

# **China RFID industry and market**

**Dr. Zhiwen Zhang**

**Ministry of Science and Technology of PRC**

## **Mission of Ministry of science and technology (MOST)**

To research and set forth the macro strategies for science and technology development, as well as guidelines, policies and regulations for science and technology

To conduct research on key issues relating to the promotion of economic and social development by science and technology,

To research and determine the major deployment and priority areas for science and technology development;

To promote the building of the national science and technology innovation system and improve the national science and technology innovation capacity.

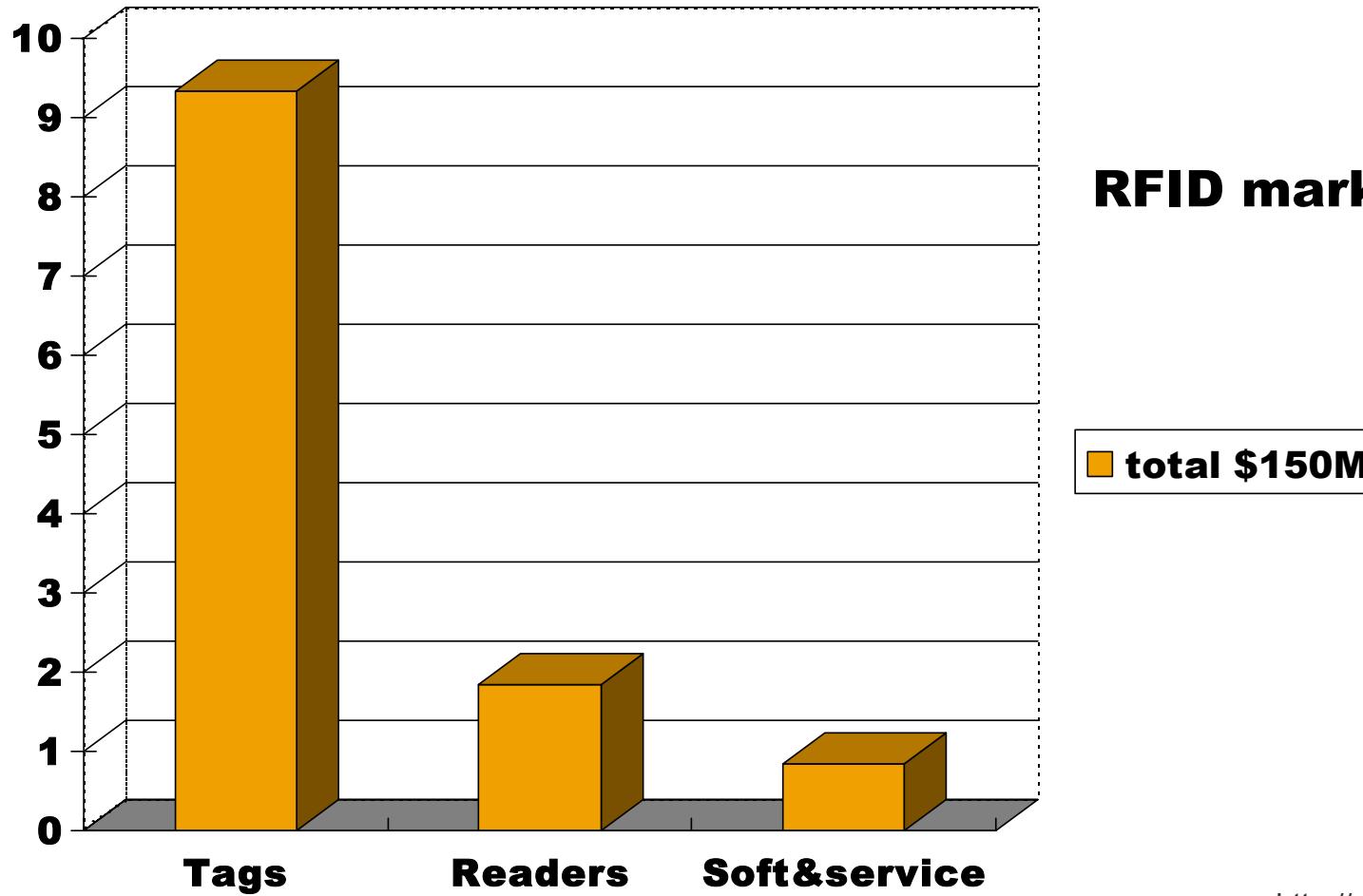
**<http://www.most.gov.cn>**

## **Large potential market in RFID application**

- The largest population, largest consumer market in the world**
- The manufacturing center of the world, the hot point for the next economic tide**
- IT application is just at the beginning, with much more potential to be explored**

# China RFID market

RFID technology and application have got prompt development in the last 2 years in china



# **Potential application in china market**

- ◆ Security & safety
- ◆ Anti-counterfeit (healthcare, tobacco, alcohol, etc )
- ◆ Logistics
- ◆ Manufacturing process management
- ◆ E-ticket system (Shanghai World Exposition, Olympic games, etc)
- ◆ Vehicle management system
- ◆ Supply chain management

# **Security & safety**

## **Sea Port container tracking**

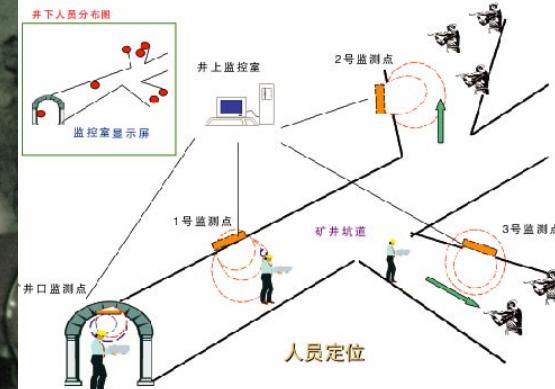


# **Security & safety**

- Fireworks management
- Dangerous gas management
- Animal & food

# Security & safety

## Coal miner location and tracking



# Logistic

## China Post EMS mailbags tracing



# Manufacturing process management



# **China RFID industry policy**

**One of the most important area in China national developing plan on high tech area for the coming 5 years.**

**Make china RFID technology's strategy and policy : funding RFID applications to prompt RFID technology and industry development**

## MST RFID program

**Constitute the “China RFID Technology White Paper ”,  
together with the other 14 Ministries**

**Research and establish architecture for China RFID  
standard, which connects with international standard  
and accommodates China circumstance**

# MST RFID program

**Set a specific RFID program in national high-tech R&D program (“863”program, established in March 1986), to speed up the progress of RFID research, application and industrialization**

- ◆ Set up a RFID committee to make national RFID research plan
- ◆ Fund RFID research
- ◆ Fund RFID application
- ◆ Help local government to set up RFID research, technology and industrial zones

# MST RFID program research plan

## Research on Standard

- Product Coding standard
- RFID communication protocol
- RFID product standard
- Equipment standard
- Application standard

## Test and Certification

- Set up national test centers on RFID technology
- Evaluate RFID products, simulate application environment, and assess applications

# MST RFID program research plan

## Tags

- UHF chip
- UHF antenna design
- Tag integrated with other sensor technology
- Packaging

## Reader

- UHF Reader
- UHF Reader antenna design
- Active RFID technology

# MST RFID program research plan

**Research network architecture and product name service system for supply chain management**

**Plan to set up local product name service system under China domestic supply chain environment, which could map and synchronize data with other name service, i.e. ONS system**

# MST RFID program research plan

**Carry out International collaboration with all kinds of organizations, such as standard committee, research academy, commercial companies, on the basis of mutual benefit.**