



Presentation 5-1

ISDB-T for Radio Broadcasting

Part 1: Digitalization of Radio Broadcasting in Japan

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KBP ISDB-T Seminar

Manila, Philippines

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Digital Sound Broadcasting Systems in the world

	Japan	Europe	USA
TV	ISDB-T	DVB-T	ATSC
Sound	ISDB-T _{SB}	DAB	IBOC

Carrier modulation

OFDM

OFDM

OFDM

Multiplex structure

MPEG-2 System

Original System

Original System

Audio coding

MPEG-2 Audio AAC

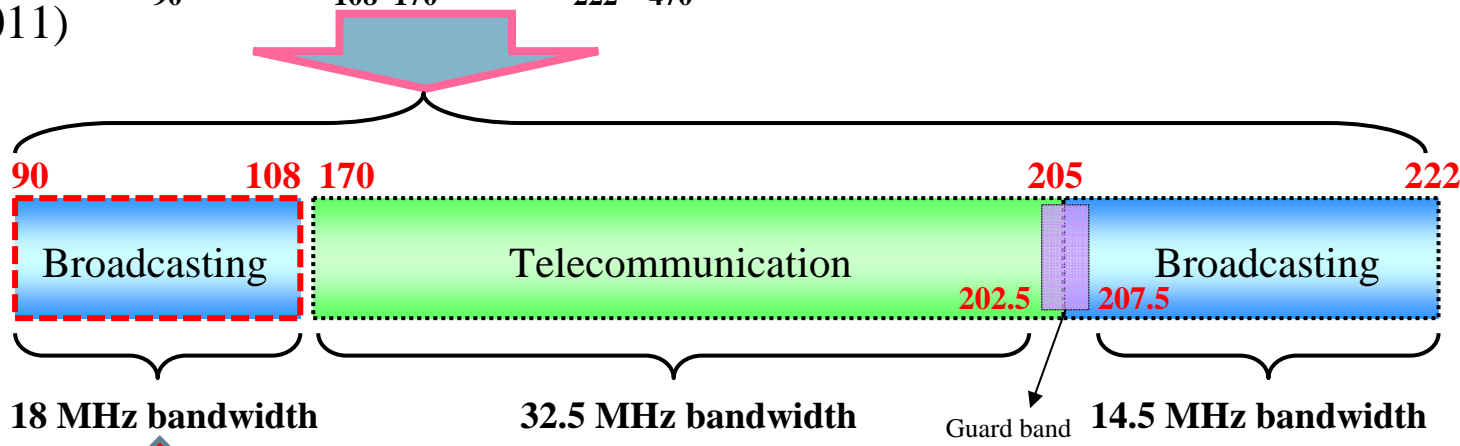
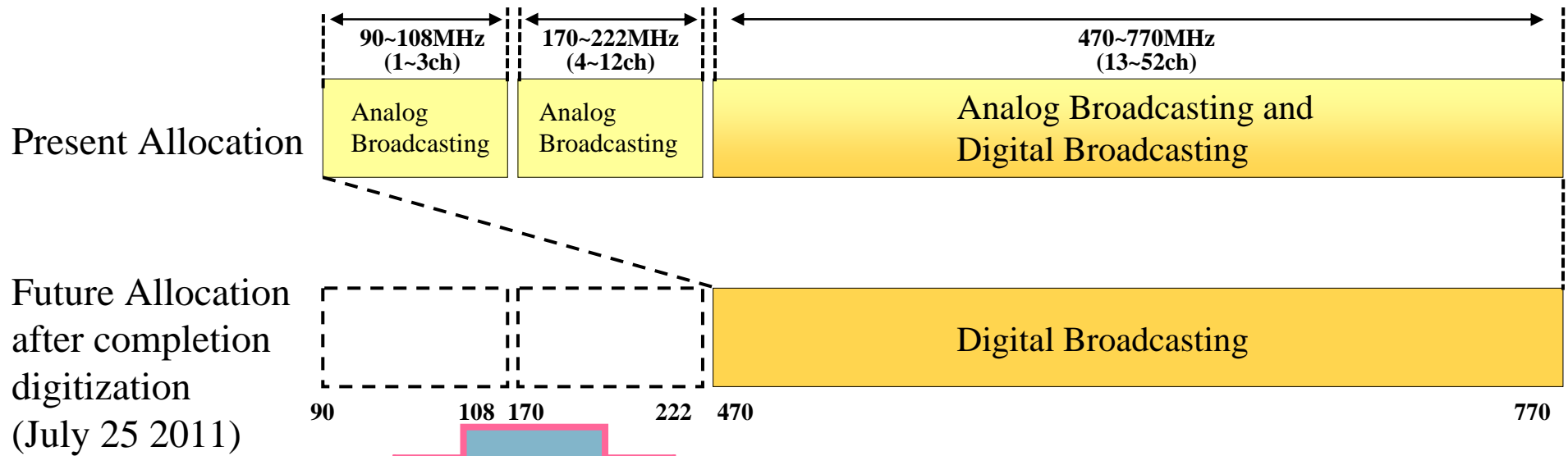
MPEG-1(Layer2)

MPEG-2 Audio AAC

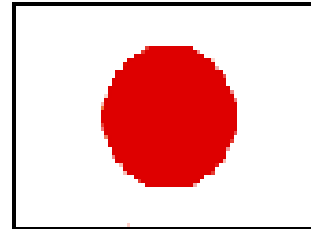
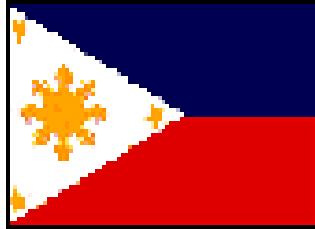
Renowned features of ISDB-T_{SB} and Trial transmission in Japan

- ◆ ISDB-T_{SB} (Integrated Services Digital Broadcasting Terrestrial for sound broadcasting) system was developed in Japan along with ISDB-T
- ◆ ISDB-T_{SB} has the same technical advantages as same as ISDB-T such as robustness with Time-Interleave technology
- ◆ Trial transmissions of ISDB-T_{SB} are going in Tokyo area and Osaka area **at the frequency from 188 MHz to 192 MHz(VHF 7ch)** since October 2003.(This trial transmission will continue until July 2011)
- ◆ Transmitting power: 2.4kW (300W@1segment) in Tokyo area, 240W (30W@1segment) in Osaka area (Bandwidth of 1 segment is 429kHz same as ISDB-T)
- ◆ Currently 9 programs are in Tokyo area and 5 programs are in Osaka area.
- ◆ The main features of Digital Radio are
 1. High quality audio (CD Quality)
 2. Variety of broadcasting services such as Data and Download services
 3. More attractive services
 4. High quality handheld reception
 5. Bi-directional service

Situation of Digitalization of Radio Broadcasting in Japan after July 2011



Digital radio broadcasting might be assigned in this frequency band



***Thank you for your
attention !***

Salamat po!

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