

**ISDB-T technical seminar(2007)
in Argentina**

Seminar #1

Introduction

June, 2007

Digital Broadcasting Expert Group (DiBEG)

Japan

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Forward

ISDB-T (Integrated Service Digital Broadcasting – Terrestrial) has been developed and now on service in Japan, and adopted by Brazil. ISDB-T proves best performances in Japanese DTTB service for more than 3 years.

Since Dec. 2003, start of Japanese DTTB service, DTTB service is rapidly migrated because of its advantages, and new service, named “One-seg”, portable reception service in same channel, has been started from April 2006.

But, because of late start of ISDB-T, ISDB-T is not so popular in the world, so, we will submit this technical report to South America countries to understand the ISDB-T system and its advantages on technical aspect.

1. Requirement for ISDB-T

Multimedia

High Quality / Multi channel

High performance

Effective utilization of Frequency resource

Mobile /Portable reception Service

Commonality (Integrated Receiver)

1. Requirement for ISDB-T(Cont'd)

Request for HDTV

In 1990s, research and development of digital broadcasting has started in Japan. In Japan, NHK led research/development of HDTV, and implementation of HDTV was almost on market at this time. So, HDTV was expected to be a main service of next generation of broadcasting. But, SDTV seemed to be a important broadcasting service, so, harmonization of HDTV and SDTV had to be a important issue of next generation broadcasting.

Effective utilization of Frequency resource

In Japan, frequency resource is not enough to start next generation broadcasting, therefore, “Effective utilization of frequency resource” had to be one of requirement of next generation.

1. Requirement for ISDB-T(Cont'd)

Multi media/Interactivity

And more, at that time, internet service was on the way of penetration and forecasted to be main service of communications in near future, so, harmonization with Internet was also set as important requirement. To support interactive service and as a new broadcasting service, data-casting was also set as a requirement.

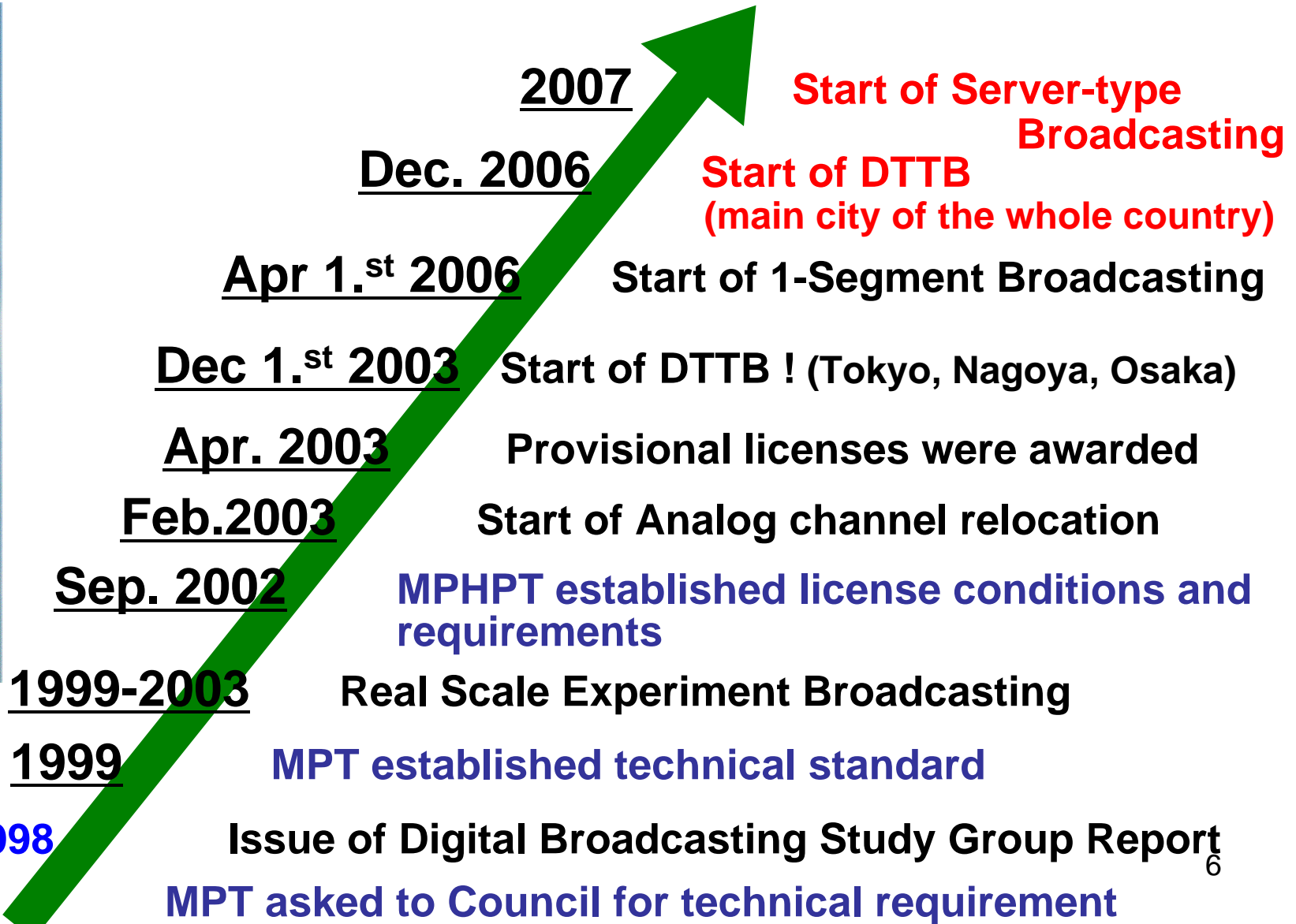
Mobile /Portable reception Service

Further more, mobile and portable service was recognized as a important advantage of broadcasting which uses radio wave. Therefore, new technology should be developed and adopted in next generation broadcasting to enable mobile and portable service.

ISDB-T has been developed and standardized to realize above request for next generation broadcasting

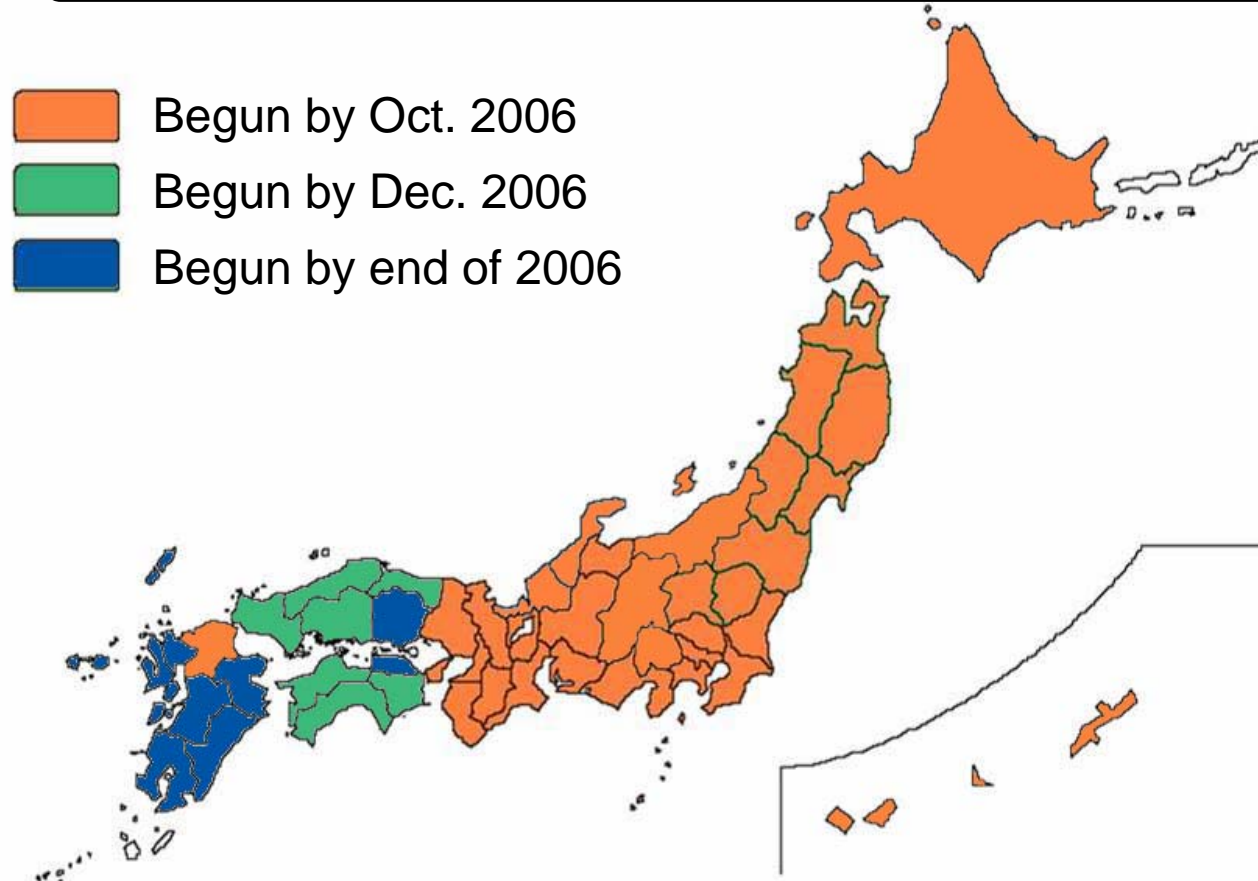
Features of ISDB-T is explained Section 2 of this seminar

Implementation Schedule of Digital Terrestrial Television Broadcasting in Japan



Current situation in Japan

Digital Broadcasting Service



As shown below, Digital Terrestrial Broadcasting has started
In all Prefecture

Service Image of Digital Broadcasting

HDTV



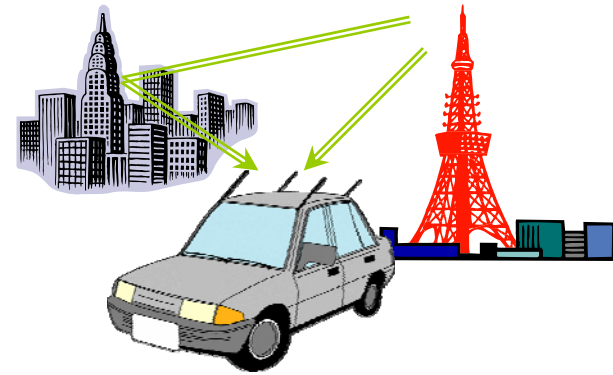
- High quality image and sound service.

Data broadcasting



- Simple program searching and retrieval of information at any time.

Mobile reception



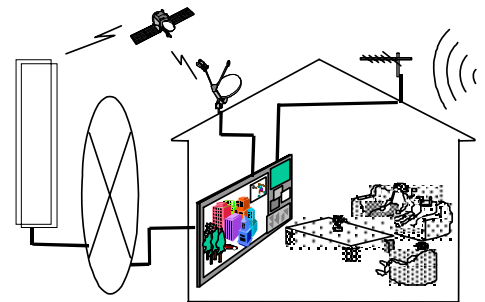
- Stable reception service

Multi-channel service



- Realization of multiple channels

Interactive TV



- Communication services and linked TV service

Contents of 1st Seminar

Seminar #1; Introduction;

Seminar #2; Structure/Features of ISDB-T system;

Seminar #3; Transmission system;

Seminar #4; key point of One seg service;

Seminar #5; Multiplex system & PSI/SI ;

Seminar #6; Source coding/middle ware;

**Seminar #7; Outline of Service/Receiver/Facility of
Broadcaster;**

(note) In First seminar, the main theme is to study What is ISDB-T, Most important features of ISDB-T is its transmission system. As this reason , #2,#3,and#4are explained details, regarding #5 and #6 will be explained for details in next seminar.

For Seminar #7,mainly explained current situation. Fr technical details will be a theme of next seminar.

Let's Start Seminar!

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