0	6458
191	0	0	0	191	Mauritius	6458	0	6458
191	0	0	0	191	Mexico	6474	16	6458
191	0	0	0	191	Micronesia	6477	19	6458
191	0	0	0	191	Moldova	6458	0	6458
191	0	0	0	191	Mongolia	6458	0	6458
191	0	0	0	191	Montserrat	6458	0	6458
191	0	0	0	191	Mozambique	6458	0	6458
191	0	0	0	191	Namibia	6459	1	6458
191	0	0	0	191	Nepal	6458	0	6458
190	3	1	0	194	Netherlands	6471	13	6458
191	0	0	0	191	New Zealand	6476	18	6458
191	0	0	0	191	Nicaragua	6458	0	6458
191	0	0	0	191	Niger	6458	0	6458
191	0	0	0	191	Nigeria	6458	0	6458
191	0	0	0	191	North Macedonia	6458	0	6458
191	0	0	34	225	Norway	6474	16	6458
191	0	0	0	191	Oman	6474	16	6458

	APPLE TRA	NSPARENCY R	EPORTS	2019 -2020 APPLECENSORSHIP'S APP STORE MONITOR (ASM)				
Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self- affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed	App Store	total # apps removed according to AppleCensorship	"Detected Changes" → total # of "Deleted"	Total # of "Disappeared Apps"
191	0	0	3	194	Pakistan	6470	12	6458
191	0	0	0	191	Palau	6458	0	6458
191	0	0	0	191	Panama	6458	0	6458
191	0	0	0	191	Papua New Guinea	6458	0	6458
191	0	0	0	191	Paraguay	6458	0	6458
191	0	0	0	191	Peru	6458	0	6458
191	0	0	0	191	Philippines	6479	21	6458
191	3	0	0	194	Poland	6458	0	6458
191	3	0	1	195	Portugal	6482	24	6458
191	0	0	0	191	Qatar	6482	24	6458
191	3	0	0	194	Romania	6481	23	6458
172	0	19	21	212	Russia	6491	33	6458
191	0	0	0	191	São Tomé & Príncipe	6461	3	6458
190	0	1	0	191	Saudi Arabia	6479	21	6458
191	0	0	0	191	Senegal	6482	24	6458
191	0	0	0	191	Seychelles	6469	11	6458
191	0	0	0	191	Sierra Leone	6458	0	6458
191	0	0	0	191	Singapore	6475	17	6458
191	3	0	0	194	Slovakia	6477	19	6458
191	3	0	0	194	Slovenia	6476	18	6458
191	0	0	0	191	Solomon Islands	6458	0	6458
191	0	0	0	191	South Africa	6475	17	6458
191	0	0	0	191	South Korea	6490	32	6458
191	3	0	0	194	Spain	6473	15	6458
191	0	0	1	192	Sri Lanka	6458	0	6458
191	0	0	0	191	St. Kitts & Nevis	6462	4	6458
191	0	0	0	191	St. Lucia	6458	0	6458
191	0	0	0	191	St. Vincent & Grenadines	6458	0	6458
191	0	0	0	191	Suriname	6458	0	6458
191	3	0	0	194	Sweden	6479	21	6458
191	0	0	8	199	Switzerland	6472	14	6458
191	0	0	1	192	Taiwan	6492	34	6458
191	0	0	0	191	Tajikistan	6458	0	6458
191	0	0	0	191	Tanzania	6458	0	6458
191	0	0	0	191	Thailand Trinidad &	6476	18	6458
191	0	0	0	191	Tobago	6458	0	6458
191	0	0	0	191	Tunisia	6465	7	6458
191	0	0	2	193	Turkey	6483	25	6458
191	0	0	0	191	Turkmenistan	6473	15	6458
191	0	0	0	191	Turks & Caicos Islands	6458	0	6458
191	0	0	0	191	Uganda	6461	3	6458

	APPLE TRANSPARENCY REPORTS						SORSHIP'S API DNITOR (ASM)	P STORE
Total # of apps removed due to removals initiated by others COLLATERAL (PLATFORM POLICY VIOLATIONS)	Total # of apps removed due to removals initiated by others COLLATERAL (LEGAL VIOLATIONS)	Total # of apps removed due to self- affecting removals (PLATFORM VIOLATIONS)	Total # of apps removed due to self- affecting removals (LEGAL VIOLATIONS)	Total # of apps removed	App Store	total # apps removed according to AppleCensorship	"Detected Changes" → total # of "Deleted"	Total # of "Disappeared Apps"
191	0	0	0	191	Ukraine	6474	16	6458
191	0	0	6	197	United Arab Emirates	6475	17	6458
191	1	0	0	192	United Kingdom	6481	23	6458
191	0	0	0	191	United States	6633	175	6458
191	0	0	0	191	Uruguay	6477	19	6458
191	0	0	0	191	Uzbekistan	6458	0	6458
191	0	0	0	191	Venezuela	6481	23	6458
191	0	0	2	193	Vietnam	6480	22	6458
191	0	0	0	191	Yemen	6475	17	6458
191	0	0	0	191	Zimbabwe	6460	2	6458
29414	79	191	869	30553		1,003,923	2933	1,000,990

Categorical Bans

One of the main obstacles to producing a complete picture of Apple's policing of the App Store from the data in Apple's 'transparency' reports is the omission of figures for apps removed regionally due to blanket restrictions requested by governments. Patterns of removals detected by the ASM in countries which appear minimally, or not at all, in Table 13 of the Transparency Reports (for example, the large number of removals in the Hong Kong App Store, which never appears in the Transparency Reports) suggest such system of Apple-enforced bans.

While Apple reports disclose government requests relating to one or more specific apps, they do not disclose the number of apps removed due to governments requesting that Apple reject or take down all apps of a particular kind or category. In fact, this type of removal is barely acknowledged by Apple.

One of the very few occasions where the company has acknowledged that it removes apps regionally without a government request being made was in a response, penned by Apple's former Vice President for Public Policy, Cynthia Hogan, to a request for information from US Senators Ted Cruz and Patrick Leahy. <u>The letter</u> focuses exclusively on VPN apps, and while it quotes Tim Cook insisting that Apple disagrees with China's stance on VPNs, the letter goes on to obliquely admit that Apple proactively polices China's App Store to remove VPN apps without the Chinese government needing to formally request these removals.

These proactive removals are worrying not only because they demonstrate Apple's compliance above and beyond its legal obligations, but also because the laws which underpin these removals are often merely facades for outright censorship. Laws concerning pornography have, for instance, been shown to often be applied discriminately, as a tool for implementing homophobic and repressive policies <u>targeting LGBT dating</u> and information apps. Thus, while Apple implies that it rarely acts upon foreign governmental requests which run contrary to Apple's professed values, the fact is that all the requests which appear in the transparency reports are - definitionally - requests which go further than Apple's own judgements for the App Store at large.

In reality, Apple's region-specific policing of the App Store is frequently proactive and extralegal - prioritizing government interests and requests over the laws Apple is in fact obligated to act within and the interests of iOS-device users. Apple makes many regional app removals which are - directly or indirectly - on behalf of governments and yet do not appear in its so-called transparency reports. As AppleCensorship has previously <u>identified</u>, Apple is complicit in systematic, politically motivated censorship of the App Store in countries with damning human rights records. Further, Apple actively attempts to hide this complicity, and in doing so also covers up the mechanisms by which repressive states censor digital content on a vast scale.

It is likely that the huge number of takedowns recorded by the ASM is a further indication of a system of blanket requests: demands from governments for Apple to do the work of state censors and identify all apps of a certain kind without needing to be notified in each case by the government in question. Apple does not publicly acknowledge this system - which one ex-Apple employee called 'categorical bans' - or disclose any of the categories of apps which it monitors and removes in particular App Stores. In the absence of such information, it is also impossible to verify whether these 'categorical bans' are based upon local laws, or whether they in fact are wholly at the discretion of governments. Categorical bans - which are also referenced in the <u>New York Times investigation</u> published in May 2021- allow Apple to circumvent the spirit of their own commitment to transparency, by omitting figures for large numbers of government-mandated app removals from the biannual transparency reports.

Apple's failure to disclose any data relating to these removals, or the very existence of this internal procedure for categorical regional app removals, renders the content of its transparency reports actively misleading as it presents only one part of Apple's government-mandated App Store takedowns.

The existence of an internal list of categories of content, specific app creators, and technologies prohibited in App Stores around the world also points to Apple's desire to ease, rather than resist, digital censorship and repression.

Rather than requiring governments to make a direct request each time they discover an app which they feel should be banned, Apple has constructed a system to speed up the process of regional takedowns and reduce the thoroughness of the vetting process for requests. If the story told by the figures Apple does release is damning (Apple removed all 502 apps which governments requested be made unavailable in 2020), the full story, including all the apps removed as a result of regional categorical bans, is much worse.

Looking for Categorical Bans

Although Apple strictly limits the information it discloses about removals from regional App Stores, and never willingly releases data on the specific apps involved in these takedowns, it is possible to interrogate the gaps between Apple's disclosures and the frequent disappearance of apps from certain countries' App Stores. The App Store Monitor facilitates the collation of data on a sample of regional removals from within the timespan covered by Apple's LVTR reports. Analysis of this data, with particular attention to countries with high incidences of digital censorship, and kinds of apps likely to be politically significant, allows us to question the honesty of Apple's self-avowed transparency, and to highlight the extent of removals from the App Store which are never accounted for by Apple.

Despite the App Store Monitor containing entries for only a fraction of the almost two million apps on the App Store, it detected 2,931 removals in the period January 2019 - December 2020. Apple's transparency reports declared just 1437 government requested removals in the same period. Apple's complete opacity with respect to app removals not covered by its transparency reports makes it difficult to distinguish between voluntary and involuntary removals amongst the cases identified by the App Store Monitor. Certain patterns, however, draw attention to the takedowns that are likely to represent instances of censorship. Given the already scant information Apple provides with respect to removals from the App Store, the accumulation of categorical bans promises to further obscure collusion between Apple and governments to restrict users' access to digital content.

Evidence of Category Bans

The ASM found 47 removals of 29 different VPN and private browser apps during the studied period:

#	VPN related app	App Store where app was removed from (2019 – 2020)	Current unavailability	Link
1	@nifty VPN wifi	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1339514450
2	Atom - secure browser	Russia	Russia, China (mainland)	https://applecensorship. com/app-store-monitor/ app/1116666629
3	Avast Secureline VPN + Proxy	Russia	China (mainland), Russia	https://applecensorship. com/app-store-monitor/ app/793096595
4	Brave VPN Private Web Browser	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1052879175
5	Cake Web Browser	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1163553130
6	Cốc Cốc Browser	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1170593919
7	Daily VPN - Secure VPN Proxy	Hong Kong SAR (China), Taiwan,	China (mainlaind), Hong Kong SAR (China), Macao SAR (China), Taiwan	https://applecensorship. com/app-store-monitor/ app/1421658630
8	Free VPN by Free VPN .org™	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1050171910
9	HotspotShield VPN & Wifi Proxy	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/443369807
10	Ladder VPN·Fast VPN	China (mainland)	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1434933017
11	LionVPN-fast secure social vpn	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1483918382
12	My VPN - Compare VPN	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1455210693
13	Norton Secure VPN - Proxy VPN	Russia, Turkey	Unavailable in 42 App Stores (available in Turkey)	https://applecensorship. com/app-store-monitor/ app/1095519285
14	OneClick VPN·Super VPN Ranking	China (mainland)	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1475210157
15	Opera Browser: Fast & Private	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1411869974
16	QuickRun VPN - 加速VPN, 安全穩定	Sweden, U.S.	Unavailable in 99 App Stores (available in U.S)	https://applecensorship. com/app-store-monitor/ app/1408521135
17	Super VPN -Unlimited VPN Proxy	Hong Kong SAR (China)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1316837659
18	TOR Browser Private Web	U.S.	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1444388609
19	UFO VPN - Super VPN Proxy	Hong Kong SAR (China), Macao SAR (China),	China (mainlaind), Hong Kong SAR (China), Macao SAR (China)	https://applecensorship. com/app-store-monitor/ app/1436251125
20	VPN - A MangoVPN	Egypt, Guinea-Bissau, Hong Kong SAR (China), Japan, Malawi, Malaysia, Singapore, South Korea, Taiwan, Thailand, U.S,	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1322234287
21	VPN - GAIA ExpressVPN Master	Japan, Mexico, Singapore, South Korea, U.S,	Unavailable in 40 App Stores	https://applecensorship. com/app-store-monitor/ app/1362645427

#	VPN related app	App Store where app was removed from (2019 – 2020)	Current unavailability	Link
22	VPN - Unlimited Privacy & Security Proxy	U.S.	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1234077393
23	VPN 24: Hotspot VPN for iPhone	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1171369916
24	VPN Fire: Best Unlimited Proxy	China (mainland)	China (mainland)	https://applecensorship. com/app-store-monitor/ app/1439192364
25	VPN Proxy Master - Unlimited	Hong Kong SAR (China)	China (mainland) (available in Hong Kong)	https://applecensorship. com/app-store-monitor/ app/1025707485
26	VPN Ranking:Super vpn List	China (mainland)	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1472346950
27	VPN: Simple Secure Proxy	Russia	Belarus, Russia, China	https://applecensorship. com/app-store-monitor/ app/1440130022
28	Yoga VPN	Singapore	Singapore, China (mainland), Hong Kong SAR (China), Macao SAR (China)	https://applecensorship. com/app-store-monitor/ app/1249219174
29	yoloVPN - Best VPN Unlimited	U.S.	Removed from all App Stores ("Disappeared")	https://applecensorship. com/app-store-monitor/ app/1371148447

See the list of VPNs and private browsers removed regionally: DC: VPN & Browsers

These 47 removals make it abundantly clear that, at the very least, Apple buried mandatory removals of VPNs from China's App Store in its figures, which it describes as "apps with illegal content". Apple also possibly concealed their systematic removal from many other App Stores (including Macao, Hong Kong, Russia, and Oman) as forthcoming research from AppleCensorship will demonstrate.

However, given Apple's track record of proactively removing apps in China without declaring these removals in its LVTR reports (see above case of mass-takedown from December 2020), it is likely that Apple does not include all its VPN removals in its Transparency Report figures, as it removes VPNs apps from China's App Store without requiring a specific and formal request from the Cyber Administration of China for each VPN that they want to be removed.

Such tacit agreements, whereby Apple removes all VPNs which have not registered with the authorities, are not documented or acknowledged anywhere by Apple. This makes it possible for Apple to enforce removal of a hypothetically unlimited number of apps without having to disclose any information to the public.

It would not be hard to imagine that the extent of removals is so vast that Apple could hardly keep track of all apps that must be removed due to legal obligations imposed by the numerous national legal frameworks of countries where it operates. However, Apple's letter to U.S. Senators Cruz and Leahy in November 2017 suggests otherwise. In answering the Senators demand on the number of apps that had been removed from its China App Store, Apple provided the very accurate number of 674 VPN apps, removed at the request of the Chinese government. This indicates that Apple in fact keeps precise records of the apps and the number of apps that are removed from its App Stores, but chooses not to release this information to the public when it falls outside the scope of the LVTR and PPVTR reports.

This pattern of covert censorship is not limited to VPNs, a similar picture emerges when we examine other high-risk "categories" of apps.

AppleCensorship compiled lists of apps taken from the Detected Changes list (<u>ASM: DETECTED CHANGES</u>), regrouped in the following categories: "VPNs & browsers", "LGBTQ+" related apps, "Security & Privacy" apps, "News" apps, "Religion" related apps and "Other" apps which could include sensitive content or functions deemed controversial or illegal by national authorities or by Apple itself.

Apps category	# Detected Changes (DC)	# Unique apps concerned	# Unique App Stores concerned	Link to the list
VPNs + browsers	47	29	17	DC: VPN & Browsers
LGBTQ+	28	12	22	DC: LGBTQ+
Security & Privacy	11	8	6	DC: Security & Privacy
News	102	35	55	DC: News
Religion	26	24	4	DC: Religion
Other	13	11	5	DC:Other
Total	229	119	70	

Further, hundreds of apps in these high-risk categories have disappeared completely (<u>ASM: DISAPPEARED</u>) from the App Store Monitor:

Apps category	# Disappeared apps (DIS)	# Resulting removals	# Unique App Stores concerned	Link to the list
VPNs + browsers	203	31465	155	DIS: VPN & Browsers
LGBTQ+	37	5735	155	DIS: LGBTQ+
Security & Privacy	44	6820	155	DIS: Security & Privacy
News	142	22010	155	DIS: News
Religion	77	11935	155	DIS: Religion
Other	122	18910	155	DIS: Other
Total	625	96875	155	

Combing the two lists of removed apps compiled by the ASM, we found a total of at least 744 apps removals that demand an explanation from Apple, since the content or function of the apps, the App Store's region which they were deleted from, their intended audience, or the timing of their removal provide plausible indications of State censorship.

Only through online investigation, and with luck, can the cause of removal of some of these apps be identified (i.e Gayvox was removed in 2020 due to its <u>publisher's financial situation</u>). However, since such information - when it does exist - is not made available by Apple, and because the vast majority of these removals remain unexplained, users are often left with uncertainty surrounding the cause of removal (whether decided by the app's publisher, by Apple, or by local authorities), its nature (whether temporary or permanent) and even the risks posed by continuing using the app if already installed on the user's device.

VPNs and Private Browsers: Since four VPN apps from the Detected Changes list were also found to have been later "disappeared" from all App Stores, a total of 228 VPN apps (203+(29-4)) have been removed from at least one App Store. The worldwide removal of 203 VPNs and web browsers with private navigation features also deserves some clarification from Apple, since we have established that China, known for its anti VPN stance, triggered 167 out of 191 worldwide removals reported by Apple in its reports. The possibility that some of these removals result from Chinese authorities' requests is particularly concerning, since these removals affect users around the world, and are shielded from the public by Apple's opacity. Out of the 47 removals of VPN and private browsers apps detected by the ASM, 14 occurred in China, 20 if we include Hong Kong and Macao.

LGBTQ+ related apps: Excluding Gayvox, which ceased its operations in 2020, 11 removals were recorded, notably in China (6 removals) or in countries known to crimnalize, or discriminate against, homosexuality (such as Pakistan and South Korea). Even more worrying is the total of 37 apps that were removed from all App Stores, mostly in 2020. From radio and information apps, to festivals, events and (safe) travel apps, as well as several social networking apps. LGBTQ+ related apps have continually disappeared over the last few years, leading to a widespread restriction of access to such apps worldwide, as detailed by <u>AppleCensorship and FFTF joint report</u> on censorship of LGBTQ+ apps published in June 2021.

Security & Privacy apps: Once again, China is the App Store which records a majority of the removals (8 out of 11) of digital security and privacy related apps. Meanwhile, 44 such apps were subjected to worldwide takedown in 2019 and 2020. Encryption and secure messaging apps are particularly represented in this category. Although China and Russia remain the countries with some of the most draconian regulations on encrypted communication, these removals could result from almost any government's request, given the existence of restrictions on encryption in almost all countries.

News apps: As four detected removals concerned apps which were later removed from all App Stores, a total of 173 (142 disappeared apps + (35 - 4 apps taken down regionally)) News and information related apps have been detected as removed from one or several App Stores. News apps constitute the second most frequently removed category after VPN and browser apps, but is first in terms of regional app removals. The highest number of regional removals occur in China's App Store (26 removals out of 102). The fact that many news apps curate third party content makes it even harder to assess the potential cause of removal, since governments may be targeting specific content within the apps without declaring this to developers or the general public.

Religion related apps: Out of 26 removals detected by the ASM in 2019 and 2020, 22 occurred in China. Two thirds of these removals were related to Christianity and the Bible, the rest being related to Muslim apps (except for one case regarding a buddhist app). Eleven apps out of the 77 affected by worldwide removals were Quran apps, while 17 Bible-related apps were taken down from all App Stores. China has <u>deleted</u> a <u>number of Quran and Bible apps</u> as well as other Muslim and Christian apps in a period <u>marked by</u> <u>the repression on Uyghurs in the Xinjiang</u> province of China. Apps related to other religious groups such as Jeovah's witnesses or Baha'i groups also populate both lists of regional and worldwide removals.

Other apps: AppleCensorship identified 133 "other" apps with a high likelihood of having been censored by authorities due to their content, functions, or due to the politically repressive environment of the countries where the apps have been removed. The majority of these removals are worldwide takedowns (122 out of 133 apps). Apple's complete opacity on these removals (and, most probably, thousands of others) makes it impossible to determine if these removals were voluntarily effected by the apps' respective owners/ publishers, and to determine which local or national government might otherwise have caused these removals. China remains a particular cause for concern, as a significant portion of these apps were related to Taiwan, Tibet, and Hong Kong. Other groups of potentially sensitive apps include Human Rights related apps, apps concerning Politics and Elections, Legal/Court related apps, as well as apps relating to Russia, Saudi Arabia, and Turkey.



Risks to Human Rights & Society

A fundamental area of concern for human rights watchdogs is state censorship and restrictions of news, personal privacy, religious practices, and sexuality. If Apple was making any effort whatsoever to uphold its professed values to protect human rights, one would think there would be no evidence of foul play in the most high-risk and sensitive categories. Instead, we not only see data that raises numerous questions and concerns, but we also see indications that Apple is actively complicit with repressive regimes and hiding their censorship.

For example, in the case of the unavailability of LGBTQ+ apps in the vast majority of the App Stores, we see two serious limitations of Apple's transparency reports. First, a huge number of these important and deeply worrying removals simply are not accounted for in the figures that Apple provides. Saudi Arabia appears just once in the transparency reports for Legal Violation, in H2 2018, and once in the H2 2020 report, despite figuring prominently in <u>AppleCensorship's findings on LGBTQ+ app removals</u>. Secondly, the dishonest and euphemistic language of the reports' 'Matters of Note' section hides the reality of such removals for the sake of Apple's image, by failing to disclose the real reasons for such removals (in the limited cases where Apple does disclose the removals).

Another example, November 2021, Apple <u>removed</u> the "Smart Voting" app developed by the team associated with Russian political opposition leader Alexei Navalny. The app, which informed its users about candidates for the Parliamentary elections and their political affiliation, was removed just as polls opened. Apple went further by contacting private messaging app Telegram to request the removal of content (i.e. a chat bot) related to Navalny's campaign. Telegram published a statement condemning the move but stating it had to comply with Apple in order to avoid being removed from the App Store.

In contrast, Apple was <u>fined</u> \$466,912 (USD) in 2019 by the United States government for violating Foreign Narcotics Kingpin Sanctions Regulations. Apple had approved and then published an application in its App Store for several years, which was developed by a Slovenian software company designated on a sanctions list ("SDN") and also a "significant foreign narcotics trafficker." Apple collected over a million dollars in profit from customer use of the apps. The U.S. Treasury wrote in its decision against Apple that Apple showed "reckless disregard" for legal requirements.

Another counterexample is Apple's hosting of iOS apps run by a <u>China Paramilitary Group</u> (the Xinjiang Production and Construction Corps, "XPCC"). The U.S. Treasury sanctioned the XPCC in 2020 over its *"connection to serious human rights abuses against ethnic minorities in Xinjiang, which reportedly include mass arbitrary detention and severe physical abuse, among other serious abuses targeting Uyghurs."* U.S. Senators <u>described</u> Apple's involvement as *"beyond troubling" and "deeply concerning."* U.S. lawmakers also noted Apple's denial of any knowledge of wrongdoing as *"tainted."* One US Representative even <u>accused</u> Apple of crimes against humanity due to Apple's complicity.

It appears Apple's approach is to be proactive with state censorship and to show "deeply concerning" "reckless disregard" for actual legal requirements related to its App Store. It is unknown how severe or broad the issues of state censorship via the Apple App Store are, or the level of Apple's complicity, simply because Apple chooses to refuse to disclose the very information needed to make that assessment. Further, Apple protests any inquiries to obtain transparency - fighting shareholder proposals and shutting down government inquiries.

Regardless of what Apple says its values are, reviewing Apple's actions (and lack of action) around App Store censorship paints a very concerning picture of an enormous corporation shutting down transparency requests and partnering with oppressive regimes, all the while holding themselves out as some sort of blameless middle-man who just happens to be in the same room as oppressive governments. In reality, Apple not only built that room - they built it as a walled-garden fortress where only they make the rules, adjudicate claims, negotiate resolutions, and implement enforcement – all with almost zero transparency or public oversight.

The App Store data gathered and analyzed by AppleCensorship, journalists, and other watchdogs raises an enormous amount of critical questions which demand answers. Yet, to begin to investigate and pursue answers requires transparency and disclosures from Apple - something Apple voluntarily chooses not to do.

CONCLUSION

Apple prides itself on being pro-consumer and pro-freedom. A growing part of the image Apple presents to the world is its purported resistance to government demands which undermine the privacy and freedom of Apple users. Apple tries to present this picture of itself as an ethical company through numerous channels, including its biannual 'Transparency Reports'. In reality, however, Apple's transparency reports are anything but transparent. Not only is the information that Apple discloses in relation to the government requests it acknowledges vague and frequently euphemistic, it is also strikingly incomplete - as data collected by AppleCensorship shows.

While claiming to willingly disclose important and useful data to the public, Apple ensures that its practices with respect to the App Store and removals from it remain effectively inscrutable to those outside the company. When compared to companies that handle similar responsibilities and requests regarding the moderation of third-party content on their platforms (most notably Google and Twitter), Apple stands out in its reluctance to share information about the circumstances in which it removes content from the App Store. Both the rhetoric and figures of Apple's transparency reports are deliberately misleading. Apple's brief explanations of its removals strike a tone which conflates regional removals and platform wide ones, thereby making it seem as if app takedowns which - in fact - necessarily diverge from the values Apple has enshrined in its guidelines are actually in accordance with these values. This rhetorical gesture, which serves to conceal and whitewash repressive action by national governments, appears even in cases where Apple has rejected the relevant request.

Use of the ASM further reveals enormous discrepancies between Apple's disclosures concerning removals and the volume of content which is removed from the App Store. Most pressingly, Apple's Transparency Reports refer to less than 3% of the platform-wide takedowns detected by the ASM. Even putting aside the straightforward lies told in Apple's Platform Policy Violation Reports, the vast discrepancy between the removals covered by these reports and the total extent of worldwide takedowns reveals Apple's exploitation of 'Transparency' to conceal the realities of its behavior, both autonomous and government-led.

Apple's current 'transparency' functions only as an exercise in public relations and marketing. The Transparency Reports disclose only fragments of the full picture of Apple's policing of the App Store, and an alarmingly misleading picture of the company's interactions with - and actions on behalf of - governments. Apple avoids all mentions of its proactive removals, especially those which occur on behalf of governments (most notably China's) that Apple claims to disagree with on matters of digital freedom.



RECOMMENDATIONS

If Apple is to do more than pay lip service to the ideal of transparency, the company must provide outsiders with a fuller picture of how it manages digital content across its regional App Stores. After all, if transparency is about removing obstacles to understanding the inner workings of companies and institutions, Apple's careful curation of the information it releases to the public is directly opposed to transparency.

By presenting select fragments from the world of App Store moderation as transparency, Apple is more misleading than if it simply declined to release details of government requests and takedowns. Even when supplemented with a host of news stories, employee leaks, and data obtained from the App Store Monitor, the information released by Apple leaves us with a woefully incomplete picture. With only glimpses of Apple's real activities with respect to content curation and censorship, it is impossible to hold the company fully to account for its actions.

How Apple Should Act If It Wants To Take Transparency Seriously

For the Transparency Reports to establish meaningful transparency or accountability for Apple and its interactions with governments, information currently missing from the reports, should be integrated into future publications:

The following information and data should be added to "Table 13: Worldwide Government App Store Takedown Requests - Legal Violations":

- 1 Details of the apps removed: the names of specific apps, their App Store categories, the developers who made the apps.
- 2 Indication of the laws the apps allegedly broke.

Given that the entire section of its website hosting the transparency reports is already entitled 'legal violation', it is striking that it offers no further confirmation of the fact that the apps removed in fact contained illegal content. As it stands, we are asked to take Apple - or perhaps even the government agency which originally made the takedown request - at its word. This is precisely opposite in spirit to the ideal of transparency.

- 3 A breakdown of the requests listed: how many apps were included in each request, what law or type of content each request concerned, what rules and procedures regulate the making of these requests.
- 4 A timeline of the requests being filed, the length of their consideration, or the point at which the apps specified were removed from the country's App Store.
- 5 Apple must explain how the structure of these requests works; whether all apps specified in a single takedown request must contain similar content, or break the same law.
- 6 The number of Stores in which an app was released into before being taken down.

This is crucial information as locally released apps (i.e. released in a single App Store) targeted by Legal violation Takedown Requests are de facto disappearing from the App Store, in a similar way to apps removed following Platform Policy Takedown Requests



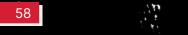
The following information and data should be added to "Table 14: Worldwide Government App Store Takedown Requests - Platform Policy Violations":

- Apple should disclose details of the apps removed and which guideline(s) they broke.
- Apple should indicate whether the offending content was the result of a change or update to the app, or whether the app had always been in breach of the App Store Guidelines, without being noticed.
- Apple should clarify whether the apps removed broke one of the App Store's content-specific guidelines, or whether they broke the App Store Guidelines insofar as they facilitated (or participated in) locally illegal activity.

This is of particular importance as Apple's App Store Guidelines prohibit a number of illegal activities, which allow Apple to classify some removals as platform violations when they are in fact removed for legal violations. Apple can therefore decide to delete an app entirely even if it broke the law in a specific country.

Other missing key information Apple should disclose includes:

- Data on the rejection and removal decisions it makes autonomously.
- Data on the rejection and removal decisions it makes after requests from third parties other than government agencies or official bodies with legal powers.
- Data on removals it makes according to categorical requests for governments, which do not specify apps but do function as blanket legal violation requests.
- A list of all apps which remain on the App Store but are blocked by governments (like Facebook, Twitter or Clubhouse in China). Apple should further inform users of such block directly on the apps' page within the App Store.



General Recommendations:

• Apple should report the details of the apps it removes of its own accord, whether these removals are due to guideline violations, proactive takedowns of apps which break local laws, or government-requested category bans.

Where these removals are a result, directly (as in the case of HKmap.live's removal) or indirectly (as in the case of Apple's mass removal of unlicensed apps in China) of national governments' requests, Apple should report them as such.

 Apple should publish data concerning government-requested and autonomous app removals much more quickly. Given the simplicity of the data currently provided in Apple's transparency reports, there is no excuse for the year-long gap between the beginning of a reported period and the publication of the transparency report for it.

If the reason for this delay is the time taken to compile other parts of each transparency report, Apple should publish app removal figures separately, using the pages of their website which already display these numbers separately from the main Transparency Report documents.

• Apple should model its Transparency Reports on the efforts of Twitter and Google to provide as much - rather than as little - useful information as possible.

This would include the addition of many of the details listed above, as well as a broader effort to use the Transparency Reports to resist - rather than enable and conceal - censorship and repressive governance. Apple should, for instance, highlight app removals that are politically sensitive in a manner analogous to Twitter's emphasis on requests for the removal of journalists' accounts.

- Apple should rewrite its guidelines to be fit for the important role they play in the availability of digital content worldwide. This is particularly pressing if Apple continues to allow governments to use the App Store Guidelines to request the removal of apps from all 175 App Stores.
- Apple should take the necessary steps to enable public access to the 20 App Stores which were added in 2020, thus allowing monitoring of apps' availability in those App Stores.

Apple Censorship

GreatFire's AppleCensorship project <u>AppleCensorship.com</u> <u>contact@applecensorship.com</u> (ProtonMail)



No. of Concession, Name of Street, or other

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