IEC/TC100 activities of quality for audio, video and multimedia systems

by Junichi Yoshio, Pioneer Corporation
IEC/TC100/TA11 TAM

at VQEG, Kyoto, 3 March 2008
IEC/TC100 activities for quality

- Mainly for consumer products (but the border between professional and consumer is unclear)
- Current concerns
  - AV synchronization and lip sync
  - Loudness in multi channel
  - Colour measurement and management
  - ...and other issues are under study in TA11
In many organizations

- Quality issue is a concern in many organizations
  - ITU/VQEG
    - ITU-T SG 9/WG 5
    - ITU-R SG 6/WP 6Q
  - ISO/IEC JTC1 SC29
  - IEC/TC100/TA11
  - ...and in many
IEC TC 100

TC 100: Audio, Video and Multimedia Systems and Equipment
TA (Technical Area) of TC 100

TA 1: Terminals for audio, video and data services
TA 2: Colour measurement and management
TA 4: Digital system interfaces and protocols
TA 5: Cable networks for television signals, sound signals and interactive services
TA 6: Higher data rate storage media, data structures and equipment
TA 7: Moderate data rate storage media, equipment and systems
TA 8: Multimedia home server systems
TA 9: Audio, video and multimedia applications for end-user network
TA 10: Multimedia e-publishing and e-book
TA 11: Quality for audio, video and multimedia systems
Application examples under TC 100

- Digital satellite broadcast
- Digital terrestrial broadcast
- Cable TV
- Broadcasting stations
- Local governments

- Home network
- Home server
- Expanded range of services using digital TV

- Requests
- Reservation service
  - Reserve public tennis courts
- Reservations
  - Reserve books at the library
- Access
  - Use digital learning materials
  - Access today's Arabic language lesson

- Explanation of government services
  - What services are available for the elderly?
Form contents to end users

Contents

Satellite Broadcast
CATV
Terrestrial Broadcast
Internet

Package Media

Data Compression

Terminal (Receiver, STB, Player)

Internal Storage

De-compression

Display Sparkers

Storage (Recorder, Server)

Data Compression

Network, Broadcast

Compression

Compress
Display and quality

- Display device is a final reproduction device and also an interface to the end users.
- Quality studies are started, but there are many issues to be solved because of the development of digital video and flat panel display technologies.

Display device involves:
- Video signal decompression
- Video signal processing
- Flat panel drive method
- Flat panel natures
  ...etc.
Observation

- IEC/TC100 makes standards of audio, video and multimedia systems and equipment including quality issues.
- Outside of the terminal is not the issue of IEC.
- ITU, ISO and IEC corroborates to realize providing quality experience to the end users.