Introduction of Telecommunications Equipment Network Access License (NAL)

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Course Objectives:

To provide a basic knowledge of China’s Network Access License (NAL) system for telecommunication equipment
Outline

• What is NAL
• Procedures of applying for NAL
• Obligation and Post-license supervision
• Introduction of TAF
Telecommunications terminal equipment, wireless communication equipment and equipment used in network interconnection shall be subject to a state-implemented license system for connecting to the public telecommunications networks.

What for

- Interconnection
- Network & information security
- Rights and interests of users and carriers
Related agencies

- **Implementation Body**: MIIT
- **Administrative Institution**: ICTA, MIIT
- **Application Accepting**: TECC, MIIT
- **Local Administration**: Provincial branches of MIIT
- **Catalog Formulating**: MIIT & AQSIQ
Categories

Telecom Terminal Equipment (12)
- Fixed telephone
- Mobile terminal
- Pager
- Modem
- Fax machine
- PBX
- Key-Phone system
- Cordless telephone terminal
- ISDN terminal
- Data terminal
- Multimedia terminal
- Other telecom terminal

Wireless Telecom Equipment
- Base Station
- Microwave Communication Equipment
- Satellite communication Earth Station

equipment used in network interconnection (13)
- Optical Transmission Equipment
- Frame Relay Switch
- Routing Equipment
- Digital SPC Exchange
- ATM Switch
- Data Communication Equipment
- Signaling System No.7 Equipment
- Intelligent Network
- Synchronous Equipment
- IP Gateway and Gatekeeper
- Access Network Equipment
- Integrated Services Switching System
- Call Centre equipment

28 categories in total.
Conditions of Approval

- meet the state and industry standards as well as provisions of MIIT
- have sufficient quality assurance system and post-sale service measures
- *have been experimented for at least three months
- meet other relevant state laws and regulations

*Wireless equipment, equipment used in network interconnection and equipment without state standards and industry standards
  - Experiment: on the networks or on the imitated experiment network
## Comparison between NAL and certification system

<table>
<thead>
<tr>
<th></th>
<th>NAL</th>
<th>Certification system</th>
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</thead>
<tbody>
<tr>
<td>Implementation body</td>
<td>government (MIIT)</td>
<td>Certification organization</td>
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<tr>
<td>Approval condition</td>
<td>- National/industry standards</td>
<td>- National/industry standards</td>
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<td></td>
<td>- Provisions of MIIT</td>
<td>- Consortium standards</td>
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<tr>
<td>Purpose</td>
<td>- State security</td>
<td>Conformity assessment</td>
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<td></td>
<td>- Fair competition</td>
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<td></td>
<td>- Interests of users</td>
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<td>- Industry planning</td>
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</table>
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The Documents of Applications

9 documents should be submitted

- Application
- Business License
- Introduction of the Applicant
- Certificate of Quality System Certification
- Introduction of Telecom Equipment
- Test Report
- Type Approval Certification (Radio Transmission Equipment)
- the overall technological schemes and experiment reports
- Documents required by other relevant regulations
Application & Acceptance
- 5 days
- Accepting the application if the files are complete and in conformity with the statutory form
- If not, informing the applicant of what needs to be supplemented or corrected all at once

Examination & Decision
- 60 days
- Telecommunications Equipment Certification Center
- ICTA, MIIT
- Expert evaluation*
- Issuing NAL if the files meet the requirements
- If not, sending paper replies to the applicant
Wireless equipment, equipment used in network interconnection and equipment without state and industry standards
- being organized by ICTAB within 45 days (not being reckoned in the 60 days time limit)
- Experts from carriers, academia, governments, test agencies
- To evaluate the test reports, the overall technological schemes and experiment reports
Modification
- technological or exterior changes
- contents prescribed in the NAL have been changed

Renewal
- applying for the NAL over again 3 months before the NAL expires
- returning the former license
Procedures for New technology

- equipment without state and industry standards
- To encourage the application of new technologies, MIIT grants trial license to device applying new technologies

1. Evaluation
2. Test
3. Application & acceptance
4. Examination & decision
5. Renewal

- Industrial policy
- China’s national condition
- Network & information security
- Interconnection, and fair competition among carriers
- Advancement of the technology
- Application status in international and domestic markets
- Progress of international and domestic standards

- Referring to international / consortium/ enterprise standards
- Same as other device
- trial license
- Valid term is less than 1 year

After the national and industry standards being released, the manufacturer could apply to change the trial license to a formal license.
<table>
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<tr>
<th>Valid Term</th>
<th>3 years</th>
<th>Less than 1 year</th>
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<tbody>
<tr>
<td>License</td>
<td>![License Image]</td>
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<tr>
<td>NAL label</td>
<td>![NAL Label Image]</td>
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</table>

MIIT publishes the list of equipment and manufacturers which have obtained the network access licenses every 2 weeks on its website.
• Foreign applicant should authorize a domestic agency to submit the application.
• The applicant may submit the application in personal presence, by mail or online (50% in total, 95% for mobile phones).
• Documents should be written in Chinese.
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The manufacturing enterprises shall:

1. **Bearing label**: affix the label on their telecommunication licensed equipment. The labels shall be printed and issued by MIIT.

2. **Consistency**: keep consistency of the licensed equipment before and after obtaining the license and shall not lower quality.

3. **Indicating the serial number**: indicate the serial number on the packages and in the published advertisements.

4. **After-sale service**: fulfill the statutory obligations of after-sale service, such as repair, exchange and return.
Inspection and Supervision

Annual inspection
- conducted by the provincial branches of MIIT
- submitting the Annual Inspection Form at the beginning of the December every year

Post-license Supervision
- conducted by MIIT
- to check consistency of equipment before and after obtaining the network access license
By August 2017, more than 7000 manufacturing enterprises obtained more than 88,000 licenses.

About 1800 manufacturing enterprises hold 14,000 valid licenses.
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Telecommunication Terminal Industry Forum Association

- mobile network operators
- approval and testing organization
- telecom terminal equipment manufacturers
- system equipment manufacturers
- chip design corporations
- software service corporations
- Internet corporations
Main Tasks

Playing a bridge role as association, building exchange platform between manufacturers and government.

Being responsible of issuing IMEI to Chinese manufacturer, establishing an effective and standardized IMEI management system.

Promoting association standard development and rolling out variety of test services.

Carrying out exchange cooperation with international organizations, such as GSMA, BABT, MTDA, MSAI and GP, technically supporting Chinese manufacturers.
Main Bodies

General Assembly

Board

Legal Department

Secretariat

IMEI Management Department

WG1  WG2  WG3  WG4  WG5  WG6
Standards

Disclosure Guideline for Smart Mobile Terminal Pre-installed Application Information

TEE Internal API Test Method for Java

Test methods for Fingerprint Framework Interface of Smart Mobile Terminal

Developer Guide for Android Application Permission

General Specification for the Module of Narrow Band Internet of Things (NB-IoT) based Terminal, First Stage

Quality Technical Requirements and Testing Specification for Android Application

…
Test Services

Smarter Apps

Security capability of smart mobile terminal
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