TTA Standardization Activities

3rd CJK IT Standard Meeting
3-5 November 2003, Beijing, China

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Managing Director, Standardization Dept.

Telecommunications Technology Association
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• International standardization activities
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• Domestic standardization activities
  ■ Issued Standardization Areas, Re-Structuring Issues, Electronic Support by TTA Homepage, etc

• IT Testing and Certification services
  ■ IT testing & certification serves,
  ■ External relations,
  ■ What happened in Open Lab
Status of TTA Membership
As of October, 2003

<table>
<thead>
<tr>
<th>Categories</th>
<th>Year 2002</th>
<th>Year 2003</th>
</tr>
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<tbody>
<tr>
<td>Regular</td>
<td>87</td>
<td>133</td>
</tr>
<tr>
<td>Observer</td>
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<td>9</td>
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<tr>
<td>Cooperative</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Associate</td>
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<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
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</tr>
</tbody>
</table>
Telecommunications Technology Association

Standardization Organization
Technical Assembly, Technical Committees, Project Groups

Technical Assembly

Coordination Committee

SC1 Strategic & Planning
SC2 Testing & Certification
SC3 International Cooperation
Adhoc#2 User Group

TC2 Telecommunication Network
TC3 Transmission
TC5 Broadcasting
TC6 Radiocommunication
TC7 Informatization
TC8 Data Engineering
TC9 Software Engineering
TC10 Information Security
TC11 IC Card
TC12 NGIS
PG1 IMT-2000
PG4 ITS
PG5 2.3GHz Portable Internet

Chairman of TA
- Dr. Sang-Hoon Lee
  (Executive Vice President of KT)

Vice Chairman of TA
- Dr. Ki-Shik Park
- Dr. Kyu-Jin Wee
- Dr. Young-Kyun Kim

Adhoc#2 User Group
## Standardization Work Items

Number of Work Items assigned to Technical Committees, Project Groups

<table>
<thead>
<tr>
<th>Areas</th>
<th>No. of Items</th>
</tr>
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<tbody>
<tr>
<td>SC2 Testing and Certification</td>
<td>2</td>
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<tr>
<td>TC2 Telecommunication Network</td>
<td>134</td>
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<tr>
<td>TC3 Transmission</td>
<td>39</td>
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<tr>
<td>TC5 Broadcasting</td>
<td>1</td>
</tr>
<tr>
<td>TC6 Radiocommunication</td>
<td>41</td>
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<tr>
<td>TC7 Informatization</td>
<td>147</td>
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<tr>
<td>TC8 Data Engineering</td>
<td>14</td>
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<td>TC9 Software Engineering</td>
<td>21</td>
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<td>TC10 Information Security</td>
<td>34</td>
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<td>TC11 IC Card</td>
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<td>TC12 NGIS</td>
<td>29</td>
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<td>PG1 IMT-2000</td>
<td>705</td>
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<td>PG4 ITS</td>
<td>11</td>
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<td>PG5 2.3GHz Portable Internet</td>
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<td><strong>Total</strong></td>
<td><strong>1208</strong></td>
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Status of Established TTA Standards
As of October, 2003

Yearly Status

Classified by Areas

Total Accomplishment

- Standards [Revised]  2, 606[417]
- Technical Reports      11
- Guidelines            2
International Standardization

- GSC (Global Standards Collaboration)
  - To collaborate in high interested standardization area among;
    ACIF, ARIB, committeeT1, ETSI, TIA, TSACC, TTA, and TTC
  - Next GSC-9 meeting will be held in Seoul Korea, 9-13 May 2004
    hosted by TTA
- Recognized as ITU-T Rec. referencing organization (Jul. 2001)
- 3rd Generation Partnership Projects (3GPP, 3GPP2)
- CJK IT Standards Meeting among CCSA, ARIB, TTC, TTA
- Actively participating in regional standardization activities (ASTAP)
  - TTA organized the ASTAP-7 Seoul meeting in August 2003
- Bilateral Standardization Cooperation with SDOs (ACIF, ETSI, ITU-AJ
  TTC, ARIB, T1, TSACC)
Issued Standardization Areas of TTA

- Portable Internet (2.3GHz)
- Mobile Internet Platform (ex. WIPI)
- DAB/ DMB (Digital Audio/Multimedia Broadcasting)
- NGN (Next Generation Network)
- Digital Home Equipments
- ITS (Intelligent Transportation Systems)
- Digital TV
Dramatic increase of demand on (Wire/Wireless) Internet services in Korea

- The wireless internet services on 2.4GHz(ISM Band) could not satisfy the future demand

- An efficient frequency band was sought by Industries; the government reallocated 2.3GHz, once allocated for FWA, for Portable Internet service(Dec. 2002)

- Portable Internet Project Group(PG05) to develop its standards was established in TTA (June. 2003)

- Definition of Wireless Portable Internet
  - Indoor/Outdoor(Coverage), Nomadic(Mobility), High speed data rate(xDSL)
The Network of Wireless Portable Internet.

- Extension of service area provided by W-LAN.
- ALL-IP based Core Network.
- IP centric Base Station.
Direction for successful standardization of Wireless Potable Internet

- In launching Wireless Portable Internet standard,
  • will receive proposals freely whoever are interested in the standardization.
  • will consider all of the proposals to accommodate the domestic/overseas excellent technology.
  • will be made by the private members like vendors, service providers and research organizations to reflect user requirements fully.

- For Successful standard,
  • WPI Project Group members will develop the standard after careful consideration of items like Cost, IPR and appropriate technology for competition in the market.
Wireless Internet Platform for Interoperability (WIPI)

the middleware providing the standard API for heterogeneous wireless internet application in mobile communications.

The specifications and implementation of WIPI began in 2001 with project members (specially SKT, KTF, LGT, ETRI, TTA, RRL and about 26 members)
WIPI specification : freely open to all interested Parties
- WIPI is now being upgraded by the related bodies (research institutes, vendors, telecommunications operators and implementers).

Interoperability Testing :
- TTA certifies the WIPI applications in Korea
- Certification has been done for interoperability

The Future of WIPI Next Generation
- Expansion of rich API set for MM contents & applications
- Platform for Smart phone as embedded software
**Activity Status related with NGN in TTA**

- NGcN Forum
- Internet Telephony Forum
- URI Forum

**TTA**

**MIC**

**Telecommunication Network TC**

**TFT on NGN**
- Next Generation VoIP
- NGN Telecom. Architecture
- NGN Service over Integration of wired and wireless Network
- NGN ENUM
- NGN Access
Vision of BCN in Korea

IP based integrated network for high quality convergence services through dynamic accesses
**General Architecture of BcN**

- ONA for easy of new service
- All IP based integrated transport net.
- Dynamic Access Network
- Multi-Function TE
Re-Structuring Issues of TTA Technical Committee

- **Background**
  - Rapid change and convergence of technology
  - Overlap of work items among TCs, SGs
  - Unnecessary expenditure of budget, human resources

- **Principles**
  - Flexible with change
  - Closely connected with Standardization Fora
  - Merging similar technical areas
  - Industry-oriented

- **Re-Structuring of TTA TC**
  - Expected to restructure TTA TC at the next TA(12. 2003)
Electronic Support by TTA Homepage(www.tta.or.kr)

- **Standardization Activities**
  - Rules of Procedures, Committee's Activities (Electronic Balloting), Proposal of Standard, Request to Participation in committees, etc.

- **Standard Information**
  - Search/Browse/Download of Standards, Electronic Dictionary (30,000 Words)

- **Secretariat Support Services**
  - Meeting Notification, Meeting Docs, Participants, Minutes, etc.
  - Reports: Standardization Activity Plan, Mid-term and Final Reports

- **Standardization Work Item Record Handling**
  - Maintain a historical record of each Standardization Work Item for its life cycle
Electronic Information Services

The Number of Standards Downloading since Year 2002

<table>
<thead>
<tr>
<th>Year</th>
<th>The Total Number of Standards Stored in Server (A)</th>
<th>The Total Number of Downloaded Standards (B)</th>
<th>The Ratio of Downloaded Standards (B/A%)</th>
<th>The Total number of Standards Downloading</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1,894</td>
<td>1,863</td>
<td>98.4%</td>
<td>35,149</td>
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<tr>
<td>2002</td>
<td>2,557</td>
<td>2,546</td>
<td>99.6%</td>
<td>36,852</td>
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</table>

IT Standard Weekly Service
- Selected Information Dissemination Service
- Providing IT Technology & Standardization Information via TTA Web, Mailing Group.
IT Testing and Certification Services
Launched in December 2001

**Objectives**
- Maximizing the practical use of Standard(s)
- Securing Compatibility, Interconnectivity, Interoperability, and the quality of the IT products, etc.

**Major Activities**
- Provide IT Testing, Certification Services, Open Lab Operation

**Testing & Certification Service Area**
- Network Equipments (Ethernet, ATM, Router, WLAN, ADSL, VoIP, Bluetooth, Mobile Phone Charger, etc)
- Software (Component, Mobile, Embedded, Web-based S/W, etc)
- Digital Broadcasting Equipments (DVB-MHP, ATSC-DASE, Digital TV, etc)
- Mobile Communication (CDMA, PCS, GSM/GPRS, IMT-2000(3GPPs))

**Open Testing Lab Service**
- To provide the testing environment for IT product testing (Ethernet, ATM, MPLS, IPv6, VoIP, ADSL, etc.)
- To lease the testing equipments and reference equipment
Partnership
- The Tolly Group (USA) (Network Area)
- VeriTest (USA) (S/W Area)
- Provides joint testing service and Issues Joint-Certification Logo

Co-operation with related Organizations
- CDG in the Cellular Phone sector
- WECA for wireless LAN testing (Wi-Fi certification)
- TUV Rheinland and CETECOM for BQTF operation
- CableLabs for Digital Cable TV
Testing & Certification Services

Testing & Certification Performances

<table>
<thead>
<tr>
<th></th>
<th>Network</th>
<th>Software</th>
<th>Digital Broadcasting</th>
<th>Mobile Communication</th>
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<tbody>
<tr>
<td>Testing</td>
<td>389</td>
<td>130</td>
<td>21</td>
<td>3</td>
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<tr>
<td>Certification</td>
<td>94</td>
<td>48</td>
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</tr>
<tr>
<td>Total</td>
<td>483</td>
<td>178</td>
<td>24</td>
<td>3</td>
</tr>
</tbody>
</table>

Facilities

- Over 100 Testing and Reference Equipment
- 4 Testing & Certification Labs
- 4 Radio Shield Rooms for CDMA and Bluetooth testing
- 1 OpenLab (100 m²) for customer’s self use
- 8 Customer Islands
- Seminar Rooms
Open Lab

- **Services**
  - To help the manufacturers to debug their new products
  - To provide the testing tools and reference equipment
  - To organize the **Interoperability testing event** (ION)

- **Interoperability Testing Event - ION (Interoperability ON !)**
  - 6 times in 2002 (SIP, H.323, WIPI, IPv6, MHP, VPN)
  - 10 times in 2003 (SIP, Open Cable, Wireless LAN, IPv6 etc…)
  - More than 100 manufacturers participated.

- **International Cooperation**
  - *Cooperation with ETSI in Plugtest event (IPv6 in 2003)*
  - *Provide leadership in at ASTAP IOP WG activity*
  - *Cooperation among CJK*
Vision

One Stop Service

Planning

Standards Setting

Testing & Certification

ITU, JTC1, GSC, CJK, etc

Government

SDOs

Industries

Infrastructure of Standards Setting

TTA

Standardization Committee

Fora/Consortia

User

Standardization Cooperation

Telecommunications Technology Association
Thanks for your attention!

Let’s do standardization …

Information Sharing,

Cooperation,

Collaborate!