# **Future Integrated Broadband Cable Networks**

## Cable Television in Korea



#### Cable Television in Korea



## Trends of technology

Trends of service market

## RolP (RF signal over IP: J.1106/1107/1108)



#### **Evolution of cable network**

 Directly access to home FTTH or fiber network access point move to maximum closing point almost nearly

\* about 28% ('2016.08)

#### **Smart common device**

- Smart integrated broadcasting and communication common devices based on fiber
  - simplify broadcasting and communication line establish

#### **Terrestrial UHD broadcasting**

- Start terrestrial UHD broadcasting
- Direct rates continuous decease

**%** '05, 23.2% --> '15, 5.3%

#### smart cable integrated transmission

#### **RoIP**



- Without change of existed or planned cable transmission and terminal device
- RF receiving in subscriber terminal with cost effectively
- Terrestrial retransmission device

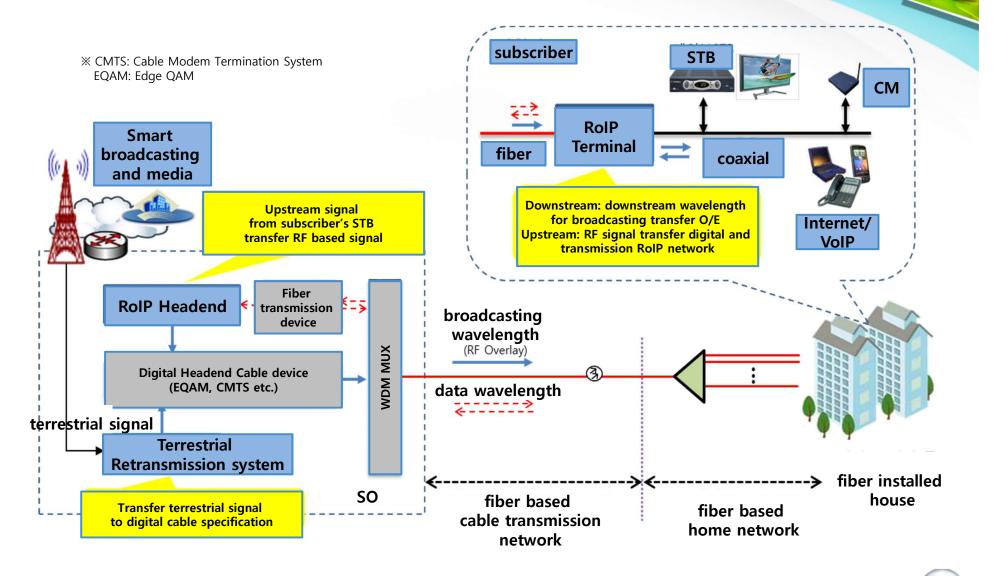
#### RolP (RF signal over IP: J.1106/1107/1108) STB (Terminal 1) CMTS (internet) digital EQAM (broadcasting) broadcasting OE transfer (downstream) amplifier Tap-off CM (Terminal 2) Cable broadcaster Tap-off upstream downstream data data

#### RoIP transmission of cable signal → Synchronized upstream transmission

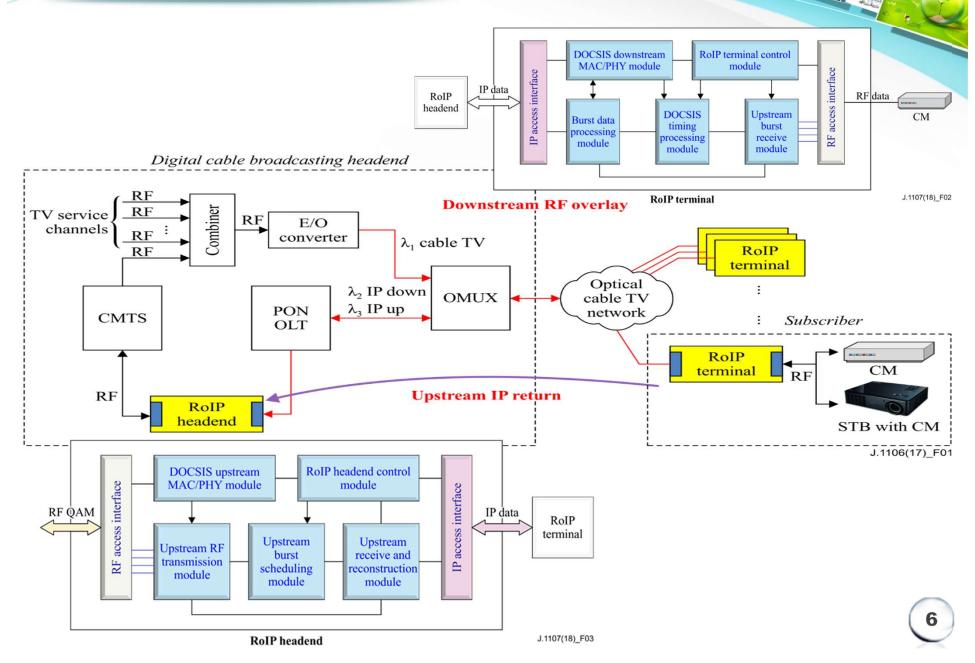
❖ Different delay time of cable terminal makes difficult receiving normal data in CMTS

Terminal 3

### RolP (RF signal over IP: J.1106/1107/1108)

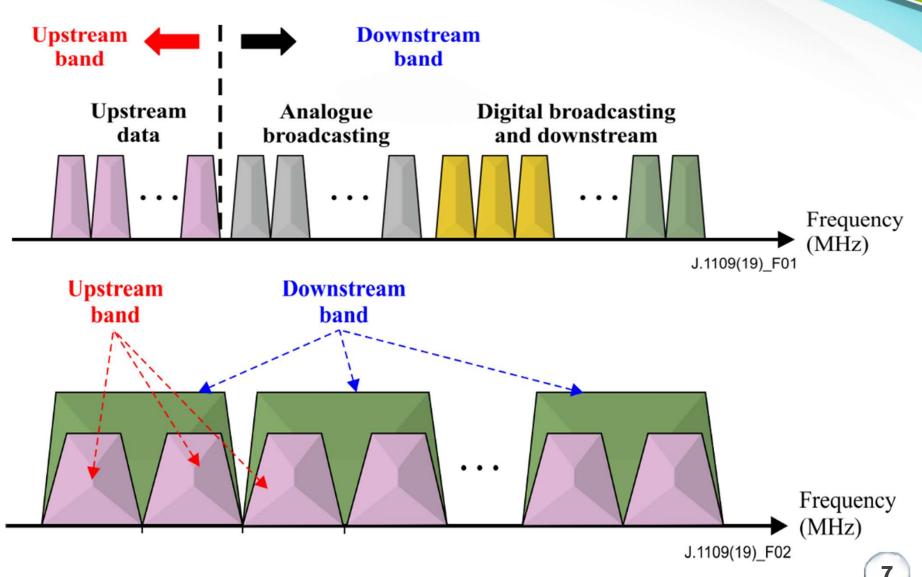


## RolP (RF signal over IP: J.1106/1107/1108)



## IFDX(In-band Full-duplex: J.1109)



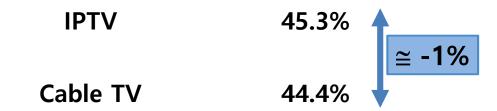


## Cable TV



	2013		2014		2015		2016. 3	
Pay TV	25,399,625	100.0%	27,368,396	100.0%	28,182,171	100.0%	28,630,819	100.0%
Cable TV	14,737,884	58.0%	14,611,459	53.4%	13,732,042	48.7%	13,736,608	48.0%
analogue	8,587,712	33.8%	7,481,306	27.3%	4,678,124	16.6%	4,266,758	14 9%
digital	6,1:> <b>30</b>	<b>%</b> 2%	7,130,153	26.1%	9,053,918	32.1%	9,469 <b>~ 7</b>	<b>7%</b> 1%
satellite	3,066,692	12 1%	3,090,739	11.3%	3,091,938	11.0%	3,104,572	10 8%
IPTV	7,595,050	29.9%	9,666,199	35.3%	11,358,191	40.3%	11,789,639	41.2%
OTS	2,226,411	8.8%	2,338,435	8.5%	2,217,655	7.9%	2,164,215	7.6%

#### 2017



#### Cable TV



KT (20.67%)

**KT Skylife (10.19%)** 

SK broadband(13.97%)

LG U+ (11.41%)

CJ Hellovision (13.02%)

T-broad (9.86%)

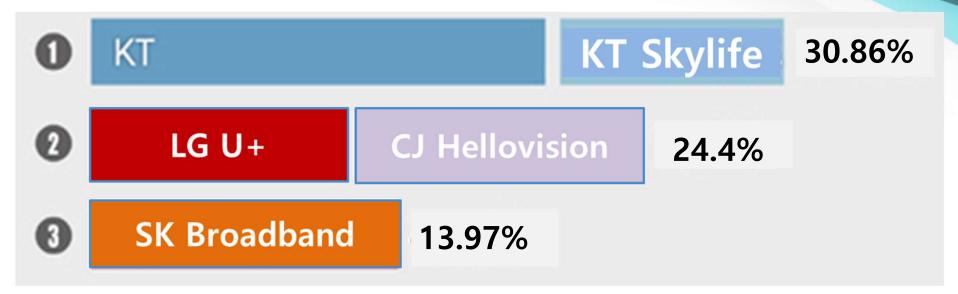
**Dlive (6.45%)** 

**CMB** (4.85%)

Hyundai HCN (4.16%)







### remaining MSOs

T-broad Dlive CMB Hyundai HCN

25.32%



# Thank you