National Smart City Pilot Projects (MOHURD,2012-2020China) And International Collaboration
国家智慧城市试点与国际合作

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CONTENT

1) Smart City Introduction and
China Smart City Pilot Project

2) International Collaboration (China)

3) Case Study—Shanghai Pudong

SMART CITY

Smart City Introduction and China Smart City Pilot Project

SMART CITY AND NEW-TYPE URBANIZATION

Green City

Smart City

Sponge City

Humanity City

中共中央、国务院印发
《国家新型城镇化规划（2014-2020年）》

■《规划》是今后一个时期指导全国城镇化健康发展的宏观性、战略性、基础性规划
■制定实施《规划》，努力走出一条以人为本、四化同步、优化布局、生态文明、文化传承的中国特色新型城镇化道路，对全面建成小康社会、加快推进社会主义现代化具有重大现实意义和深远历史意义

引领我国城镇化健康发展的纲领性文件
——专家谈《国家新型城镇化规划（2014—2020年）》

National New-Type Urbanization Planning 2014-2020

Comply with trends of modern urban development, promote urban green development, improve the level of intelligence, enhance the charm of history and culture, improve the inner quality of the city.

Promoting Smart City Sound Development Guidance

Promoting Smart City Sound Development Guidance is issued in August 2014, and it is **co-issued by 8 different ministries**.
This guidance proposed that **a group of smart cities should be constructed to 2020**, and by that time, their aggregation and radiation effects and comprehensive competitive advantages will be strengthened, which reflected on guaranteeing and improving civic livelihood, innovating social governance, and maintaining Internet safety, etc.

CURRENT SITUATION AND TREND ANALYSIS

住房建设部 Ministry of Housing & Urban-Rural Development

- **National Smart City Pilot Project, 299 cities and districts involved**

工信部 Ministry of Industry & Information Technology

- **National Information Consumption Pilots Cities Project**
- **China and Europe Green Smart City Cooperation Pilot Cities Project**
- **Smart City Pilot Project with Zhejiang Province，Smart City Pilot in Changzhou and Yangzhou**

发改委 National Development & Reform Commission

- *Issued Carry Out Government and Social Investment Cooperation Guidance*
- **Issued** *Government and Social Capital Cooperation Projects General Guidance*

**科技部 Ministry of Science & Technology**

- **National High Technology Research and Development Program("863"Program) of China - Smart City Survey**
- **Smart City Pilot Project with 20 cities and districts**

交通部 Ministry of Communica-tions

- **Smart Publish Transportation Pilot Project in 10 cities**
- **Smart Taxi Management Project in 25 cities**

公安部 Ministry of Public Security

- **Safe City Project in whole China**
- **Automatic Alarm and Monitoring Network System Pilot Project in 473 cities**

旅游局 National Tourism Administration

- **National Smart Tourism Pilots Cities Project, 33 cities involved**

财政部 Ministry of Finance

- **Issued** *Government and Social Capital Cooperation Projects General Guidance*

National Smart City Pilot Project, 299 cities and districts involved

3 Patches of Smart Pilot Cities
- 🔴 City Level
- 🟡 District Level
- 🔵 Town Level
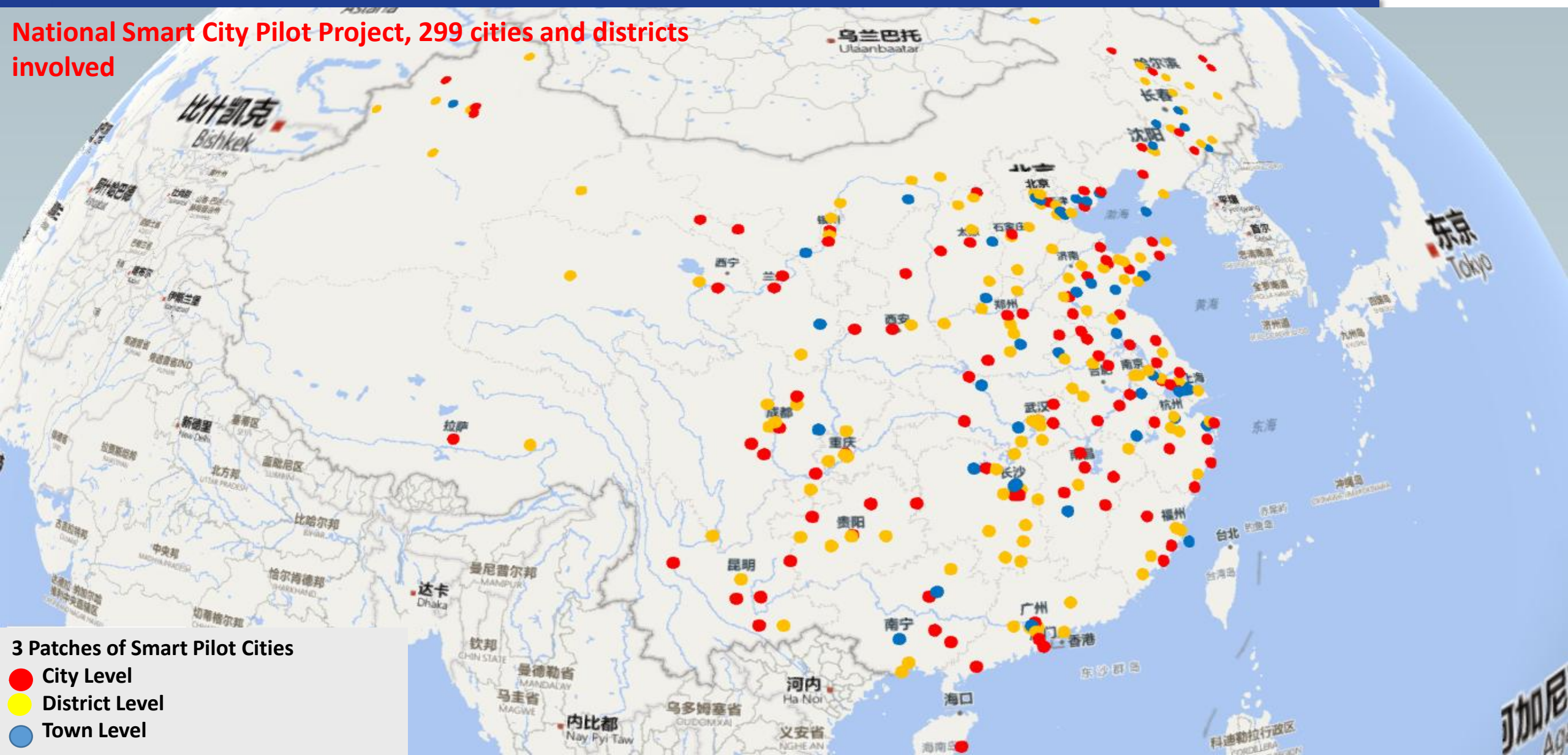
Map of First Pilot Smart Cities of the MOHURD

Total	90
Provinces	28
Provincial Capital Cities	5
First-level Cities	30
Second-level Cities	18
Zones/New Zones	34
Towns	3

Map of Second Pilot Smart Cities of the MOHURD

Total	112
Provinces	29
Provincial Capital Cities	4
First-level Cities	38
Second-level Cities	31
Zones/New Zones	46
Towns	6

Map of Third Pilot Smart Cities of the MOHURD

Total	97
Provinces	27
Provincial Capital Cities	1
First-level Cities	27
Second-level Cities	42
Zones/New Zones	24
Towns	3

CURRENT SITUATION AND TREND ANALYSIS

Guilin
Smart Tourism

Lanzhou
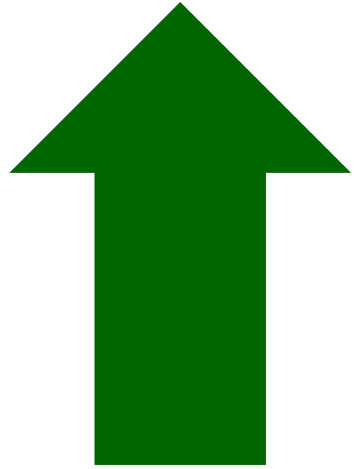Virtual Pension

Lecong
Integration between
Industry and the City

Chaoyang
Service Management
Integration

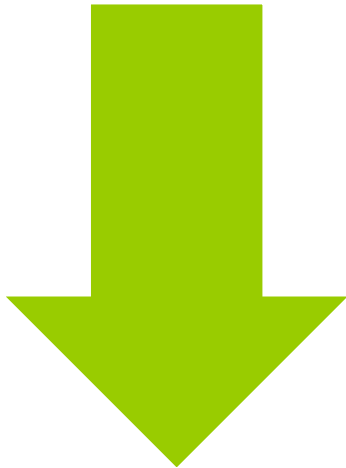Nanhai
Integration Between Technology
and Finance Industry
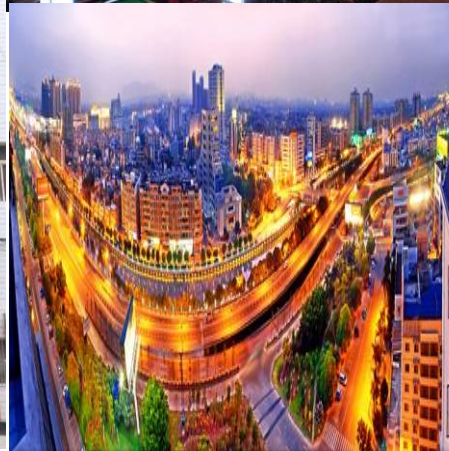
CURRENT SITUATION AND TREND ANALYSIS

Extension

Smart City Group – Competition and coordination between cities and region about talent, funds and industry must exist,

Concentration

Basic unit (Smart community, parks, micro-city, etc.) – The practical results of the Construction of Smart City ,while it always is a long process.

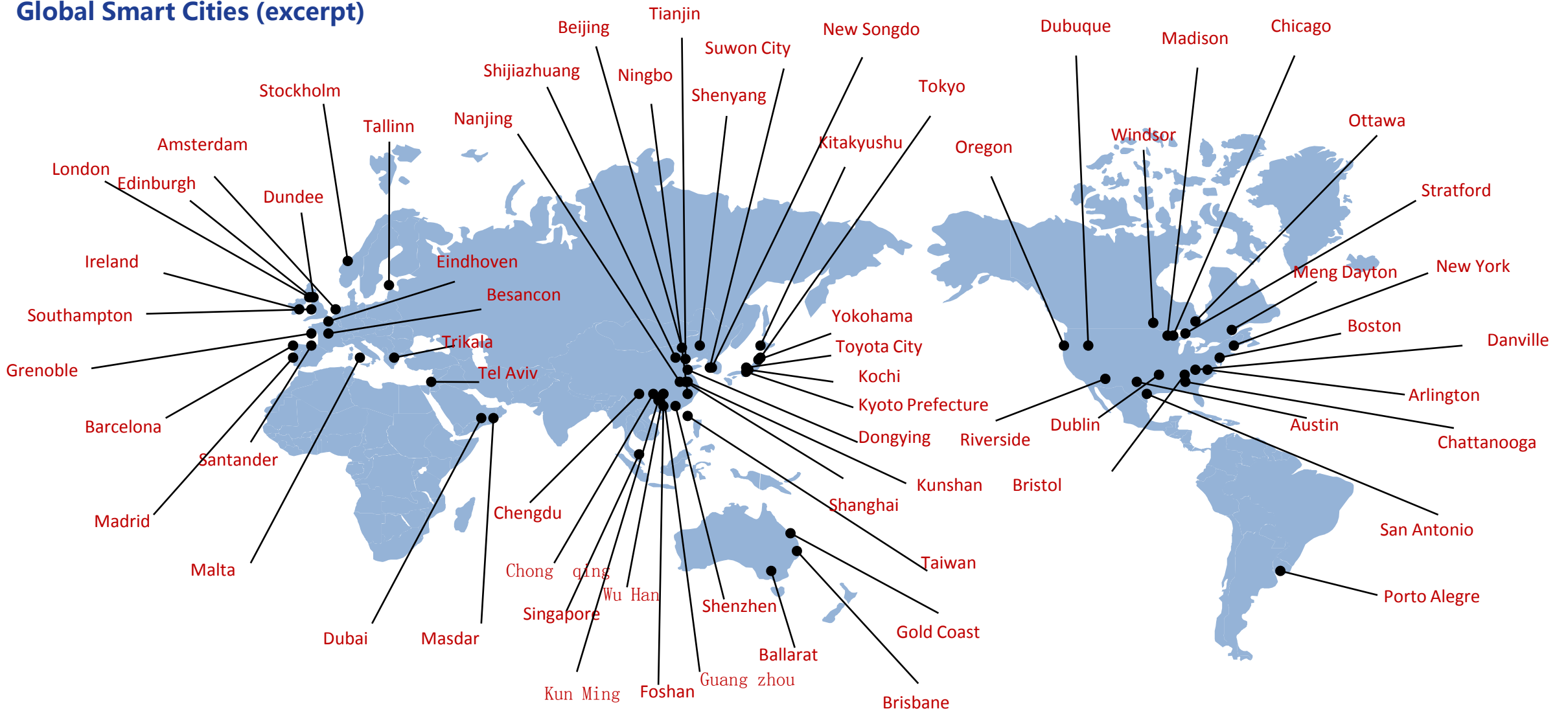**Economic development** **Social Justice** **Beautiful Environment**

SMART CITY

International Partnership (China)

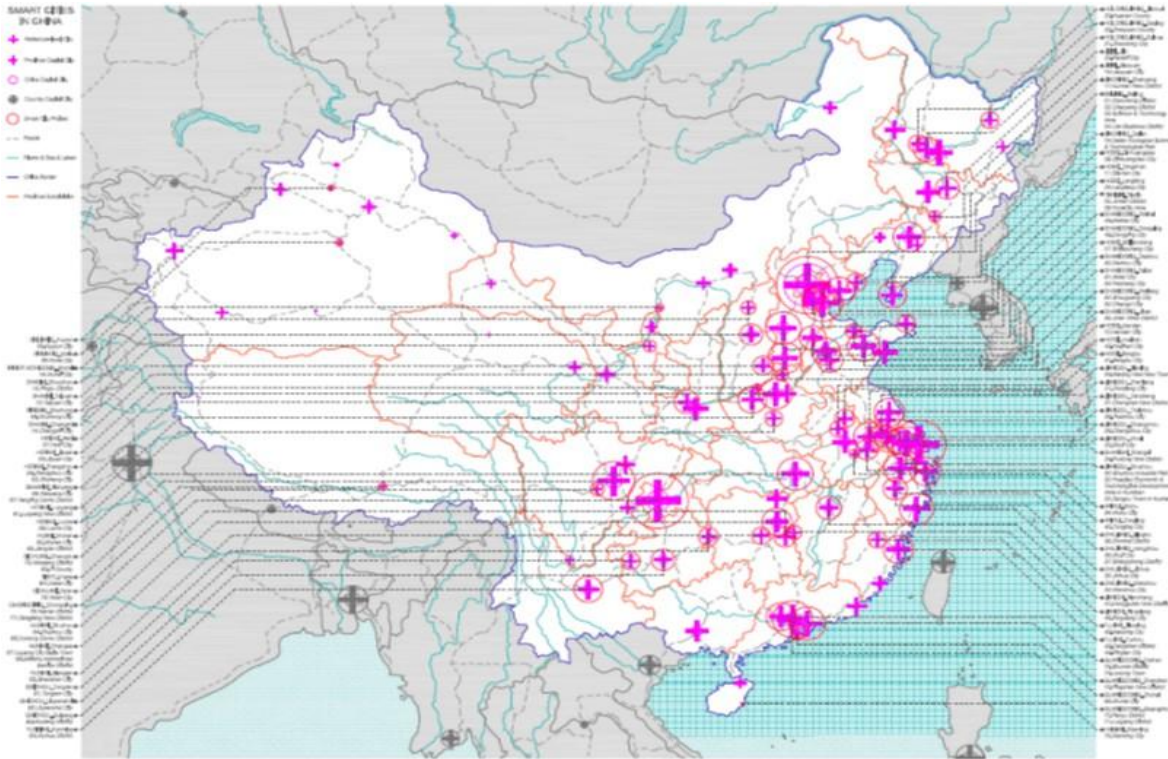# INTERNATIONAL PARTNERSHIP

Global Smart Cities (excerpt)

INTERNATIONAL PARTNERSHIP

China Smart Cities (Pilot Cities)

Global Smart Cities

INTERNATIONAL PARTNERSHIP (CHINA)

National Cooperation

US-China for Building Smart Cities Based on Clean Energy

With the theme of *Smart City, Smart Growth*, Premier Li Keqiang and US Secretary of Commerce Penny Pritzker and Deputy Secretary of Energy Elizabeth Sherwood-Randall, exchanged ideas on green building, energy-saving reconstruction, building management, green data center, carbon capture, utilization and storage, energy saving, clean air and water, waste disposal technology, smart grid and green transportation etc., topics.
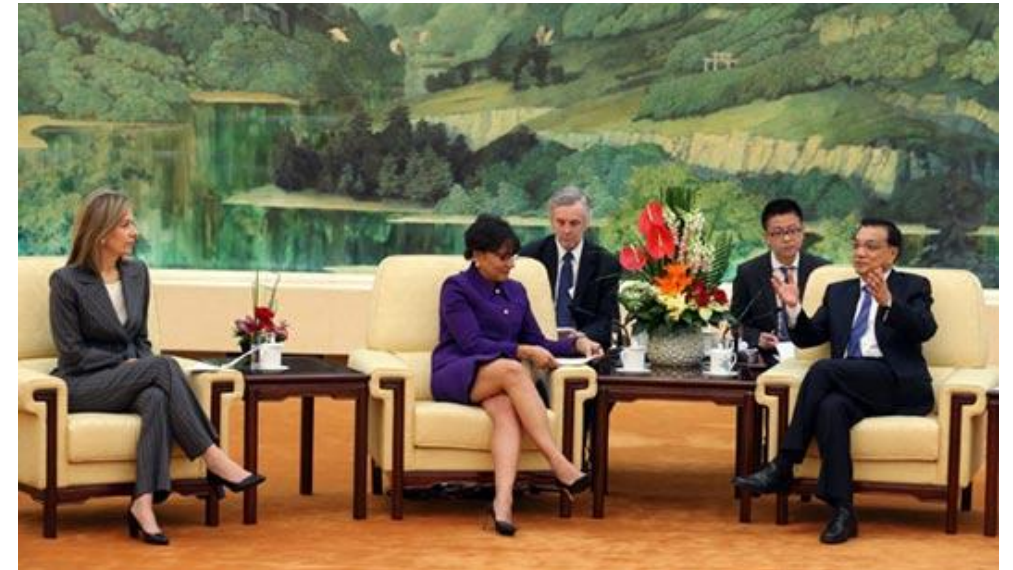

Premier Li Keqiang and US Secretary of Commerce Penny Pritzker and Deputy Secretary of Energy Elizabeth Sherwood-Randall (Beijing, 13th Apr, 2014)

National Cooperation

EU-China Green Smart City Cooperation

The EU-China Green smart city cooperation stems from the agreement between DG CONNECT and the Chinese Ministry for Industry and Information Technology (MIIT) to develop "Green Smart City" cooperation, to establish an expert framework for promoting EU-China Smart Cities cooperation, to select 15 pilot cities from China and the EU, and to establish a technical experts group to carry out related research and cooperation.
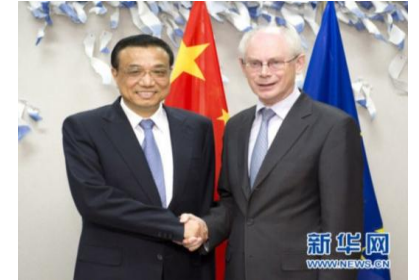
Europe-China Eco Cities Link，EC-LINK

The Europe China Eco Cities Link project is officially launched as a sub-forum event of the Eleventh International Conference on Green and energy Efficient Buildings. The project is supported by the European Commission Directorate General for Development Cooperation, and by the Ministry of Housing and Urban Rural Development in China. The Project Management office is set in China Society for Urban Studies (CSUS), which is responsible for the coordination. It has a total budget of 9,3 million EUR and its implementation will last until November 2017 from Now, 2013.

INTERNATIONAL PARTNERSHIP(CHINA)

Standardization Cooperation

ISO TC 268 SC1 Sustainable development in communities-Smart community infrastructures was founded in 2012, and China is the vice-chairman country.

IEC/SEG 1 was founded in June, 2013, and China undertook 5 WGs and 1 TG as convertor.

ITU-T/SG5/ Focus Group on Smart Sustainable Cities is founded in June 2013, and China is the vice-chairman country.

ISO TC 268 Canada Meeting

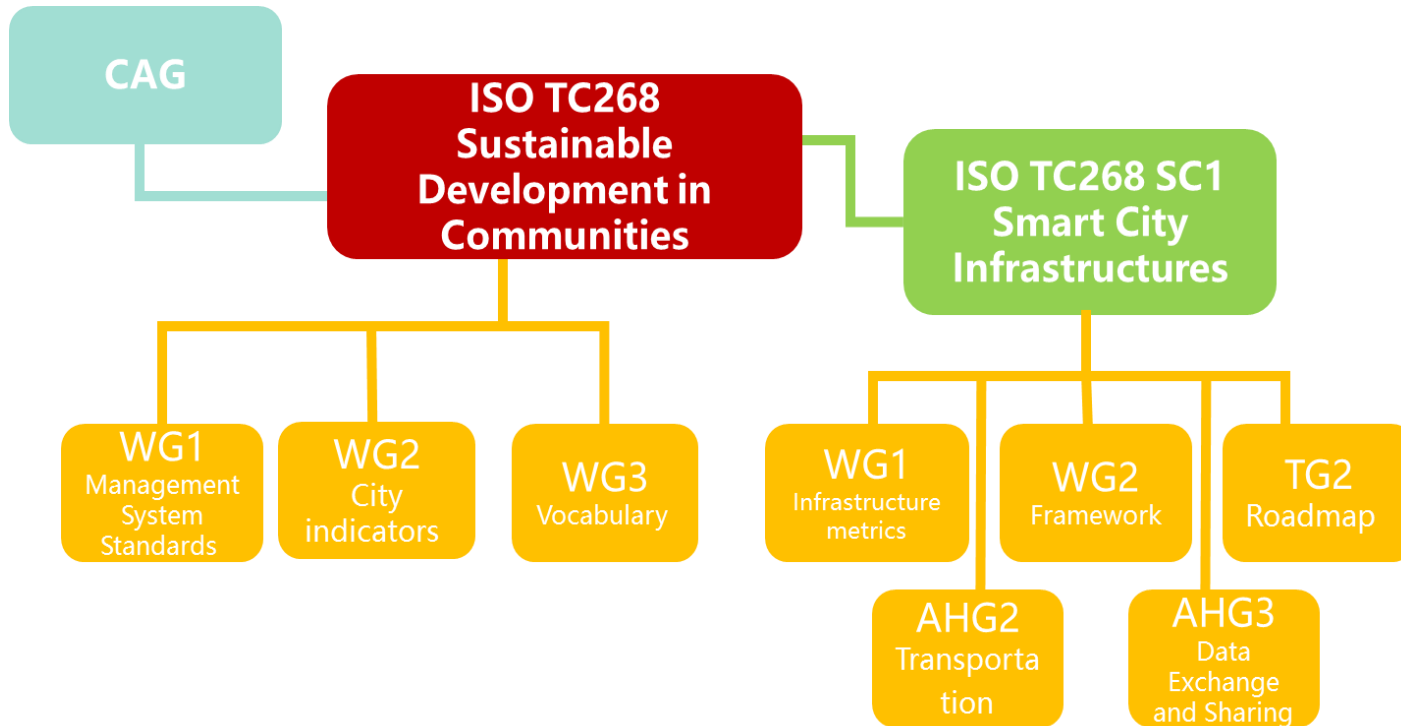The 14th Northeast Asia Standards Cooperation

2015 Session of Chinese-German Standardization Cooperation Commission

INTERNATIONAL PARTNERSHIP(CHINA)
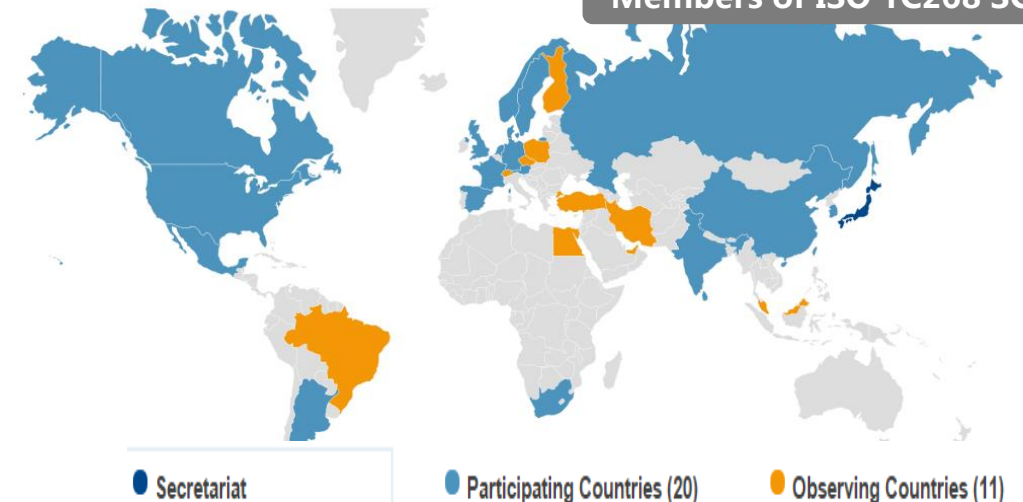
Standardization Cooperation—ISO TC 268

Structure of ISO TC268

CAG

ISO TC268 Sustainable Development in Communities

ISO TC268 SC1 Smart City Infrastructures

WG1 Management System Standards

WG2 City indicators

WG3 Vocabulary

WG1 Infrastructure metrics

WG2 Framework

TG2 Roadmap

AHG2 Transportation

AHG3 Data Exchange and Sharing

Members of ISO TC268

● Secretariat   ● Participating Countries (25)   ● Observing Countries (20)

Members of ISO TC268 SC1

● Secretariat   ● Participating Countries (20)   ● Observing Countries (11)

INTERNATIONAL PARTNERSHIP(CHINA)

Standardization Cooperation—ISO TC 268

Title	Smart community infrastructures (TC268 SC1)
Creation	2012
Chairperson	Dr. Yoshi Ichikawa (JP)
Vice-Chair	Dr. Biyu Wan (CN)
Secretary	Mr. Isao Endou (JP)
TPM	Mr. Gerrit Harjung (ISO/CS)
P-Members (17)	Argentina, Austria, Canada, China, Denmark, France, Germany, Japan, Korea, Netherlands, Norway, Russia, South Africa, Spain, Sri Lanka, Sweden, United Kingdom
O-Members (09)	Brazil, Czech Republic, Egypt, Finland, India, Malaysia, Poland, Singapore, UAE, United States
Liaisons	ISO/TC 207, ISO/TC 224, ISO/TC 269, IEC/TC 111, ISO/IEC JTC 1, ITU-T, GCIF, OECD, WBCSD

Standardization Cooperation—IEC SEG1

Works to be done		Leader
TG1	- Inventory of relevant existing standards - Survey and collection of existing and to-be-defined evaluation, metrics and Terms & Definitions - Survey of smart city strategies	CN
TG2	- Reference architecture - Generic use cases - Supplemental research	DE
TG3	- Roadmap - Mapping of closely related activities - Definition of terms to be shared in SEG	JP
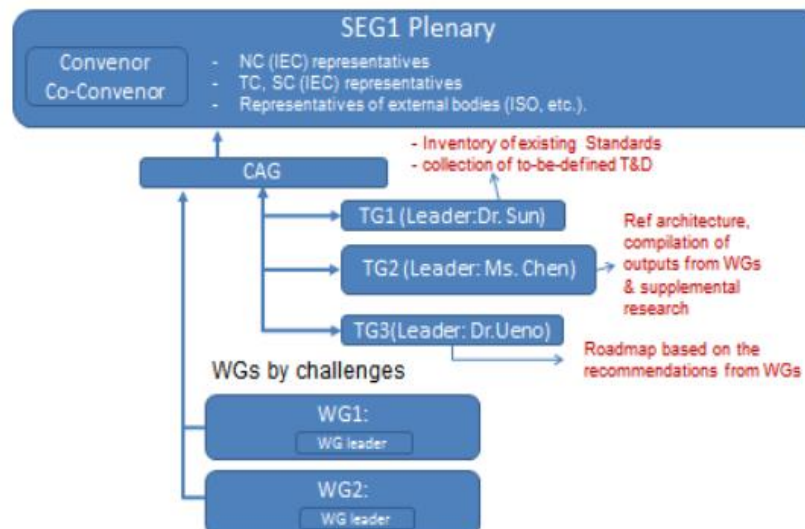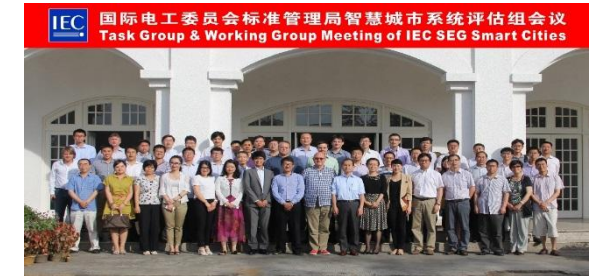
| City Service Continuity	JP	Hirohisa AKI
City Service Continuity	JP	Hirohisa AKI
Urban planning and simulation system	CN	Wan Biyu
City Facility Management(CFM)	CN	Wan Biyu
Use Case Smart Home	CN	Zhang Weihua
Use Case Smart Education	CN	Zhang Weihua
Smart City Assessment	CN	Yuan Yuan
Standards development for smart cities using the City of Johannesburg- in a rapidly emerging country- as a piloting benchmark for smart cities implementation.	南非	Sicelo XULU

Enterprise Cooperation

On May 2015, AliCloud, Alibaba's cloud computing subsidiary, signed a deal to set up a technology joint venture with Dubai-based Meraas on Tuesday, in order to boost big data and cloud computing services in the Middle East and North Africa region (MENA).

On October 2015, AliCloud, the cloud computing business of Alibaba Group, that it has opened its second data center in the U.S.

On March 2013, Huawei and SAP established all-level cooperation especially focus on Smart City business and BYOD (bring your own device) Project.
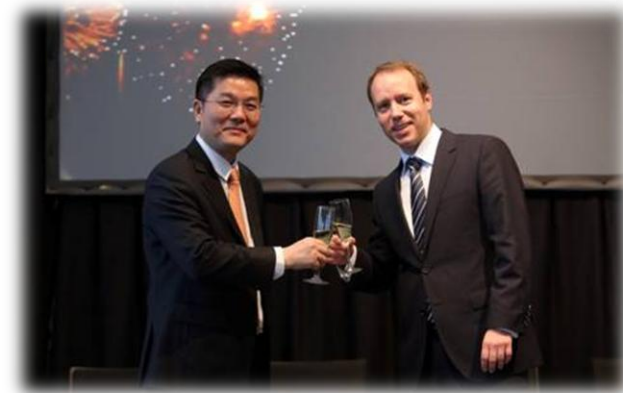
CHINA SMART CITY Group

Urban Agglomerations
China Urbanization Development Strategy

中国城市群发展战略图

32 Urban Agglomerations

Completion 11

Under Construction 14

Potential Agglomerations 7

China City Urban Agglomerations Development Strategy

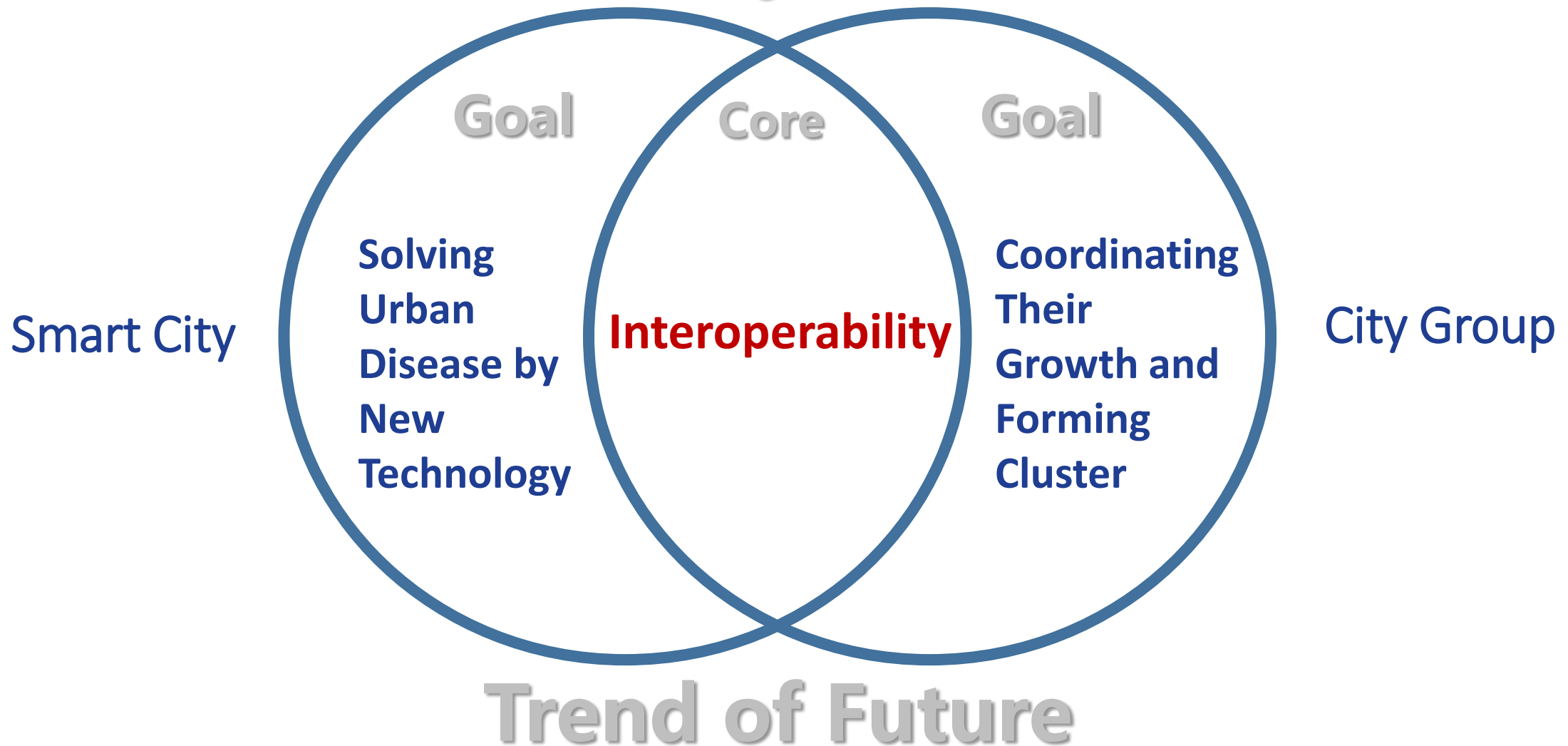# City Belts
China Global-regional Development Strategy

◆ Focusing on building a new Eurasian Land Bridge and developing China-Mongolia-Russia, China-Central Asia-West Asia, and China-Indochina Peninsula economic corridors by taking advantage of international transport routes, relying on core cities along the Belt and Road and using key economic industrial parks as cooperation platforms

◆ Up to 60 countries have become involved
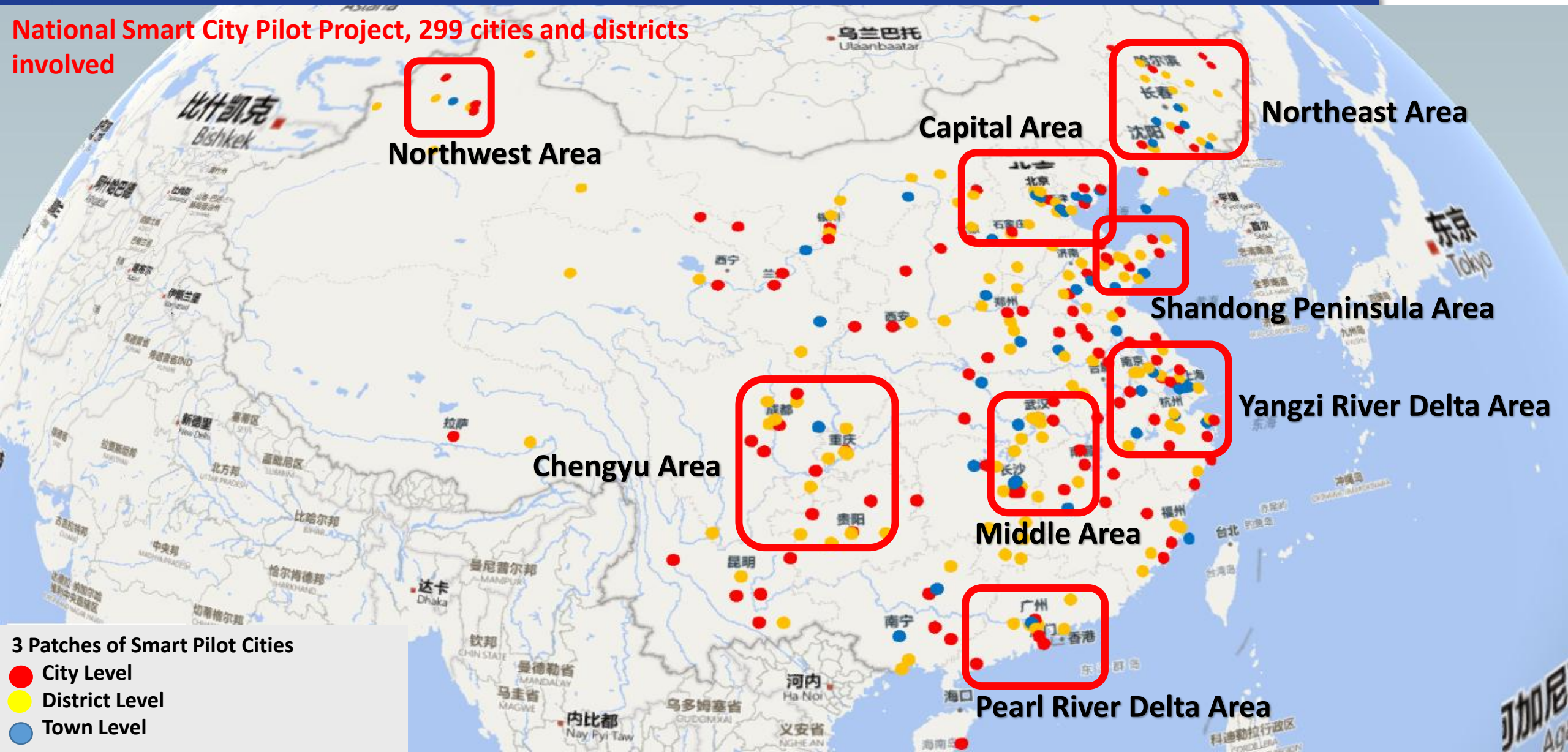
One Belt, One Road

CHINA SMART CITY GROUP

Smart City GROUP

Smart City

Goal

Solving Urban Disease by New Technology

Core

Interoperability

Goal

City Group

Coordinating Their Growth and Forming Cluster

Trend of Future

CHINA SMART CITY GROUP

National Smart City Pilot Project, 299 cities and districts involved

Northwest Area

Capital Area

Northeast Area

Shandong Peninsula Area

Chengyu Area

Middle Area

Yangzi River Delta Area

Pearl River Delta Area

3 Patches of Smart Pilot Cities
- City Level
- District Level
- Town Level

SMART CITY

Case Study—Shanghai Pudong

- Square: 1210 km²
- Jurisdiction: 12 community committees, 24 towns
- Residents: Over 5.4 million
- GDP 2014: 68.5 Billion Yuan

CASE STUDY—SHANGHAI PUDONG

Challenges

Low level of convexity between different departments can hardly provide much synergistic effect.

Traditional public service can no longer match the increasing demand of the residents.

Pudong is facing a number of economic sustainability challenges.

Methods

Smart Governance

E-governance Platform
Operation Center
Administrative and Approval Platform

E-service

Smart Transportation
Smart Health
Smart Community
Old-age Caring System

Integrating city and the industry

Innovation industry clusters
Free Trade Zone
Energy Consumption Monitoring Platform

CASE STUDY—SHANGHAI PUDONG

E-governance Platform

- 202 branches achieve accessibility
- Data connectivity for 34 different government business systems

Administrative and Approval Platform

- Pudong website
- 12345 special telephone line
- Administration Service Center

Public Data Base

- Contains information over 5.3 million residents, covers 99% of the registration residents and cooperate by 111 organizations
- Contains information over 200,000 registration companies, covers 98%
- Contains Geographic information over 120 layers

CASE STUDY—SHANGHAI PUDONG

Smart Transportation

Smart Health

All buses(3,000+) in Pudong is under control of the smart scheduling system

63 hospitals have access to each other and to the Shanghai Health Platform

More than 300 solar power bus stations

Residents can check his/her medical history and health information online

APP for PC and mobile
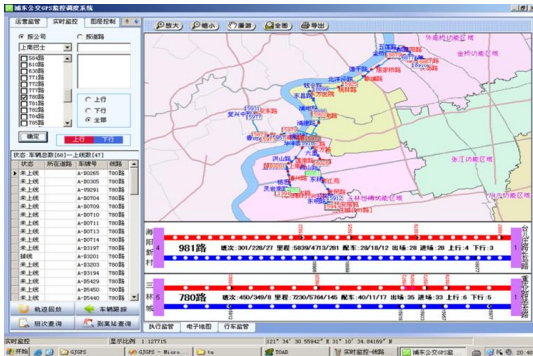
CASE STUDY—SHANGHAI PUDONG

Macroscopic
- Overall master plan and multi-departments communications

Innovation
- Innovation information sharing system

Resources
- Cooperation between government and companies

Microscopic
- From Pilot area to the whole area

THANKS

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