internetzo (*

MILITARY-GRADE

CYBER PROTECTION

WeChat Analysis

Authors David Robinson Robert Potter Thomas Perkins Luke McWilliams



Table of Contents

Executive Summary	2
' Introduction	
Part 1 – Technical Analysis of WeChat	
Part 2 – Chinese Propaganda Department Contracts	
Survey	17



Executive Summary

This report is a technical analysis of the source code of WeChat versions 8.0.15s as well as an analysis of publicly available Chinese government procurement documents. It has been prepared by Internet 2.0 for policy makers and legislators to make evidence-based decisions. WeChat is significant because it is a digital communications gateway to China as it has a monopoly on digital communication in Mandarin. Nearly all citizens of the Peoples Republic of China (PRC) use WeChat in their daily lives to communicate by private message, to make payments for services, and as an application to connect through social media. WeChat has an estimated monthly user base of more than 1 billion people.¹ While most 'Weixin' (the domestic version of WeChat in China) users reside in China, WeChat also has an active user base globally including Australia (0.6 million users)², the UK (1.3 million users)³ and the United States (1.5 million users)⁴.

This report has been broken into two primary parts. Part One is a technical analysis of WeChat and Part Two is an analysis of WeChat procurement contracts with Chinese Communist Party (CCP) propaganda departments. We have based our analysis primarily on WeChat's written submission on 30 September 2020 to the Australian Parliamentary Select Committee on Foreign Interference through Social Media (the Select Committee). The context of this report is in the statements made by WeChat to this Select Committee as well as the deteriorated legal autonomy of Hong Kong over the past two years. This erosion of legal autonomy is important because WeChat has structured its operational architecture, terms of service and company structure on the consensus that Hong Kong is a more compatible legal jurisdiction to the international community. In our opinion the creation and enforcement of the Hong Kong National Security Legislation has changed the nature of this compatibility and we expect the international community will be asking more questions of WeChat's handling of their citizens' data.

Our summary findings in Part One are:

Tencent Holdings (owners of WeChat) refers to WeChat and Weixin as sister applications. In our opinion the technical architecture is more like Weixin as the parent and WeChat as the child. This is based on URL⁵ architecture and management as well as probable focus due to the higher Weixin user count. Further, Weixin has all available functions and the app is governed by the CCP whereas WeChat has limited functionality and has to manage the myriad of international jurisdictions, while allowing communication with Weixin users in mainland China.

¹ https://www.cnbc.com/2019/02/04/what-is-wechat-china-biggest-messaging-app.html

² https://www.zdnet.com/article/wechat-sets-the-record-straight-for-its-690000-aussie-users/

³ https://financesonline.com/wechat-statistics/

⁴ https://99firms.com/blog/wechat-statistics/#gref

⁵ URL is short for Uniform Resource Locator is the address of a given unique resource on the Web.



- WeChat states that all its servers are kept outside of mainland China. This is critical because our analysis uncovered that while all chat and audio/video calls are probably managed by servers internationally, all user data that WeChat logs and posts to its logging server about its users goes directly to Hong Kong. We argue it is reasonable to consider that under the Hong Kong National Security Legislation there is little difference between Hong Kong resident servers and those on mainland China.
- We ascertained that WeChat users can interact directly with servers on mainland China and we consider that it is becoming quite difficult to manage the competing jurisdictional priorities of a software platform that connects mainland China under the CCP and international data privacy laws such as General Data Protection Regulation in the European Union and the California Consumer Privacy Act in California.
- During our analysis we found no evidence that contradicts the claim that chats are not stored outside of the user's device. There is no logging attempt on chats we could find. The only security flag we saw was that WeChat has the potential to access all the data in the user's clipboard (see Figure 6). This is a risk to flag as users that have a password manager rely on the clipboard to copy and paste their passwords.
- WeChat Pay has functionality in multiple global currencies but it is tied to the US Dollar as the default base currency and posts all its user logs to a Hong Kong server.

Our summary findings in Part Two are:

- WeChat's submission to the Select Committee on combating disinformation states it prohibits accounts that spread content that breaches any applicable laws or regulations, or content which may constitute a genuine risk of harm or direct threat to public safety. WeChat also prohibits paid promotional content regarding:
 - a candidate for an election;
 - a political party or any elected or appointed government official appealing for votes for an election;
 - o appeals for financial support for political purposes; and
 - a law, regulation or judicial outcome.

In our opinion these policies were contradictory to democratic free speech and must be difficult to implement. We see the structural pressure the CCP has over WeChat by barring democratic speech.

internet2.0

 ⁶ SSL is short for Secure Socket Layer, and an SSL certificate will give you a way of encrypting information while it travels online.
 ⁷ AES (Advanced Encryption Standard) is one of the most used algorithms for block encryption. ECB (Electronic Code Book) mode is one of five modes of AES.



- We also found these policies do not align with WeChat's own practices on mainland China. This means that democratic advertising is banned but authoritarian speech is not. This gives the application an explicit authoritarian bias. We found 10 contracts between 2016 and 2019 from Chinese Communist Party Propaganda Departments to conduct influence or propaganda actions over Tencent platforms on behalf of CCP governing departments. The sum of these contracts is 2,327,000 Yuan (see Figure 9). These contracts were awarded to subsidiaries in China owned by either Tencent Holdings or companies which Ma Huateng (马 化腾), Chairman and CEO of Tencent, has a controlling stake in.
- We consider that these policies favour the CCP to the disadvantage of all other democratic governments and in nature are contradictory to their written testimony to the Select Committee. This policy bias privileges authoritarian voices and renders democratic speech as second class and prohibited. To see Tencent defend this as a feature in their submission was noteworthy.
- Internet 2.0 conducted an industry survey in response to our initial reaction to these findings. The question was asked with no context nor mention of WeChat. Respondents could infer any platform or data was behind this question. The question was "Should the data of electoral/political communications be housed within the sovereignty of the country conducting its own electoral process?". Out of the respondents 97 per cent agreed with the above statement with an affirmative yes. All respondents did so under their own name.

Introduction

WeChat is the dominant digital platform for communications in Mandarin and digital gateway to China. Nearly all PRC citizens, and Mandarin speakers wishing to connect digitally with China, use WeChat in their daily lives to communicate by private message, to make payments for services and as an application to connect through social media. WeChat is the dominant communication platform for communicating in Mandarin. This was best described by Li Yuan writing for the New York Times:

"There's no company in the world like Tencent. It's a true monopoly on many levels. It wields the kind of influence in China that Facebook, Amazon, Apple and Google can only aspire to." ⁸

Because of this monopoly most Chinese based globally also use it as a preferred social media and communication platform. Anyone wishing to communicate using Mandarin on social media, but are overseas, are shaped into using WeChat through this monopoly. This is true even if both audiences are based outside of mainland China.

We have analysed the application for several reasons, firstly with the explosion in dis- and misinformation social media applications themselves play a large role in policing and supporting what our society holds in consensus to be true. As the dominant Mandarin messaging and social media platform globally, WeChat is governed predominantly under the CCP. This is through their Hong Kong stock market listing as well as the fact that most of their users are geographically based

⁸ https://www.nytimes.com/2021/06/02/technology/china-tencent-monopoly.html

in mainland China. We consider that WeChat is under structural pressure to support the CCP's rule of law. We believe this structural market pressure may come at a disadvantage to all other governments' rule of law.

Secondly, in our opinion, WeChat has structured its international operations and terms of services in the context of Hong Kong's legal autonomy as a more compatible legal jurisdiction for international governments. Hong Kong's legal autonomy has been eroded over the last two years by the creation and enforcement of Hong Kong's National Security Legislation. In our opinion, we now struggle to see any difference between the legal rights of user's data on servers based in Hong Kong over mainland China. Given Hong Kong's changing legal compatibility, international policy makers and legislators will be asking more questions of WeChat's handling of their citizens' data.

It is immediately noticeable in WeChat's submission to the Select Committee that it is operating under the culture that Hong Kong still affords legal autonomy from mainland China through its stated operational policies. In our opinion the perceptions on this question of legal autonomy are changing. This changing perception has informed our analysis and findings.

Lastly, the Prime Minister of Australia has had difficulty himself with his WeChat account after he was deregistered as its authorized user effectively removing or blocking his access to the platform.⁹ Prime Minister Morrison uses WeChat to reach out to his 75,000 followers in Australia through Mandarin. We note other prominent Australian politicians, including Leader of the Australian Labor Party, Anthony Albanese, use WeChat to also communicate to Australian residents through Mandarin. Key concerns raised by the media and politicians include the extent to which platforms such as WeChat, with structural pressure under the CCP, could control and censor accounts and whether this amounts to foreign interference by the CCP. According to recent media reports, the Prime Minister's Office is now in direct discussions with WeChat to resolve the matter.¹⁰

As Tencent is the parent company of WeChat we found it necessary to record the complex company structure that has been built by its founder, CEO and Chairman Ma Huateng. This structure records Tencent as the parent of WeChat, which is registered in the Cayman Islands and listed on the Hong Kong Stock Exchange as well as several of its sister companies registered on mainland China that were recorded within Chinese government propaganda procurement records (see Figure 1 below).

ínternet2.0 🏷

⁹ https://www.afr.com/politics/federal/wechat-s-hijacking-of-pm-could-lead-to-banning-of-chinese-app-20220124-p59qqx

¹⁰ https://www.canberratimes.com.au/story/7600856/wechat-parent-tencent-reaches-out-to-pm/



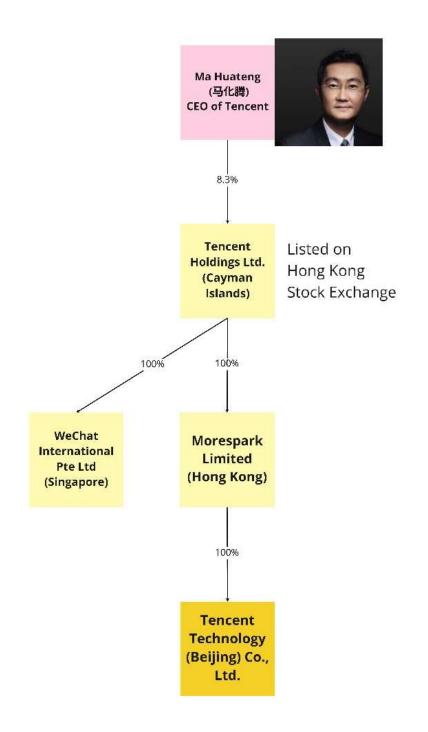


Figure 1: Ownership structure of Tencent and WeChat.



Part 1 – Technical Analysis of WeChat

There are two versions of the WeChat application. Weixin and WeChat. Tencent refers to the duopoly of WeChat and Weixin as "interoperable sister" applications. In this technical analysis we only conducted analysis of the WeChat version 8.0.15 available globally but not in China. We note that Tencent states:

"While each is based on a different server architecture and subject to different laws, WeChat users can chat and share with Weixin users...this was a conscious decision designed to serve different users while ensuring compliance with applicable laws across different jurisdictions."¹¹

WeChat advises that users outside of China are not governed by Chinese law, as opposed to Weixin users, and that all servers for overseas users are located outside of mainland China. Users who register with a Chinese mobile phone number will be made a Weixin user, while users who register with a non-Chinese mobile number will be made a WeChat user.

Further, WeChat does allow users to access certain Weixin functions through the WeChat application.¹² WeChat advised in its submission to the Select Committee that when it allows some Weixin features through WeChat it advises the user they are coming under Weixin terms of service. This is not the case for core functions including messaging, audio/video calls and moments.

We determined that Weixin is probably hierarchically higher than WeChat in its architecture management. A better term would be parent and daughter than sister apps. WeChat uses Weixin URLs for its support and agreement functions as below. There are a total of 1207 references to Weixin URLs in the WeChat source code and Tencent's QQ domains are the higher hierarchical logging server:

- (new Image).src="https://support.weixin.qq.com/cgi-bin/mmsupportmeshnodelogicsvrbin/cube?biz=3512&label=wx110.support.frozen"
- <url><![CDATA[https://weixin.qq.com/agreement?lang=en&cc=US&s=privacy&scene=reg&v= 1&needopenplatform=0]]></url>
- <url><![CDATA[https://res.wx.qq.com/t/wx_fed/weixin_portal/res/static/js/agreement_a5f6 151.js]]></url>

From a software development and data management perspective we assess that this is a complex architecture management problem. The questions that immediately come up are: If a Weixin user and WeChat user are communicating or a WeChat user is accessing Weixin functions where is the data stored? How does Tencent manage the competing legal priorities of the CCP that governs Weixin users and international residents that come under laws such as the GDPR in Europe or the CCPA in California? At some point there will be compromise on the storage of user's data as it travels through competing jurisdictions. We noted this is a complexity for any software company operating

¹¹ WeChat Submission to Australian Select Committee on Foreign Interference through Social Media on 30 September 2020.

¹² https://www.zdnet.com/article/wechat-sets-the-record-straight-for-its-690000-aussie-users/



with interoperability between China and internationally. This is also true for Tesla as Keith Zhai writing in the Wall Street Journal noted:

"Some Chinese state-owned companies, along with military staff, have been restricted from using Tesla Inc.'s vehicles over Beijing's concerns that data the cars gather could be a source of national-security leaks. Tesla's chief executive, Elon Musk, said the company would never provide the U.S. government with data collected by its vehicles in China or other countries."¹³

Anti-sandbox feature

The Internet 2.0 team have analysed many mobile applications in our careers. We firstly must compliment the engineers that worked on WeChat as it had some unique and sophisticated technical features that made these findings initially difficult to come to. Their ability to avoid SSL pinning during static sandbox analysis as well as the encryption using AES ECB enabled the application to encrypt and obfuscate how WeChat managed and pushed its user logs. From a professional standpoint it would be unfair not to call out and compliment this skilled engineering. In our opinion, it was a deliberate measure to avoid analysts from having any insight into the user log management of WeChat.

WeChat User Data and Logs

WeChat logs data with the intent to gain marketing data and improve on their user experience. It is possible to log the user's interactions with the application and the device characteristics the application is installed upon. This type of data is not chat specific but interaction specific such as when you press on the keypad, to when you click a link or watch a video. The data that is collected includes information concerning the user's current network, device information, GPS information, cell phone ID (most likely the advertiser ID), and build version (or android API version) as per Figure 2 below. The data is logged into two places within the application while on the mobile, these locations are:

- \$ANDROID_HOME/files/tbslog/tbslog.txt or
- \$ANDROID_HOME /files/Tencent/tbs_live_log/\$APP_ID/com.tencent.mm_\$STRING_\$STRING.livelog

¹³ https://www.wsj.com/articles/chinas-state-run-firms-limit-use-of-tencents-messaging-app-11637837474



VeChat Analysis



Figure 2: Snapshot of a data logging record.

From here the data logs are sent using a POST request as seen in Figure 3 and located in the following locations in Hong Kong as per Figure 4 below.

- log.tbs.qq.com (129.226.107.80)
- qprostat.imtt.qq.com (101.32.212.183)



Figure 3: WeChat user logs POST command.

ínternet2.0 🏷

VeChat Analysis

Elapsed Time	10 seconds	IP Address	101.32.212.183 Find Sites IP Whois
Blacklist Status	POSSIBLY SAFE 0/115	Reverse DNS	Unknown
IP Address	129.226.107.80 Find Sites IP Whois	ASN	A\$132203
Reverse DNS	Unknown		, 6 (51205
ASN	AS132203	ASN Owner	Tencent Building, Kejizhongyi Avenue
ASN Owner	Tencent Building, Kejizhongyi Avenue	ISP	Tencent cloud computing
ISP	Tencent cloud computing	Continent	Asia
Continent	Asia	Country Code	💉 (HK) Hong Kong
Country Code	😭 (HK) Hong Kong		
Latitude / Longitude	22.2908 / 114.1501 Google Map	Latitude / Longitude	22.2908 / 114.1501 Google Map
City	Central	City	Central
Region	Central and Western District	Region	Central and Western District

Figure 4: Central Logging post locations for WeChat user logs.

The logging data is also encrypted using AES ECB. This encryption method is used for all log files while stored on the device and while the logs are posted back to their central logging server in Hong Kong. This cipher mode allows data to look very similar to one another after being encrypted. One of the characteristics of this encryption method is that it is difficult to use data pattern recognition to be able to spot encrypted data. In our opinion, it is possible to encrypt multiple different types of data without changing the pattern, providing a unique way of preventing detection on what data is being encrypted and uploaded.

It is important to note that while Tencent and WeChat manage multiple servers around the globe, these internationally based servers exist to ensure chats and audio/video calls work with good user experience. During the analysis the user's log data is posted directly to only Hong Kong servers. This is the boundary of the insight we had into WeChat's management of user data. It is reasonable to take Tencent at their word that the data is managed in Hong Kong. It is also reasonable to consider that as the data is posted directly to Hong Kong Tencent would be legally required to provide user data on request of the CCP under the new National Security Legislation.

We must note this record was taken at the time of analysis which was the first week of February 2022. WeChat can easily change their logging processes with a simple update and the IP address and logging records we have outlined are only accurate as at the time of analysis.

WeChat states in its submission to the Select Committee that "servers are all located outside of mainland China".¹⁴ During the analysis we were able to determine there were multiple IP addresses within the application that touched mainland China. We did note that these Aliyun servers were also being used by third parties. In our opinion Weixin functions like a marketplace that are enabled for WeChat users and we consider if data was to be logged as Tencent suggests WeChat would advise

¹⁴ WeChat Submission to Australian Select Committee on Foreign Interference through Social Media on 30 September 2020.



the user they are coming under Weixin terms of service. CHINANET is China's national internet backbone and it was impossible to determine what this function was. IP addresses we found were in mainland China are at Figure 5.

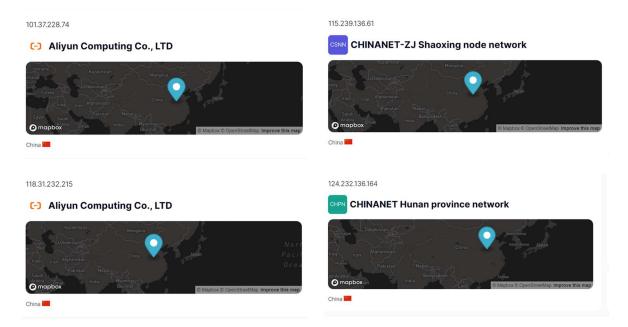


Figure 5: Mainland China IP locations that touch WeChat users.

WeChat states in their submission that:

"WeChat complies with applicable privacy laws and transparently discloses its collection and processing of users' data in its Privacy Policy (which is GDPR compliant). WeChat also adheres to industry best practices such as data minimisation and the concepts of privacy by default and privacy by design (e.g. chats are not monitored and are stored on a user's device rather than on our servers)."¹⁵

During our analysis we found no evidence that contradicts the claim that chats are not stored outside of the user's device. There is no logging attempt on chats as we could find. The only security flag we saw was that WeChat has the potential to access all the data in the user's clipboard as per Figure 6 below. This is a risk to flag as users that have a password manager rely on the clipboard to copy and paste their passwords.

¹⁵ WeChat Submission to Australian Select Committee on Foreign Interference through Social Media on 30 September 2020.



Figure 6: WeChat's potential access to data in user's clipboard.

WeChat Payment function

WeChat has a payment functionality called WeChat Pay where users can send currency exchange between each other. WeChat maintains a digital wallet record of these payments and manages the currency against their digital account. Payments are available in the following currencies according to the WeChat Pay guide:

"WeChat Pay support major currencies including but not limited to GBP, HKD, USD, JPY, CAD, AUD, EUR, NZD, KRW settlement. WeChat Pay will have settlement with vendors according to the price in local currency. For unsupported currencies, trade can be made through settlement on US dollar."¹⁶

After analysing the WeChat Pay function we noted that during payments, the data is logged in Hong Kong at IP address 203.205.239.155 as per Figure 7. Part of this function is seen at Figure 8.

IP Address	203.205.239.155 Find Sites IP Whois
Reverse DNS	Unknown
ASN	AS132203
ASN Owner	Tencent Building, Kejizhongyi Avenue
ISP	Tencent cloud computing
Continent	Asia
Country Code	😭 (HK) Hong Kong

Figure 7: Location of WeChat Pay logging server in Hong Kong.

internet2.0

¹⁶

 $https://pay.weixin.qq.com/wechatpay_guide/help_faq.shtml \#:~:text=WeChat\%20Pay\%20support\%20major\%20currencies, through\%20set tlement\%20on\%20US\%20dollar.$



```
PS C:\Users\rando> ping api.unipay.qq.com
Pinging apiunipay.msf.tencent-cloud.com [203.205.239.155] with 32 bytes of data:
Reply from 203.205.239.155: bytes=32 time=195ms TTL=44
Reply from 203.205.239.155: bytes=32 time=200ms TTL=44
Ping statistics for 203.205.239.155:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 195ms, Maximum = 200ms, Average = 197ms
Control-C
PS C:\Users\rando>
```

Figure 8: WeChat Pay Logging server.

Part 2 – Chinese Propaganda Department Contracts

WeChat policies towards democratic speech

In its submission to the Select Committee WeChat states the following on combating disinformation and its policies on political communication:

"WeChat's policy is to ensure that content and behaviour on its application is authentic and to remove false news, disinformation, misinformation, false advertising and security breaches. It does this by setting and enforcing acceptable use standards [...] WeChat prohibits [...] accounts that coordinate, spread, distribute, or participate in inauthentic behaviour. This includes in relation to false news, disinformation, or misinformation in relation to a topic or individual [...] content which breaches any applicable laws or regulations [...] content which may constitute a genuine risk of harm or direct threat to public safety [...]

WeChat prohibits paid promotional content regarding: a candidate for an election; a political party; or any elected or appointed government official appealing for votes for an election; appeals for financial support for political purposes; and a law, regulation, or judicial outcome, including changes to any such matter. WeChat enforces this restriction through its usual advertising content review process before the advertisement is accepted and by the user report function which appears in the application to report undisclosed, miscategorized advertisements and any other inappropriate, offensive or inauthentic material."¹⁷

¹⁷ WeChat Submission to Australian Select Committee on Foreign Interference through Social Media on 30 September 2020.



In our opinion the interpretation of this statement is crucial. One could argue that any democratically elected politician at all times was either appealing for votes or making content regarding a legislative outcome. This, in essence, is what politicians do. We also found this policy contradictory in its implementation as most Australian politicians have been making this type of content and distributing it on WeChat. Lastly, we struggled to see how WeChat could enforce these policies while also adhering to their other policy of not breaching any applicable laws and regulations. In the United States for example freedom of speech is a constitutional right, WeChat's policies possibly run-in direct contradiction to these constitutional rights. Basically, we struggled to comprehend how WeChat could regulate content and combat misinformation while also regulating content which breached any applicable laws but then bar all political content. It is in this muddled policy we see the structural pressure the CCP has over WeChat.

Propaganda Department Contracts

During our analysis of Chinese government procurement records there were at least 10 contracts between 2016 and 2019 from CCP propaganda departments to conduct influence or propaganda actions over Tencent platforms. The sum of these contracts was 2,327,000 Yuan. These contracts were awarded to subsidiaries in China owned by either Tencent Holdings (owners of WeChat) or companies which Ma Huateng (马化腾), Chairman and CEO of Tencent, has a controlling stake in. These companies are listed in Figures 9 and 10. In our opinion the award of these contracts from CCP propaganda departments is contradictory in nature to the policies it provided in their submission to the Select Committee.

Year of Publish Date	Company	Buyer							
2016	Zhejiang Tengyue Network Technology Co., Ltd	Propaganda Department of Hangzhou Municipal Committee of the Communist Party of China							¥300K
2017	Beijing Tencent Culture Media Co., Ltd	Propaganda Department of the Nanjing Municipal Committee of the Communist Party of China							¥300K
	Hunan Tengxiang Technology Co., Ltd	Changsha County Party Committee Propaganda Department					¥168K		
2018	Chongqing Tenghui Technology Co., Ltd	Liangshan Prefecture Committee of the Communist Party of China in the Liangshan Yi Autonomous Prefecture of Sichuan Province					¥1	98K	
	Guangdong Tengnan Network Information Technology Co., Ltd.	Propaganda Department of the Hezhou Municipal Committee of the Communist Party of China					¥2	00к	
Henan Teng Hunan Teng	Chongqing Tenghui Technology Co., Ltd	Liangshan Prefecture Committee of the Communist Party of China in Liangshan Yi Autonomous Prefecture, Sichuan Province					¥19	ок	
		Propaganda Department of the Zigong Municipal Committee of the Communist Party of China					¥1	99К	
	Henan Tenghe Network Technology Co., Ltd	Propaganda Department of Fengdong New Town Committee, Xixian New District, Shaanxi Province							¥284K
	Hunan Tengxiang Technology Co., Ltd	Propaganda Department of the Fuzhou Municipal Committee of the Communist Party of China					¥18	зк	
	Zhejiang Tengyue Network Technology Co., Ltd	Propaganda Department of the Suzhou Municipal Committee of the Communist Party of China							¥300K
			ок	50K	100K	150K Contra	200K	1.000	300K 35

Figure 9: Procurment Contracts between Tencent subsidiaires and CCP propaganda departments.



We have provided below a detailed description of the 10 contracts between 2016 and 2019 from CCP propaganda departments to conduct influence or propaganda actions over Tencent platforms.

Zhejiang Tengyue Network Technology Co., Ltd. (浙江腾越网络科技有限公司), which is 51 per cent owned by Shenzhen Tencent Computer System Co., Ltd. (深圳市腾讯计算机系统有限公司), successfully won two propaganda tenders totalling 600,000RMB (\$94,324 USD) in 2016 and 2019.

- 1. On the 2 August 2016, Zhejiang Tengyue Network Technology Co., Ltd. (浙江腾越网络科技 有限公司) was announced as the successful supplier for a tender titled "Hangzhou released and the city government's Weibo and WeChat construction funds - Hangzhou released, Tencent Weibo, WeChat publicity and promotion project list......". The buyer was the Propaganda Department of Hangzhou Municipal Committee of the Communist Party of China for 300,000RMB (\$47,162 USD).¹⁸
- 2. On 21 November 2019, Zhejiang Tengyue Network Technology Co., Ltd. (浙江腾越网络科技 有限公司) was announced as the successful supplier for a tender titled "Announcement on the transaction of the Propaganda Department of the Suzhou Municipal Committee of the Communist Party of China on the publicity and promotion of the content of the WeChat public account 'Suzhou Release'''. The buyer was the Propaganda Department of the Suzhou Municipal Committee of the Communist Party of China for 300,000RMB (\$47,162 USD).¹⁹

Hunan Tengxiang Technology Co., Ltd. (湖南腾湘科技有限公司), which is 51 per cent owned by Shenzhen Tencent Computer System Co., Ltd. (深圳市腾讯计算机系统有限公司), successfully won two propaganda tenders totalling 356,000RMB (\$55,966USD) in 2017 and 2019.

- 1. On 24 March 2017, Hunan Tengxiang Technology Co., Ltd. (湖南腾湘科技有限公司) was announced as the successful supplier for a tender titled "Changsha County released the announcement of the single-source procurement transaction results of the WeChat public account platform construction project", The buyer was the Changsha County Party Committee Propaganda Department for 168,000RMB (\$26,410 USD).²⁰
- 2. On 9 October 2019, Hunan Tengxiang Technology Co., Ltd. (湖南腾湘科技有限公司) was announced as the successful supplier for a tender titled "Announcement on the results of the event to praise the new China and talk about the new Fuzhou (Package 1)". The buyer was the Propaganda Department of the Fuzhou Municipal Committee of the Communist Party of China for 188,000RMB (\$29,555 USD).²¹

Henan Tenghe Network Technology Co., Ltd. (河南腾河网络科技有限公司), which is 51 per cent owned by Shenzhen Tencent Computer System Co., Ltd. (深圳市腾讯计算机系统有限公司), successfully won a propaganda tender on 18 October 2019 for 284,000RMB (\$44,647 USD). The tender was titled "Media Publicity and Promotion Project of the Propaganda Department of

¹⁸ https://archive.ph/2lqzC

¹⁹ https://web.archive.org/web/20220201215855/https://www.bidcenter.com.cn/newscontent-82377800-4.html

²⁰ https://archive.ph/itosu

²¹ https://web.archive.org/web/20220201214839/http://www.ccgp.gov.cn/cggg/dfgg/cjgg/201910/t20191009_13060106.htm



Fengdong New Town Committee, Xixian New District, Shaanxi Province - Tencent (Secondary Purchase) Single Source Transaction Announcement". The buyer was the Propaganda Department of Fengdong New Town Committee, Xixian New District, Shaanxi Province.²²

Guangdong Tengnan Network Information Technology Co., Ltd. (广东腾南网络信息科技有限公司

), which is 51 per cent owned by Shenzhen Tencent Computer System Co., Ltd. (深圳市腾讯计算机 系统有限公司), successfully won a propaganda tender on 7 November 2018 for 200,000 RMB (\$31,441 USD). The tender was titled "Hezhou Public Resources Trading Centre About the Propaganda Department of the Communist Party of China Hezhou Municipal Committee Tencent Daguang Network 2018 Guangxi (Hezhou) Elite" and the buyer was the Propaganda Department of the Hezhou Municipal Committee of the Communist Party of China.²³

Chongqing Tenghui Technology Co., Ltd. (重庆腾汇科技有限公司) is 51 per cent owned by Shenzhen Century Kaixuan Technology Co., Ltd. (深圳市世纪凯旋科技有限公司), making it the major shareholder. The major shareholder of Shenzhen Century Kaixuan Technology Co., Ltd. (深圳 市世纪凯旋科技有限公司) is Pony Ma (马化腾) who owns 54.29 per cent of the company. Chongqing Tenghui Technology Co., Ltd. (重庆腾汇科技有限公司) successfully won 3 propaganda

tenders between 2018 and 2019 totalling 587,000RMB (\$92,281 USD)

1. On the 30 November 2018, Chongqing Tenghui Technology Co., Ltd. (重庆腾汇科技有限

公司) was announced as the successful supplier for a tender titled "Announcement on single-source procurement of the annual new media publicity cooperation project of the Liangshan Prefecture Committee of the Communist Party of China in the Liangshan Yi Autonomous Prefecture of Sichuan Province". The buyer was the External Propaganda Office of the CPC Liangshan Prefecture Committee for 198,000RMB (\$31,127 USD).²⁴

2. On the 24 October 2019, Chongqing Tenghui Technology Co., Ltd. (重庆腾汇科技有限公

司) was announced as the successful supplier for a tender titled "Announcement on the single-source transaction of the 2019 Tencent Dacheng.com publicity and promotion service procurement project by the Propaganda Department of the Zigong Municipal Committee of the Communist Party of China in Zigong City, Sichuan Province". The tender involved targeting more than 100 million people in Zigong City to "promote strong external public opinion support". The buyer was the Propaganda Department of Zigong Municipal Committee of the Communist Party of China for 199,000RMB (\$31,274 USD).²⁵

²² https://archive.ph/8wssk

²³ https://archive.ph/qYzc4

²⁴ https://archive.ph/YqFKI

²⁵ https://web.archive.org/web/20220129134434/http://www.ccgp-

sichuan.gov.cn/view/staticpags/shiji_cjgg/2c9240ea6dfa5dfe016dfcf7729505e1.html



3. On the 20 December 2019, Chongqing Tenghui Technology Co., Ltd. (重庆腾汇科技有限 公司) was announced as the successful supplier for a tender titled "Announcement on the single-source transaction of the annual new media publicity cooperation project of the Liangshan Prefecture Committee of the Communist Party of China in Liangshan Yi Autonomous Prefecture, Sichuan Province". The buyer was the Propaganda Department of the CPC Liangshan Prefecture Committee for 190,000RMB (\$29,869 USD).²⁶

Beijing Tencent Culture Media Co., Ltd. (北京腾讯文化传媒有限公司) successfully won a propaganda tender on 27 November 2017, titled "[NJZC-2017R064] 2017 World Intelligent Manufacturing Conference Tencent Publicity Service Procurement Announcement". The buyer was the Propaganda Department of the Nanjing Municipal Committee of the Communist Party of China for 300,000RMB (\$47,162 USD).²⁷

Beijing Tencent Culture Media Co., Ltd. (北京腾讯文化传媒有限公司) is 100 per cent owned by Tencent Technology (Beijing) Co., Ltd. (腾讯科技(北京)有限公司), which in turn is 100 per cent owned by Morespark Limited (添曜有限公司). SEC filings show that Morespark Limited is a British Virgin Islands company and a direct wholly-owned subsidiary of Tencent ("<u>Morespark</u>"). The authorised representative is listed as Ma Huateng, (马化腾), Chairman and CEO of Tencent.²⁸

We note the legal representative of Beijing Tencent Culture Media Co., Ltd. (北京腾讯文化传媒有限公司) is Luan Na (栾娜). An article posted on the Tencent website in 2020 describes Luan Na (栾娜) (aka Helen Luan) as Vice President of Tencent.²⁹ She joined Tencent in 2008 and is currently the head of Tencent's advertising accounts. The legal representative for Tencent Technology (Beijing) Co., Ltd. (腾讯科技(北京)有限公司) is Xi Dan (奚丹) who is the Senior Vice President of Tencent, having joined Tencent in 2002.³⁰

Survey

Internet 2.0 conducted an industry survey in response to our initial reaction to these findings. The question was asked with no context nor mention of WeChat. Respondents could infer any platform or data was behind this question. The question was "Should the data of electoral/political communications be housed within the sovereignty of the country conducting its own electoral process?". Out of the respondents, an overwhelming 97 per cent agreed with an affirmative yes. All respondents did so under their own name.

²⁶ https://archive.ph/AkKae

²⁷ https://archive.is/N2A2c

²⁸

https://web.archive.org/web/20220202213624/https://www.sec.gov/Archives/edgar/data/1293451/000095014216003982/eh1600731_1 3d-bit.htm.

²⁹ https://web.archive.org/web/20210815184019/https://www.tencent.com/zh-cn/articles/2201039.html

³⁰ https://web.archive.org/web/20211117150220/https://www.crunchbase.com/person/xi-dan



VeChat Analysis

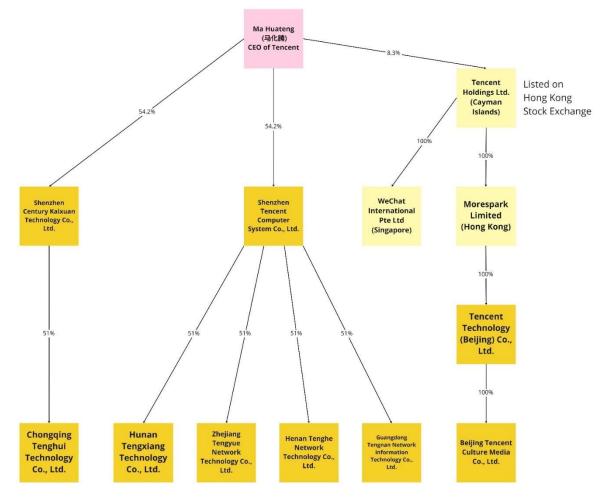


Figure 10: Tencent and Ma Huateng's company structure.

internetzo (*

MILITARY-GRADE

CYBER PROTECTION

Australia

Level 18 National Barton ACT 2600 ABN: 17 632 726

United States Suite 100 211 N Union Alexandria EIN: 86-1567068

contact@internet2-0.com