



Overview of the Public Security Sector

Agenda

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- 1. Organizational Structure**
- 2. PS Services & Police Reform**
- 3. Current Status of Information Communication**
- 4. The Golden Shield Project**
- 5. Challenges of the Industry**

Ministry of Public Security

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Bureau 1 (Domestic Security Protection Bureau), Bureau 2 (Economic Crimes Investigation Bureau), Bureau 3 (Public Security Management Bureau), Bureau 4 (Border Control Bureau), Bureau 5 (Criminal Crimes Investigation Bureau), Bureau 6 (Border Entry & Exit Affairs Bureau), Bureau 7 (Firefighting Bureau), Bureau 8 (Security Guard Bureau), Bureau 9 (Central Gov. Security Guard Bureau), Bureau 10 (PS Bureau of the Ministry of Railways), Bureau 11 (Public Information & Network Security Supervision Bureau), Bureau 12 (Action & Technology Bureau), Bureau 13 (Jails Management Bureau), Bureau 14 (PS Bureau of the Ministry of Communications), Bureau 15 (PS Bureau of CAAC), Bureau 16 (PS Bureau of the National Forestry Administration), Bureau 17 (Traffic Administration Bureau), Bureau 18 (Legal Affairs Bureau), Bureau 19 (Foreign Affairs Bureau), Bureau 20 (Equipment & Financial Bureau), Bureau 21 (Anti-Narcotics Bureau), Bureau 22 (Science & Technology Bureau), Bureau 23 (Information & Communication Bureau), Bureau 24 (Smuggling Crimes Investigation Bureau)

The Ministry of Public Security has bureau level organizations including the General Office, Police Affairs Supervision, Personnel & Training, Publicity, Domestic Security Protection, Economic Crimes Investigation, Public Security Management, Border Control, Criminal Crimes Investigation, Border Entry & Exit, Firefighting, Security Guard, Public Information & Network Security Supervision, Jails Management, Traffic Administration, Legal Affairs, Foreign Affairs, Equipment & Finance, Anti-Narcotics, Science & Technology, and Information & Communication.

The PS bureaus of railway, traffic, civil aviation, forestry, and smuggling crimes investigation are included in the Ministry of Public Security, but are subject to the dual leadership of the respective governing authorities and the Ministry of Public Security.

(China used to treat terrorist cases as serious criminal cases in the past, so such cases were mainly handled by the criminal affairs police, and the first section/unit of the PS bureaus at different levels (Officially called: Domestic Security Protection Section/Unit, which formerly known as Political Security Protection Section/Unit) was responsible for intelligence support)

Beijing Municipal Public Security Bureau

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1. Criminal Investigation Brigade
2. Firefighting Bureau
3. State Security Protection Brigade
4. PS Brigade
5. Population Management Section
6. Action & Technology Section
7. Office of Technical Measures for Security Protection
8. Culture Protection Section
9. Patrol Police Brigade
10. Public Transportation Sub-bureau
11. Security Guard Bureau
12. Security Protection Section
13. Internal Security Protection Bureau
14. Border Entry & Exit Administration Section
15. Economic Investigation Section
16. Anti-riot & Security Detection Section
17. Traffic Administration
18. Supervision Section
19. Headquarters of the bureau
20. Information Center
21. Monitoring Center
22. Command Center
23. Ankang Hospital
24. Public Security Hospital
25. Police Academy
26. The Second Police School

The Criminal Investigation Brigade (The SWAT Team): Recreated on the basis of the former Criminal Investigation Section, Pre-interrogation Section, Anti-Narcotics Section and SWAT Team of the Beijing Municipal Public Security Bureau

Beijing Traffic Management Bureau

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It is under the leadership of the Beijing Municipal Public Security Bureau, has 22 business sections & offices, and has traffic detachments (brigades) in 18 districts (counties), the Capital Airport, and the Yizhuang Economic Development Zone

Beijing Fire Fighting Bureau

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Beijing Fire Fighting Bureau

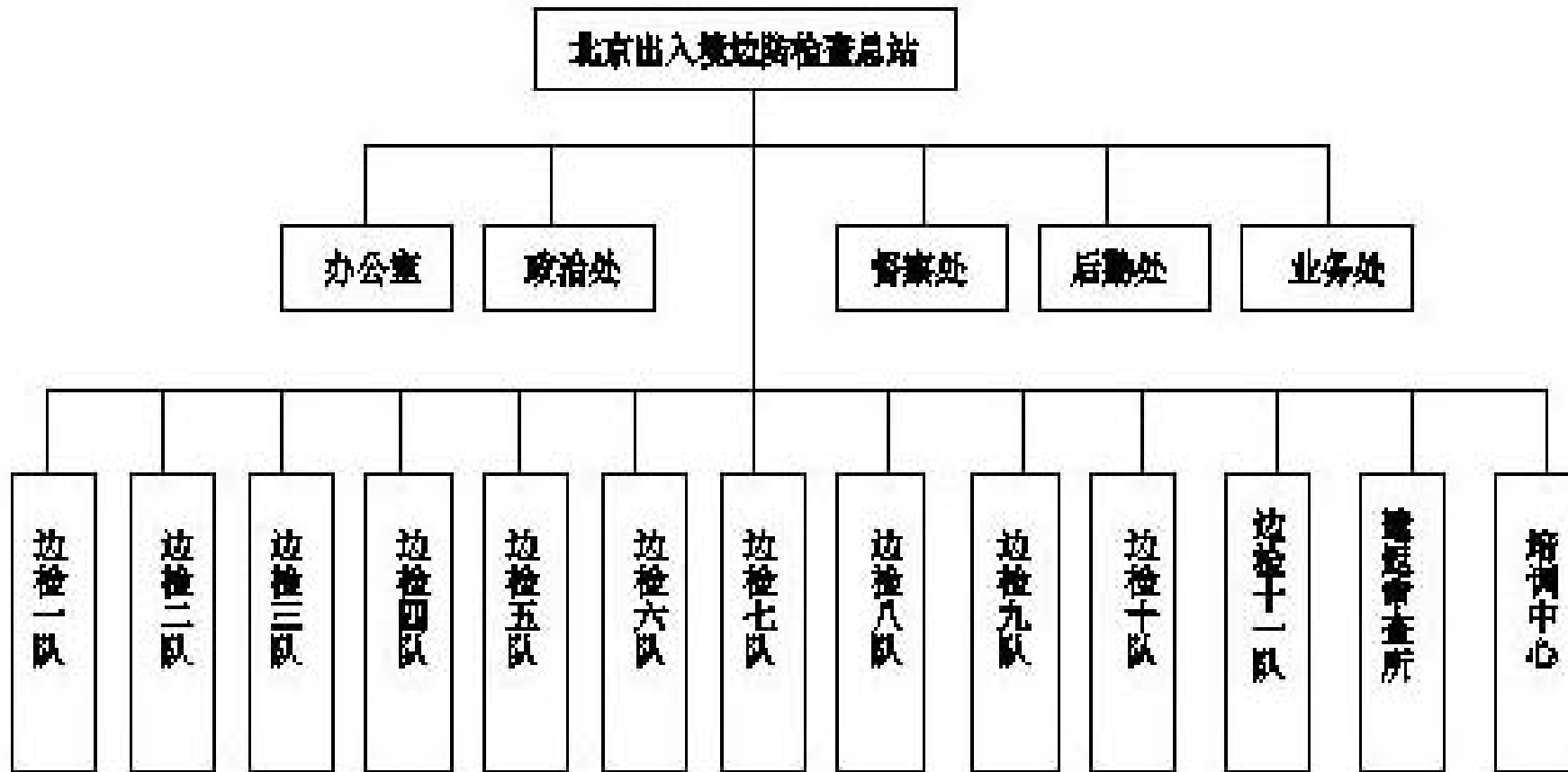
The Beijing Fire Fighting Brigade of the Chinese People's Armed Police
Beijing Public Security Bureau Fire Fighting Brigade

The Fire Fighting Bureau has four units: **The Command Office, the Political Unit, the Logistics Unit, and the Fire Prevention Unit**

The four units has 29 business sections/offices and 3 direct subordinate organizations—the Guiding Brigade, the Hospital and the Training Center (no official staff treatment yet)

The entire city has a total of 44 detachments

Beijing Border Check Station



In May 1988, Beijing Border Check Station and the Border Control Bureau of the Beijing Municipal Public Security Bureau were merged to become a single organization, which was called the Border Control Bureau of the Beijing Municipal Public Security Bureau internally and Beijing Border Check Station externally.

In Jan 1, 1998, in accordance with the Approval Opinions of the State Council on the Pilot Reform of the Professionalization of Border Check in Nine Cities Including Beijing, on the basis of the Border Control Bureau of the Beijing Municipal Public Security Bureau, the Beijing Entry & Exit Border Check Station was set up, directly reporting to the **Entry & Exit Administration Bureau of the Ministry of Public Security**.

Tianjin Public Security Border Control Brigade

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**Border check stations in Zhang Guizhang, Tanggu,
Nanjiang, and Donggang
Marine Police Branch
Guiding Brigade
Border Control Branch**

**Since 1998, the focus of the Border Control Brigade
has been shifted to:**

**Fighting cross-border criminal activities such as
illegal immigration, smuggling, and trafficking of
weapons and drugs**

Different Organizations

Grass-root PS organizations:

Local police stations, criminal police units in charge of specific areas, police affairs studios (station), firefighting brigades, traffic teams (accidents sections, law enforcement stations), vehicles administration offices, patrol police squads, security police squads

Security protection councils of towns, joint security protection squads in rural areas , security check stations, border check stations

Local police stations: local police stations for security/ local police stations for household registration (can also in charge of security) /police stations in border areas (population, security)

Community police service: community police, security police, internal affairs police

Local police stations: 30 thousand; 2500 in Jiangsu province

Border control brigade, detachments, border check stations, border workstations, and border police stations

Brigade (firefighting, traffic police, patrol police, criminal police, public security, anti-narcotics, economic investigation, action technologies) /branch squads /detachments (battalions or companies)

Custody stations, jails (1-6 months), security custody stations, rehabilitation centers for drugs users, forced custody & education centers, and Ankang Hospitals

Law enforcement: prisons (0.5-20 years), forced labor (1-3 years)

Civil affairs: forced custody and repatriation centers

PS in Different Industries

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- **Railways**
- **Transportation**
- **Civil Aviation**
- **Forestry**
- **Smuggling Crimes Investigation Bureau**

The Political & Legal Affairs Commission

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- **The Political & Legal Affairs Commission (integrated management office, population office, office for fighting against smuggling, and anti-narcotics office)**
- **PS, procuratorate, court, jurisdiction, and security authorities having the law enforcement power**
- **5 subordinate organizations: court, procuratorate, public security bureau, legal affairs bureau, and civil affairs bureau**

Public security, procuratorate, court, legal affairs (prisons), national security, and armed police

Police Varieties of the Public Security System

1. Security police
2. Household registration police
3. Criminal police
4. Traffic police
5. Foreign affairs police
6. Economic investigation police
7. Anti-narcotics police
8. Internet police
9. Anti-riot police
10. Legal police
11. Prison police

1. Armed police
2. Border police
3. Firefighting police
4. Security guard police
5. Railway police
6. Anti-smuggling police
7. Navigation police
8. Civil aviation police
9. Forest police

1. Special police
2. Water police
3. Traffic & patrol police
4. Air police

The armed police has eight varieties of police forces in three categories

Category one, internal security protection force: under the direct leadership of the head office of the armed police

14 mobile divisions: code-named 8610, 8620, 8630, 8640, 8650, 8660, 8670, 8680, 8690, 8710, 8720, 8730, 8740, and 8750.

Category two, under the dual leadership of related governing agencies of the State Council and the head office of the armed police

The gold force, the hydro-electric force, the transportation force, and the forest force

Category three, under the leadership of the public security authority

The border force: The border control bureau administers border check, border patrol, and sea-based smuggling control

The firefighting force: Under the administration of the firefighting bureau, implementing fire prevention and fire fighting tasks

The security guard force: Under the administration of the security guard bureau, responsible for the security guard of the Party and state leaders, main provincial & city leaders, as well as the visiting foreign dignitaries

Overview of the Police Force Nationwide

1.60 million police, 10.86 per ten thousand people; 35 per ten thousand people in developed countries

Local police stations: 380 thousand

Traffic police: More than 200 thousand, 1.2 traffic police/kilometer of highway

Criminal police: 150 thousand

Firefighting police (armed police): 120 thousand

Patrol & anti-riot police squads: 80 thousand; the “110” police is responsible for both anti-riot tasks and patrolling

Information & communication police: 16,000

Confidential staff: 10 thousand

Guangdong: 120 thousand Jiangsu: 70 thousand Beijing: 30 thousand

Overview of the Police Force Nationwide

Over the past 20 years, more than 6 thousand police officers died at work and 100 thousand were injured across the country.

“There is blood shedding every moment, and there is sacrifice everyday”

The frontline police officers work 11 to 15 hours a day on average

In 2001 more than 450 police officers died at work in China, whereas the number was just 2 in Japan in the same year

In 2001, among the 458 died, 148 died at work due to long-time overwork, accounting for 33.4%; 68 died of attack from criminals; 204 died of traffic accidents, accounting for 46%; and 38 died in the process of pursuing criminals

The percentage of police in the total population is the lowest for the Chinese police, their salary is also the lowest in the world, but their workload is the biggest in the world

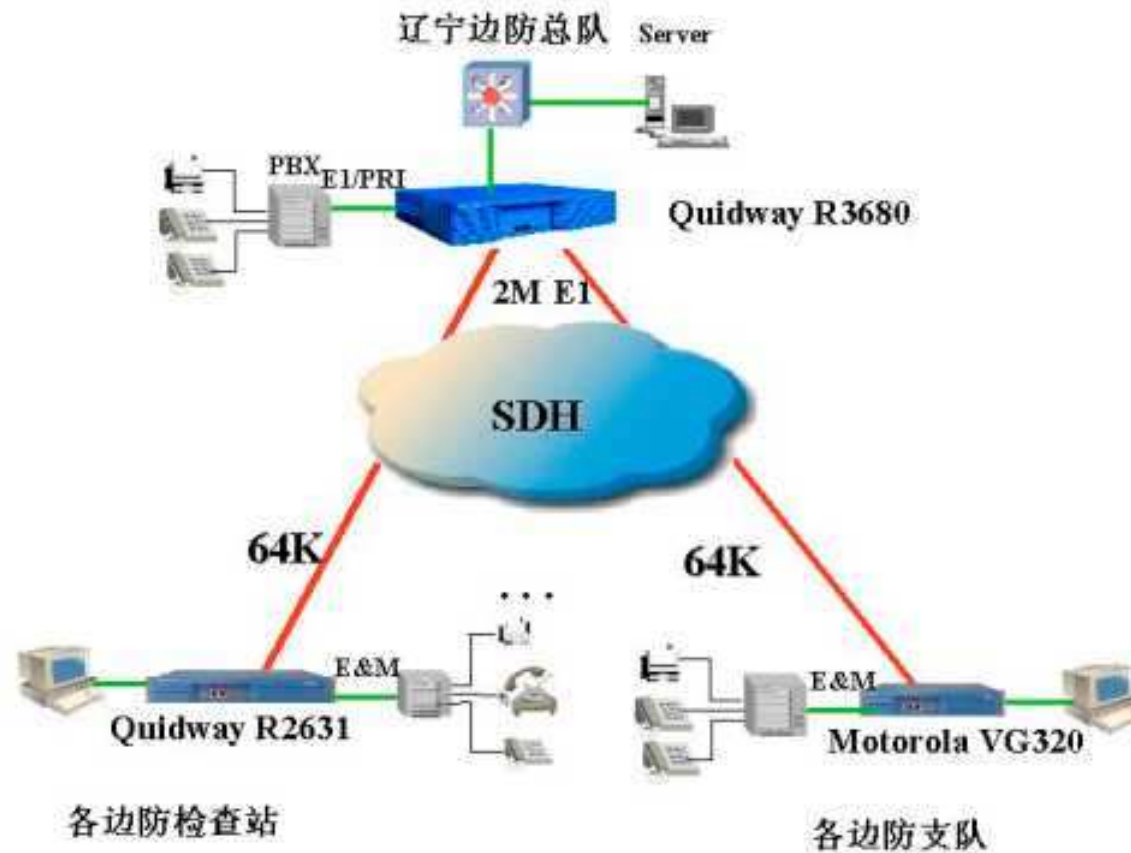
Opportunities for Cisco: Levels 1, 2, 3 and 4 Networks

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- **Traffic management**
- **Firefighting**
- **Border control**
- **Legal affairs network**

Liaoning Border Control Network

辽宁边防组网图



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Police Services

1. Security management
2. Household registration management
3. Traffic management
4. Legal affairs
5. Economic investigation
6. Criminal investigation
7. Border management
8. Firefighting management
9. 110 patrol police
10. Narcotics confiscation and control
11. Police service supervision
12. Anti-smuggling police
13. Foreign affairs management
14. Science & technology safety
15. Border entry & exit management
16. Complaints handling
17. Internet monitoring & supervision

Jia Chunwang 11.20 [Government Statement of Goals by Jia Chunwang]

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- Give top priority to maintaining **stability**, and further improve and enhance domestic security protection
- Stick to the principle of getting tough on the criminals, and substantially improve our **skills and levels** in fighting criminal activities
- Focus on the development of the public security prevention & protection system, and combine the **rigorous enforcement, rigorous control, rigorous prevention, and rigorous management** organically together
- Further reform and enhance the **public administration work of the PS system**
- Reform the **PS management systems and public service assurance mechanisms** based on the simplified, unified, and effective principle
- The development of the Party's system and the **police force** in the PS sector

The Four Principles Related to Police Management

- **Developing the police force with an awareness of government policy goals**
- **Managing the police force in accordance with law**
- **Building up the capacity of the police force with technology: information, criminal investigation, action**
- **Culture education for the police**

Features of the PS Sector: Law Enforcement Goal

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- **Unified command**
- **Fast reaction**
- **Concerted action**

Three Major Strategies for Local Police Stations

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- **Information strategy**
- **Community police service strategy**
- **Standardization strategy**

Role Models in the PS Sector

- **Jinan Traffic Police: A flag in the country's PS sector**
“Rigorous law enforcement, warm services”—Jiang Zemin
- **Zhangzhou 110:**
Police call command & dispatching system
- **Benxi Municipal Public Security Bureau:**
Improving the quality and capacity of the police force through
internal reform

The Fifth Squad of the traffic & patrol police in Yangpu was
named “Xiao Yuquan Detachment” by the Shanghai
Municipal Public Security Bureau; respect ones job and
caring for the people

Police Reform

- 1. Criminal investigation**
- 2. Traffic & Patrol Police**
- 3. Administration Reform**
- 4. Introduce Community-based Police Services**

Reform in Criminal Investigation

On June 9, 1997, the Ministry of Public Security convened the National Working Conference on Criminal investigation in Shijiazhuang, Hebei Province, and made the decision to initiate reform in criminal investigation in the country's PS sector

**Based on the criminal police squad responsible for a specific area
Investigation & interrogation combined together**

Accountability system in criminal investigation

New mechanisms for cracking down on criminal activities

Criminal investigation information system

Training for all the criminal police officers

**Enhancing the technology awareness, and promoting the adoption of IT
and other modern technologies in criminal investigation activities**

Reform of Traffic & Patrol Police

In the past, there was only one variety of police, there were too many law enforcement processes and there was a waste of the police force

“Simplifying the head office, enriching the grass-root, improving efficiency, and enabling one police officer to have multiple skills”

The new traffic & patrol police: one police with multiple law enforcement tasks; improved police services

In the past: criminal activities were not able to be cracked down thoroughly; a case might be accepted, but might not be handled or handled by two different police teams at the same time; lack of accountability among different police teams

**Shanghai Municipality
Tieling, Liaoning**

Administration Reform

- **Transparency in police services, “sunshine operation”**
- **Simplifying service processes**
- **Reducing intermediate processes**
- **Shortening the time needed for a service**
- **Improving efficiency**

The Four Revolutions in Police Services

Specialization: The signature of the first revolution in police services

Marked by the modernization of the police force in Greater London, UK, in 1829,

Professionalization: The core at the second revolution of police services

Marked by the professionalization of the American police at the end of the 19th century and the beginning of the 20th century

Equipment modernization: Characteristic of the third police revolution in police services

Marked by the modernization of police equipment, the dramatic improvement of the police capacity, and the emphasis on quick reaction in European and North American countries in 1930-70s

Community police services: The cornerstone of the fourth revolution in police services, from 1970s until today

The slogan of the community police services in the United States: “Let’s create miracles together”

Community Police Services: the Basic Direction of Police Service Reform in Different Countries Today

1997, Suzhou, Shijiazhuang Conferences, promotion

Mar, 2002, Hangzhou, Conference of Local Police Stations, three major strategies

Before the end of 2004, in major cities around the country, one police officer is responsible for the local administration [of law enforcement] for 1000 households or 3000 people; one police officer in one community or several police officers in one community; police service strategy: based on prevention and focused on eliminating the root causes of crimes

Working goal:

Low crimes, good social order, stable society, and satisfaction of the public

To eventually realize the shift of police work:

From enforcement to prevention,

From being passive to being proactive,

And from being administration-oriented to being service-oriented

Luo Feng, Vice Minister, Ministry of Public Security, November 25, Nanjing, International Workshop

In the future, the Ministry of Public Security will further increase efforts to reform police services in communities, to be based in communities, to serve the communities, to optimize police force arrangement, to regulate police operation, and to gradually create a mechanism for community police services operation that is in line with the management system of the new types of communities

24X7 Police Services

- **Patrol vehicles, fixed posts, and mobile posts**
- **Points (police posts, police offices)**
- **Lines (patrol lines)**
- **Areas (communities)**

Opportunities for Cisco

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- **Trends**
- **Industry Hotspots**
- **Service Assurance (BW, QoS/Security)**

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Information System Status: Wired Communication Network for Telephone (1)

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Head office of the Ministry: Siemens 350, 4 E1 relay lines and 150 E&M relay lines, with satellite line serving as the backup line for the primary network

- **Primary network: 3-6 lines**
- **Primary network: 1-4 lines**
- **Tertiary network: 1-3 lines**

- **Long-distance telephone, tele-conferencing, text fax, photo fax, password-protected telegram**

Information System Status: Wired Communication Network for Data (2)

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Mainly relying on the digital lines rented from China Telecom and the communication arm of the Headquarters of the General Staff of the PLA, supported by the exclusive satellite channels for public security

Primary network: $N*2M$ ($1 \leq N \leq 3$)

Information Center of the Ministry: two units of CISCO 7507

Current Situation of Information System: Confidential Communication (3)

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Encryption Work Steering Group of Ministry of Public Security
(**Confidential Affairs Bureau** of General Office of the State Council)

All levels higher than region-city

All counties except for Tibet

Level 1 and 2 networks: Encrypted communication network for **core encrypted fax**

Level 3 network: Encrypted communication network for **common encrypted fax**

Ministries, province (autonomous region and municipals) and “Two Offices”

Internal protection, border guard, borders inspection and guard

Encrypted communication: life line, security line and command line

Millions of encrypted telegram and messages per year

Current Situation of Information System: Wireless and Mobile Communication (4)

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Distributed mobile network: 30KM Fixed point link network, Emergency Command Network:
100KM

Band dedicated for Public Security System:

VHF-D, S: Band for 150M network

UHF-P: Band for 360M network

UHF-E: 460M link frequency, band for supplementary network

UHF: Band for 800M network

- Basic 150M for public security: paging interference is severe, still being used in some small city and counties as well as in rural areas

Remote areas: short-wave network, certain public security organs: paging system

- Functional 360M for public security: guard, transportation and reconnaissance, small in number
- Automatic GA176 for public security (enhancement to MPT-1327)

Over 300 360M base station; over 2000 channels; over 80000 sets of mobile devices

Shanghai: TETRA Digital Cluster

CDPD, GPRS

Issue: Mobile data transmission and internetworking

Current Situation of Information System: Image Communication (5)

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TV monitoring system:

Beijing cameras: 4000, between: 16-way switching

Public security: 500 Traffic administration: 1000

**Airport: 2000 West Railway Station: 200 Beijing Station:
200**

1-core optical fiber 8 signal inputs

Video and audio conference system:

H.320 from ZTE

Using satellite communication platform for public security

Shandong: VTEL H.320

Current Situation of Information System: Satellite Communication (6)

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Joint Communication Network of Ministry of Public Security and Ministry of State Security

Use Ku band

Transponder bandwidth: 27 M

Support 16k voice, 9.6k fax and in-band data

Point-to-point transparent data transmission from 9.6 to 64k

Broadcast and image transmission above 2M

Current Situation of Information System: Microwave and Short wave Communication (7)

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**Microwave communication:
Guangdong: Ericsson 800M
Jiangsu, Henan: Harris 2G**

**Short wave communication:
Remote mountainous areas**

Current Situation of Information System: 110 Alarming, Commanding and Scheduling Communication (8)

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Networking of alarming systems:

110, 119, 122

Important places

Key venues

Residence communities in cities, etc.

**Commanding Communication and Scheduling
System:**

Wireline, wireless, satellite and computer, etc.

Current Situation of Information System: Emergency Communication (9)

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**Communication Assurance in the event of emergency
Temporary networking (wireless)**

**Transceiver station, mobile communication vehicle (GPS
positioning)**

**In vehicles, airplanes and ships, etc. Set command post in
battle areas**

A wide range of interfaces: E&M, E1, RJ11, RJ45, V.35

**Common (150M), clustered (360M), VSAT, integrated
communication**

Current Situation of Information System: Application System

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High level of application in Security, criminal investigation, traffic administration, border entry & exit administration

By 2001:

Over 30000 local police stations achieved computer-based population information management

Nearly 1.1 billion persons have been registered in computer system

Information of over 600 millions persons in 255 cities is available on web site of Ministry of Public Security

About 170000 escaped criminals were arrested in 1999 through "Online Criminal Pursuing"

With respect to border entry & exit management, all passport issuing offices and border

inspection sites have implemented computer-based management

When it comes to Traffic management, information of over 30 million vehicles and about

7000 drivers is management in computer and is available on Internet throughout the country .

Current Situation of Information System: Application System

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1. **Foreign-related Information Management System**
2. **Taiwanese Entry Information Management System**
3. **Criminal Information Management System**
4. **Population Information Management System**
5. **Government Insurance Information Management System**
6. **Computer-based Portrait Combination System**
7. **Fire Statistic Information System**
8. **Road Traffic Accidents Information Management System**

Current Situation of Information System : CCIC

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Criminal Information Center
3 Levels: Ministry, Province and City
Stolen or Robbed vehicles
Escaped criminals
Stolen, robbed or missing guns

Current Situation of Information System: Online Applications

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- **Online Escaped Criminal Pursuing**
- **Online anti-human trafficking**
- **Remote Fingerprint comparison**
- **Ballistic Verification**
- **Image Recognition**
- **DNA Query**

Cisco's Opportunities

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- **Compatibility**
- **Development**
- **Quality Assurance**

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National Public Security “The Golden Shield Project” Office Leader Working Meeting

[Quotes

from Government goals]

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16th July

Chunwang Jia

En'tao Zhu:

Treat information system construction for public security as a **strategic and comprehensive** work

Drive **high-level planning** and **high standard construction** of “The Golden Shield Project”

Enhance high-level **scientific workforce development** and **training** on information applications for policemen

Runsen Li

Characteristics of Public Security System: The Golden Shield Project

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- **Unified leadership, centralized planning, consistent standard and phased implementation**
- **Phase I (2001-2003), Phase II (2004-2005)**

- 1. Focus on “Application” and “Benefit”**
- 2. Underlying works first**
- 3. Insist on Innovation**

Application as soul and network as foundation

**Digitalization and networking represent future direction
of security protection products**

Features of Public Security Industry: The Golden Shield Project

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- 1. Information Network**
- 2. Application System**
- 3. Standard Specification System**
- 4. Safety Control System**
- 5. Operation Management System**
- 6. Public Network Information Security Monitor System**

The Golden Shield Project: Information Network

- **Stage 1 Project:** All public security organs at prefecture level or above, 50% public security organs at county level, 10% grassroots public security units (division, station, brigade) and 40% grassroots units will be available with dial-up networking.
- **Stage 2 Project:** It is expected that 98% public security organs at county level and 40% grassroots public security units will be available with leased circuit connection, another 2% public security organs and 60% grassroots units will also be available with dial-up networking.

The Golden Shield Project: Application System

- **Stage 1 Project:**
 - Population Information Management System**
 - Criminal Investigation Information System**
 - Entry & Exit Administration Information System**
 - Watch & Control Information System**
 - Traffic Management Information System**
 - Drug Prohibition Information System**
 - Office Information Management System**
 - National Public Security Quick Search Comprehensive Information System**
(including China Criminal Information Center)

 - Public Security Commanding Center**
 - Mobile Communication Commanding & Dispatching System**
 - Publicize Mobile End Gradually**
 - Security Videoconference and Major & Key Criminal Cases Coordinating Conference**
 - Remote Public Security Service Training & Teaching System**

 - National Public Information Network Security Control Center**
- **Stage 2 Project: Other public security service application systems, realizing the sharing of service information regarding national public security organs' services**

The Golden Shield Project: Standard Specification System

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- **Coding Standards for Terminologies & Vocabularies, etc.**
- **Standards for Information Processing and Exchanging**
- **Standards Regarding Data Communication Network**
- **Standards for Reliability & Maintainability**
- **Standards for Safety & Electromagnetic Compatibility**
- **Standards for Engineering & Quality Control**
- **Public Security Service Processing Process**
- **Response Time for Inquiry Log-on**

Total of 1272 items

The Golden Shield Project: Safety Control System

- **Stage 1 Project: Establish structural model of engineering security system”**
- **Take security, performance, practicality, convenience and easy management, etc. into consideration**
- **Reliability indicator, fault tolerance & fault recovery, disaster tolerance & disaster recovery**
- **Network security & system security**

- **System security, network management security, internal network resource protection,**
- **Network interconnection and user access, security management and monitor, etc.**

- **Computer system security, PKI , CA certification**

The Golden Shield Project: Operation Management System

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- **Operation mechanism**
- **Management Mode**
- **Rules and Regulations**
- **Technical Standards & Specifications**
- **Talent Cultivation**
- **Related Technical Systems**

The Golden Shield Project: Public Network Information Security Monitor System

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- **Stop the network-related crimes**
- **Guarantee the security and services of public network**
- **Combat “Falun Gong” evil religion and other hostiles**

[Note: Statement of Government goals from speech government official Li Runsen]

Cisco Opportunities

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- **High starting point planning**
- **High standard construction**
- **Technical training**
- **Security, operational maintenance**

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Challenges Facing Public Security Organs

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- 1. Challenge from new economic era**
- 2. Challenge from system shift & society transition**
- 3. Challenge from entry of WTO**
- 4. Challenge from “westernize”, “Differentiation”**
- 5. Challenge from transition from rule of man to rule of law**
- 6. Challenge from world police affair revolution**
- 7. Challenge from the 4th Criminal Peak in China**
- 8. Challenge from relationship between police and other people**

Challenges Facing Public Security Organs

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- **Insufficient police strength**
- **Increase of floating population & unemployment population**
- **High-tech crimes**
- **Challenge from entry of WTO**

Challenges Facing Public Security Organs: Insufficient Police Strength

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**1.6 million policemen, accounting for 11/10000,
which is 35/10000 in developed countries**

Police strength of institution: 66.5%

Police strength of grassroots unit: 33.5%

- 1. Gain police strength from science & technology**
- 2. Gain police strength from quality improvement**
- 3. Gain police strength from management**
- 4. Gain police strength from renovation**

Gain Police Strength from Science & Technology: Challenge from information communication sector

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- **Separate reigns in different sectors**
- **Mobile case handling**
- **Prevention & control system of public security**
- **Community police affairs**
- **Urban emergency responding center**

Mobile case handling

- **110 police car, 110 emergency police affair car**
- **Prowl car (110, 122)**
- **Incident handling car**
- **Emergency communication car**
- **Commanding & dispatching car**



CDPD

- **Beijing, Shanghai, Guangzhou, Shenzhen, Changsha, Xiamen**
- **CDPD comprises 3 parts: equipment to be provided by Lucent**
 - Mobile Data Base Station (MDBS)**
 - Mobile Data Intermediate System (MDIS)**
 - Mobile End System (MES)**

TCP/IP-based

19.2K, about 10k actual transmission rate

Allows for a transmission rate of more than 100km/h

Access air link by means of DSMA/CD

Terminal interface: RS232, PCMCIA

Permanent population, temporary population and wander away population

Drivers, motor vehicles, lost vehicles, criminal at large

Beijing: more than 400 iPAQs 10 thousand yuan/set 6000+4000 (card)

GPRS

SGSN: Serving GPRS support node
GGSN: Gateway GPRS support node
PCU: Packet Control Units

Speed is 150Kbps, 15 times faster than GSM's 9.6Kbps

Now: actually about 40K

GPRS application of the public security system - "GPRS-police"

By the use of portable "-police," the public security personnel can easily search for various types of information, thus greatly improve work efficiency.

Beijing: Patrols can use M388 phone or PDA, and do suspicious-person check at the same time using a mobile phone through GPRS network connected to the network of public security, Find suspicion's information at site.

Traffic police use mobile phones or handsets to connect to the specific GPRS network

Enter license plates, engine, driving number

then check out the illegal operation of vehicles;

Coming to drivers of the violation, Traffic police can give punishment bill immediately

And look for a driver's violation history at the time.

3G: Dynamic 384 K, static 2 M

CDMA 1X CDMA 1X (spreading rate of 1)

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Data transfer rate: 150K at least two times faster than GPRS

**Data security: military technology,
a high degree of confidentiality algorithm**

**Data transfer costs: utilization of the spectrum is probably
more than six times of GPRS,
the base station signal coverage is over 3 to 4 times of GPRS**

order movies or positioning services with accuracy of 5-10 meters

Cluster: TETRA and Mobile Data

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Shanghai TETRA: 7.2 K, the net rate of 3 K

16 base stations, expand 8, covering to skirt area

Beijing:

350M Mobile Communication System

800M simulation cluster system

Mobile Data: No handheld station

Air 19.2 K, automotive platform 9.6 K (RS232)

City Emergency Center

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- **110, 119, 122**
- **120, 999**
- **Electric water gas system repair**
- **Emergency relief**
- **Mayor Hotline**

Cisco Opportunities

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- **MPLS VPN**
- **WLAN/Mobile Router**
- **IPT/IPCC**
- **IP Video (Multicast/QoS)**
- **E-Learning**

ITS Intelligent Transportation Systems

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- **Traffic management System**
- **Driver Guiding System**
- **Automobile Control System**
- **Public Transport System**
- **Road Transport System**
- **Commercial Vehicle Operating System**

ITS

- **Guangzhou**
- **Shenzhen**
- **Qingdao**
- **Ji'nan**
- **Shanghai**
- **Beijing**
- **Zhongshan**

- **Safety: Reducing traffic accidents and property loss**
- **Economic Benefits: Ensuring travel time punctuality**
- **Environmental Protection and Reducing Energy Consumption**

Beijing : Traffic Management Comprehensive Information System

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**Three networks, namely Cable, Wireless and Computer Communication
And interconnected at the communication center**

Cable Network

It comprises 2nd ring and 3rd ring TV monitoring system, signal control system and comprehensive data communication system, 2000 special electric switch system and 122 alarming system, totaling 2100 pairs of core-KM optical fiber;

Wireless Network

It comprises 28 channels and 450 and 800M wireless cluster communication system covering the urban and suburb areas of Beijing. The terminals of the network includes several thousands of radios, 60 vehicle-carrying computers and 300 GPS police vehicle.

Computer Network :

It covers 186 nodes distributed in 18 counties and districts of Beijing and more than 1326 networked computers, and 3214 fixed and portable printers, it realizes the networking of information center, traffic police squad and duty squad at three level networks, and adopt optical fiber, DDN and ISDN/PSTN and other communication means in accordance with the volume of business data..

Beijing : Road Condition Information Collection

Inspect the loops, TV monitoring, microwave detection and frequency detection

1400 ring-shaped loop detector are set at 240 road crosses in Beijing for inspecting the vehicle flow and speed.

155 sets of microwave detection equipments are installed at the 2nd-ring and 3rd-ring road to detect the traffic flow data of 105 sections: flow, occupation rate, speed, travelling time and delay.

More than 160 sets of TV monitoring systems are installed within the 4th –ring roads of Beijing for capturing real-time road conditions.

Once there are traffic congestion, accident, troubled vehicles, security incident and other accidents, the information can be communicated to the command center through five channels at least..

First, through traffic control signal system,

Second, through TV monitoring cameras;

Third, through microwave detector;

Fourth, through patrol police;

Fifth, through “122” traffic emergency phone reporting system.

Xiangfan City Public Security Traffic Command Center

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- **Traffic Command System**
- **Traffic TV Monitoring System**
- **Auto-image-capture System of Traffic Rules-breaking**
- **Traffic-lights Control System**
- **Traffic Guiding System**
- **Traffic Information Inquiry System**
- **Traffic Communication System**
- **Driver's IC Card Management System**

Wireless Interphone (350 MB)

Traffic Management Information System

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- **Detection System for Rules-breaking Activities**
- **Enforcement System (Enforcement Station)**
- **Annual Inspection System**
- **Parking System**
- **Off-site Penalty System**
- **Vehicle-related Affairs System (Vehicle Administration Office)**

Traffic Police

Cisco.com

- 1. On Duty Urban Highway Police**
- 2. Highway Patrolmen**
- 3. Traffic Accidents Police**
- 4. Police for Vehicle Management**

Highway Traffic Police

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Special Service, Special Traffic Management Service

Route Traffic Police

Field Traffic Police

Stationed Traffic Police

Highway Patrolmen

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**Highway patrol squadron/30Km, >10
members**

**Freeway Traffic police group/40-60Km, >40
members**

Traffic Signal Control Technologies

Cisco.com

Point control:
Timed control, induction-based signal control

Line control: Green wave control

Area control: Regional control, and coordinated network control

Traffic Management Technologies

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- **Radar speed-meter:**
 - Radar speed measuring & photographing system
 - Portable radar gun for speed measuring
- **Alcohol detection**
- **Red light photographing: e-police**
- **Vehicle automatic monitoring system**
 - Speeding vehicles
 - Vehicles passing through key sections of road
- **Distance measuring & photographing at the scene of traffic accidents**

Video-based Traffic Monitoring

Cisco.com

Analog
Digital

Professional video quality: 3M, 25-frame, 720*576
(big screen)

Desktop video quality: 1.5M, 25-frame, 720*288
(Video-on-Demand for internal staff)

Police's Law Enforcement Information

1. Investigation work information
2. Security work information
3. Border control work information
4. Security management information
5. City security information
6. Grass-root PS organization's information
7. Pre-interrogation & custody work information
8. Firefighting supervision work information
9. PS publicity work information
10. PS industry information
11. Information on the development of the leadership team
12. Information on PS science and technology research
13. Information on IT research
14. Information on PS education
15. Information on security work status
16. Other information

Border Check, Customs, Special Check

“Border check”: Entry & exit border check

The ports opened up to the outside, such as the harbors, air ports, stations, and border passages

Border check authorities located in the opened up ports (known as “the frontline” for short)

Main task is to “manage people”, to check the passports, IDs, and visas of people entering or leaving the Chinese border; to monitor & protect the transportation tools; and to check the transportation tools & luggage if necessary

Specific work is managed by different border check stations.

Border check police and border control military officers

“Customs”: “Managing materials”, the offices of the General Administration of Customs in each opened up port

Border brigades, border check stations, border workstations, and **border police stations**

Border check & customs operate together in the same ports; when there is a border check station, there is a customs office; and vice versa

“Special check”: Check in special economic zones

The administration line of special economic zones (known as the “second line” for short)

“Border Pass of the People’s Republic of China” (or “Border Pass” for short)

The specific operations are the duties of the check stations of special economic zones (the check station of the Shenzhen Special Economic Zone and the check station of the Zhuhai Special Economic Zone).

“Shenzhen Entry & Exit Border Check Station”, manages eight entry & exit border check sub-stations at Luohu, Huanggang, Shekou, Wenjindou, Airport, Shatoujiao, and Sungang respectively, reports to the Entry & Exit Administration Bureau of the Ministry of Public Security, and all the staff members are professional police officers.

But the check station of the Shenzhen Special Economic Zone still remains part of the armed police system, and is still under the leadership of the Border Control Bureau of the Guangdong Provincial Public Security Bureau

The border check officers in Shenzhen wear the uniform of Public Security, but the special check officers in Shenzhen wear the uniform of the armed police

Criminal Investigation Technologies

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- **Trace inspection: fingerprints, footprints, traces of tools, and traces of guns & bullets**
- **Document inspection**
- **Micro-material evidences**
- **Forensics**
- **Toxics & narcotics inspection**
- **Criminal imaging technologies**
- **Audio & video inspection**
- **Police dogs**
- **Criminal intelligence**
- **Identification & prevention of computer crimes**
- **Judicial expert testimony of mental disorders**
- **Judicial accounting & testimony**
- **Others: Psychological test, and mesmerizing technologies**

“Networked” Prisons & Jails

Aug 15, 2002

The Supreme People's Procuratorate, the Ministry of Public Security, the Justice Department held the National network-based management and dynamic monitoring on-site conference

Currently, the efforts to realize network-based management and real-time monitoring of prisons & jails are going forward in full steam in Beijing, Zhejiang, Heilongjiang, and Jiangsu.

By connecting with the information system networks of the prisons & jails, the procuratorate authorities can realize the real-time and dynamic 24 X 7 supervision each day, and can find out the detention period of a particular inmate in advance through the system, so as to remind police officers in charge to prevent and remedy cases of over detention

The practice of network-based management and dynamic monitoring will be gradually adopted by prisons and jails in different level around the country, in an effort to realize network-based management and monitoring of prisons & jails across the country in the shortest time possible.

“Networked” Prisons & Jails

When a suspect is transferred to a jail, his/her information will be transferred to the management information system of the jail in real time from the computer system of the criminal investigation authority. The officer in charge can enter the ID number of the suspect into the system, which will extract the personal information and case information of the suspect from the population information system and the criminal investigation information system automatically, and compare the information with the Ministry of Public Security’s database of criminals on the run; if the suspect is such a criminal on the run, the system will give out an alarm.

The suspect will be transferred to the transitional jail room, and various activities of him/her will be tracked and recorded dynamically through the management information system of the jail.

After the conclusion of the criminal investigation stage, if the suspect is to be released without being convicted, the system will automatically transfer the case information to the local police station of the area where the suspect resides. Thus, a close loop is formed from the point the suspect enters the jail to the point he/she leaves the jail. The case information is transmitted automatically on the network in real time, the legal documents are printed automatically, and the information is updated and saved automatically, to form a complete and standard information flow.

Management of Migrant Population

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- **People involved in criminal activities in Beijing: over 60% are migrant population**
- **Hotels, guesthouses, and rented houses**

National Conference of Leaders in Charge of Prisons & Jails from Provincial PS Bureaus

Cisco.com

Bai, Jingfu
August 15

Prison & Jail Management Information System

Strive to realize network-based management of prisons and jails across the country in two to three years

Realize the sharing of information on inmates across regions and among different types of police