Role of CAICT in promoting ICT research, stakeholder cooperation and capacity building

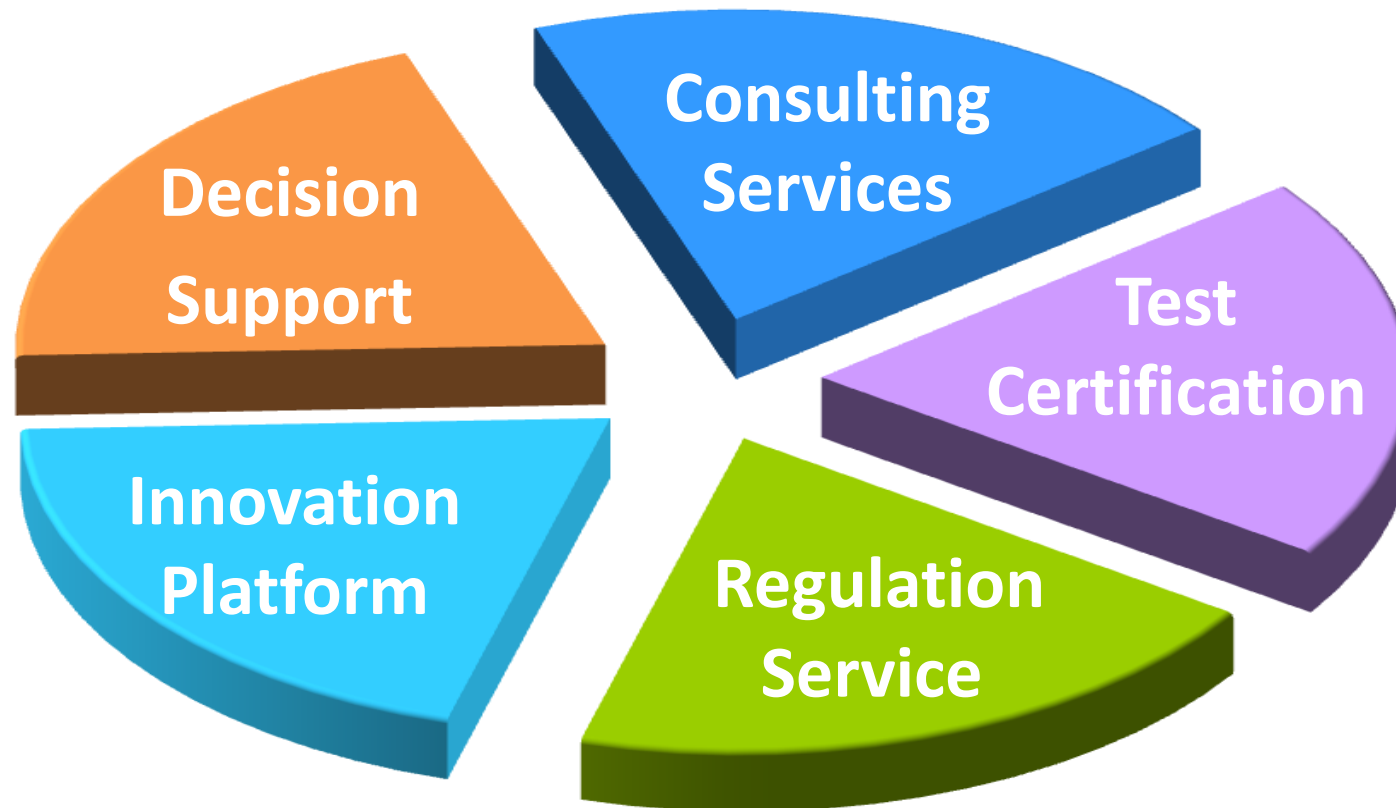## Dr XIE, YI

Vice President, CAICT

Role in ICT field

the Think-tank for government & the Platform for Industry

- CAICT focus on ICT policy, planning and technology research

- Special role in both domestic and international standardization, many experts attend the activities in international ICT organizations, such as ITU

- Designed conformity assessment in test and certification

- Comprehensive consulting institution in ICT market

- CAICT is one of Think-tank of China in ICT field

Areas of Research - 5 Core Business Areas

1. Support the Introduction of Major Policies

- **In Telecommunication Field**
  - "Guidance on accelerating the construction of high speed broadband network and promoting the speed & drop charge of network" (the General Office of State Council,2015.5)

- **In Internet Field**
  - "Views on promoting innovation of Cloud computing and development the new normal of information industry" (the State Council,2015.1)
  - "Action outline on promoting the development of big data"(the State Council,2015.8)

- **In Informatization Field**
  - "Guidance on promoting the 'Internet +' action actively " (the Sate Council,2015.7)
  - "Opinions from the State Council for some policies and measures on promoting innovation and public entrepreneurship" (the Sate Council,2015.6)

- **In Convergence of Informatization & Industrialization Field**
  - "Made in China 2025" (the Sate Council,2015.5)

2. Strengthen the research of ICT Standard

- Job for domestic standards:
  - In 2015,the total standards issued by MIIT was 351, 145 were from CAICT ,more than 41%. Such as
    - Telecom and Internet Service: Technology Requirements of Users' Personal Information Protection
    - Technical Requirements and Test Methods for Mobile Resale Business Management Platform

- Work on international standards:
  - In 2015, more than 400 person-time from CAICT attended international standard organization activities.

3. Accelerate the Construction of Industry Platform

- Organize the research and development of 5G and international cooperation

- Organize 4G interoperability testing and service fieldtrip experiment

- Build a public service platform for mobile internet and intelligent terminal

- Start to construct a big data platform for industry

- Run Innovation laboratory of the integration of internet and industry

- Run a management platform of Internet information security

- Run a platform for monitoring the quality of the broadband network

4. Provide Testing and Certification Services

- More than 1000 Engineers,

- About 3 billions properties of test instrument,

- Test for both Chinese and abroad market

- Assistant to issue domestic and abroad licenses

- Assistant to hand out Chinese NAL Labels

- National Engineering Laboratory for New Generation Mobile Communications Testing and Verification

- National Quality Supervision and Inspection Center for Internet of Things Communication Products

- National Telecommunication Metrology Station

- China Telecommunication Technology Labs (CTTL)

- Electro Magnetic Compatibility (EMC) Lab

- MTNet (Mobile Communication Trial Simulation Network)

- RTNet (Fixed Telecommunication Trial Simulation Network)

- TD/LTE Test Environment
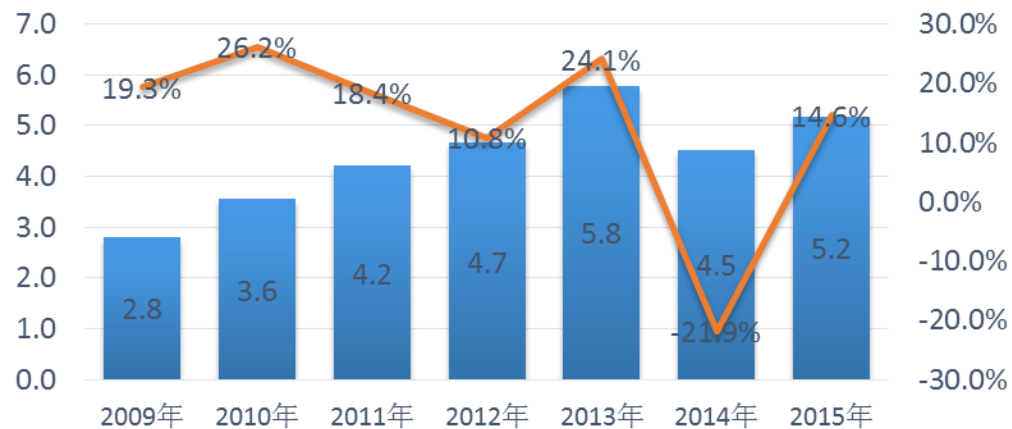
Some Domestic Mobile Phone Statistic Data

□ In 2015, shipment is 518million, Year-on-year growth is 14.6%；
□ 2016.1-4, shipment is 159millions, growth compared to the same period last year is 9.0%.
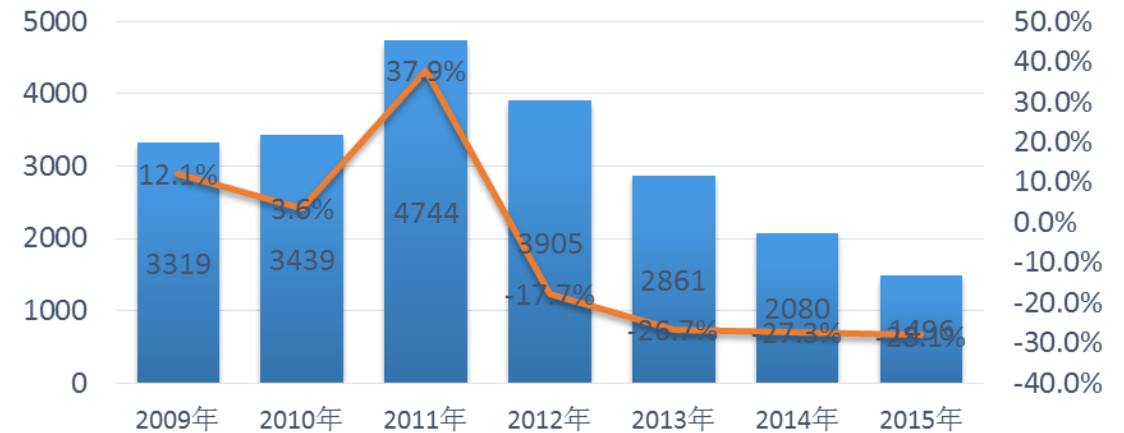
1、Domestic market shipments

2、Domestic market new types

□ In 2015, new types are 1496, year-on-year fall is 28.1%；
□ 2016.1-4, new products type are 508, growth compared to the same period last year is 1.0%.

Domestic market shipments（unit:100 millions）

New products in the domestic market（type）

Note：Data based on Chinese domestic market statistics
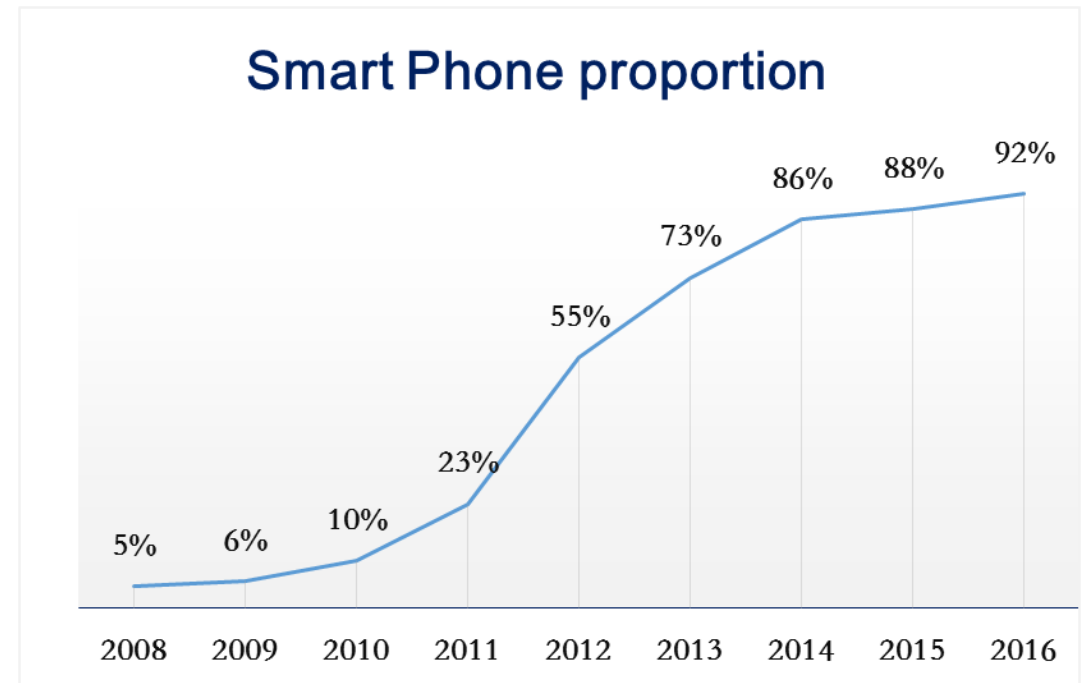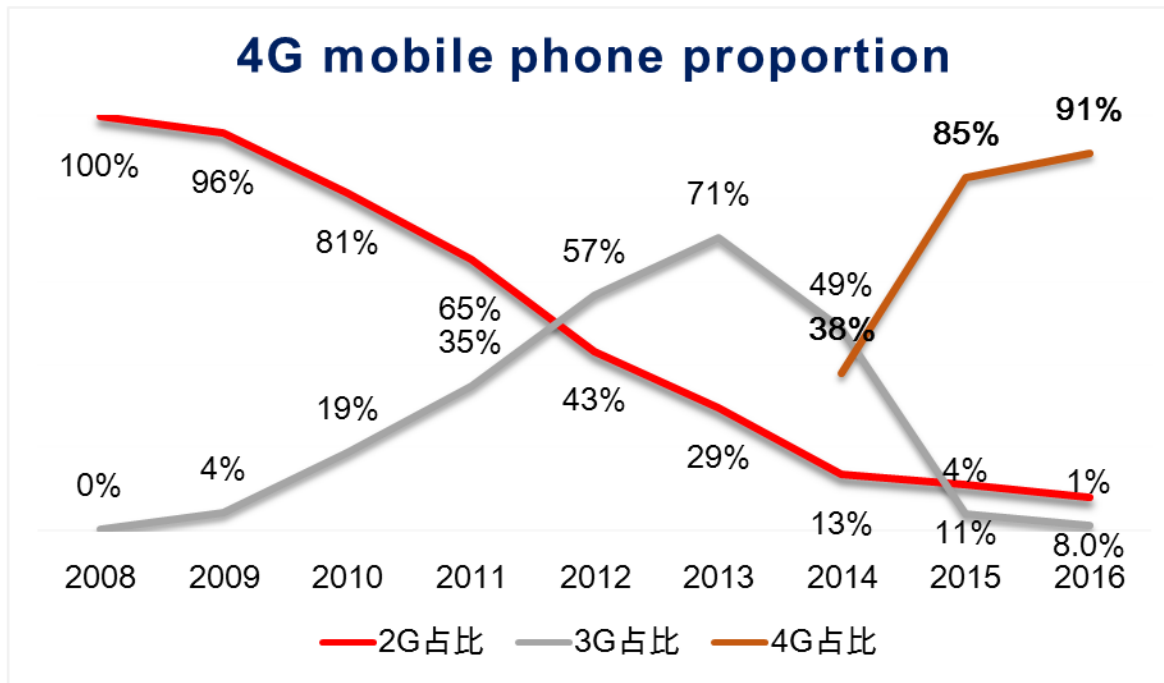
☐In 2015, the shipment of 4G mobile phone is 440 millions, the year-on-year growth is 157.0%, the proportion is 85.0% of total mobile phone shipments. Now the market of 4G mobile phone is almost replaced 3G mobile phone within two years.

☐In 2015, the shipment of smart phone in Chinese domestic market is 457 millions, the growth is 17.7%, the proportion is 88.3%.

4G mobile phone proportion

Smart Phone proportion

2G占比 3G占比 4G占比

Note: For Statistic data in 2016, as the end of April,2016

Cooperation with International Organizations

- Cooperation with ITU
  - More than 100 experts from CAICT attend the ITU activities, including ITU-T,ITU-R,ITU-D. They work in study group, attend expert group or working groups, promoting the standardization and projects and make their contributions for ITU.
  - CAICT also cooperation with ITU in many other issues, such as holding Research Forum in popular topic in ICT field.

- Collaboration with other organizations
  - The standard organizations: ETSI,3GPP,IETF,OMA,ONEM2M,W3C,IEEE,IIC,BBF etc.
  - The global/regional associations: GCF,CCF,PTCRB,CTIA,Bluetooth (SIG), NFC, Wi-Fi, WiMAX etc.
  - Designated/listed conformity assessment body by the government: FCC(US),IC(Canada),NTRA(Egypt),PTA(Pakistan)
  - Business With association/companies: JATE(Japan), TUV,VDE(Germany), Nemko(Norway), BABT(British) etc.

ITU C&I CoE

- **CAICT applied to be ITU APR C&I CoE in 2014**

ITU C&I Training Course—2015

- **First year training activity focus on :**
  - Development and implementation of Conformity Assessment Programme
  - Conformity Assessment Principles
  - Global and Chinese Certification System
  - PTN (Packet Transport Network) Interoperability Test——ITU-T G.8113.1OAM
  - Mobile Terminal Testing

ITU C&I Training Course - 2016

- **Second year training activity focus on：**

- Online Training (April 25- May 20,2016)
  - C&I
  - EMC
  - PTN
  - Mobile terminal testing

  - 90 participants all around the world

- Face to Face Training(Oct. 17-21，2016, Chongqing , China)
  - C&I Brief
  - IMS
  - 4G-LTE
  - Hands on testing

Suggestion to ITU C&I Programme

- It is noted that the improvement of interconnection of network all over the world becomes an important target within the scope of C&I project.

- In this regard, ITU should take effect measures to promote C&I.

- It proposed to update Resolution 76 of the WTSA2012 "Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme" in following aspects:
  - To extend the scope of C&I to interconnection of global network, especially for emerging technology;
  - To improve the analysis and sharing mechanism for result of conformance and interoperability testing in different area;
  - To enhance the responsibility of each participants in order to increase the efficiency of the progress of C&I.

Some CAICT's Focus Points of ICT Industry in 2016

- 5G
  - Technical trial,
  - International standards, etc.

- Broadband Network
  - Personal information protection,
  - Security assessment for new technology and new service, etc.

- Internet
  - Network and information security,
  - Open public information resources, etc.

- Industry Internet
  - Internet of things,
  - Internet of Vehicles,
  - Smart Devices, etc.

Thank you !

http://www.caict.ac.cn