Smart City in China

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Outline

Target of SC Development

Initiatives of SC

Practice of SC

Target of SC Development

- ☐ **In the coming decade, industrization, urbanization and informatization will be the focus of development**
- ☐ **Accomplished via smart city**
- ☐ **more than RMB 440 billion in 5 years – forecasted by investment banks**

informatization

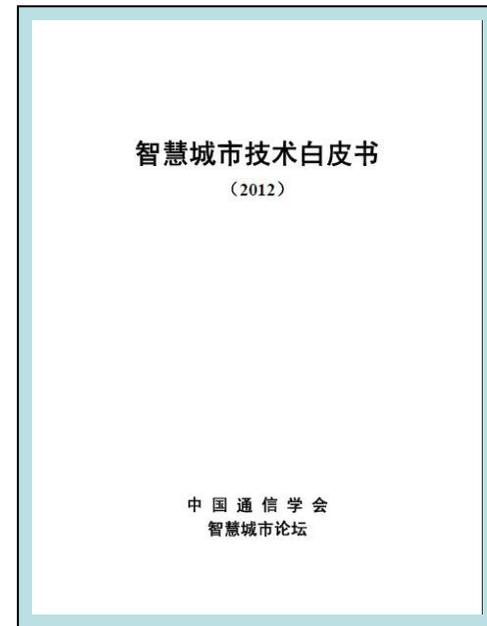Smart city

industrization

urbanization
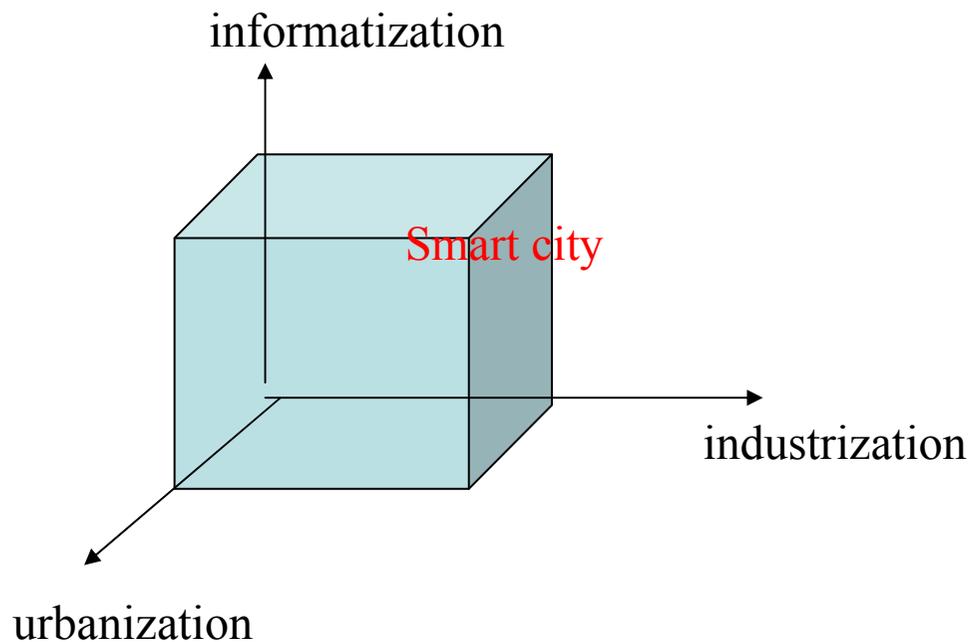
Initiatives of Smart City

- Ministry of Central Government
  - Ministry of Science and Technology (MOST)
  - National Development and Reform Commission (NDRC)
  - Ministry of Housing and Urban-Rural Development (MOHURD)
  - Chinese Academy of Engineering (CAE)
  - National Administration of Surveying, Mapping and Geoinformation (SBSM)
- Municipal Government
  - Wuhan City, Hubei Province
  - Yangzhou City, Jiangsu Province
  - Ningbo City, Zhejiang Province
  - etc
- Consortia
- Forum

Activities of SC by MOST

Nov. 2010	China Smart City Forum Conference 2010	Wuhan
May 2011	China Smart City Development Advisory Council	Yangzhou
Jul. 2012	China Smart City Forum Conference 2012	Tianjin

Roadmap of SC by MOST

Information City, Digital City, and Smart City

2011-2015
12th Five-Year Plan

2006-2010
11th Five-Year Plan

2001-2005
10th Five-Year Plan

1996-2000
9th Five-Year Plan

Smart City
urbanization
industrization
informatization
……

Digital City,
Digital China
Urban planning
Geoinformation

Digital City
National platform
E-government

Information City
Municipal &
enterprise info
system

Atlas of SC by MOST

FiberHome

Atlas of SC
(MOST, May 2011)
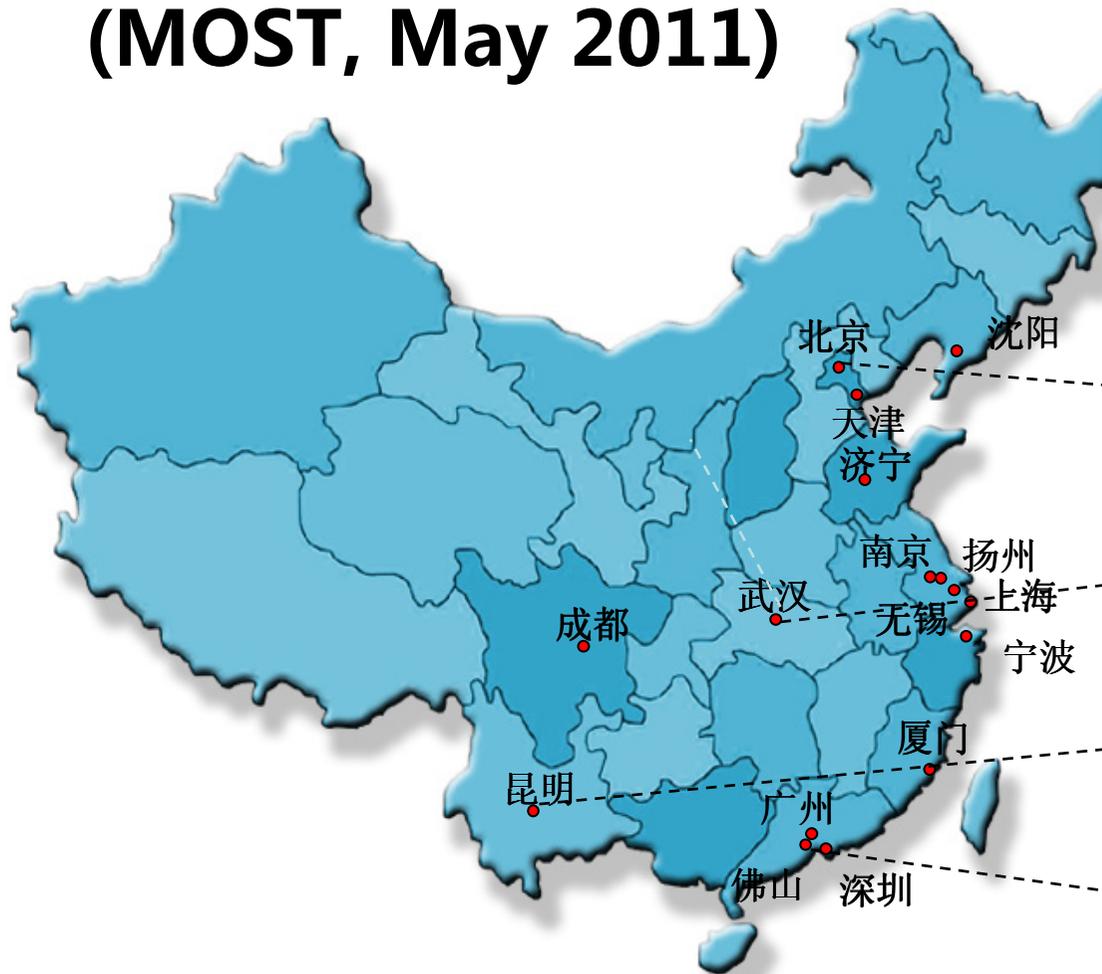
Shanghai, Yangzhou, Ningbo, Shenzhen, Nanjing, Wuxi, Chengdu, Tianjing, etc. outline smart city

Beijing：Smart Beijing Action Plan

Wuhan：Central Smart Capital

Kuming：Eco-friendly City

Foshan：Smart Foshan

北京 沈阳
天津
济宁
南京 扬州
武汉 无锡 上海
成都 宁波
厦门
昆明 广州
佛山 深圳

International Cooperation of SC

- June 2011，Minister of MOST visited France. In the meeting "la XIIIème Session de la Commission mixte scientifique et technique franco-chinoise"，Smart City as one of 6 prior cooperation fields.

Project of SC, funded by MOST

- Oct. 2010 , MOST launched a project of Smart City (863 program, the High Tech Research and Development Program).

- Researchers from 12 organizations:
    - 5 universities,
    - 3 institutes,
    - 2 companies, and
    - 2 municipal governments (Wuhan City and Shenzhen City)

- Nov. 2011 , research group of SC and UPMC France organized SCIC2011.

- Oral reports from: Univ. Paris-Sud 11, France Telecom, IBM, UCL UK, Aalto Univ. Finland, Univ. Cantabria Spain, UPMC France, TU Berlin Germany, George Masson Univ. USA, and research group of SC

Activities by Other Ministries/administrations

Ministry / Admin.	Activities	Further action
NDRC	Strategy Study on Smart City (2011-2013)	Coordinate ministries
MOHURD	index system of pilot SC	90 cities and towns as national pilot SC
CAE	Intelligent City , or iCity	5 pilot cities
SBSM	"Digital city" upgrading to "Smart City"	Cloud Computing Platform of SC, each branch invest 36M

- China Strategic Alliance of Smart City Industrial Technology Innovation
- Set up on 28 Sept. 2012
- 45 members
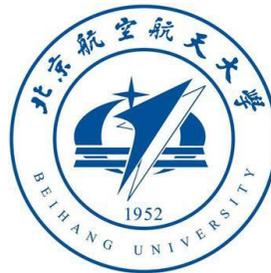
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Wuhan, a case study

- Wuhan, a metropolis, population over 10 million
- one of the pilot cities selected by MOST, MOHURD, and CAE at the same time
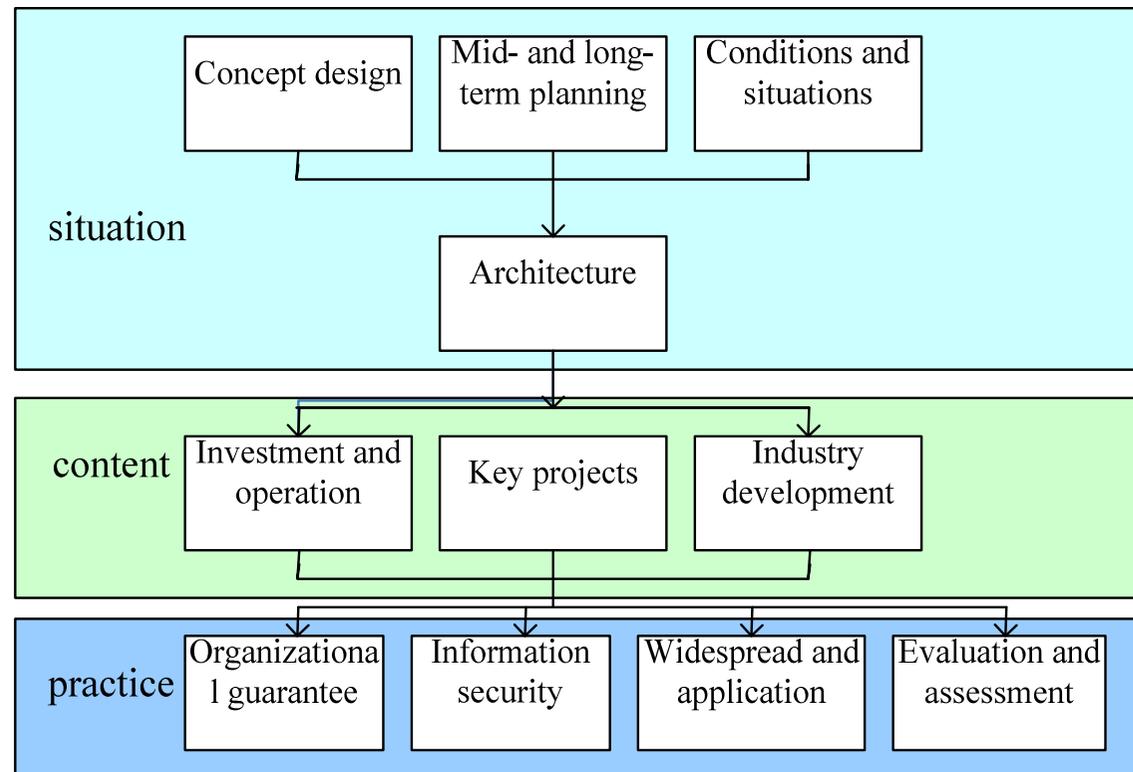
Wuhan, public bidding

- 2 invitation of bids, total RMB 10m :
  - Concept design, Mar. 2011
    - 17 groups/teams participated in the competition
  - Planning design, Jul. 2011
    - 9 groups/teams participated in the competition
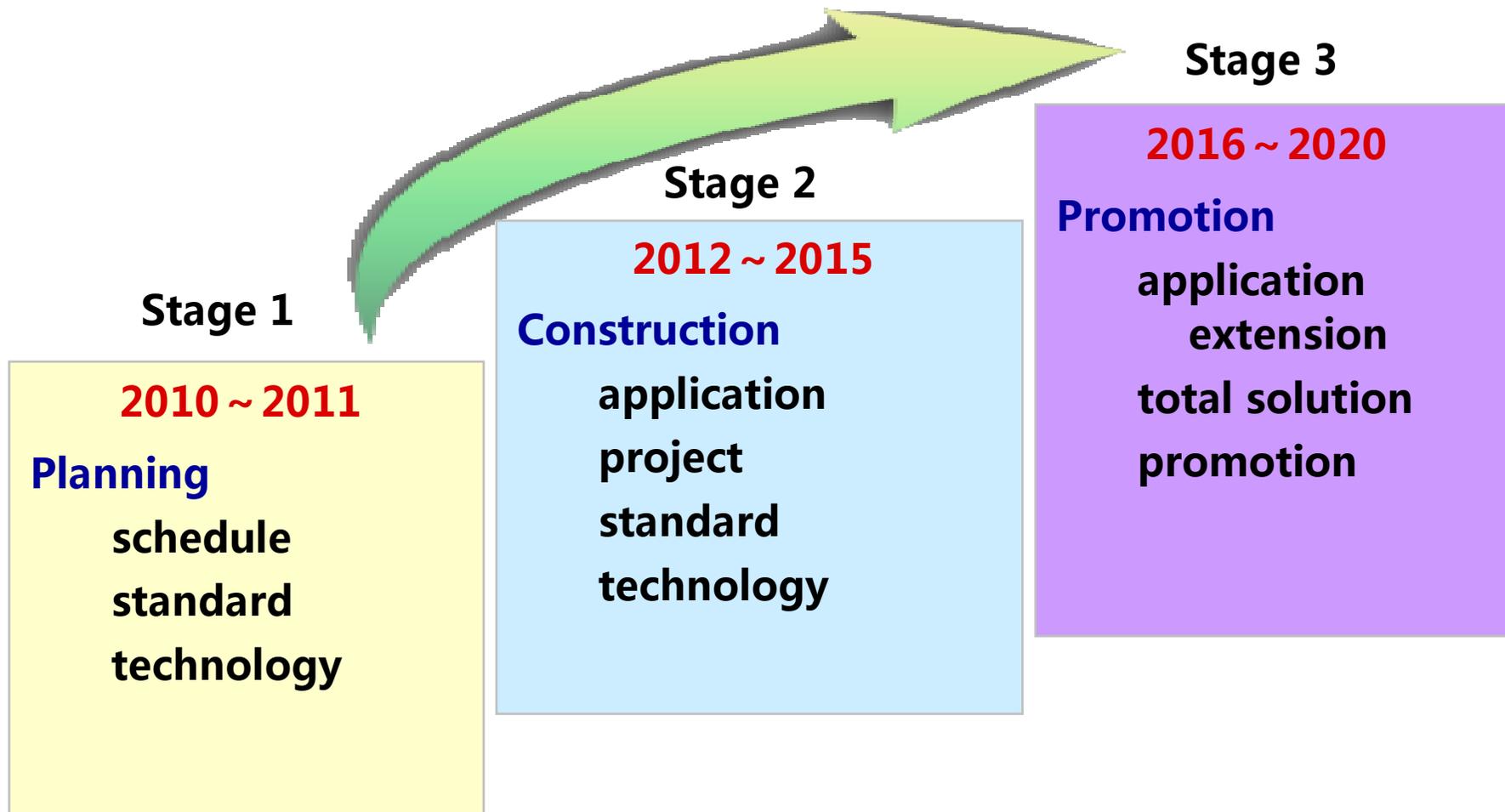
Wuhan, Sketch of biddings

7 Outputs:
- Architecture
- Investment and operation
- Key projects
- Industry development
- Organization guarantee
- Security
- Widespread
- evaluation

Wuhan, Construction planning

Stage 1

2010 ~ 2011

Planning
- schedule
- standard
- technology

Stage 2

2012 ~ 2015

Construction
- application
- project
- standard
- technology

Stage 3

2016 ~ 2020

Promotion
- application extension
- total solution
- promotion

Wuhan, Application

– **13 projects, authorized as application of SC**

Sector	Authorized project
E-Health	"Mobile hospital" in Wuhan Central Hospital
Agriculture	Cattle breeding project in Hannan District
E-government	GIS-based Digital decision-making assistant system
Public security	Video surveillance system of Wuhan City
ITS	No-waiting toll collection system on roads, bridges and tunnels
Food and drug safety	Meat quality traceability information system
Geo-space	Wuhan geo-space information framework
Urban management	Digital grid platform of urban management
Service government	Municipal information system of administration center
Telecommunication	Free wifi in "optical valley"
Smart community	Intelligent management program in Yongqing CBD

THANK YOU

谢谢！