Joint ITU - AICTO Workshop on “Interoperability of IPTV in the Arab region”

(Dubai, UAE, 20 – 21 September 2011)

IPTV Standards in China

Chuanyang Miao
ZTE Corporation, China
IPTV Subscribers status in China

- The second largest number in the world and the largest one in Asia.

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IPTV Market in China

<table>
<thead>
<tr>
<th>Region</th>
<th>Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Guangdong</td>
<td>900,000</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Anhui</td>
<td>500,000</td>
</tr>
<tr>
<td>Hubei</td>
<td>280,000</td>
</tr>
<tr>
<td>Chongqing</td>
<td>175,000</td>
</tr>
<tr>
<td>Shanxi</td>
<td>450,000</td>
</tr>
<tr>
<td>Xiangjiang</td>
<td>17,500</td>
</tr>
<tr>
<td>Hainan</td>
<td>31,000</td>
</tr>
<tr>
<td>Hunan</td>
<td>101,000</td>
</tr>
<tr>
<td>Yunnan</td>
<td>110,000</td>
</tr>
<tr>
<td>Ningxia</td>
<td>300</td>
</tr>
<tr>
<td>Fujian</td>
<td>440,000</td>
</tr>
<tr>
<td>Qinghai test</td>
<td>0</td>
</tr>
<tr>
<td>Beijing test</td>
<td>0</td>
</tr>
<tr>
<td>Jiangxi test</td>
<td>0</td>
</tr>
<tr>
<td>Gansu test</td>
<td>0</td>
</tr>
<tr>
<td>Sichuan</td>
<td>500</td>
</tr>
<tr>
<td>Tianjin</td>
<td>660</td>
</tr>
<tr>
<td>Liaoning</td>
<td>138,932</td>
</tr>
<tr>
<td>Shangdong</td>
<td>16,757</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,161,649</strong></td>
</tr>
</tbody>
</table>

- **IPTV service deployed in almost all provinces in China.**
- The last data shows near 8 million IPTV Subscribers in total now in China.

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Basic IPTV service

- **Live TV**: over 100 channels covers sports, news, stock, etc.
- **Timeshift TV**: 60min timeshift TV for all channels.
- **nPVR for live TV**: 48h program recoded for all live TV.
- **VoD**: over 15,000h, including movies, TV series, live music

Value-added Services
IPTV Standards in China

CCSA (China Communications Standards Association) is the most important organization which releases IPTV Specifications in China.

266 members in CCSA are composed of Telecom Operators and Vendors, together with some Researching Institutes and universities.

From 2007~2010, CCSA has released 14 Specifications which targets to provide basic IPTV service over standard Service Platform, Transport network, Access network and Terminal devices.
ITU-T’s IPTV Recommendations are the most valuable reference and guideline in CCSA IPTV Specifications development, such as:

- IPTV architecture, user case and scenario, Requirements
- Terminal device, middleware, Multimedia Framework
- Content distribution
CCSA IPTV Specifications in Stage 2

Since 2010, CCSA has initiated IPTV Standards version 2 development. In this stage, some hot topics in ITU-T IPTV-GSI are also hot in CCSA, such as:

- Full-fledged terminal device, Service over Multiple terminal device, etc.
- 3D IPTV, Audience Measurement, Widgets

Emphasize capability & quality optimization and openness.

<table>
<thead>
<tr>
<th>Now</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV like service</td>
<td>rich broadband app</td>
</tr>
<tr>
<td>Video definition SD</td>
<td>HD &amp; Mobile</td>
</tr>
<tr>
<td>TV &amp; movie</td>
<td>User generated content</td>
</tr>
<tr>
<td>Closed system</td>
<td>Open system</td>
</tr>
<tr>
<td>STB</td>
<td>Terminal Convergence</td>
</tr>
<tr>
<td>Fixed</td>
<td>Mobile IPTV</td>
</tr>
</tbody>
</table>
CCSA Standardization Strategy

- Keep in line with Global Standard making actives
  - adopt ITU-T IPTV recommendations as much as possible
  - make contribute to the ITU-T IPTV activities and other SDOs
  - liaise with ITU-T, IETF, ETSI, ATIS, and other SDOs

- Strengthen cooperation with regional organizations

- Encourage members to participate IPTV work of ITU-T

- Cooperate with other SDOs
ZTE’s contributions in CCSA and ITU-T’S IPTV Standards

ZTE has been participating the CCSA’s IPTV Standards development in almost all fields and achieves the leadership in some core topics.

Since FG-IPTV, ZTE has been making many contributions to ITU-T IPTV Recommendations.

- IPTV architecture
- Terminal device
- Service discovery
- Content distribution
- Audience measurement
- IPTV service over multiple terminal devices (Technical Paper)

ZTE leadership achievements in ITU-T

- Dong WANG-FG WG3 Co-Chair & SG9 Vice Chairman,
- Mingdong LI-FG WG1 Editor,
- Hongfei XIA-SG13 Co-Editor,
- Feng JI-SG16 TP Editor
- Chuanyang MIAO- SG16 co-Editor.

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ZTE is a successful leader of IPTV market in China (No.1) and World Wide (No.3).

- Over 34 Global Commercial Deployments in the world, over 600 million subscribers.
- Over 50% market share in China.
- Establish top IPTV Brand in China.
- Provide perfect End-to-End solutions and Convergence service.
ZTE IPTV 33 Global Commercial Deployments

Great Success in China:
1. Shanghai Telecom
2. Beijing Netcom
3. Guangdong Telecom
4. Jiangsu Telecom
5. Jiangsu Mobile
6. Shaanxi Telecom
7. Yunnan Telecom
8. Fujian Telecom
9. Hubei Telecom
10. Xinjiang Telecom
11. Wuhan Telecom
12. XinJiang Telecom
13. ChongQing Telecom
14. Daqing Oil
15. ......

• Total 5.6 Million active users and 9.8 Million deployed system capacity by ZTE IPTV Platforms;

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ZTE IPTV Solutions

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IPTV Basic Services

Live TV & Info bar | VOD | TSTV

PIP | TVOD/NPVR | KOD

Content search | Bookmark | Favorite

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IPTV Value Added Services

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Planned Services in Phase 2

- Whole-Home DVR
- TV control with Android tablets
- Dynamic Bandwidth Control
- Caller ID, Widgets, Fioptics Mail
- Over-The-Top video (e.g. Hulu+, YouTube, Facebook)
- Customer-Generated Mosaic
- Multi-Screen Services (Android tablets/iPads/Smartphones) to be addressed separately.

Dubai, UAE, 20-21 September 2011
Thanks!

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