

This is Huawei, a Reliable Partner

Innovation, Openness, Transparency & Collaboration

Tonny Bao

CEO of Huawei Polska



Huawei: Leading Global Provider of ICT Infrastructure and Smart Devices

Bring digital to every person, home and organization
for a fully connected, intelligent world



180,000+

Employees



80,000+

R&D employees



170+

Countries



68 in

Interbrand's
Top 100
Best Global Brands



72 in

Fortune Global 500

Worldwide Recognition

Winner of 2018 GSMA Award

for Outstanding Contribution to
the Mobile Industry



No. 68

Interbrand Best
Global Brands



No. 72

in the Fortune
Global 500 2018



Top Companies

most sought-after
employers 2018



No. 1

Universum, China's Most Attractive
Employers (Engineering/IT)

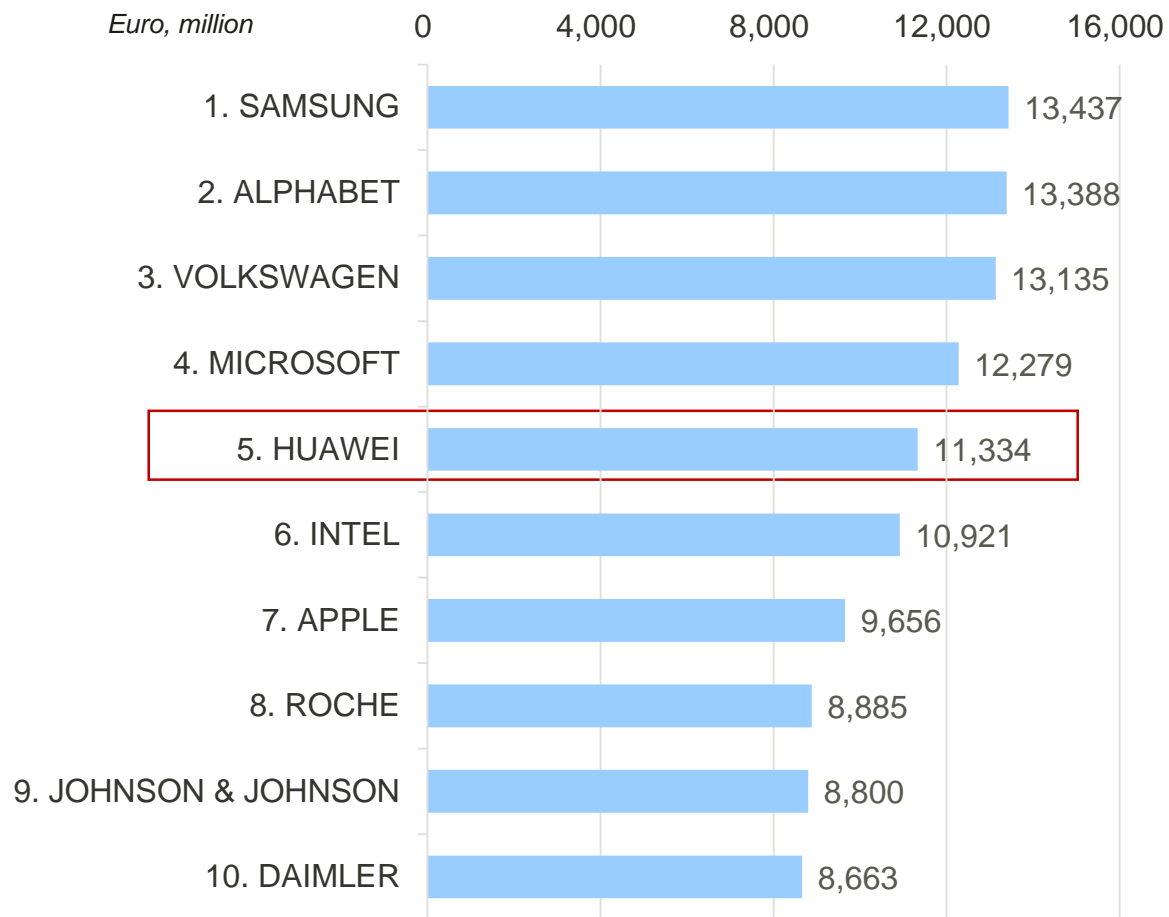


No. 5

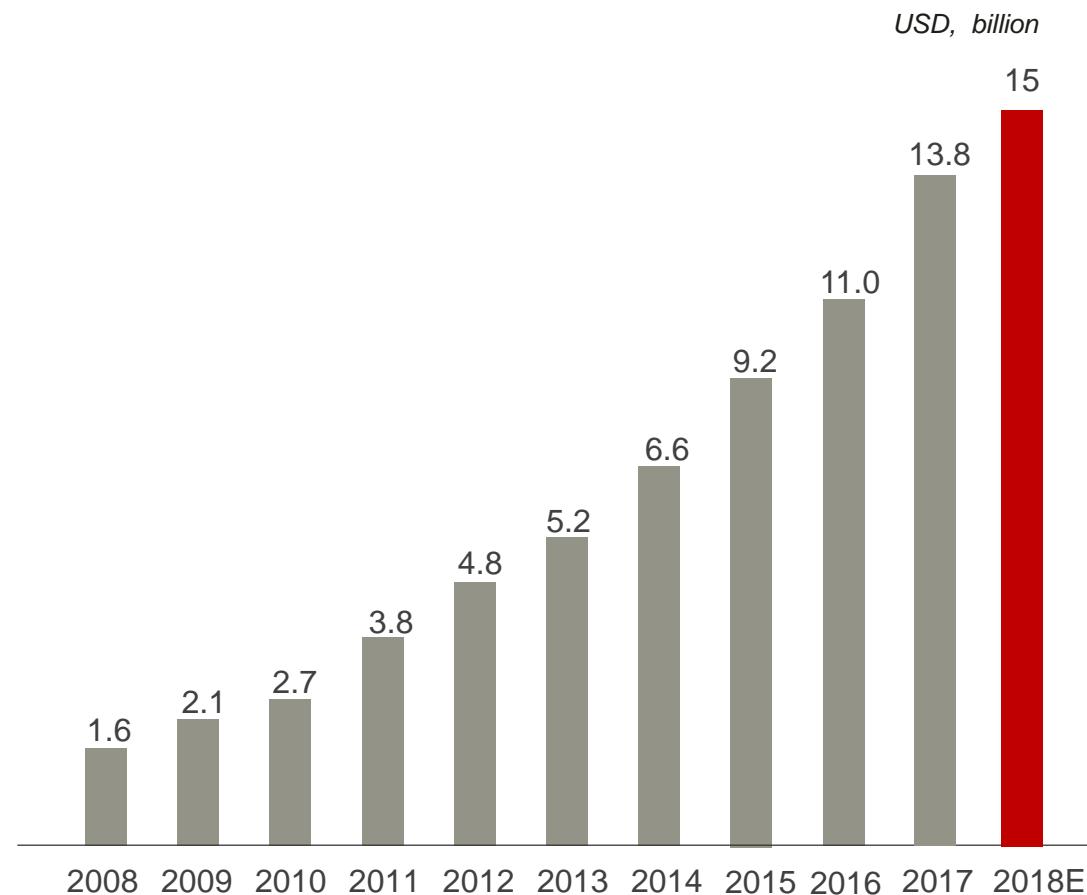
EU Industrial R&D
Investment Scoreboard 2018



Sustained Investment in R&D Drives Technology Breakthroughs



Source: The 2018 EU Industrial R&D Investment Scoreboard



- Huawei ranks number 5 on total R&D investment of companies in 2017

- **\$ 75+ billion** invested in R&D in the past 10 years
- Huawei will invest **\$100+ billion** in the next 10 years

Promoting ICT Standardization and Industry Development

Total Patents

87,805

Patents outside China

44,434

Proposals for standard

59,000+

Membership in
industry organizations

400+

Organizations
founded by Huawei

30+

Key positions in
standard organizations

400+

Huawei in Poland



900+

Employees



3000+

Jobs created



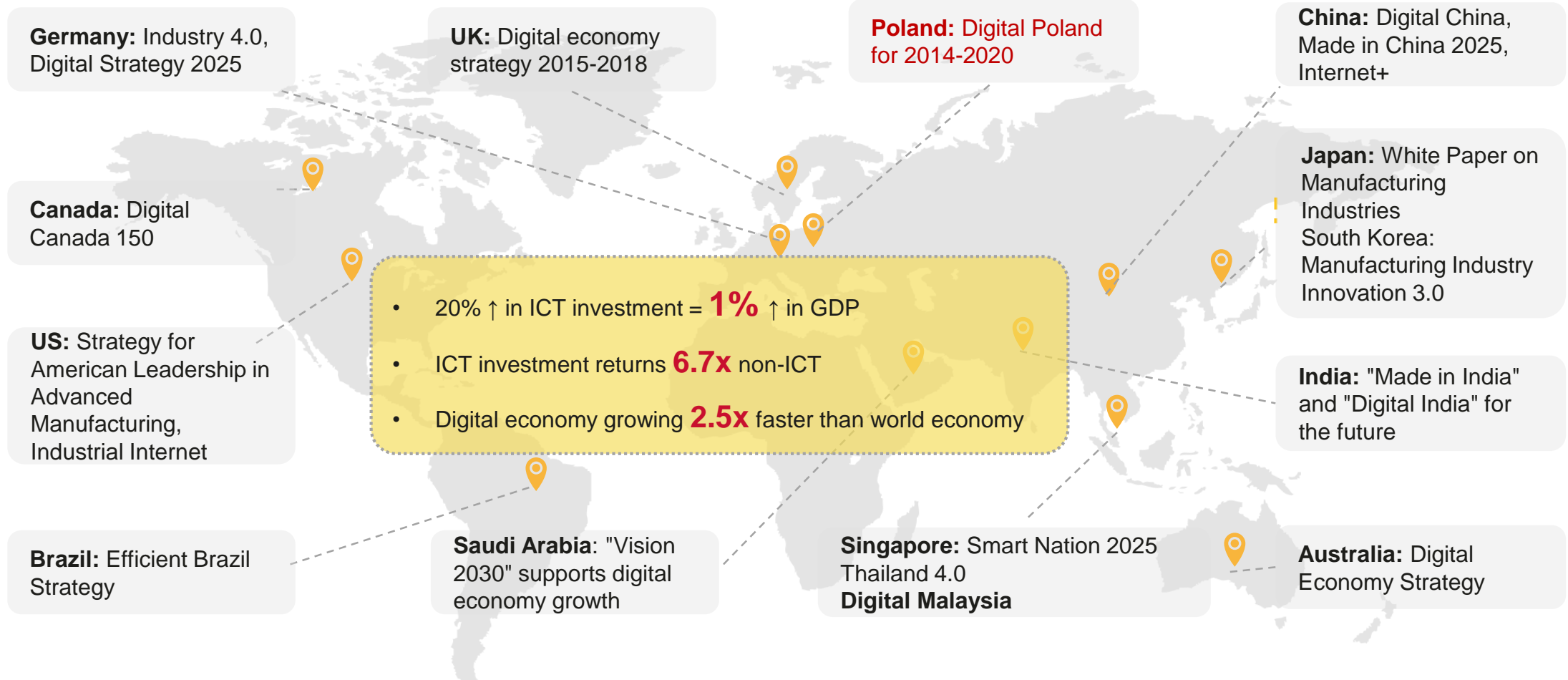
250+

Huawei Certificated Experts



- 1** Innovation Center
- 1** Training Center
- 1** R&D Center (2019 base on Investment environment)
- 1** Technical Support Center (2019 base on Investment environment)

Digital Economy is the New Growth Model in 170 Countries



Over 170 countries worldwide have published a national digital strategy (ITU)

5G is the Evolution of 4G, and will Bring more Opportunities



Ultra Faster
10 Gb/s

Low Latency
1 ms

Massive Connections
1 million / km²

More Secured
256 bit key

By 2035:



3500 bn \$

5G Industry Contribution



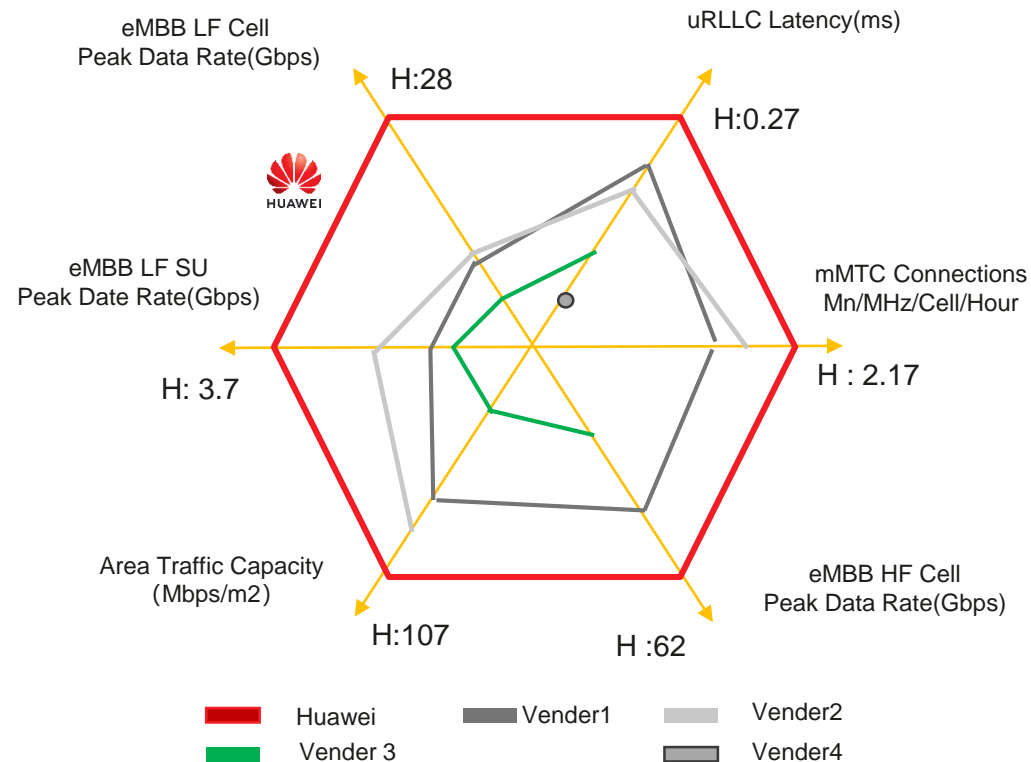
22 mn

New Jobs

Source: IHS Markit

Huawei is the Global Leader in 5G

IMT-2020 5G Benchmark Testing (Leading in all indicators)



Huawei Tests the Most Complete Scenarios
and the Performance Ranks First

30+ (18 in Europe)

5G commercial contracts

25,000+

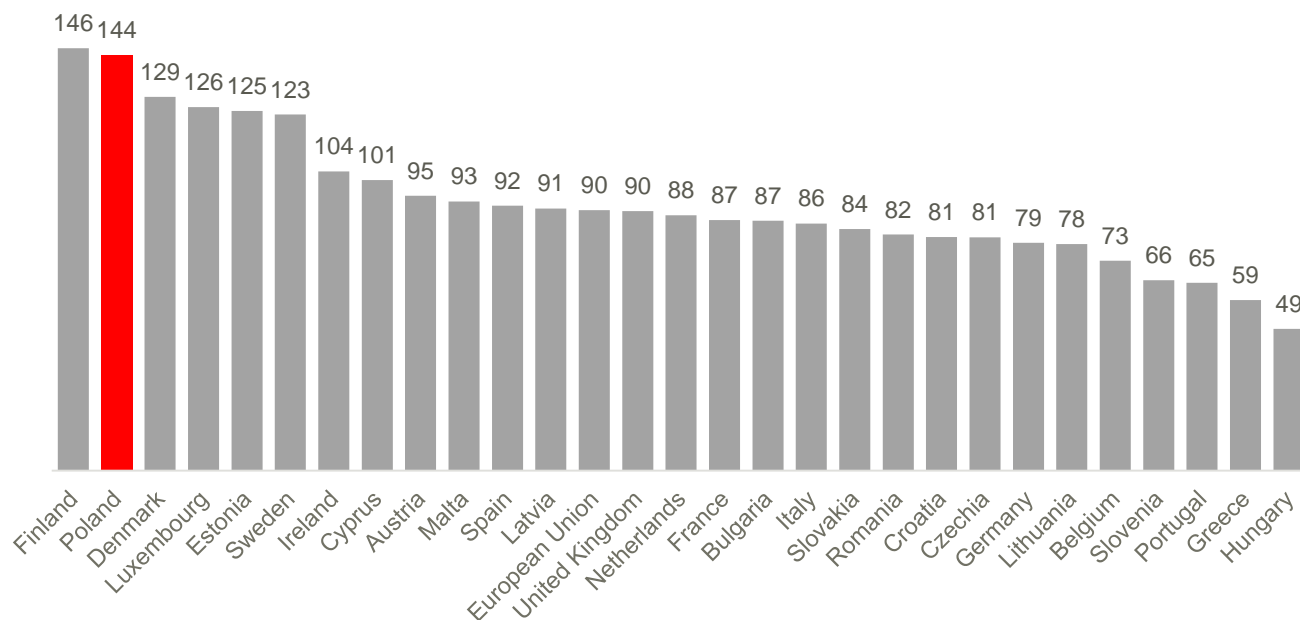
5G base stations shipped

\$2 bn

Heavy investment since 2009

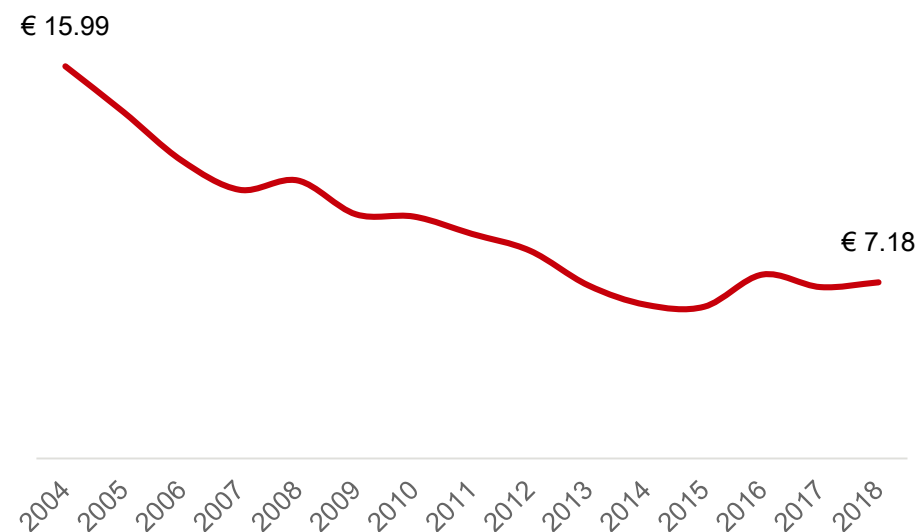
Full Competition with Huawei's Participant has Speeded Up Development of Poland Digital Infrastructure

Poland Ranks **No.2** Mobile Broadband Penetration(%)



Source: European Commission, Digital Scoreboard, June 2017

Mobile Tariff Decreased by **55%** in last 15 years



Source: GSMA 2018

Telecommunication services cost will increase by **100%~300%** without full competition.

Reduced Presence of Huawei in Poland Will have a Significant impact to the Society



Total impact could reach **8.5 Billion EUR**

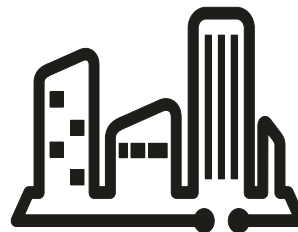


2G/3G/4G

- Accelerated devaluation of investment
- Cost of equipment replacement
- Cost of migration services



- Lack of competition will lead to higher price



- Reduced local investment by Huawei
- Delayed digital economy progress

Cyber Security and Privacy Protection is Huawei's Top Priority

“... Huawei guarantees that its commitment to **cyber security will never be outweighed by the consideration of commercial interests.**”

– *Statement on Establishing a Global Cyber Security Assurance System*

"As a company, **cyber security and privacy protection are our top priorities.** We are committed to building trust and high quality into every ICT infrastructure product and solution we develop."

– *An open letter to all Huawei employees*

Huawei Has Maintained Proven Cyber Security Records Worldwide

30

years

170+

countries

3 billion

people

1,500

carrier networks

Poland

15

years in Poland

38+ million

people

10+

networks

Huawei's practices in cyber security have been recognized by customers.

Huawei Cyber Security & Privacy Approaches: 5 Key Pillars

R&D Cyber Security

- Active participation in standards organizations
- Lifecycle IPD Process integration
- Industry security best practices as reference (OpenSAMM, BSIMM, Microsoft SDL etc)

Supply Cyber Security

- From materials, production to customers in the supply chain
- Suppliers management & global logistics management

Service Cyber Security

- Infrastructure security, Application security, Data security & Personnel security
- Audited for accountability
- Security and privacy protection code of conduct

HR Cyber security

- Clean record and clean behaviors
- Imbedding awareness

Vulnerability Management and Disclosure

- Responsible disclosure
- Timely resolution

Europe Cyber Security Center in Brussels

Dedicated Communication Platform for Europe-Openness & Transparency, Collaboration



Open in Brussels on March 5th 2019

Europe Cyber Security Center

Cyber security communication with EU governments, carriers, and customers

Experience Center

Demonstrate security competitiveness of Huawei solutions and Huawei's cyber security engineering capabilities

Knowledge Hub

Carry out communication and cooperation and best practice sharing (such 5G, cloud, IoT)

Evaluation Center

Provide standardized Huawei products black and white (**source code**) box cyber security test and evaluation services

We are ready to establish a similar cyber security center in Poland, if the authority accept it as a trusted solution.

Independent Clarification on China's Laws by External Legal Experts

Independent legal opinions by preeminent law firms incl. Zhong Lun, and Clifford Chance

- **No empowerment to government authorities to order for backdoor installation**
No law in China authorizes intelligence offices to ask companies to install backdoors.
- **No extraterritorial effect:**
Companies and branches established outside the territory of China and their employees have no obligation of “assistance”.
- **Consistency**
The Intelligence Law applies also to the foreign-invested companies incorporated in China, and the China subsidiaries/branches of foreign companies. The legal obligations they assume are the same as those of Chinese enterprises under the Intelligence Law.
- **Procedural requirements and limitations in law enforcement**
According to the Article 31 of the Intelligence Law, the conduct of state intelligence agency and its staff is subject to restrictions of the law, and potential abusive conduct, including infringement of legitimate rights and interests of citizens and organizations, and enforcement beyond authority would be subject to investigation and punishment in accordance with the law.
- **Obligation for defense/protection**
After the Snowden event, China has released series of laws including Cybersecurity Laws, National Security laws, and National Intelligence laws since 2014, **the purpose of which is to protect itself from potential security threats from other countries. It is a legislation for defense purpose, not for malicious intelligence actions or espionage.**
The telecommunication networks set up outside the territory of China with the participation of Huawei pose no threat to China's national security. “Obligations of assistance and support” should not be interpreted as “Huawei is unconditionally obligated to meet malicious intelligence requests”, as this interpretation does not align with the intent and purpose of the legislation.

Chinese Government Clarification



“I would like to stress again that Chinese laws and regulations never give any institution the mandate to force companies to build ”mandatory back doors“. The Chinese government always encourages Chinese enterprises to follow international rules and abide by local laws when conducting economic cooperation with other countries. We also hope that relevant countries can provide a fair, transparent and unbiased environment for Chinese enterprises seeking investment, operation and cooperation there and refrain from setting up unnecessary obstacles for the normal operation of Chinese businesses out of other motives.”

-- Spokesman of Ministry of Foreign Affairs of People's Republic of China

10th December, 2018

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1620575.shtml

Bring digital to every person, home and organization
for a fully connected, intelligent world

