Multimedia equipment for electric vehicle
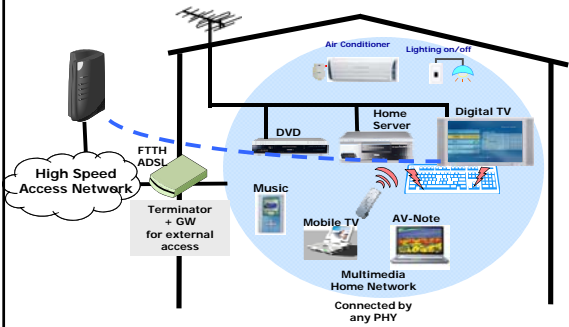
100/AGS463
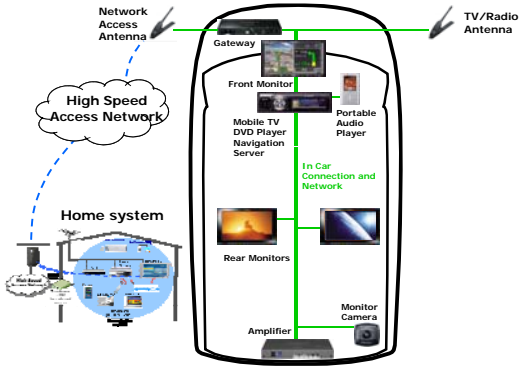
At AGS, 24 October, Melbourne
By Junichi Yoshio

Home system and network structure

Car system and network structure

Car is a small home!

EV brings new aspects to IEC

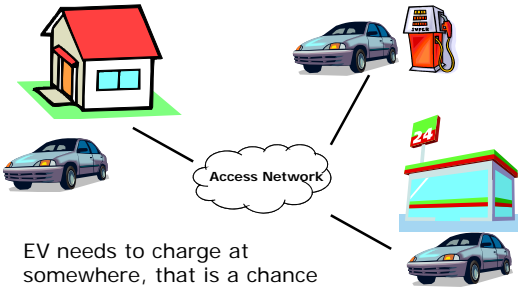Car becomes one of electric equipment.

New Use interface for AV equipment

Power Transmission, Contact or contactless
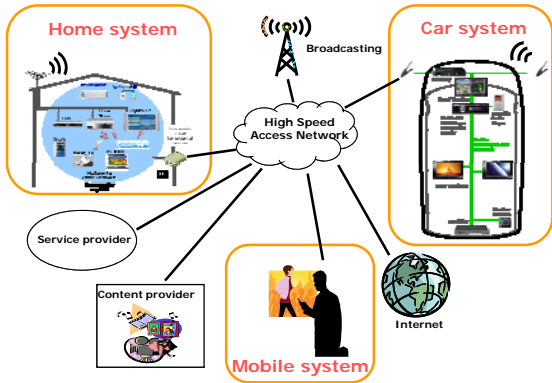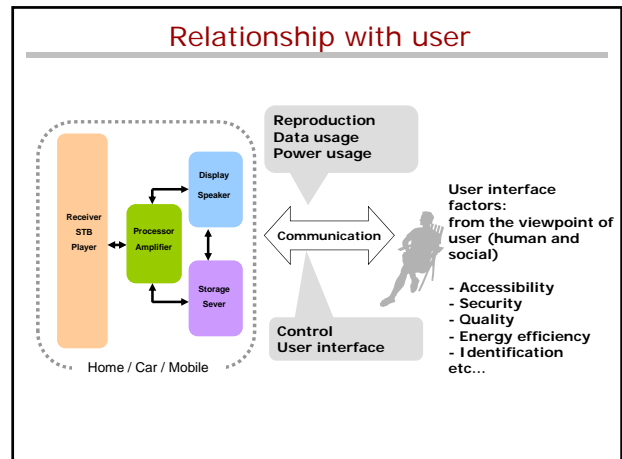
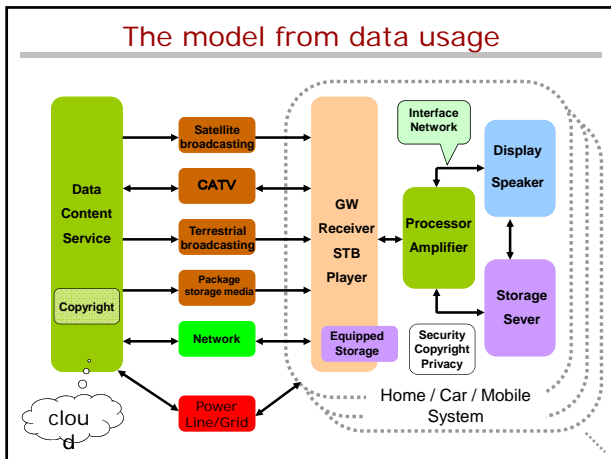Data Connection, Wired or wireless

by TC69

by TC?

Data usage at charging

EV needs to charge at somewhere, that is a chance to communicate with network. AV date is also chargeable.

TC100 model now and then

The model from data usage

Relationship with user

New factors of Car AV system, not only for EV

- Car Navigation
  - Network service based – e.g. Google maps, OVI
- User Interface and safety
  - Voice control – no standard
  - Head up display – safe monitor? >
  - Accessibility, etc. – UI factors for Car
- Internet
  - Data line management
  - Network configuration is also useful for car

Proposal

- TC100 standards are basically home use, Car AV&IT equipment applies these standards.
- There are items to be standardized for car but TC100 doesn't start it.
- EV brings a new connection path to car, this makes TC100 to recognize car as one of electronic devices and systems.

- **Proposal:**
- Start a group that studies a new TA of multimedia equipment and systems for electric vehicle
  - Also SMB/4587/DC, Potential new fields of technology where IEC standardization should be considered, mentions that TC100 and other TCs to study Electrotechnics in the automotive field

Supplementary: borders of CAN

- CAN safety first; CAN and AV line is completely separated physically.
- But some EV brings AV&IT display and driving display in one panel.
  It is a intermingle in application layer.
  - Current car navigation is also a intermingle case in application layer.
- This area needs standard.
  - From Safety
  - From Technical

Head up Display:

A kind of overlay display on front window

Navigation   Signage, Information

OLED

HUD

Smart Phone

Example from Pioneer ≥