JLabs
Japan Cable Laboratories

Japan Cable Laboratories @EIDR TWG F2F MTG

May, 2013

Agenda

1. Japan Cable Labs

2. Cable Business in Japan

3. JLabs Specifications
   - Advanced Cable STB
   - TV Everywhere

1. Japan Cable Labs (JLabs)

- A non-profit technology development consortium supported by more than **250** cable operators and cable vendors in Japan
- Established in **June, 2000**
- A.4 qualified organization by ITU-T as well as **a member of ITU-T** (A.4 means an official communication organization with ITU)

Principal Mission

- **Development and standardization** of cable telecommunication technology
- **Research** into new cable telecommunication technology
- **Certification** of cable equipment such as set-top box
- **Collaboration** with similar overseas organization such as US CableLabs
- **Training** of cable engineers

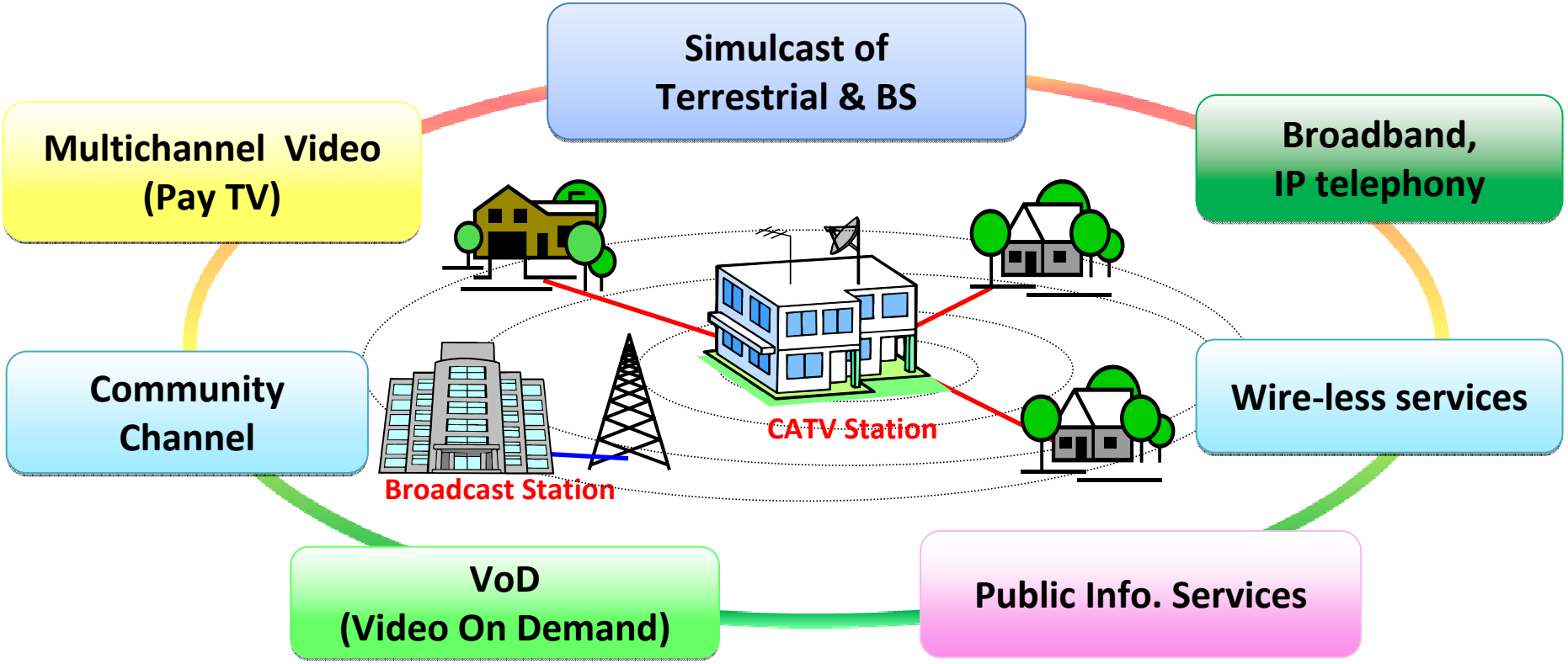
JLabs Membership

- Members
  - 185 Cable Operators

- Associate Members
  - 47 Organizations and Venders

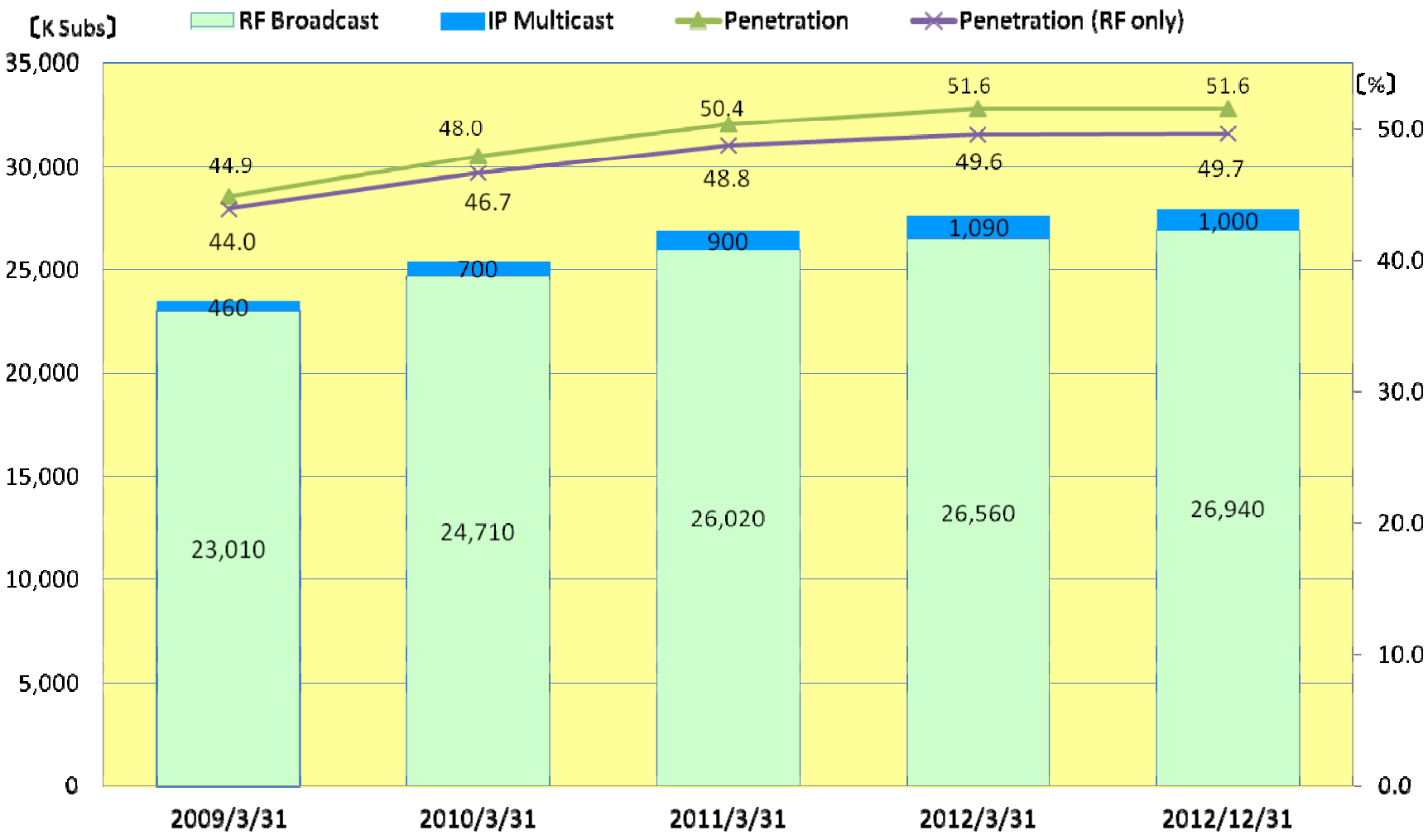
(as of March 2013)

2. Cable Business in Japan



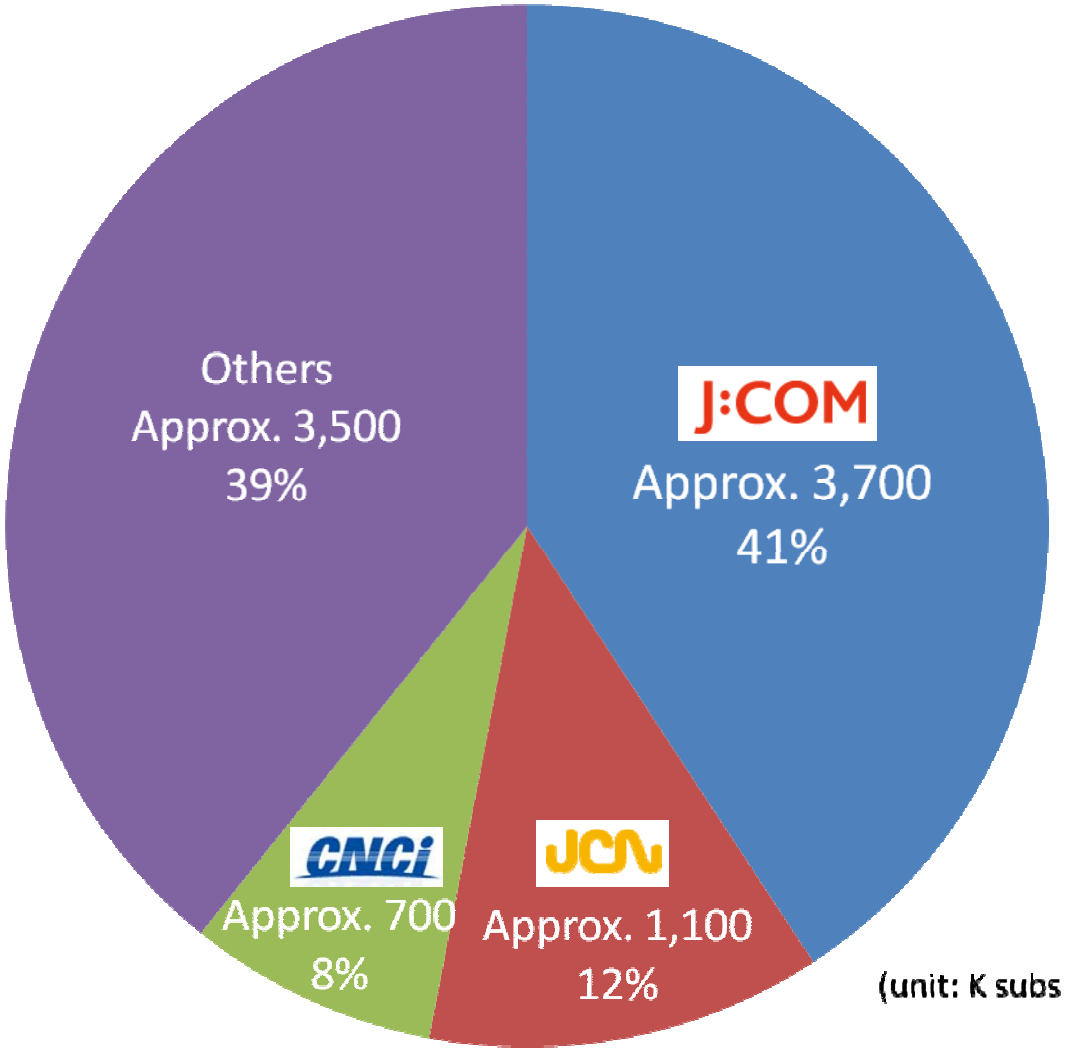
Cable operators provide TV related service, broadband service, telephone service, and wireless service, etc.

Subscriber Number and Penetration of Cable Services



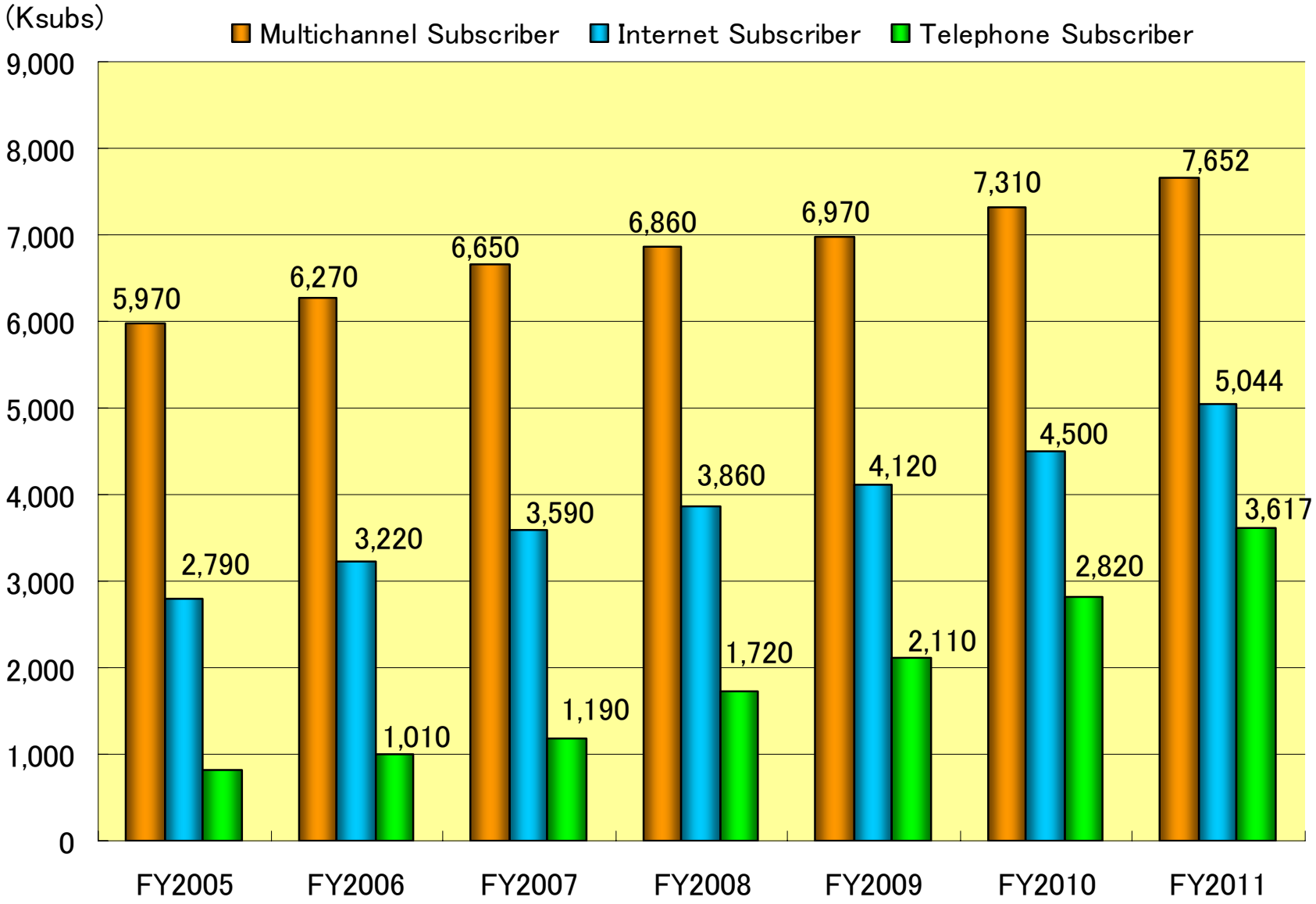
(April. 2013 Data from Ministry of Internal Affairs and Communications)

Top3 Cable MSO



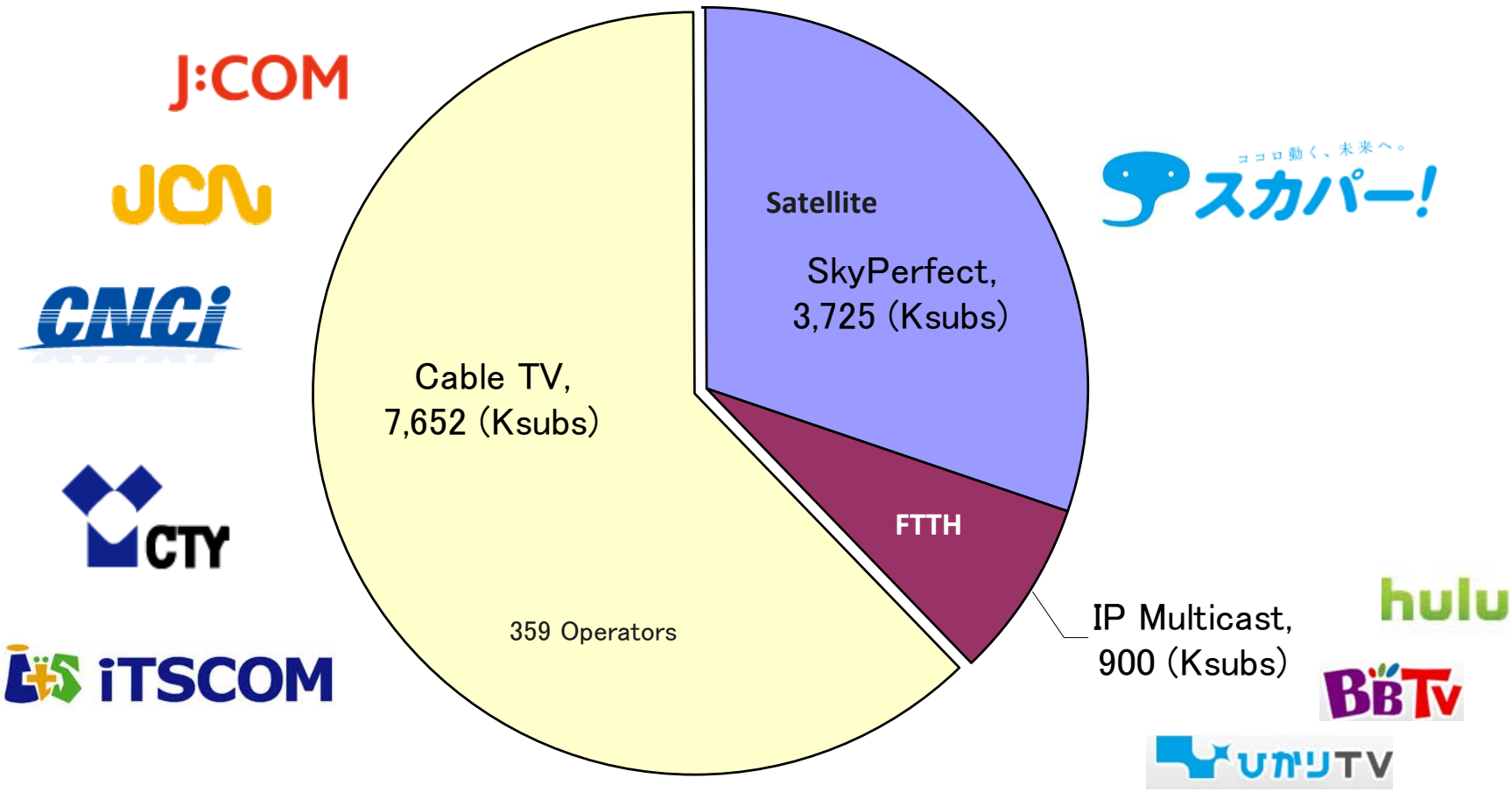
(unit: K subs of Pay Services)

Triple Play Service Trend



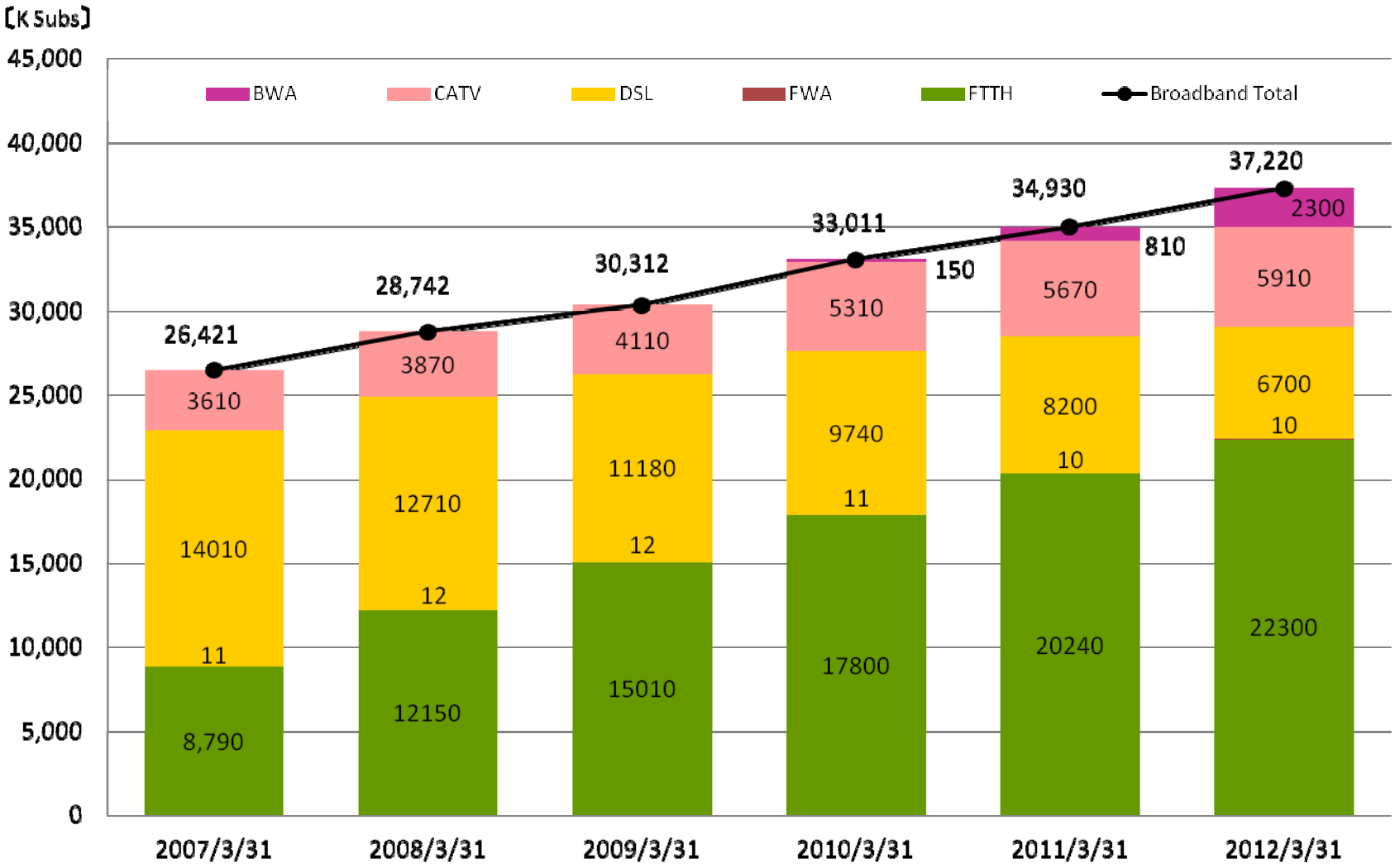
(JCTA: Cable TV Industry Report 2011)

Multichannel Service



(JCTA: Cable TV Industry Report 2011)

Trend of Broadband Access Service



(Sep. 2012 Data from Ministry of Internal Affairs and Communications)

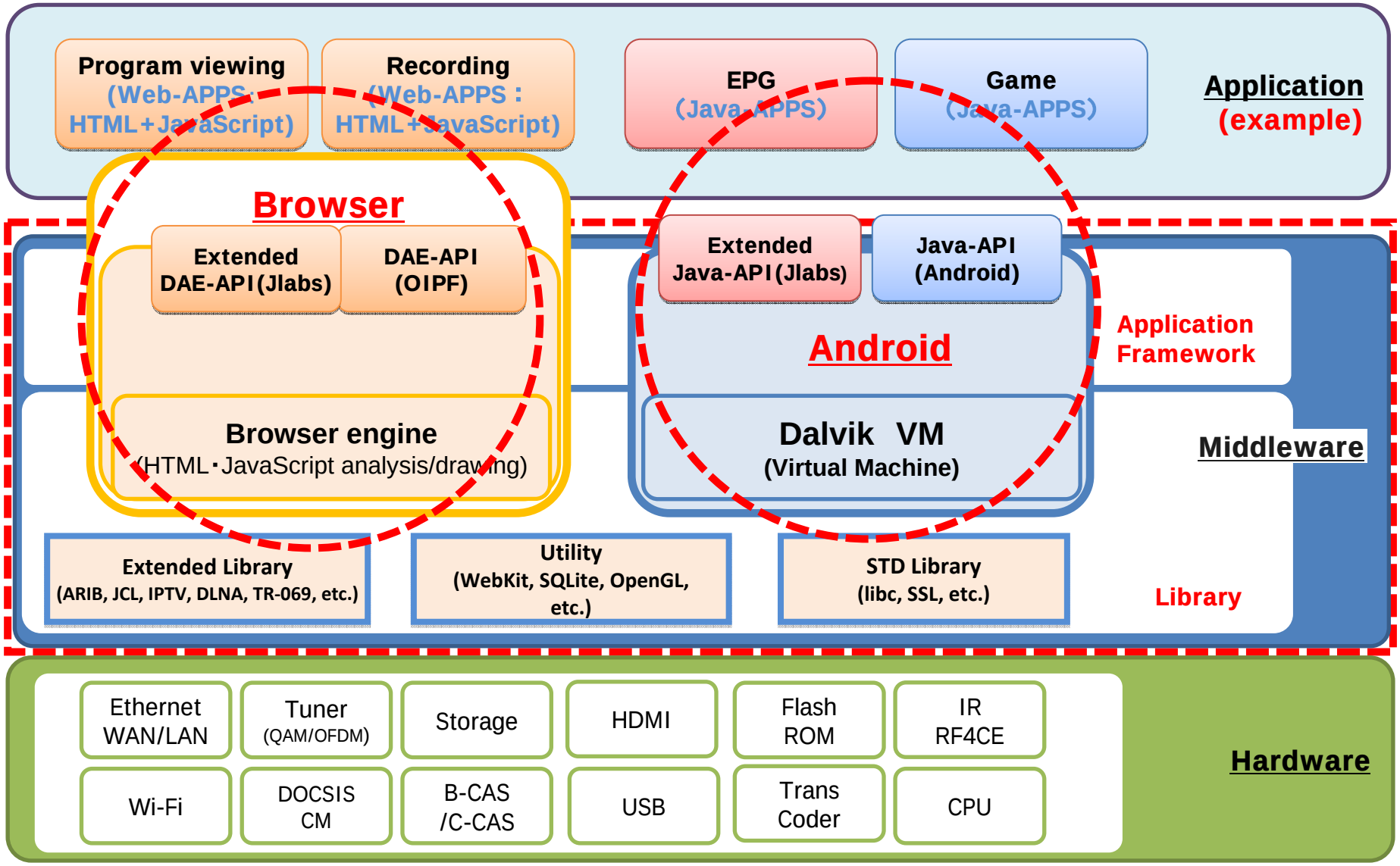
3. JLabs Specifications

SPEC#	Rev.	Description	Issued
JLabs SPEC-001	1.01	BS (Broadcasting Satellite) Digital Broadcasting Trans-Modulation Specifications	Oct '08
JLabs SPEC-002	1.01	The East Longitude 110 Degree CS (Communication Satellite) Broadcasting Trans-Modulation Specifications	Oct '08
JLabs SPEC-003	3.0	Digital Broadcasting Re-MUX Specifications (for Original Program)	Oct ’11
JLabs SPEC-004	2.1	Digital Broadcasting Re-MUX Specifications (for i-HITS)	Mar ’10
JLabs SPEC-005	2.3	JC-HITS Trans-Modulation Specifications	Apr ’11
JLabs SPEC-006	2.02	Terrestrial Digital Broadcasting Pass Through Specification	May ’11
JLabs SPEC-007	2.02	Terrestrial Digital Broadcasting Trans-Modulation Specification	May ’11
JLabs SPEC-010	1.0	Bi-directional Digital Broadcasting Specifications	Jun '03
JLabs SPEC-011	1.0	Bi-directional Digital Cable TV Specifications (Maintenance･Web･PPV)	Dec '05
JLabs SPEC-015	1.0	Specifications of Metadata Structure for Cable Contents Distribution	Dec ‘07
JLabs SPEC-017	2.0	Digital Broadcasting Advanced Re-MUX Specifications (for Original Program)	Feb ‘13
JLabs SPEC-018	1.0	Digital Broadcasting Advanced Re-MUX Specifications (for i-HITS)	Sep. ‘11
JLabs SPEC-019	1.0	JC-HITS Advanced Trans-Modulation Specifications	Sep. ‘11
JLabs SPEC-020	1.2	Operational Specification for Cable TV based on DLNA Guideline	Sep. ‘12
JLabs SPEC-023	1.2	Specification of Advanced Cable Set-Top Box (Hybrid Cable STB)	Feb. ‘12
JLabs SPEC-023-01	1.0	Specification of Audience Measurement Functions for Advanced Cable Set-Top Box	Jun. ‘12
JLabs SPEC-025	1.0	Specification of Cable Wi-Fi	Mar. ’12
JLabs SPEC-026	1.0	Operational Specifications for TV Everywhere Services	Mar. ’13

JLabs SPEC-023 Advanced Cable STB

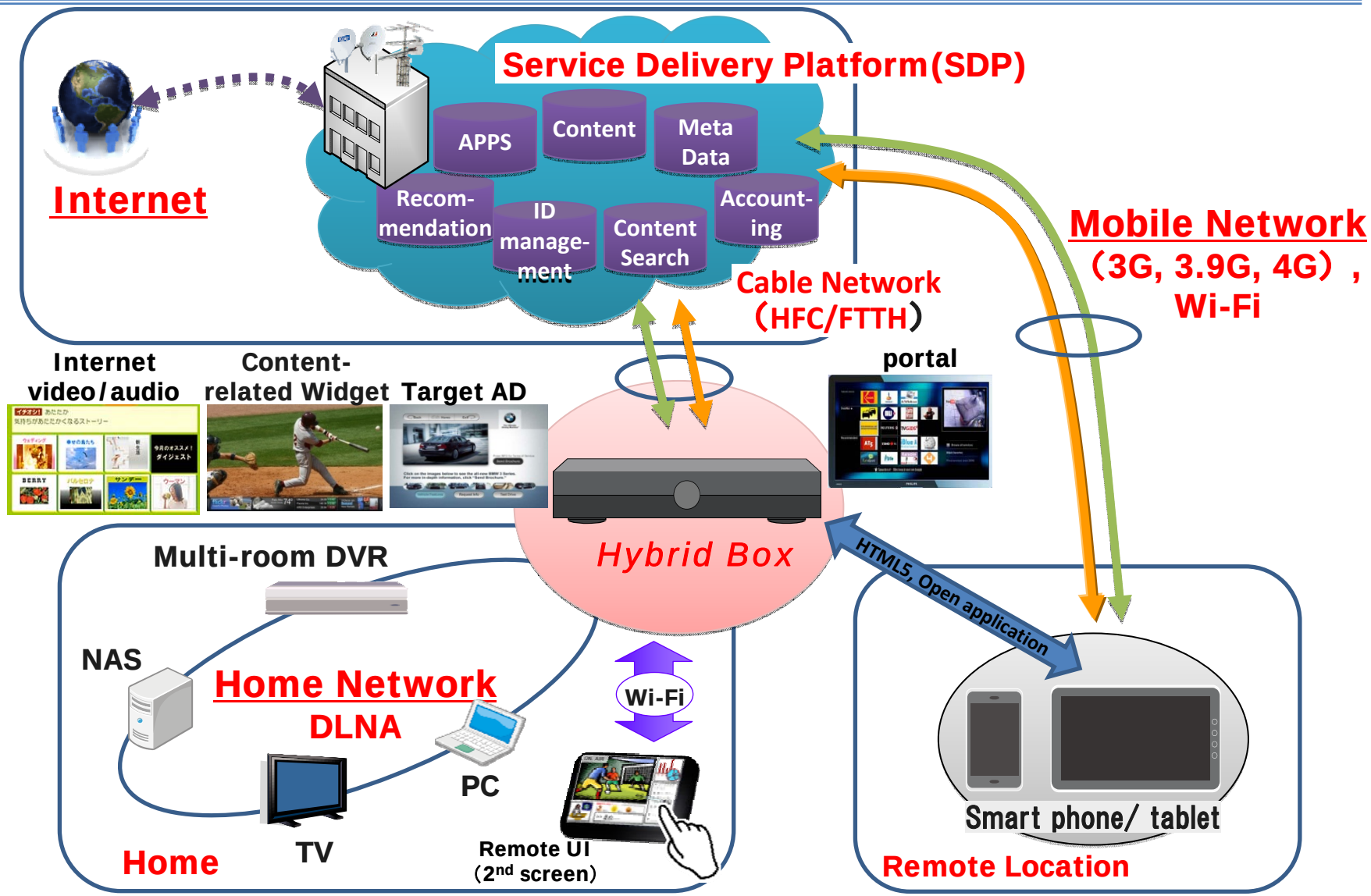
Feature	Description
RF/IP Dual function	4 QAM tuners, DOCSIS 3.0, WAN/LAN interface
Hybrid Application Platform	Open Application Platform ・Android applications（Java） ・Web applications（HTML + JavaScript + CSS)
Wi-Fi Access Point	Collaboration with smart phone/tablet appliance via home network
DLNA Beyond	DLNA + mobile Profile, remote UI, DTCP+
Remote Management（BBF TR-069)	STB maintenance, application software control
Audience Measurement	Functions based on ITU-T Recommendation H.741

Hybrid Application Platform



2 types of Applications are available; Web and Android Applications

New service world provided by Hybrid Box

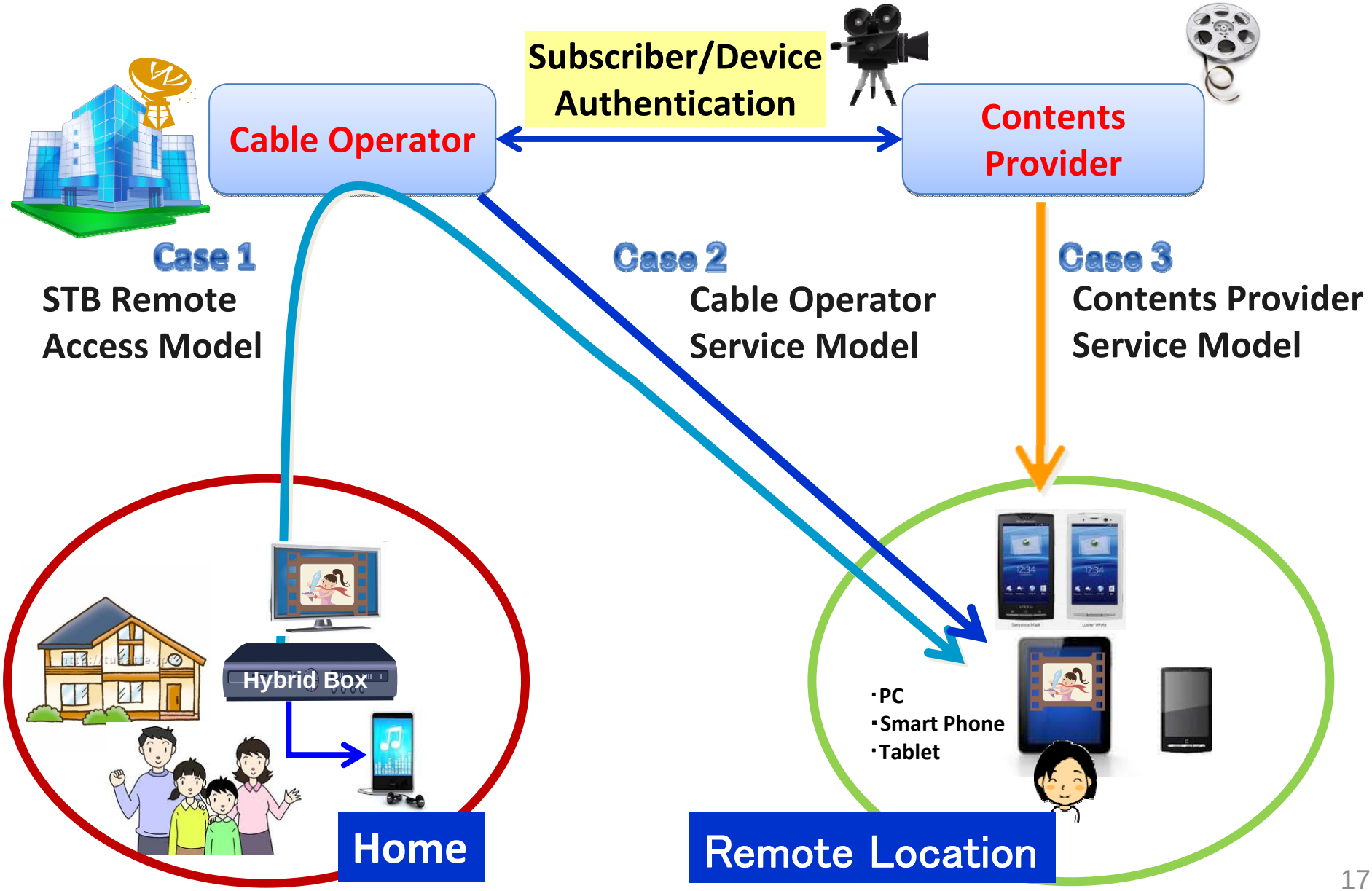


Bridge to Internet, Home network and Mobile network

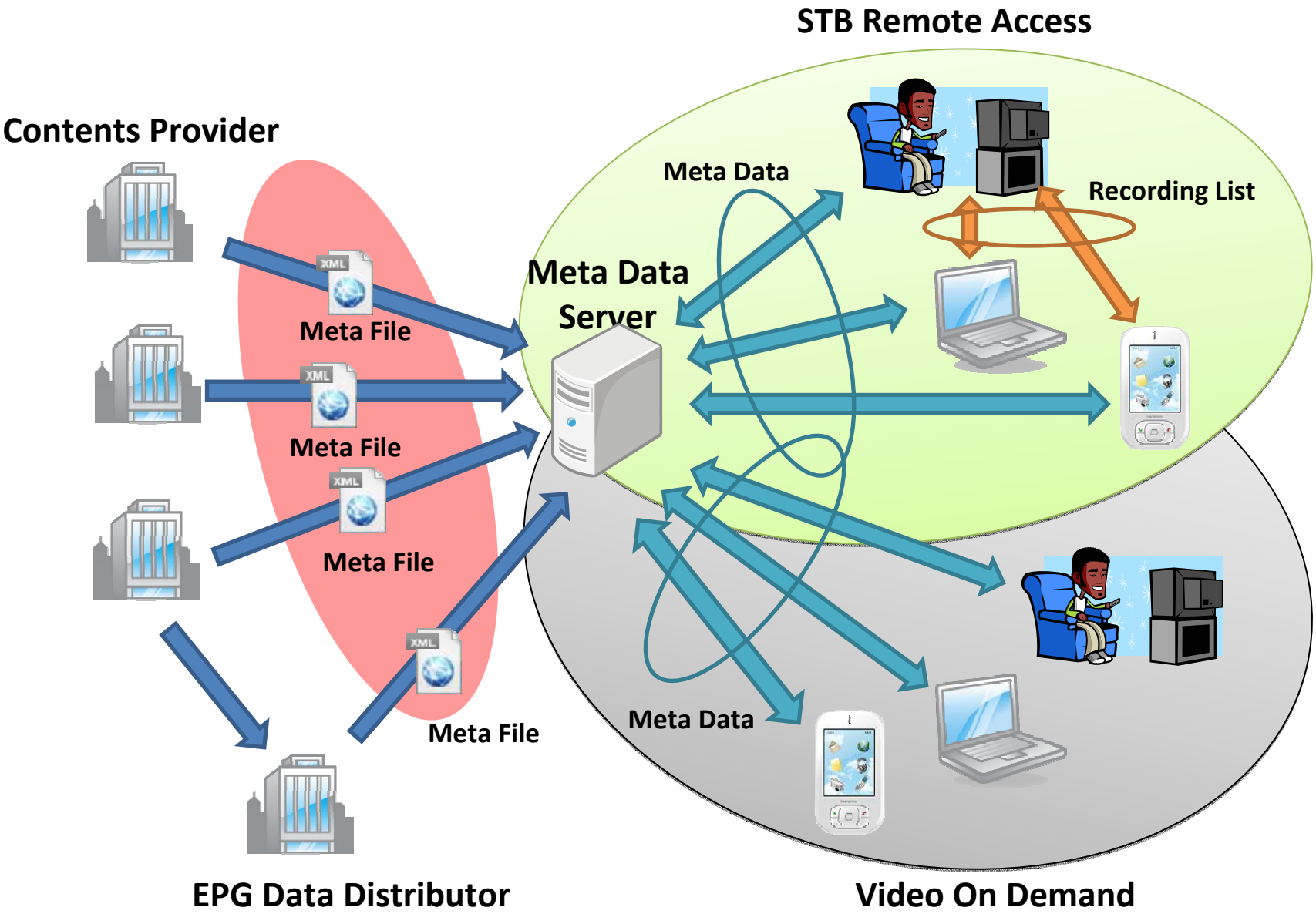
JLabs SPEC-026 TV Everywhere Service

Chapter	Titles
I	Outline of Operational Specifications
II	Specification for Subscriber Authentication
III	Specification for Online Contents Authentication and Authorization
IV	Specification for Meta Data
Appendix I	Guideline for Distribution Technologies
Appendix II	Guideline for Digital Rights Managements

TV Everywhere Service Use Cases



TV Everywhere Meta Data



Thank You !