

Presentation 5

Service application/ Interactive/data casting

10th Oct. 2008

Manila, Philippines

DiBEG JAPAN

Tomonori Inada

(Fuji Television Network, Inc.)

Contents

▣ *Features of ISDB-T*

▣ *Data casting for Stationary Reception*

- *Data Broadcasting***
- *Interactive Services***

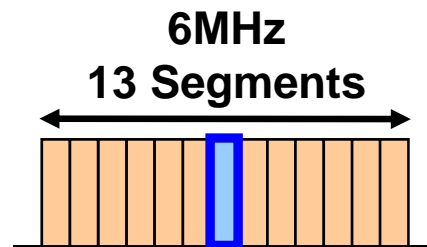
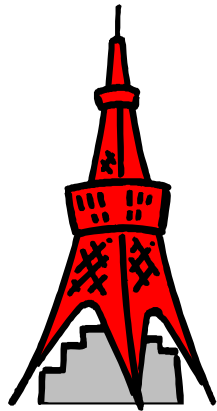
▣ *Data casting for Mobile Reception*

- *One-Seg Service***
- *Interactive Services***

Features of ISDB-T system

TV station

Support three reception types within one channel



Mobile Reception

1 segment



Handheld terminal

HD Mobile Reception

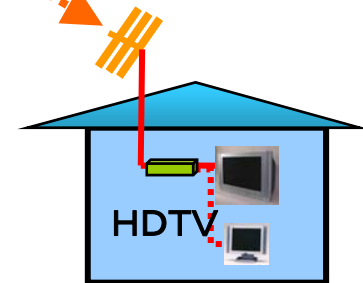
12 or 1 segment



Receiver in Vehicle
(diversity reception)

Stationary Reception

12 segments



Home Receiver

DiBEG

Powerful applications

HDTV



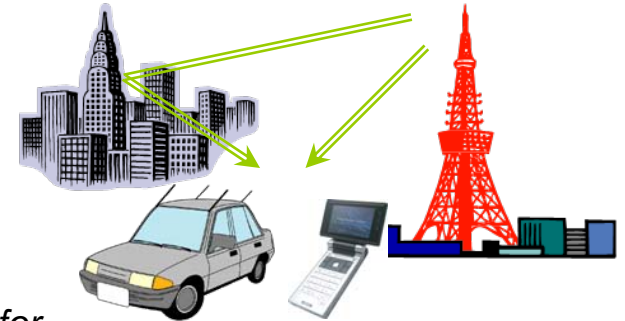
- High quality image on wide screen and CD quality sound.

Data broadcasting



- Local news and weather forecast for viewers at any time.

Mobile accesses



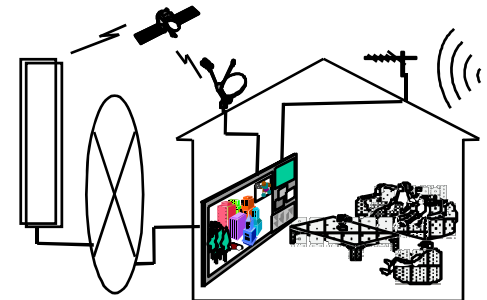
- Transmission service to Mobile accesses

Multi-channel program



- Standard quality multi-channel service

Interactive TV

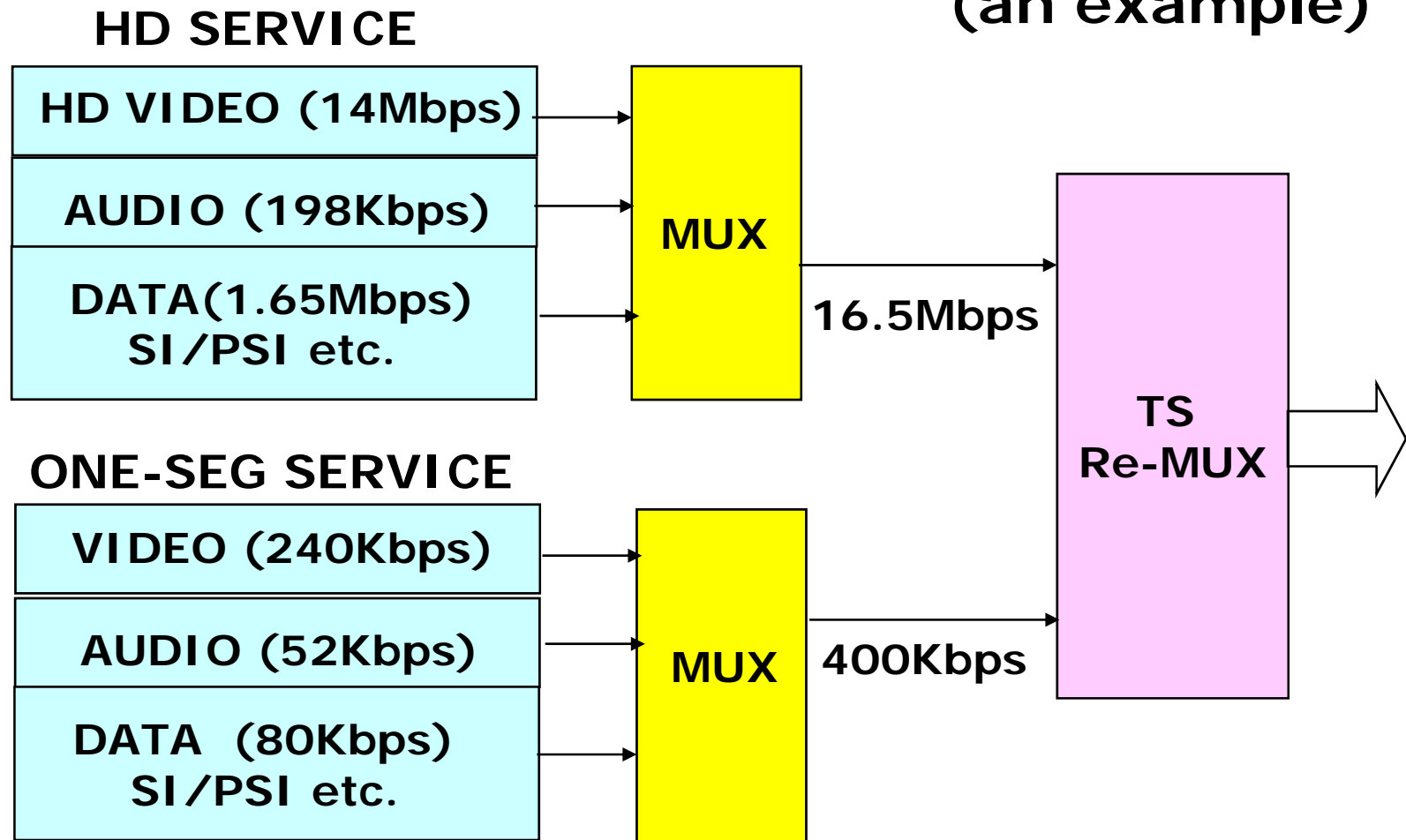


- Offers Interactive service

DiBEG

Multiplex of Video/Audio/Data

(an example)



Stationary Reception

- ▣ *Data Broadcasting*
- ▣ *Interactive Services*
- ▣ *Advanced Caption*
- ▣ *EPG*

■ ***By clicking on d-button of a remote control unit, you can access your requested information such as local weather forecast, 24H news and traffic information, etc.***



Data broadcasting (2)

□ Basic page format



Present time and date

Buttons to select contents

Local weather information

TV station ad banner

News banner

Traffic Information banner

Data broadcasting (3)

□ 2 types of data services:

■ Program-linked contents

- *Information service linked to on-air programs*
- *Accessible during on-air*

■ Non-linked contents

- *Information service not linked to on-air programs*
- *Accessible any time*

Data broadcasting (4)

□ Program-linked data contents

On-air program



Click on
d-button



Linked data page format



Contents
Menu



Click on
Menu button

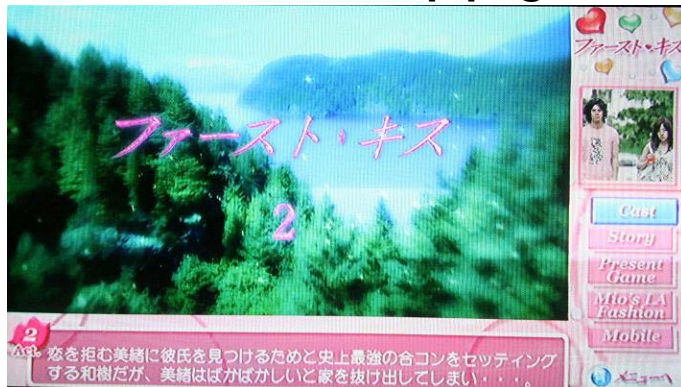


Basic page format

Data broadcasting (5)

□ Program-linked data contents

Linked data top page



Cast

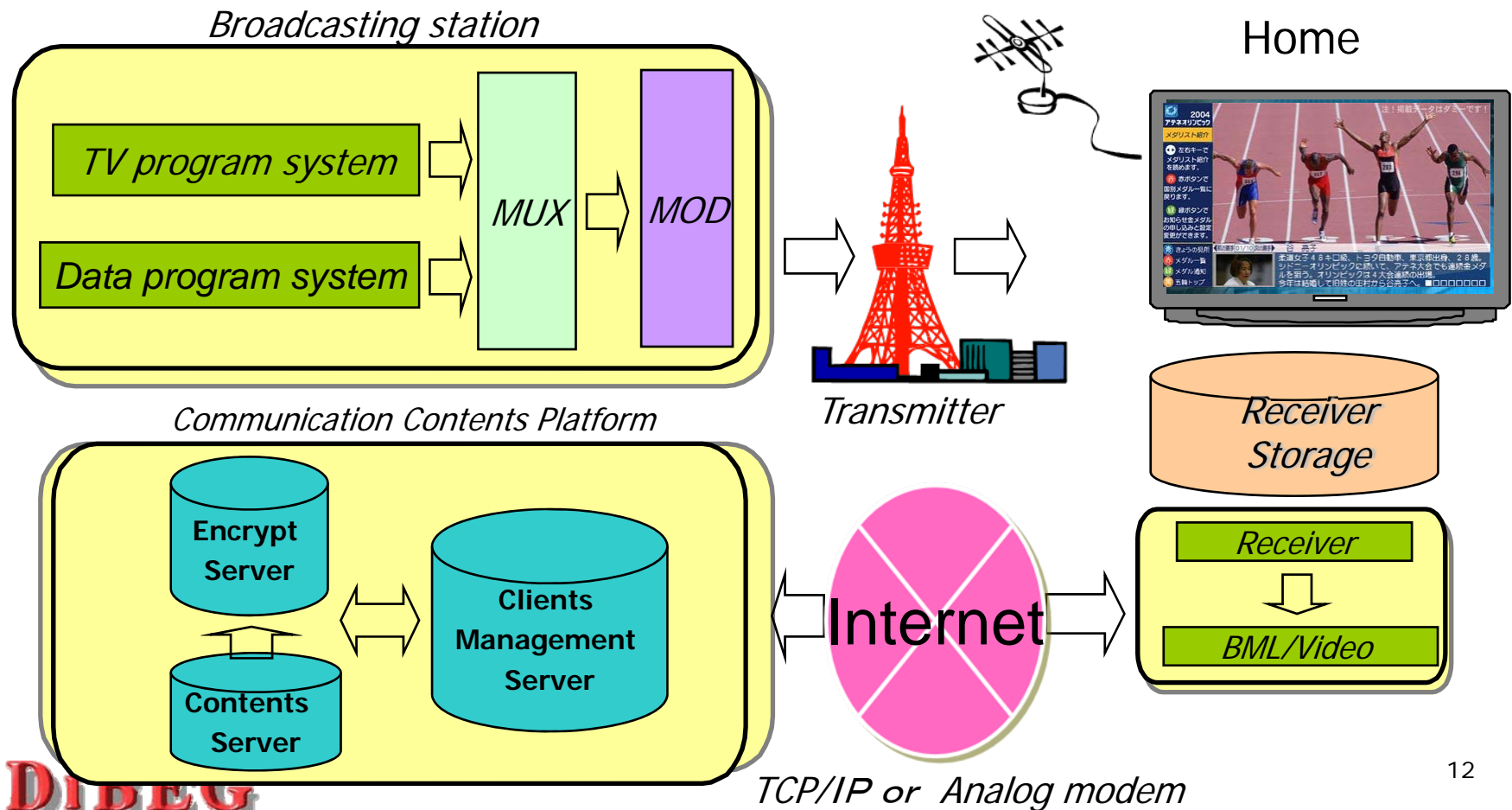


Story



Interactive Services

□ *Interactive services is to realize the interactive communications via internet line.*



Advanced Caption

- *Closed Caption can be realized more flexible manner.*
- Caption of several languages can be sent to receiver.*



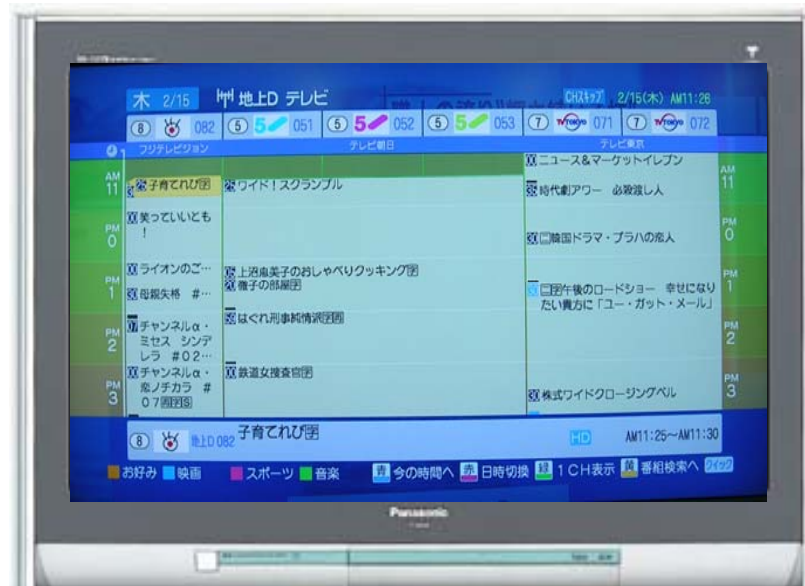
Caption

DiBEG

EPG

□ EPG (Electronic Program Guide)

■ An Electronic Program Guide (EPG) is an interactive schedule of current and upcoming programs that a viewer can display on-screen simply by pressing a button on his remote control unit.



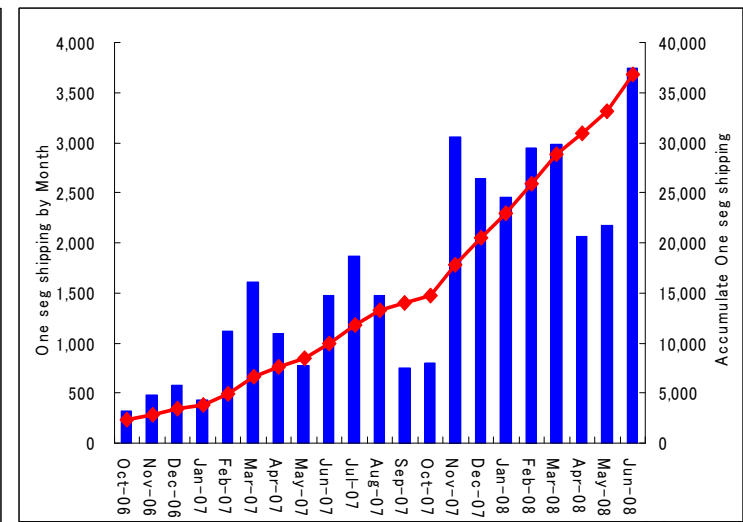
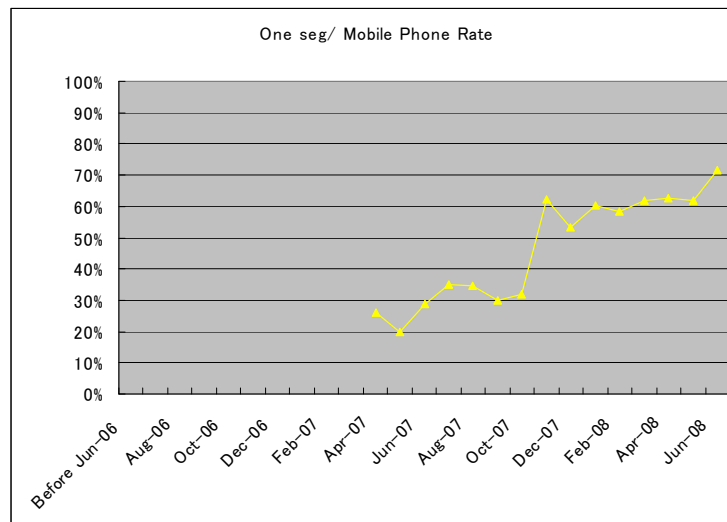
Mobile Reception

- ▣ *One-Seg Service*
- ▣ *Data Broadcasting*
- ▣ *Interactive Services*
- ▣ *ISDB-Tmm, Future Service*

One-Seg service (1)

Hybrid Mobile Phone **39.71 M July. 2008**

	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08
Shipping monthly	777	1,468	1,869	1,467	746	795	3054	2,635	2,449	2,948	2,981	2,062	2,172	3,738
Total	8,438	9,906	11,775	13,242	13,988	14,783	17,837	20,473	22,922	25,870	28,851	30,913	33,085	36,823
One seg Rate	20%	29%	35%	35%	30%	32%	62%	53%	60%	58%	62%	63%	62%	71%



One-Seg Service (2)

□ *The One-Seg service is transmitting moving images to cell phones, car TVs, personal computers etc , so that you can enjoy One-Seg programs anytime anywhere.*

□ *Merits*

- ✓ *Stable reception in a mobile environment.*
- ✓ *High quality video & audio in a mobile environment.*
- ✓ *Robustness against noise and multi-pass.*

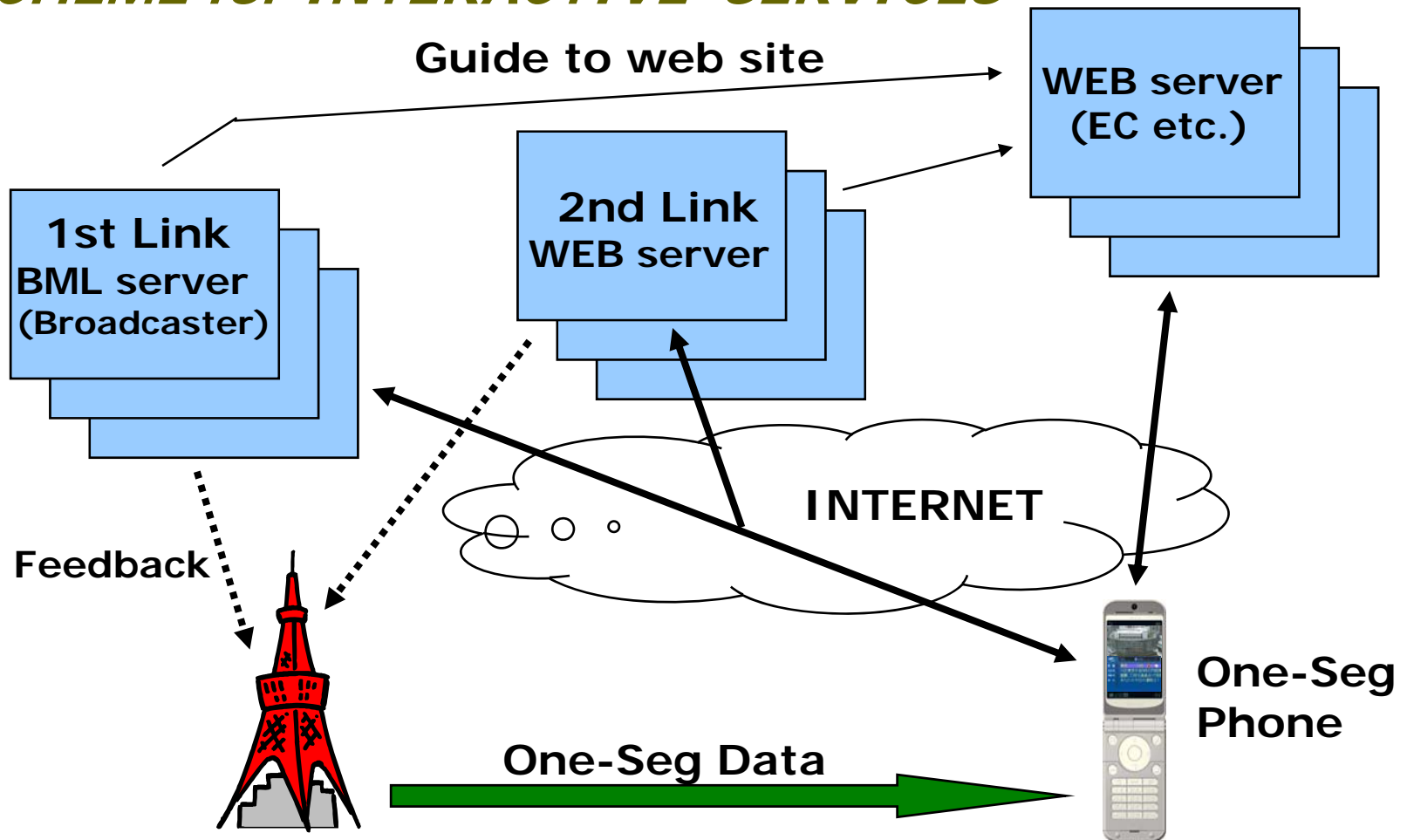
One-Seg Service (3)



- Video (H.264)
approx. 180-256kbps
- Audio (AAC-SBR)
approx. 32-64kbps
- Data-cast (BML)
approx. 20-80kbps

One-Seg Service (4)

□ SCHEME for INTERACTIVE SERVICES



One-Seg service (5)

Example of Applications

❑ TV shopping

The service enables viewers to purchase commercial goods shown on shopping program.

❑ Local service

The service can provide local information such as emergency alerts, local events, notice from local government or hospital.

❑ Coupon ticket

Service enables to get coupon tickets such as grommet ,movie, book.

❑ Additional information service

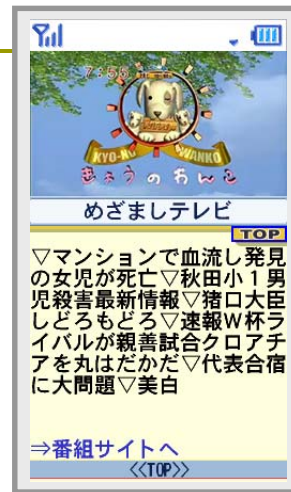
The additional information linked to on-air programs are supplement service such as information on athletes and celebrities, recipes, questionnaire and answer to a quiz.

One-Seg service (6)

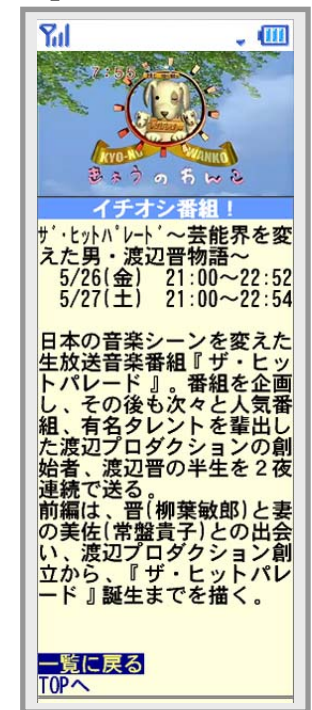
<TOP>



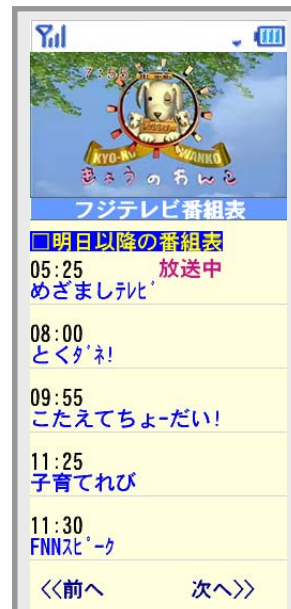
<Current Program Information>



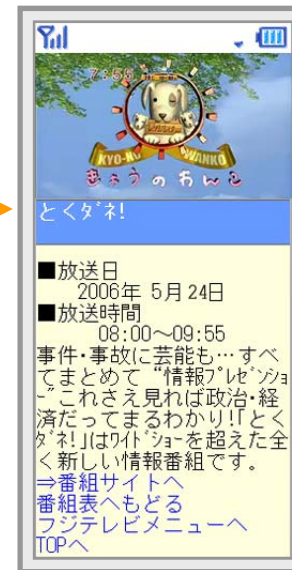
<Top Recommendation>



<Fuji TV EPG>



<Program Information>

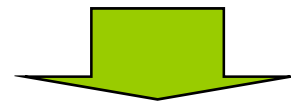


DiBEG

One-Seg Service (7)



***No subscription fee
and
Powerful terrestrial
television contents***



***Unique & Unparalleled
Feature in the world !***

Please watch Video

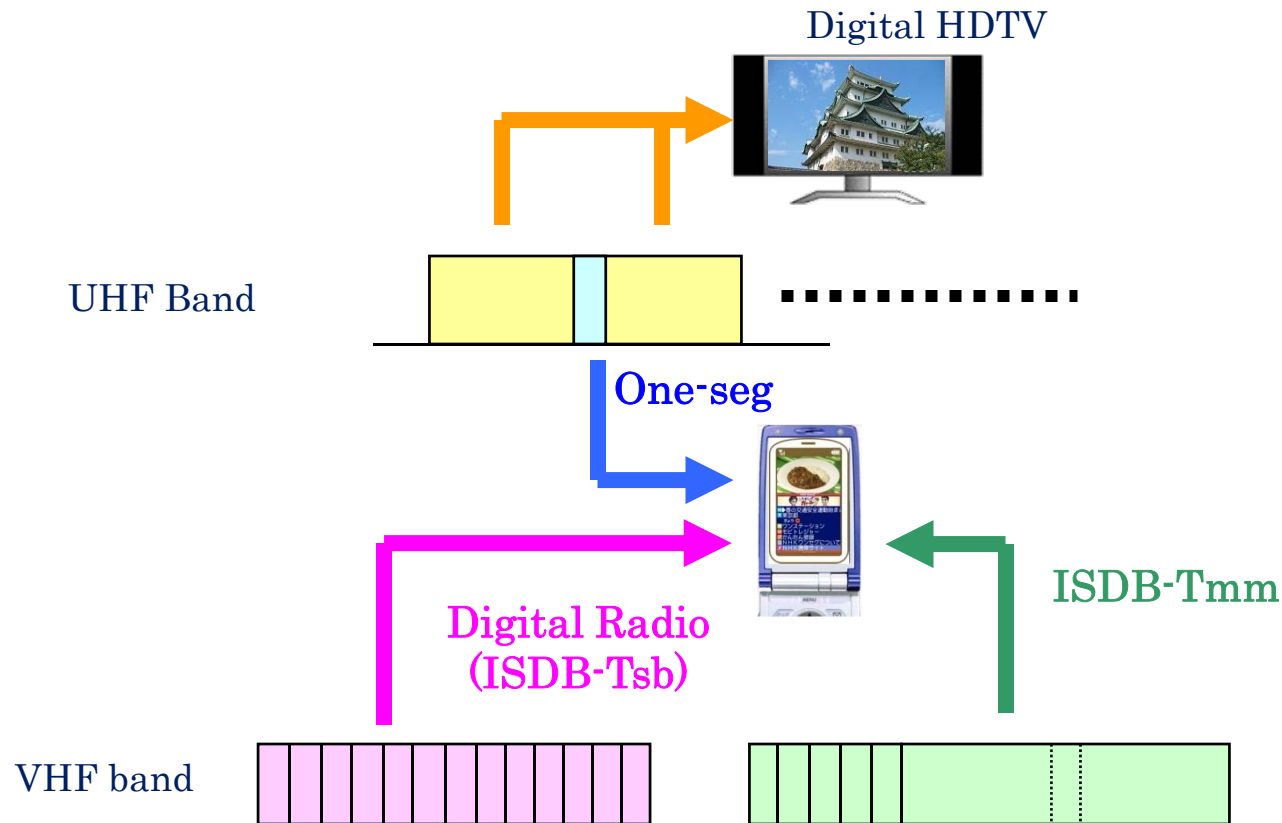
ISDB-Tmm(1)

□ What is ISDB-Tmm?

- “mm” is Mobile Multimedia broadcasting.
- Mm success to ISDB-T technology
- Seamless use with One-seg is promised
- Streaming video and Filecasting are supported

ISDB-Tmm(2)

Feature of ISDB-Tmm



ISDB-Tmm(3) *Variety of Multimedia contents*



ISDB-Tmm(3)

□ Schedule for ISDB-Tmm

- **March 5, 2008 : Tokyo trial started.**
- **July 2008 : Telecommunications Council starts study of technical standard to July 2009.**
- **2009: Amendment of radio regulation.**
- **2010: Call for candidate of licenser.**
- **July 24, 2011: Analog switchover.**
- **MM broadcasting service will begin.**

Please watch Video

ISDB-T seminar in Manila



*Thank you
for your attention !*

END

DiBEG

Digital Broadcasting Expert Group

<http://www.dibeg.org>

mail: info@dibeg.org

DiBEG

Digital broadcasting experts group