People's Republic of China (PRC)

Chief of State: President Xi Jinping

Government: Communist

Capital: Beijing

National Holiday: 1st October1

GDP by sector: Agriculture (8.6%); Industry (39.8%)

Services (51.6%)

Export Partners: US (18%); Hong Kong (14.6%); Japan (6%); South Korea (4.5%)

Import Partners: South Korea (10.9%); US (9%); Japan (8.9%); Germany (5.5%); Australia (4.1%)

Top Exports: Electrical equipment: US\$557.1 billion (26.3%); Machinery: \$344.8 billion (16.3%);

Furniture: \$89.5 billion (4.2%); Knit or crochet clothing, accessories: \$75 billion (3.5%); Clothing, accessories \$72.8 billion (3.4%); medical apparatus: \$67.9 billion (3.2%);

Plastics: \$64 billion (3%); Vehicles: \$60.4 billion (2.9%); Articles of iron or steel: \$53.1 billion (2.5%);

Footwear: \$47.8 billion (2.3%)²

Conflict areas: East China Sea (Senkaku/Diaoyu islands); South China Sea (Paracel and Spratly Islands) 3; Uighurs;

Tibet; Taiwan; Bhutan border with India⁴; Hong Kong Independence⁵

Major Religions: Buddhist (18.2%); Christian (5.1%), Muslim (1.8%)6

Current Landscape

International Relations

China's external influence and military developments have advanced during a period of time in which it has reached out globally to secure markets for exports and access to resources⁷. China is the top trading partner of over 120 countries, and is the third largest investor world-wide⁸. In 2016, China reportedly contributed more troops to the United Nations (UN) peacekeeping missions than any other permanent member of the

security council? For example, Africa's biggest trading partner is China¹⁰ and in 2015 China sent its first infantry battalion on a peacekeeping mission to South Sudan¹¹, and placed its first overseas military base in Djibouti¹². Militarisation of the South China sea and East China sea by China has also evolved despite being a continued source of tension in the region¹³. China has manufactured artificial islands and established military bases, as well as an "air-defence identification zone" (ADIZ) over the



^{1.} The anniversary of the founding of the People's Republic of China in 1949

^{2.} http://www.worldstopexports.com/chinas-top-10-exports/

^{3.} https://www.cfr.org/publication/interactive/31345#!/31345

^{4.} http://edition.cnn.com/2017/07/03/asia/bhutan-india-border-dispute/index.html

^{5.} https://www.cfr.org/global/global-conflict-tracker/p32137#!/p32137

^{6.} https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html

^{7.} https://www.uscc.gov/sites/default/files/transcripts/7.21.05HT.pdf

^{8.} http://www.europarl.europa.eu/RegData/etudes/STUD/2017/570484/EXPO_STU(2017)570484_EN.pdf

^{9.} https://www.usip.org/publications/2016/07/chinas-troop-contributions-un-peacekeeping

^{10.} https://www.cfr.org/backgrounder/china-africa

^{11.} http://www.bbc.co.uk/news/world-africa-34976580

^{12.} http://www.aljazeera.com/news/2017/07/china-open-overseas-military-base-djibouti-170712135241977.html

^{13.} http://www.bbc.co.uk/news/world-asia-pacific-13748349

East China Sea¹⁴ ¹⁵. This area is both a navigational route for the energy resources China needs to secure its continued growth and a potential source of oil and gas deposits¹⁶. There is a relationship between China's strategic requirements and the role China is playing abroad.

Internal security posture

Whilst China has been increasing in confidence with external affairs, Xi Jinping has largely centralised power internally. This year sees the end of his first five-year term as head of the Chinese Communist Party (CCP). During his time as leader there has been a sweeping "anti-corruption drive" in which the country's watchdog agency, the Central Commission for Discipline and Inspection (CCDI), has investigated and punished more than a million officials¹⁷. This was a high profile domestic campaign that has also been criticised for purging the leadership of opposition¹⁸. The consolidation of power has been complimented by a cultivation of nationalistic rhetoric, tightened control over the media and a push for party ideological conformity. Civil society is increasingly under threat of arrest for publicising critical views of the state: "The Committee to Protect Journalists identified 38 journalists in prison in China, the second-largest figure worldwide after Turkey's, as of December 2016"19. China's top three internet service providers have been given until February 2018 to prevent people from "using circumvention tools to view online content outside the great firewall"20. The environment for freedom of religion and belief related rights also experienced a decline. Uighur Muslims in Xinjiang, Larung Gar Buddhists in Tibet, Fulan Gong and Christian churches have all experienced varying forms of suppression²¹.

Economy

The World Bank describes China's overall economic development as "the fastest sustained expansion by a major economy in history" and that it has "lifted more

than 800 million people out of poverty"22. China's overall growth in the economy declined from 12% in 2006 to 7% in early 2016. The annual decline was not unplanned, however, as China set a 7% GDP growth target in their 12th five-year plan. The 13th five-year plan has implied a target of 6.5% for the period of 2016-2020, with an overall goal to double GDP23. According to a blueprint for China's "innovation-driven development" released by the CPC Central Committee and the State Council: "China will be an "innovative nation" by 2020, and an "international leader in innovation by 2030" ...and a "world powerhouse of scientific and technological innovation by 2050"24. One of the more prominent projects that China has pursued is the "One Belt One Road" initiative (OBOR). The initiative refers to the maritime silk "road" and the silk road economic "belt" which seeks to build a circular route connecting East Asian economies with European ones. Over sixty countries and six "economic corridors" will be encompassed in total.25. China is also pushing for "market economy" status from the World Trade Organisation (WTO).

National Cyber-Strategy

The Cyberspace Administration of China (CAC) published its first National Cybersecurity Strategy in December 2016. The strategy describes how cyberspace has both stimulated economic progress and brought new security risks. Challenges that the strategy outlines include:

- Political stability because it enables actors to "interfere in the internal political affairs of other countries...incite social unrest, subvert other countries regimes" and conduct "cyber espionage",
- Economic security because "networks and information systems have become critical infrastructure",
- Corrosion of "cultural security" through "online rumours... obscenity, violence, superstition and other harmful information"
- Terrorism²⁶.



^{14.} https://fas.org/sgp/crs/row/R43894.pdf

^{15.} https://www.thequardian.com/world/2017/mar/28/beijing-military-bases-south-china-sea-ready

^{16.} https://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1170/MR1170.ch3.pdf

^{17.} http://www.bbc.co.uk/news/world-asia-china-37748241

^{18.} http://www.css.ethz.ch/en/services/digital-library/articles/article.html/ff65197c-b7ab-4d50-8876-0c50bbed6646/pdf

^{19.} https://freedomhouse.org/report/freedom-world/2017/china

^{20.} http://www.rfa.org/english/news/china/controls-07112017140812.html

^{21.} http://www.uscirf.gov/sites/default/files/China.2017.pdf

^{22.} http://www.worldbank.org/en/country/china/overview

^{23.} https://www.uscc.gov/sites/default/files/Research/The%2013th%20Five-Year%20Plan.pdf

^{24.} http://english.gov.cn/policies/latest_releases/2016/05/20/content_281475353682191.htm

^{25.} http://www.cbbc.org/cbbc/media/cbbc_media/One-Belt-One-Road-main-body.pdf

^{26.} https://chinacopyrightandmedia.wordpress.com/2016/12/27/national-cyberspace-security-strategy/

The strategy articulates how important cybersecurity is by stating "without cybersecurity, there is no national security" and that "security is the precondition for development". One of the first points made in the document is that "no infringement of sovereignty in cyberspace will be tolerated". In order to defend sovereignty, it says that China will "adopt all measures, including economic, administrative, scientific, technological, legal, diplomatic and military measures, to unwaveringly uphold our country's sovereignty in cyberspace" and "oppose all actions to subvert our country's national regime or destroy our country's sovereignty through the network"27. The strategy later refers to international cooperation and global internet governance, suggesting that the OBOR initiative will also help to create a "smooth information silk road".

Chinese Intelligence

During the last two years, the elements of the Chinese intelligence services responsible for information security and related activity appear to have undergone a restructuring²⁸. In line with an overall vision to downsize but improve on the quality of the People's Liberation Army (PLA)²⁹, departments such as 3PLA and 4PLA have been embraced under a "Strategic Support Force" (SSF) alongside relevant elements of 2PLA and the Ministry of State Security. The PLA's General Staff Department (GSD) was also replaced by the Joint Staff Department (JSD) in 2016. The changes that have taken place are not entirely clear. The SSF appears to "unify space, cyber and electronic warfare capabilities" and has been likened to US Cyber Command³⁰.

Ministry of State Security (MSS) or Guojia Anquan Bu (Guoanbu)

Minister: Chen Wenging³¹ (Minister of State Security)

Headquarters: 14 Dongchangan Jie, Dongchangan Jie, Dongcheng Qu, Beijing Shi 10074132

Type of Service: National security service (domestic and overseas)

Areas of Concern: Non-military domestic and foreign intelligence, HUMINT, has a cyber mission, increased

engagement in foreign affairs, SIGINT.

APT Groups: APT3 or "Gothic Panda"33

Other Groups: OPM Hack

Ministry of Public Security (MPS) or Gonggong Anquan Bu (Gonganbu)

Minister: Guo Shengkun Buzang (Minister of Public Security)

Headquarters: 14 Dongchangan Jie, Dongchangan Jie, Dongcheng Qu, Beijing Shi 100741³⁴

Email: abzfwz[a]mps.gov.cn

Type of Service: Type of Service: National Police Force

Areas of Concern: Policing, Internal security missions, maintaining public peace and order, border security,

supervision of public information networks, is advancing into counterintelligence³⁵.

^{35.} Brodsgaard, K. E. (2017). Critical Readings on the Chinese Communist Party (Vol. 4). Leiden, The Netherlands: Koninklijke Brill NV.



^{27.} https://chinacopyrightandmedia.wordpress.com/2016/12/27/national-cyberspace-security-strategy/

^{28.} https://toinformistoinfluence.com/2017/08/04/dods-assessment-of-chinas-information-capabilities/

^{29.} http://europe.chinadaily.com.cn/opinion/2017-08/02/content_30327003.htm

 $^{30.\} https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF? source=GovDelivery$

 $^{31.\} http://www.scmp.com/news/china/policies-politics/article/2043605/former-anticorruption-agency-official-named-chinases and the second control of the$

^{32.} https://www.amnesty.org.uk/files/2017-03/UA07117.pdf?...0PJQGl9jgw

^{33.} https://threatpost.com/apt3-linked-to-chinese-ministry-of-state-security/125750/

^{34.} http://www.ccbe.eu/fileadmin/speciality_distribution/public/documents/HUMAN_RIGHTS_LETTERS/China_-_Chine/2017/EN_ HRL_20170424_China_Letter-of-concern-with-regard-to-our-colleaguesChinese-lawyers-in-detention-and-to-the-situation-of-their-relatives.pdf

Chinese Military Intelligence

There are three main departments inside the PLA's Joint Staff Department that seem to operate varying elements of defensive and offensive cybersecurity activities:

PLA, JSD, Second Department (2PLA) (possibly the new "Intelligence Bureau" 情报局)

Head: Major General Chen Youyi³⁶

Address: No. 21, North Andeli Street, Beijing

Regional Liaison Tianjin, Beijing, Guangzhou, Shanghai, Shenyang

Offices:

Type of Service: Military and political intelligence collection and analysis (Foreign)

Areas of Concern: Geo-Spatial Intelligence, HUMINT and case officer management, Technical intelligence, IMINT,

Electro-optical collection, focus on "the aggregation of intellectual property and intelligence... in concert with groups in" 3PLA "by acting as insiders... facilitating the compromise of target

systems"37

Subdivisions: Aerospace Reconnaissance Bureau (ARB); Tactical Reconnaissance Bureau (manages long-range

UAVs).38

PLA, JSD, Third Department (3PLA)

Head: (See head of the PLASSF)

Bureau Locations: Beijing (8); Shanghai (2); Qingdao (1); Wuhan (1)⁴⁰

Type of Service: Signals Intelligence

Areas of Concern: SIGINT, responsible for cryptographic and classified systems.

Subdivisions: Second Bureau (Unit 61398); Twelfth Bureau (Unit 61486); Chengdu Military TRB (Unit 78020).

APT Groups: APT 1 (comment crew/comment Panda)⁴¹, APT 2 (Putter Panda), APT 30

PLA, JSD, Fourth Department (4PLA)

Head: (See head of the PLASSF)

Type of Service: "Electronic Countermeasure and Radar Department"

Areas of Concern: CNA; electronic attacks, protection and support measures. TECHELINT, OPELINT. "Strategic

electronic denial missions like satellite jamming."

PLA, Strategic Support Force (PLASSF) 战略支援部队某部

Political Comissar: Major General Liu Fulian (刘福连)
Commander: Major General Gao Jin (高津)

Type of Service: The SSF is reported to unite a number of specialist units under

a centralized umbrella for "integrated reconnaissance, attack, and defense" (侦攻防一体化). Including the 3PLA, 4PLA and the

"Technical Reconnaissance Bureau"42.

Responsibilities: Space, cyber, and electronic warfare missions⁴³



PLASSF

^{43.} https://jamestown.org/program/strategic-support-force-update-overview/





^{36.} https://international.thenewslens.com/article/57998

^{37.} https://paper.seebug.org/papers/APT/APT_CyberCriminal_Campagin/2016/2016.07.28.China_Espionage_Dynasty/ICIT-Brief-China-Espionage-Dynasty.pdf

^{38.} https://www.uscc.gov/sites/default/files/transcripts/June%2009%2C%202016%20Hearing%20Transcript.pdf

^{39.} http://www.project2049.net/documents/Stokes_PLA_General_Staff_Department_Unit_61398.pdf

^{40.} https://www.fireeye.com/content/dam/fireeye-www/services/pdfs/mandiant-apt1-report.pdf

^{41.} https://jamestown.org/program/strategic-support-force-update-overview/

^{42.} http://www.janes.com/images/assets/484/68484/China_reorients_strategic_military_intelligence_edit.pdf

Informant Network

There are two different views regarding how China recruits and operates HUMINT activity. One of them is the "mosaic" view or "grain of sands" view. This view suggests that China does not have professional intelligence officers, but rather a number of amateur collectors, and that they pursue large volumes of "low-grade" information⁴⁴. The other view is that intelligence has "been professional from its outset", using clandestine tradecraft, coercion, blackmail and that "they were trained by the Soviets in the 1930s". China does not necessarily recruit agents with direct access, and appears to prefer agents with secondhand access. They also prefer to recruit internally within China, preferring swift transactions with payment upfront for information⁴⁵.

Activity Overview

China's reputation for engaging in offensive activity has largely been associated with campaigns that are aligned with the interests of the state rather than organised crime. According to FireEye, of the ten (currently) most active APT groups six originate from China (APT1, APT3, APT12, APT17, APT18 and APT30)46. The majority of these appear to be geared towards stealing information from private industry and defence, military or government. APT1 was reported to target those industries linked to sectors mentioned in the 5-year strategic plan⁴⁷. One exception appears to be APT12, reported to have targeted the New York Times, which seems to monitor media outlets that run stories on China. Similarly, whilst APT1 and APT3 were found to be targeting a wide array of locations and companies, APT30 is reported to focus on the ASEAN countries.

Territorial integrity and sovereignty in cyber and geographical terms are very important to China. It is therefore not surprising that many campaigns have targeted citizens deemed as a threat to this. For China, the relationship to its land, and reacquisition of historic land, is connected to a legacy of a once powerful nation losing face to colonial aggression. China's unique history has borne witness to both the rise of a hegemonic empire

at the centre of the world and its downfall (in more recent history). Remarkably, this ancient country has regained its status as an economic powerhouse and claimed back much of its former land. For regional areas hoping for independence this means going up against a very determined opponent driven by pride. In this context, areas of conflict such as Hong Kong, Tibet, Taiwan, Bhutan and the Uighur people are viewed by the Chinese government as attempting to contribute to this source of national "humiliation."

China will use material already published and produced by groups linked to these regions or protests issues, repurposing them to infect hosts. The "Self-Immolation" issue in Tibet was used to target activists with malware⁴⁸. News sites and articles are often used, although in some cases demonstration material is preferred. Hong Kong activists were targeted in 2015 by a "speech and media freedom" slide deck⁴⁹. Activists' phones were targeted during the 2014 Umbrella Revolution⁵⁰. Using the chat service WhatApp, smartphone users were sent a link to download software using the note: "Check out this Android app designed by Code4HK for the coordination of OCCUPY CENTRAL!"⁵¹.

Future Concerns

China's quiet but assertive growth across the globe brings with it a number of challenges to the international environment. Their cultural disposition is one of cooperation and protectionism, as China's sense of territorial sovereignty and growth requirements underline many conflicts it currently engages in. So, areas of growth and investment as well as areas of continued conflict are likely to see future campaigns. The following represents a number of predicted concerns.

One Belt One Road initiative (OBOR)

The One Belt One Road initiative is a huge undertaking, involving more than 60 countries and six economic corridors. It is worth noting the comments around the OBOR that describe it as an "informational silk road". This possibly means that China's internal view regarding cyber sovereignty might extend beyond the national borders to

^{51.} https://www.nytimes.com/2014/10/02/business/protesters-are-targets-of-scrutiny-through-their-phones.html



^{44.} https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol.-56-no.-3/pdfs/Mattis-Understanding%20Chinese%20Intel.pdf

^{45.} https://www.uscc.gov/sites/default/files/transcripts/June%2009%2C%202016%20Hearing%20Transcript.pdf

^{46.} https://www.fireeye.com/current-threats/apt-groups.html#apt1

^{47.} https://www.fireeye.com/content/dam/fireeye-www/services/pdfs/mandiant-apt1-report.pdf

^{48.} https://citizenlab.ca/2012/03/information-operations-and-tibetan-rights-in-the-wake-of-self-immolations-part-i/

^{49.} https://citizenlab.ca/2015/06/targeted-attacks-against-tibetan-and-hong-kong-groups-exploiting-cve-2014-4114/

^{50.} https://arstechnica.com/information-technology/2014/10/year-of-the-rat-chinas-malware-war-on-activists-goes-mobile/

secure this trade space. If this is the case, expect to see campaigns across the OBOR landscape. This will include industrial and economic espionage, and an extensive space for insider HUMINT activity. It might be worth monitoring campaigns using this area of interest, or those companies China is actively seeking to acquire.

South China Sea

Without a doubt, the countries laying claim to the South China Sea and East China sea islands will continue to be monitored by China. Vietnam has been one of the more overtly vocal opponents to China's claims, causing tension. Japan also views China's expansionist behaviour as a threat, leading the country to sign deals with the United States, Britain, France and the Netherlands to link up Japan's defence sector with the respective states⁵².

The Unites States

As the most powerful country in the world, the United States has many reasons to worry about China's rise. China represents a different way of operating within the international system. Global trade is one concern for the US. For example, measures taken under new cyber security laws in China requires local and overseas firms to submit security checks and store user data in country. This might mean that commercial organisations have to consider how their customers data is protected if they trade in China or with Chinese organisations. China's laws align with their ethos and push for "cyber sovereignty".

The US still operates unilaterally in a way that upsets the Chinese views on cooperation. This can be seen in the activity surrounding the US response to North Korea. The US defensive response on behalf of South Korea and

subsequent sanctions have angered China. Most recently "China, the main ally of Pyongyang and the recipient of some 90 percent of North Korea's exports, suspended all imports of coal in February in compliance with United Nations sanctions". "Following a seventh round of sanctions adopted in early August by the UN Security Council, Beijing recently announced it will also suspend its purchases of North Korean iron, lead and seafood"⁵³. Despite this, the US "announced new sanctions on ten Russian and Chinese firms as well as six individuals that it accuses of aiding North Korea's nuclear weapons"⁵⁴.

South America

China's growing influence in Latin America, whilst it has been noted, has not necessarily been seen as a significant issue. China has replaced the US in several Latin American states as the region's top trade partner⁵⁵, and is expected to overtake the EU as Latin America and the Caribbean's (LAC) second largest trade partner. It goes without saying that China has carefully considered the strategic long-term benefit of this development. The region itself has faced a number of economic difficulties, however, and the influx of Chinese loans has created pockets of debt. China and countries like Venezuela signed oil-for-loans contracts, where the repayments are made in the equivalent value quantity of oil. As oil prices dropped, larger quantities had to be exported and countries like Venezuela struggled to meet the required oil shipments⁵⁶. Trade imbalances have been a hallmark of China's global activity. Industrial espionage and campaigns against prominent governments and institutions are likely because of the general instability of the economies. China will want to ensure their debts are honored, and continue to strategically benefit from the region.

^{52.} http://www.dw.com/en/japan-inks-defense-deal-with-germany-amid-china-threat/a-39811584

^{53.} https://guardian.ng/news/north-koreas-trade-with-china-hit-by-sanctions/

^{54.} http://time.com/4911882/north-korea-u-s-secondary-sanctions-china-russia-treasury/

^{55.} https://www.forbes.com/sites/paulcoyer/2016/01/31/undermining-america-while-washington-sleeps-china-in-latin-america/#12a080f46c23

^{56.} https://www.chinadialogue.net/article/show/single/en/9730-Latin-America-s-oil-dependent-states-struggling-to-repay-Chinese-debts