

ISDB-T

Mobile Applications

13th - 14th.June.2007
Bangkok, Thai
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(TBS)

**ISDB-T
is filled with
leading-edge technologies
to make your dreams
come true !**

Contents

The three Experiments

- HDTV mobile access***
- Mobile access on the bullet train***
- One-Seg service in a subway car***

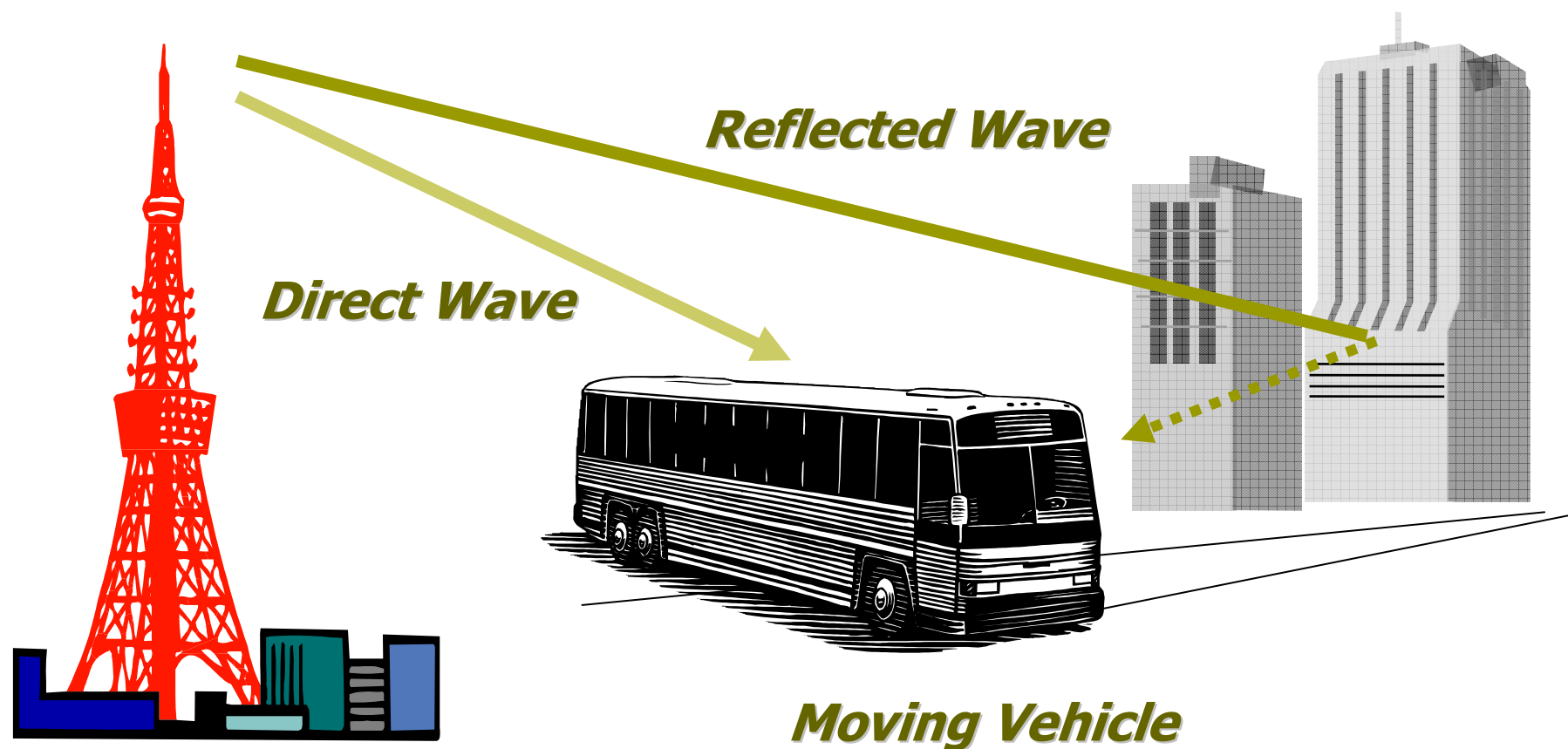
The Actual service of one-seg.

- Mobile data broadcasting
& interactive shopping***

No1. Experiment

HDTV mobile access

HDTV mobile access (1)

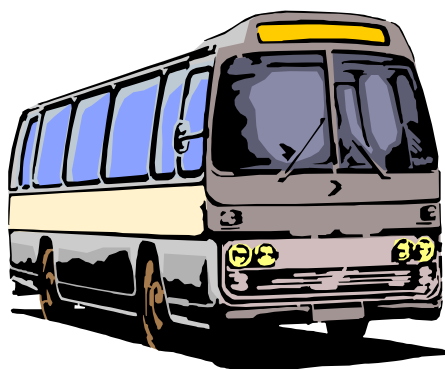


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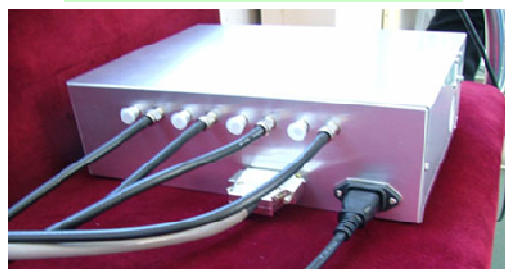
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HDTV mobile access (2)

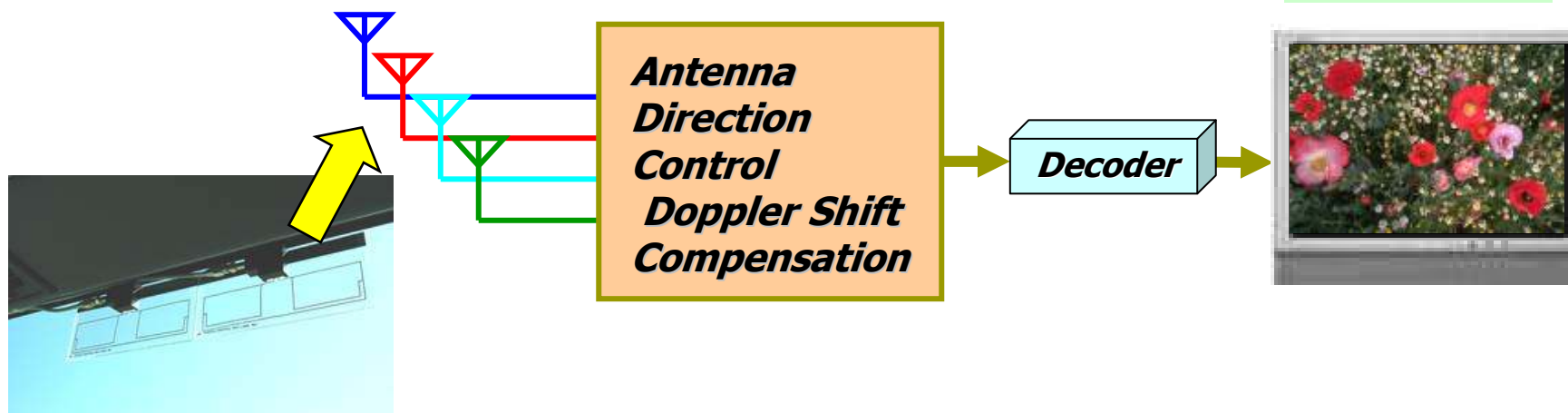
Adaptive Array Antenna on the vehicle's window



Receiving device



HD receiver



Adaptive Array Antenna
DIBEG

HDTV mobile access (3)

Comparison test on HD mobile access

Digital Broadcasting

Analog Broadcasting



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HDTV mobile access (4)

HDTV tuner for automobiles is now on sale.



**Digital terrestrial television
broadcasting tuner for
automobiles**



LCD for automobiles

**High quality image wide-LCD panel.
Faithful reproduction of DVD and digital
terrestrial television broadcasting image**

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No2. Experiment

Mobile access on the bullet train

Mobile access on the bullet train (1)

Experimental test result on mobile access on the bullet train.



Indoor test result

QPSK, FEC=1/2, GI=1/4, Mode3, Max Speed=494km/h

Field test result

Experimental test was carried on a Tohoku bullet train at Sendai city, northern part of Japan.

Constant speed 275km/h

Mode2, FEC=1/2, GI=1/4, T.I=0.43ms

Percentage of reception rate (excluding tunnel areas)

QSPK 90.3 %

16QAM 74.5 %

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Mobile access on the bullet train (2)

Time Interleaving advantage

**According to the result of the experimental test;
Time interleaving improves required C/N more
than 7 dB in the mobile environment of a bullet
train at 16QAM.**

**Diversity antenna system improves also more than
7dB at 16QAM.**

**ISDB-T has an advantage in mobile environment.
Time interleaving improves the resistance against
impulse noise interference that comes from power
lines and motor cycle engines.**

No. 3 Experiment

***One-Seg service
in a subway car***

One-Seg service in a subway car (1)

□ SFP, Subway Filling Project, is organized by 6 major broadcaster, Hitachi, Panasonic, Sanyo, and Tokyo Metropolitan Subway. SFP carried out a One-Seg access test on a subway car inside the tunnel in March 2006.

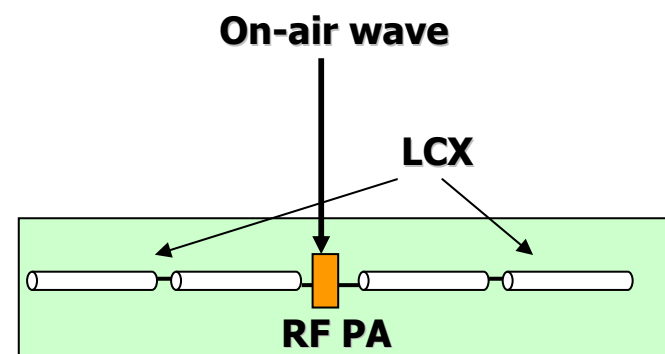
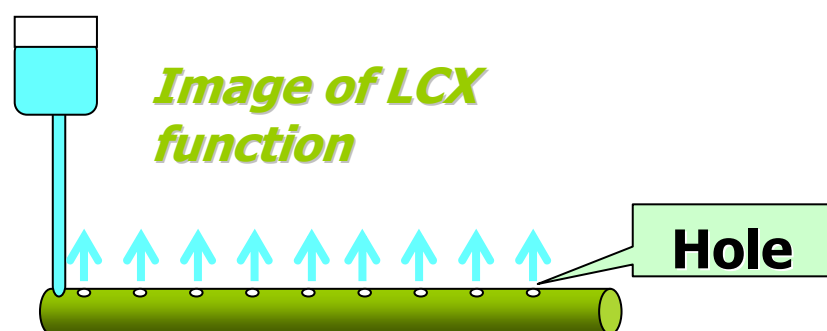
One-Seg service in a subway car (2)

□One-seg service on the subway car is convenient for passengers. And in the case of emergencies or disasters, it can be used to provide emergency information to the passengers.

One-Seg service in a subway car(3)

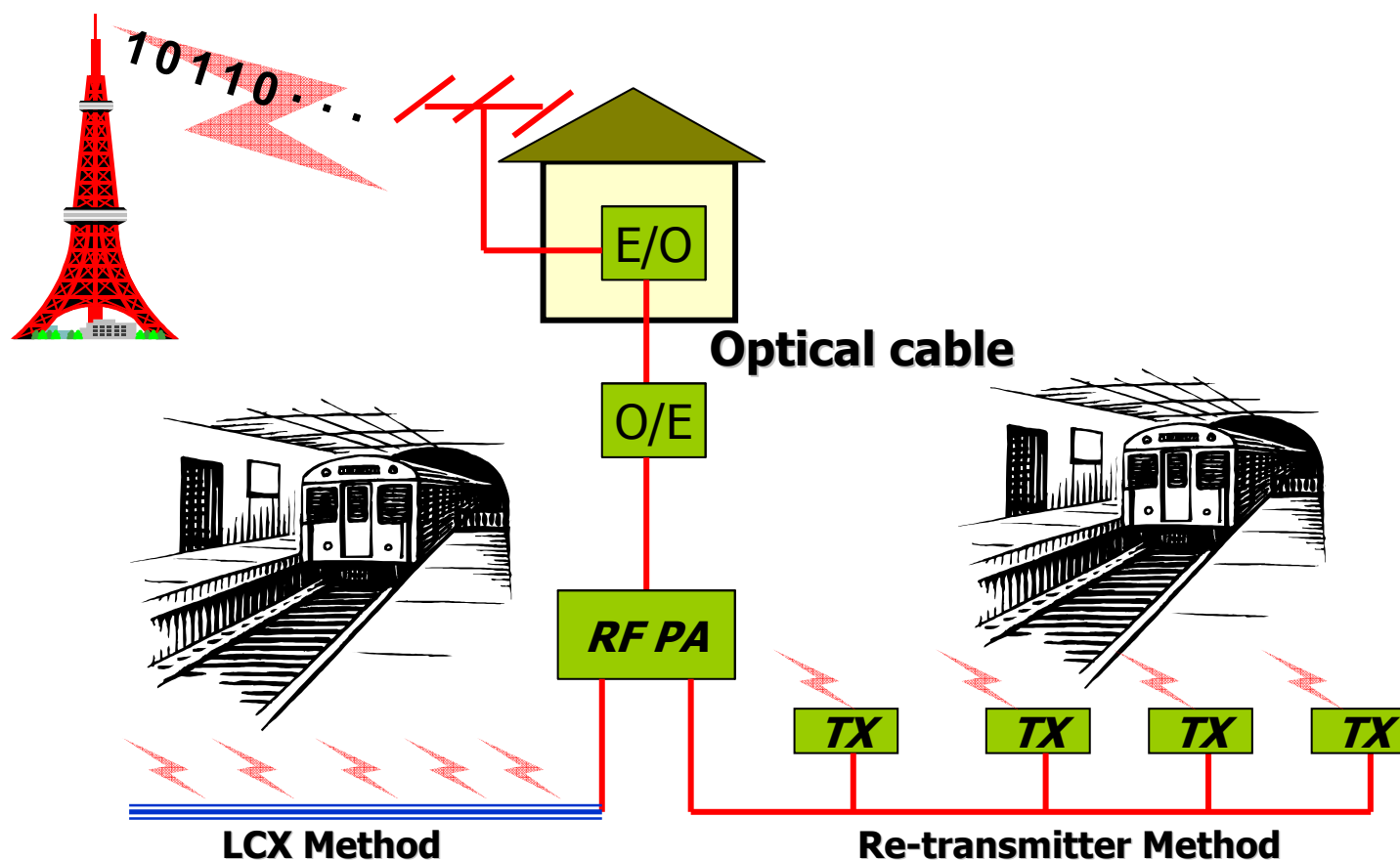
Access test in two Methods

- Deployment of multiple re-transmitters
- Laying LCX, leakage coaxial cable



One-Seg service in a subway car (4)

Conceptual diagram on the test methods



One-Seg service in a subway car (5)

Conclusion

□ More than 80% of reception rate was accomplished with re-transmitters with the power of less than 1W located 300m intervals through the tunnel.

□ The method of multiple re-transmitters is cheaper than the method of LCX.

One-Seg service in a subway car(6)

**Antenna for re-transmitter mounted
on the ceiling of station**



**Reception antenna for
re-transmission located within the car**



One-Seg service in a subway car(7)



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The mobile service for real

Mobile data broadcasting & interactive shopping

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Mobile data broadcasting & interactive shopping



Example of data broadcasting & interactive shopping



You can see the products
and you can buy it directly.

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Mobile data broadcasting & interactive shopping



You can select payment on delivery or credit card!

STEP 03

買い物かご

全12色 羽根布団10点セット/ダブル
モダン

通常価格12,800円

数量: 1

10個以上お買い求めの方は3折

1/1

| | |
|------------|---------|
| 商品価格合計 | 12,800円 |
| 送料(税込) | 525円 |
| 支払金額合計(税込) | 13,325円 |

買い物を完了させる

電話で注文の場合は3折

ワンセグ・データ放送
TBSショッピングカート画面

Bills you bought.

買い物かごの中身を確認して
あとは表示に従って進むだけ。
モバイルのTBSショッピング、
PCのTBSishop会員の方は
同じID・パスワードが使用で
きるのでぜひご利用ください!!

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One-Seg service promotion video

Enjoy the promotion video of One-Seg!!

ISDB-T seminar in Bangkok



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

END

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