

# Conformity Assessment and Telecom Regulations in China

Monica Li FU

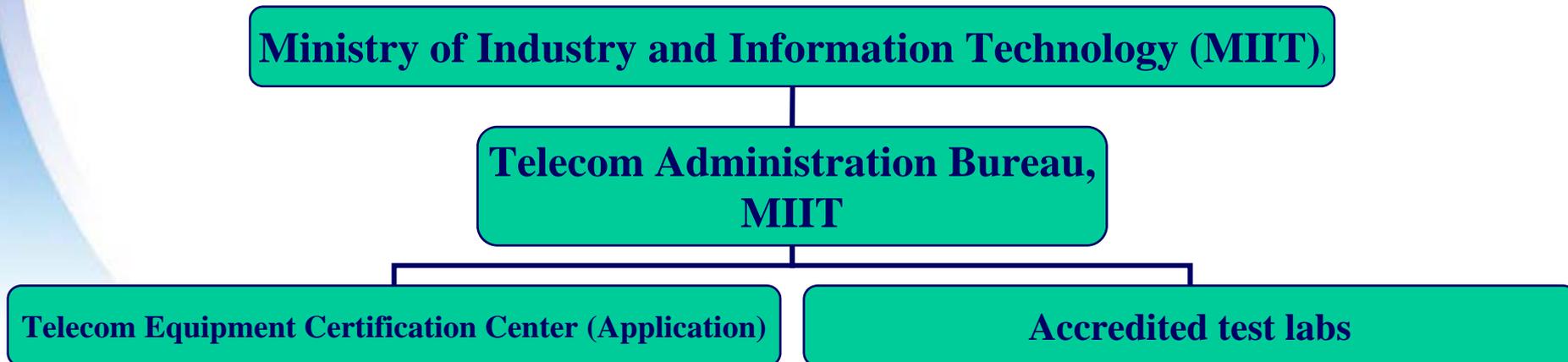
[fuli@chinattl.com](mailto:fuli@chinattl.com) or [fuli@catr.cn](mailto:fuli@catr.cn)

## 1. Introduction

- 1. NAL ( Network Access License . Some times called CTA );
- 2. RTA ( Radio Type Approval) ;
- 3. CCC (China Compulsory Certification);
- 4. CRoHS ( China RoHS ) - SDoC.

# NAL

## \* Management Organization Structure



## NAL

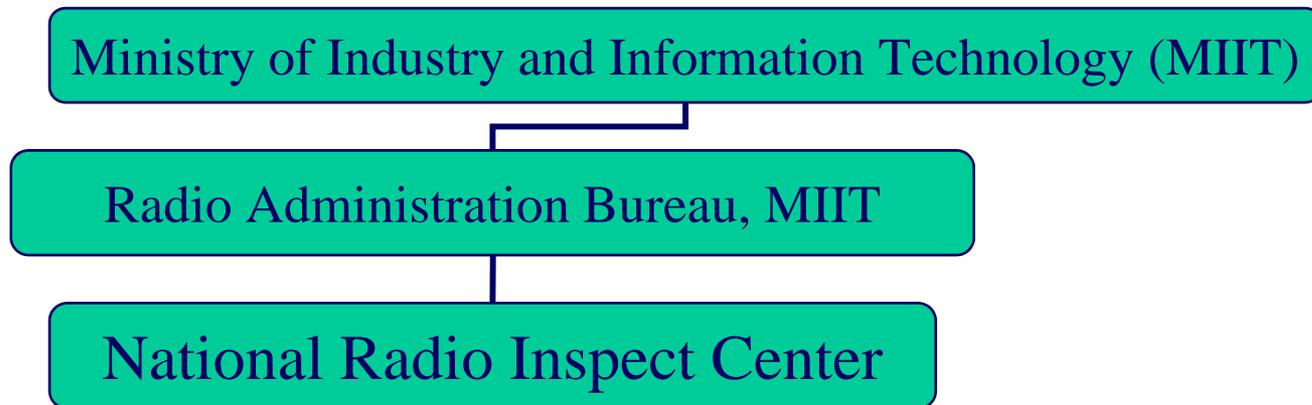
- **Products Scope:**
  - Telecom Terminal Equipment;
  - Radio Telecom. Equipment;
  - Network interconnection Equipment.
- **Requirement Scope:**
  - Telecom. requirements
  - Radio
  - EMC
  - Electrical Safety.

RA: <http://www.mii.gov.cn/>

CB: <http://www.tenaa.com.cn/>

## RTA

### \* Management Organization Structure



## RTA

- **Products Scope:**
  - Radio Telecom. Equipment. (Only for radio transmitting equipment)
- **Requirement Scope:**
  - Radio frequency spectrum
    - transmitting frequency,
    - power
    - Spurious

RA: <http://www.miit.gov.cn/>

CB: <http://www.srrc.org.cn>

# CCC

## \* Management Organization Structure

**General Administration of Quality Supervision, Inspection and Quarantine of China (AQSIQ)**

**Certification and Accreditation Administration (CNCA)**

**China Quality Certification Center (CQC)**

**China Information Security Certification Center (ISCCC)**

**Accredited test labs**

**Accredited test labs**

## CCC

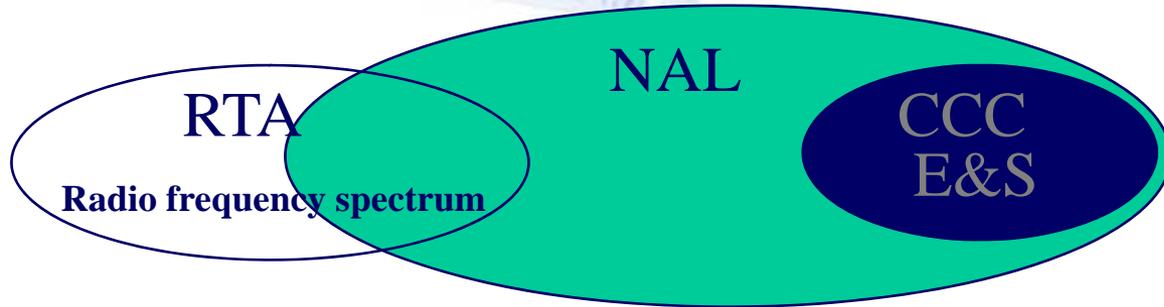
- Products Scope:
  - Telecom. Terminals only ( In Telecom. Sector )
- Requirement Scope:
  - EMC(EMI only)
  - Safety

RA: <http://www.cnca.gov.cn/>

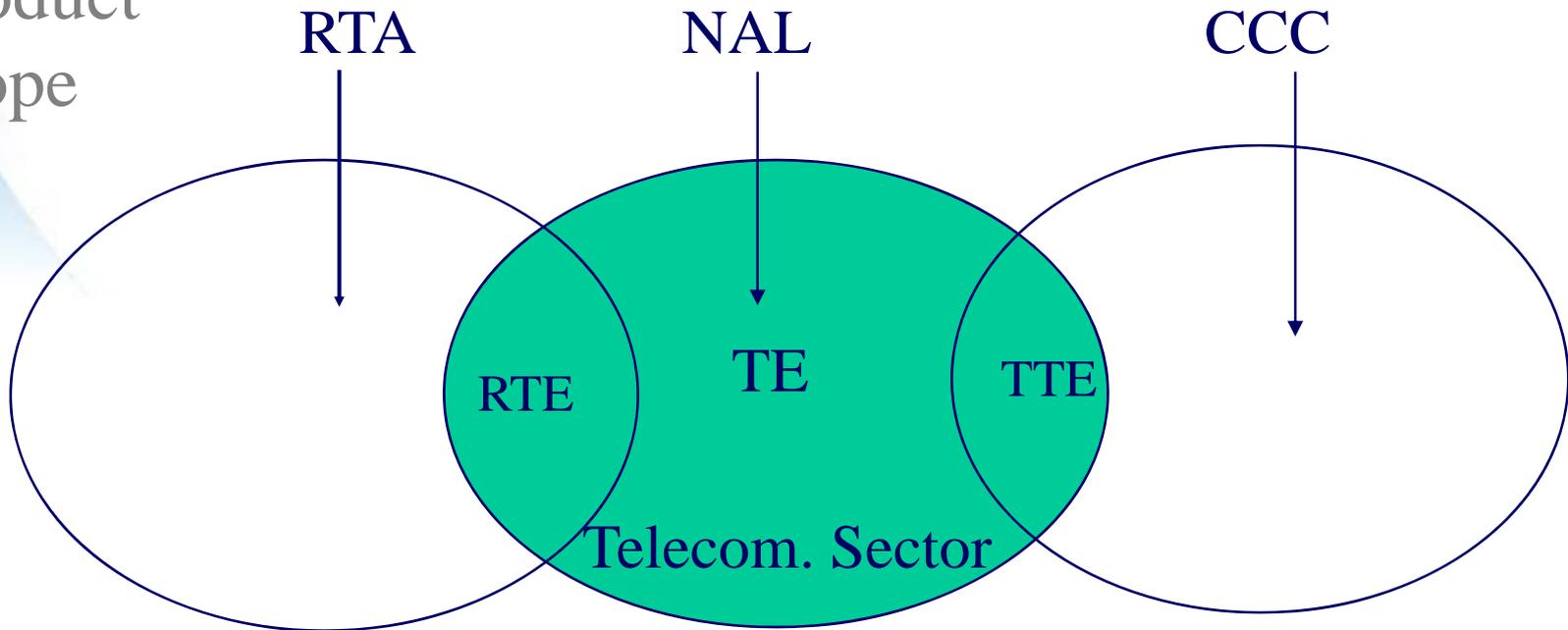
CB: <http://www.cqc.com.cn>

# Comparing with NAL, RTA and CCC

requirement



Product scope



## Comparing with NAL, RTA and CCC

The things is going on:

- The related departments of the government are trying their best to harmonize the NAL, RTA and CCC for Radio telecom. Equipment and terminals.
- To: make the procedures more simple to avoid retesting between them.
- The EMC and Safety test reports for NAL can be transferred to that for CCC certificates, and vice versa, within the CTTL .
- “Telecommunication Law of the P.R. China” is on the way.

## 2. Network Access License

- Documents
- Requirements
- Organizations
- Procedures

## Laws and regulations for NAL

- Telecommunication Provisions of the P.R.China
- ↓
- The arrangements for the approval of network access of the telecom. equipment

# China Telecommunication Provisions

(Issued by State Department of the P.R China)

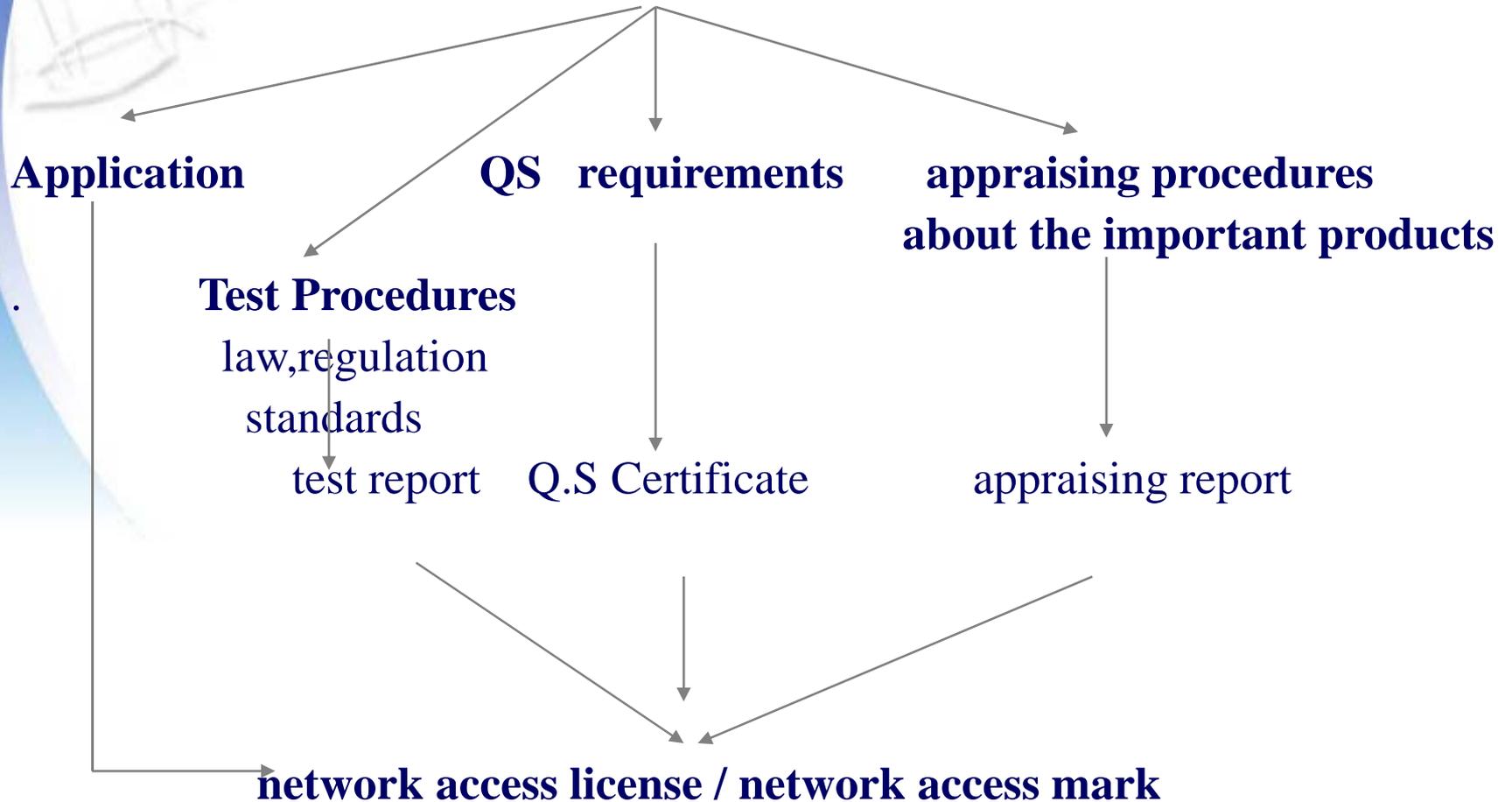
- Main reasons:
  - Safeguard the interests of the customers;
  - Ensure smooth interoperation of all the telecom networks in China;
- Scope:
  - Telecom terminals;
  - Radio telecom equipments;
  - Equipment concerning inter-connection between networks.
- All the telecommunication terminal equipment accessing to public telecommunication network shall comply with national specified standards and shall be granted with NAL.

# The arrangements for the approval of network access of the telecom equipment

(Issued by MIIT of China)

- The aim :  
    To Implement NAL
  
- The main contents :
  - Organizations
  - Requirements
  - Procedures

# Procedures for NAL



## The organizations related to NAL

**The Bureau of Telecommunication Administration  
(BTA) of MIIT (grants the license)**

**Local telecom  
administration department  
(NAL inspection )**

**NAL certification Center  
(accepting applications and issuing  
network access mark) [www.tenaa.com.cn](http://www.tenaa.com.cn)**

**Recognized test labs  
(testing)**

**Appraising committee  
(appraising for new tech.)**

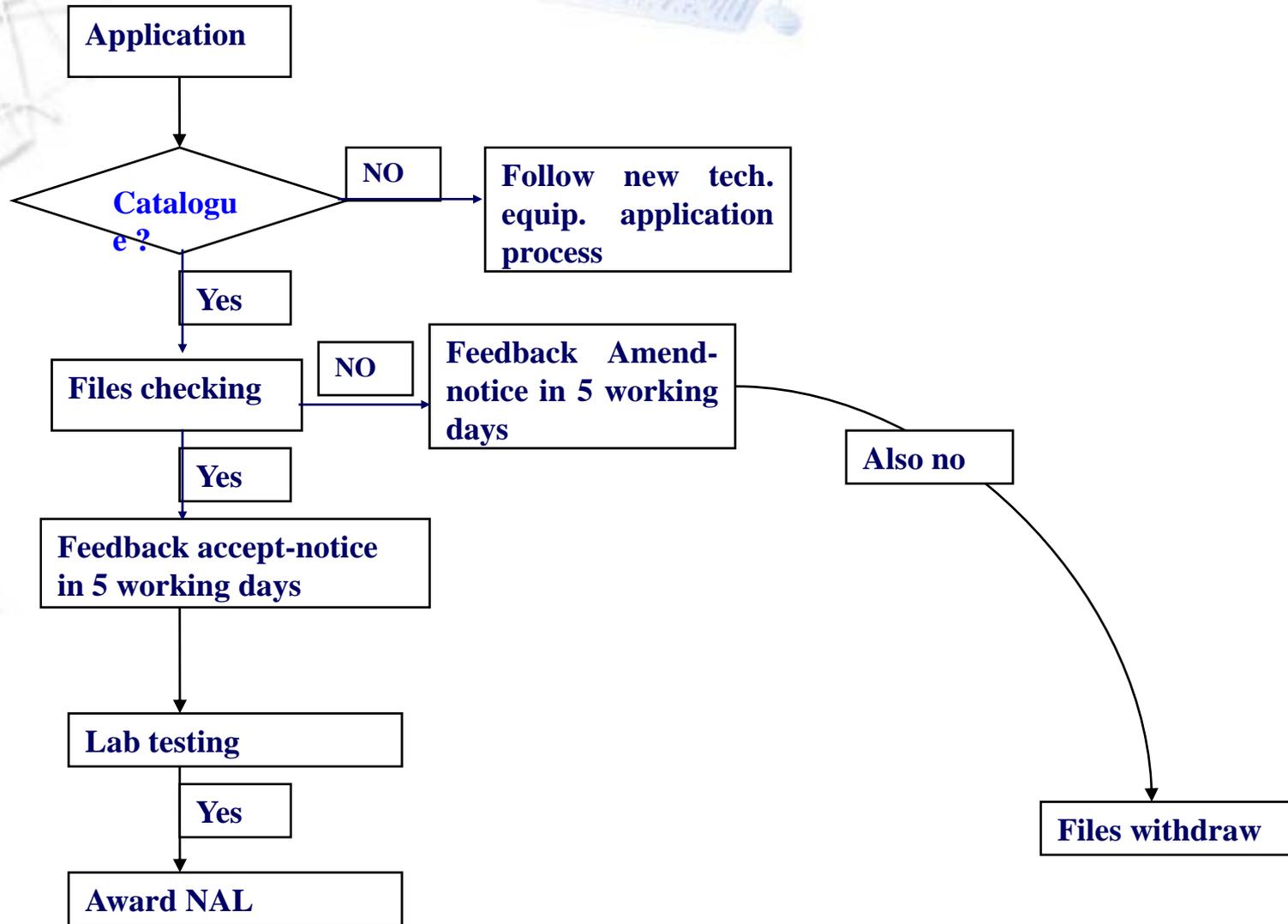
**QS certification bodies  
(auditing QS)**

## The organizations related to NAL

- NAL Certification Center (On behalf BTA,MIIT) accepts and review application form and related documents and issues NAL and Network Access Mark.
- 15 Test labs as NAL test bodies. Among them, the CTTL is most comprehensive and leading one.
- Experts appraising committee is organized by BTA only for inter-network,radio communication equipment and some new products.

P.S. The radio type approve certificate ( RTA ) is required for NAL application of radio transmission equipment.

# Procedure of NAL



## Example for NAL application (GSM/GPRS)

- **Required documents together with application form:**
  - Photocopy of the business license of enterprise or its branch/agent in China for abroad-based manufacturer;
  - Government's approval document for production or importation;
  - Entrust document (only for abroad-base enterprises);
  - Introduction of enterprise and applying products;
  - Quality System Accreditation Certificate;
  - Test reports and related certificates;
  - General technical solution and trial report for some new equipment or systems.

## Example for NAL application (GSM/GPRS)

- **Certificates and Test Reports required for application**
  - Telecom Test Reports;
  - EMC Test Reports;
  - Safety Test Reports;
  - User reports;
  - Radio Type Approval Certificates  
(Radio Products only)

### 3. Radio Type Approve

- **Regulation:**

Radio management provisions of the P.R.China  
(Issued by State Department of the P.R China)

- **State:** All the Radio transmitting equipment used in China should comply the radio management.

- In order to:

Keep the good order of radio telecommunications

## 3. Radio Type Approve

- **Requirements:**

Radio frequency spectrum specialty ---- transmitting frequency, power, Spurious

- **Organizations:**

- The Bureau of Radio Administration (BRA) of MIIT ( issues the certificate )
- Reception Office ( Handling the applications )
- Recognized test lab ( produce the test reports )

- [www.srrc.org.cn](http://www.srrc.org.cn)

## Application procedure for RTA

Application: to the **reception office**

Send the samples to the **recognized test lab** to get the test reports

**BRA** approves and issues the certificate

## 4. China Compulsory Certification

- **Law:**  
Certification and Accreditation Provisions of the P.R. China  
(Issued by State Department of the P.R China)
- **State:** All products in the list of CCC should get the certificate before get in to the China market.
- In order to: Safeguard the interests of the customers

## 4. China Compulsory Certification

- **Requirements:**
  - Safety;
  - EMC.
- **Organizations:**
  - Certification and Accreditation Administration of P.R. China (CNCA)
  - Recognized Certification Body (CQC , ISCCC)
  - Recognized test Labs

## Application procedure for CCC

Applications to recognized CB ( CQC [www.cqc.com.cn](http://www.cqc.com.cn) ; ISCCC [www.isccc.gov.cn](http://www.isccc.gov.cn) ; )

↓  
Supplier sends samples to recognized test labs ( CTTL .... )

↓  
The test lab will review the applied documents,  
implement necessary tests and produce test report

↓  
Test lab submits test report to CB

↓  
CB sends auditor to check QS of manufactory

↓  
CB reviews documents and test reports, and issues certificate

↓  
Supplier asks for CCC mark from CB

## 5. CRoHS (China RoHS)

- This is a new regulation in electron and information sector in China just like RoHS Direct in UE.
- In order to control and reduce environment pollution.
- **Regulation:**

“Administration on the Control of Pollution Caused by Electronic Information Products ” is published on **28<sup>th</sup> Feb. 2006**, signed by 7 Ministries and put into force on **1st March 2007**
- **Scope:**

EIP = products and their parts made by using electronic information technology, [www.miit.gov.cn](http://www.miit.gov.cn) to get the list
- **Regulated hazardous substances:**

Toxic and harmful substances or elements, such as Pb, Hg, Cd, Cr<sup>VI</sup>, PBBs, PBDEs etc.

## How to implement CRoHS?

- **Step\_1: DoC (in force March 1, 2007)**
  - All EIP within the scope must meet the marking and disclosure requirements for
    - **hazardous materials content AND**
    - **packaging material content**
- **Step\_2: CCC (in force TBD)**
  - Add RoHS into China CCC certification
    - **Establish a CCC regulated catalogue.**
    - **EIPs in the catalogue are subject to material restrictions**
  - Catalogue to be renewed/amended annually
  - No official timetable known.

## Specific requirements of CRoHS

- GB 18455-2001 “packing recover marking”
- GB/Z20288-2006“General Disassembly Requirements for Testing Hazardous Substances in Electrical and Electronic Products”
- SJ/T11364-2006“Marking for control of pollution caused by electronic information products”
- SJ/T11363-2006“Requirements for concentration limits for certain hazardous substances in electronic information products”
- SJ/T11365-2006“Testing methods for hazardous substances in electronic information products”

## Marking requirements of CRoHS

### • Symbols :

- The colours of the labels may be selected free (eye catching colour);
- The symbols can be molded, painted, pasted or printed on the products.
- The symbols must be marked, but not always on the products;
- Packaging must also be marked (in Chinese) with materials used see article 14;
- Considering the function and beauty factors, symbols are not required compulsorily to be printed on visible obverse side of product;
- For example:
  - **The symbol for the cell phone could be marked on the inner side of the battery hatch.**



No Toxic Subs



Contains Hazards

**Note: Number in logo 2 is product's Environmental Protection Using Period.**

## 6. Technical Standards in China

There are some categories of telecom. standards used in China

- National Standard (GB) issued by Standardization Administration Committee (SAC) under AQSIQ, (but managed by CCSA)
- Telecommunication Information Industry Standard (YD or SJ) issued by China Communication Standards Association (CCSA) under MIIT
- MIIT Technical Regulations (YDN) issued by CCSA under MIIT
- International Standard Adopted for Use
  - Identical to (IDT)
  - Equivalent to (EQV)
  - Modified from (MOD)
  - Not equivalent to (NEQ)

## CCSA

- ◆ **Background:** In order to adapt to the requirements of telecommunication system reform and opening of telecommunication market, CCSA was established with the approval by MIIT, Standardization Administration of China and registered in the Ministry of Civil Affairs on Dec 18, 2002.
- ◆ **Principle:**
  - ◆ Non-profit organization of legal person guided by MIIT;
  - ◆ To extensively absorb manufactures, universities, and institutes to participate voluntarily in the communication standards activities following the principle of “Openness, Fairness, Justness and Consensus” ;
  - ◆ To set up a market-oriented management mechanism for the standardization activities in which the enterprises take the role of as the main body, and the standards organization as the platform;
  - ◆ To further carry out international cooperation activities, actively participate in the development of international standards to make contributions to both China standards and international standards.

## CCSA

- **Membership:** the number of CCSA membership is more than 190, including about 160 members and 30 observers, covering: major network operators; manufactures; R&D institutes and universities. These companies and institutes, together with many middle-sized or small enterprises and joint ventures, form a standardization group in which, enterprises play as main body, and manufactures, universities and institutes participate extensively.
- **Field:** CCSA deals with standardization in a wide range of communication fields, such as network and switching, wireless communication, IP and multimedia, transport & access network, network and information security, network management and operation support, communication power supply and station operational environment, electromagnetic environment and protection, mobile internet application protocol, and home network.
- [www.ccsa.org.cn](http://www.ccsa.org.cn)

## 7. CAB Accreditation in China

### Accreditation Body in China

#### **China National Accreditation Service for Conformity Assessment (CNAS)**

- Founded on March 1, 2006 Merged from
  - CNAL (China national accreditation board for laboratories) and
  - CNAB (China national accreditation board for certification body)
- Under Authorization of CNCA
- In accordance with the *Regulations of the People's Republic of China on Certification and Accreditation*

## CNAS

- Authorized accreditation services
  - ✓ Accreditation on Certification body
  - ✓ Accreditation on Laboratory
  - ✓ Accreditation on Inspection body
  - ✓ individual who engages in certification activities
- Participation of international LAC cooperation
  - ✓ APLAC
  - ✓ ILAC
  - ✓ IAF
  - ✓ Others
- [www.cnas.org.cn](http://www.cnas.org.cn)

Thanks for your attention !