

**Presentation 3**

# ***ISDB-T Applications***

***13<sup>th</sup> - 14<sup>th</sup>.June.2007  
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**ISDB-T  
is filled with  
leading-edge technologies  
to make your dreams  
come true !**

# Contents

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- ☐ ***HDTV & Multi channel service***
- ☐ ***Data broadcasting***
- ☐ ***Interactive internet contents***
- ☐ ***EPG***
- ☐ ***One-Seg service***

# Powerful applications

## HDTV



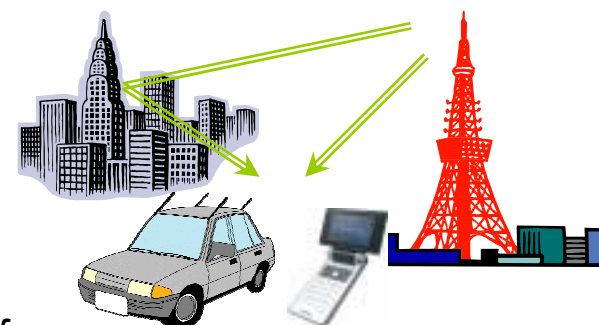
- High quality image on wide screen and CD quality sound.

## Data broadcasting



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

## Mobile accesses



- Transmission service to Mobile accesses

## Multi-channel program

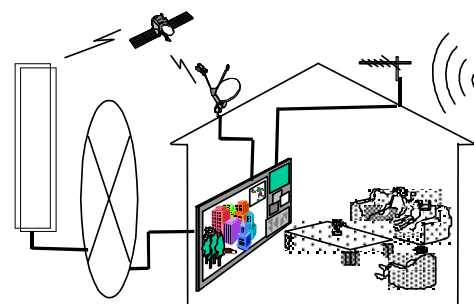


- Standard quality multi-channel service

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## Interactive TV



- Offers Interactive service

# ***HDTV***

## **□ High Definition Television Program**

- ✓ *The high quality images on a 16x9 wide screen and CD-quality sound make you feel as if you were at the theater.***
- ✓ *European broadcasters have opted for "multi-channel" strategy, but Japanese broadcasters have chosen to take advantages of "high definition" pictures.***
- ✓ *HDTV is a killer application.***



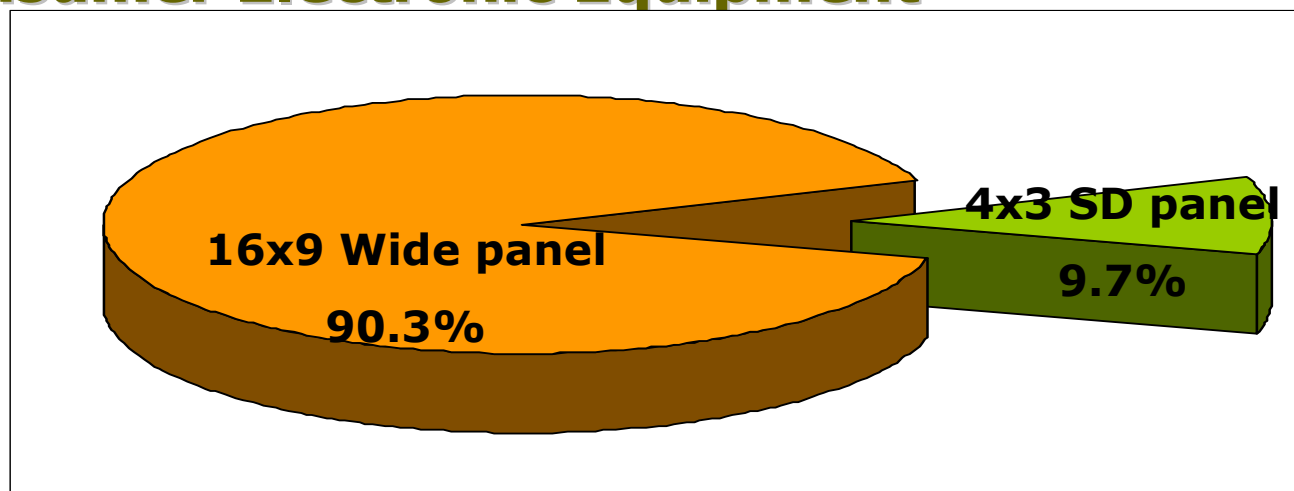
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## ***HDTV (2)***

□ ***More than 90% of TV sets on the market have a 16x9 wide panel.***

■ **JEITA 2006 Domestic Shipments of Major Consumer Electronic Equipment**



□ ***Wide panel TV sets have been the mainstream.***

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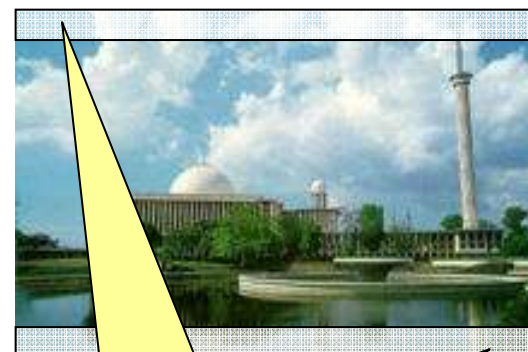
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## ***HDTV (3)***

***□ On a wide panel TV set, standard definition programs are displayed either with side panels or trims.***



***Side panels***



***Trims***

## ***Multi channel program***

***□ ISDB-T can transmit multiple SD programs simultaneously on a single digital spectrum.***



***SD-1***



***SD-2***



***SD-3***

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# ***Data broadcasting (1)***

**□ Data broadcasting is an additional service.**

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



*Local weather forecast*



*Local news*



*Information linked to on-air program*

## ***Data broadcasting (2)***

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### ***□ 2 types of data services:***

#### ***■ Non-linked contents***

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

#### ***■ Program-linked contents***

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

# Data broadcasting (3)

## Basic page format



Present time and date

Local weather information

News banner

TV station ad banner

Buttons to select the following contents

\*Traffic information

\*help

\*Weather forecast

\*earthquake information

\*Internet contents

\*News

\*event information

\*Movie Information

\*Sports

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\*shopping information

\*Recommendations

etc...



# Data broadcasting (4)

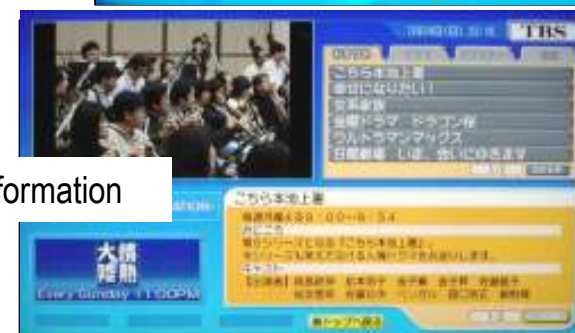
## □ Non-linked contents



Today's recommendation



Program Information



News



Weather forecast

# Data broadcasting (5)

## □ Program-linked data contents

On-air program



Click on  
d-button



Basic page format



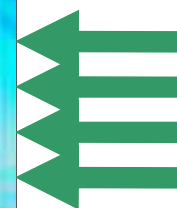
Linked data page format



Click on  
a program title



Contents  
Menu



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## Data broadcasting (6)

### □ Program-linked interactive contents

On-air program: Interactive Quiz Program



Linked data page

remote



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Answering Button

Click a correct answer with these colored button!!



# EPG(1)

## □ 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.



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# EPG(2)

□ EPG provides a lot of program information, and you can book recording programs with remote easily.



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# *Interactive internet contents(1)*

## **□ Interactive Shopping Contents**

On-air program

data broadcasting  
content

The button to  
connect to  
the internet  
contents



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# Interactive internet contents(2)

## □ Interactive Shopping Contents

On-air program

Internet Contents

The screenshot shows the 'ishop' website interface, which is a shopping platform powered by TBS. The interface is divided into several sections:

- On-air program:** A large image on the left shows a busy indoor market or shopping area, likely related to the 'On-air program' mentioned in the diagram.
- Internet Contents:** The right side of the interface displays a list of products for sale, each with a BooBo character icon and a price tag. A green arrow points to the 'goods' section of the interface.
- Shopping Cart:** A section on the left shows the contents of the shopping cart, including a '番組グッズトップ' (Program Goods Top) button.
- Product Listings:** The right side features a list of products, each with a BooBo character icon and a price tag. The products include:
  - BooBo/クリップマーカ (BooBo/Clip Marker) - ¥1,260 (税込)
  - BooBo/ゴルフカバー (BooBo/Golf Cover) - ¥1,100 (税込)
  - アスリートBooBo/タオル (Athlete BooBo/Towel) - ¥1,900 (税込)
  - BooBo/メガホンTシャツ (BooBo/Megaphone T-shirt) - ¥1,900 (税込)
- Recommendations:** A section titled 'オススメ!' (Recommend!) features a BooBo character and a product: 'BooBo ハンドパペット' (BooBo Hand Puppet) for ¥1,470 (税込). Below this, it says '大人気TBSキャラクター「BooBo」の新オリジナルグッズ新登場! 大きな鼻にくるっとした目で愛嬌をふりまく楽しい人形です!' (Popular TBS character 'BooBo' new original goods new arrival! Large nose, cute eyes, a fun doll that spreads charm!).
- Navigation:** At the bottom, there are buttons for 'カートの中身' (Cart Contents), '番組グッズトップ' (Program Goods Top), '利用規約' (Terms of Use), and '黄: 終了' (Yellow: End). There is also a '次のページ' (Next Page) button.

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# Interactive internet contents(3)

□ You can buy goods directly!!

On-air program

Input personal data



The screenshot shows a web interface for 'ishop powered by TBS'. On the left, a video window displays an airport terminal. Below the video are navigation buttons: 'カートの中身', '番組グッズトップ', 'ひとつ前へ戻る', '利用規約', and '黄:終了'. On the right, a '基本情報入力 1/3' form is visible. It includes fields for '姓' (Last Name) with the input 'あいうえおかきくけこ', '名' (First Name), '性別' (Gender) with radio buttons for '男性' and '女性', and '生年月日' (Date of Birth) with year, month, and day dropdowns. A note states '※印は必須項目です。'. Below the form is a 'ソフトウェアキーボード' (Software Keyboard) with a grid of Japanese characters and numbers. A green arrow points to the character 'あ' in the keyboard. A speech bubble from a character icon explains: '上下左右ボタンで入力する文字を選んで決定ボタンを押してください。' and '入力後は決定ボタンを押してください。'.

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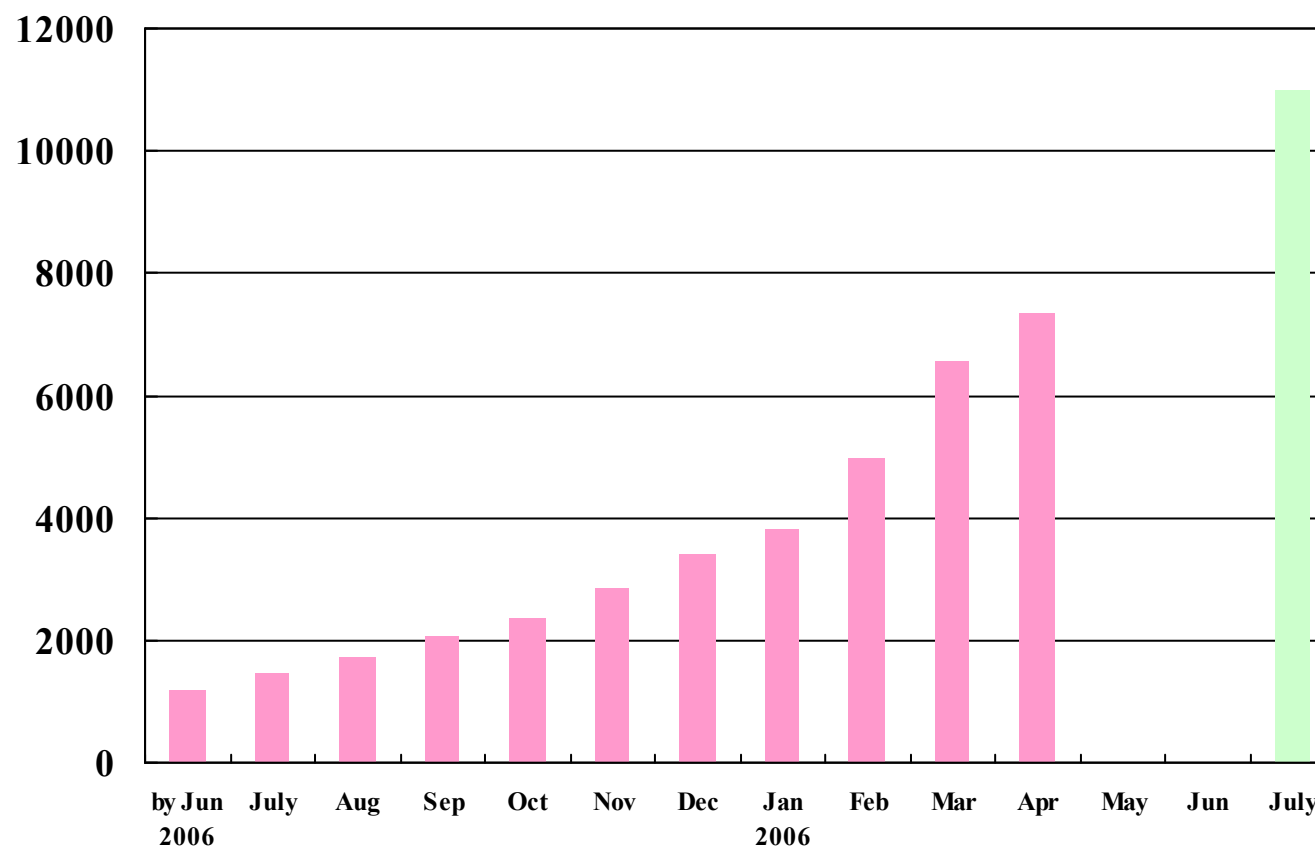
Software Keyboard

# ***One-Seg service for Mobile Devices***

# One-Seg service (1)

**7.4 million** One-Seg Mobile Phones were Shipped (by the end of Apr. 2007).

(Unit: thousand)



(JEITA)

## ***One-Seg service (2)***

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- *The One-Seg service is transmitting moving images to cell phones, car TVs, personal computers etc. so that you can enjoy digital terrestrial television 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)***

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- **Video (H.264)**  
*approx. 180-256kbps*  
*320 × 240 or 180*  
*15 fps*
- **Audio (AAC-SBR)**  
*approx. 32-64kbps*
- **Data-cast (BML)**  
*approx. 20-80kbps*

# One-Seg service (4)



*On-air program*

## Example parameters

Modulation	QPSK
Code Ratio	2/3
Guard Interval	1/8
Bit Rate	416 Kb/s

*Display Image*



*Data service*



# One-Seg service (5)

No-linked  
data  
broadcasting  
content



Weather  
Forecasts



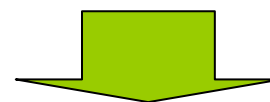
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# ***One-Seg service (6)***



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



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

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# ***One-Seg service (7)***

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## **Example of business model**

### **□ Additional information service**

**The service can show additional information linked to on-air programs such as information on athletes and celebrities, recipes, questionnaire and quiz.**

### **□ 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.**

# One-Seg service (8)

## One-seg receiver



Cell phone



Car TV



E-Dictionary



USB Tuner



Audio player



PC

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## ISDB-T seminar in Bangkok

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

***END***

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