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Broad band mobility via PWLAN

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Overview

Part I. Market Push

Part II. Motivation of PWLAN

Part III. NESPOT, PWLAN Service in KOREA

Part I. Market Push

A scenic landscape featuring a calm lake in the foreground. Numerous colorful kayaks (yellow, red, blue, green) are docked along a wooden pier. In the background, there are dark, forested mountains with patches of snow under a clear blue sky. The image has a slight motion blur effect, particularly on the kayaks and the mountains.

Broadband Global Market Share



2002 Broadband Market Share in Korea



Broadband Extension for Hidden Market in KOREA (I)

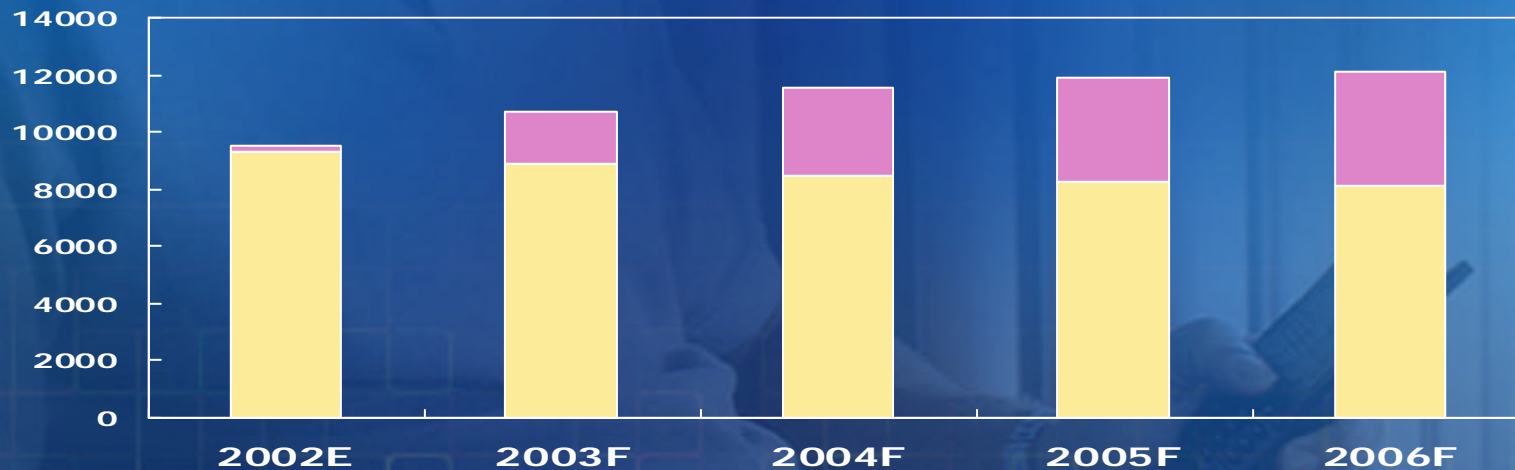


	Broad band	WLAN	CDMA
Coverage	Home, Office	Hot spots + Home + Office	Wide area
Throughput	high	high	Low
Terminals	PC	PDA, Notebook, Desk top	Phone, PDA
Applications	WEB	E-book, VOD, AOD, mp3 POP3 Mail, Messenger	Voice, Short Message
Customers	Students at home	Students/businessmen at home, campus and office Internet power users in hotspot area	Ordinary users
Promoted Industry	PC, DSL, Router, Portal	PDA, Wireless-LAN, Notebook	CDMA, Phone Industry

Broadband Extension for Hidden Market in KOREA (II)

Unit: 1,000

	2002	2003	2004	2005	2006
Broadband Subscribers Expected	9,536	10,691	11,574	11,928	12,167
Net Addition	1,691	1,155	884	354	239
Wireless LAN + BB Users Expected	191	1,829	3,089	3,632	4,068
Subscription Ratio out of Broadband sub.(%)	2.0%	17.1%	26.7%	30.4%	33.4%



Source : LG Investment & security. 2002.2

Part II. Motivation of PWLAN

A scenic landscape featuring a calm lake in the foreground with several colorful kayaks (yellow, red, blue, green) docked at a wooden pier. In the background, there are snow-capped mountains under a clear blue sky. The image has a slight motion blur effect, giving it a sense of activity and movement.

Mobile Broadband Service Motive (service)

Mobile

- Rapid growth of mobile phones
- 31,325,323 subscribers (2002.9)

High-end power users

Internet

- Fast increasing internet users
- 25,653,000 users (2002.9)

Mobile internet

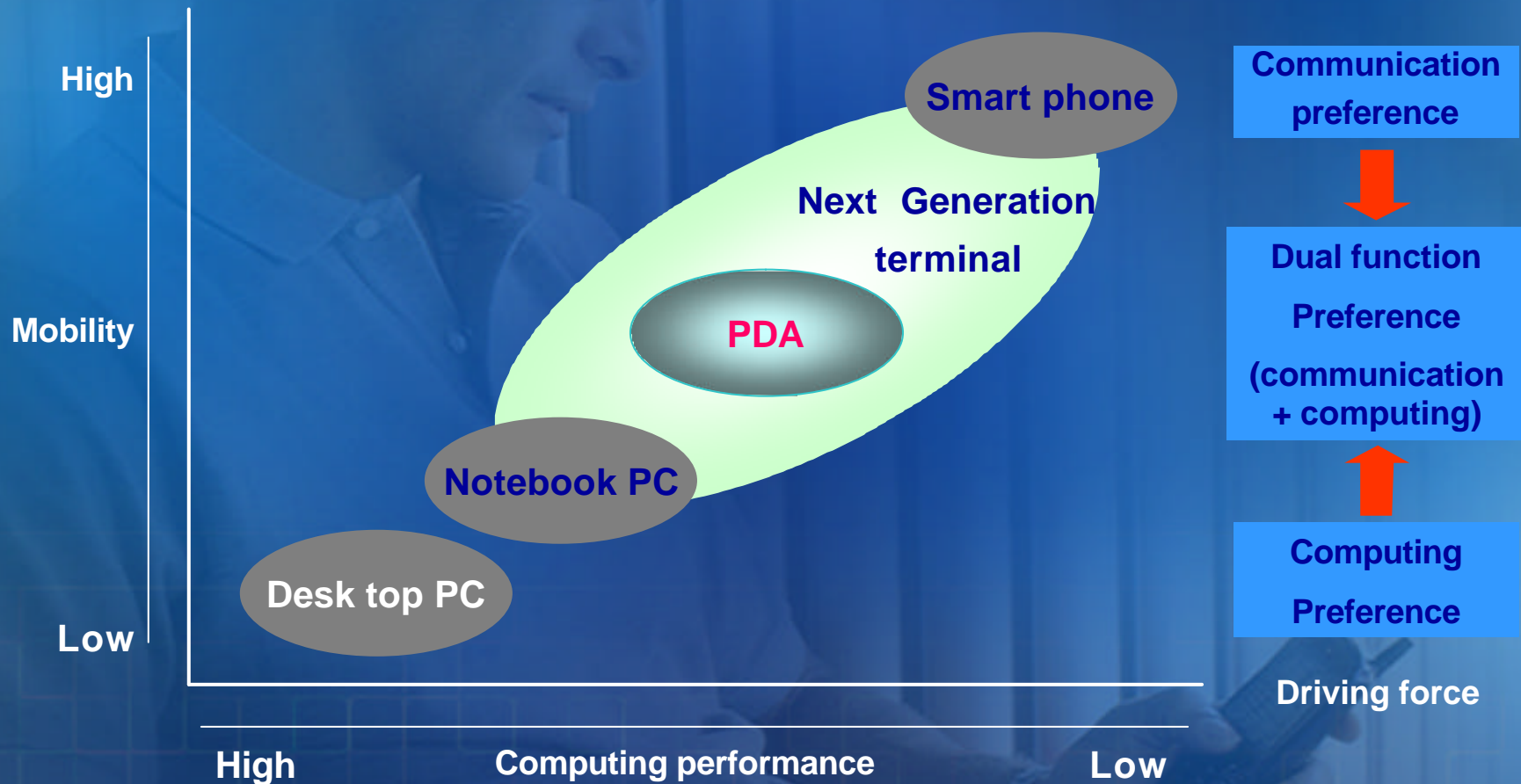
- 1x-EVDO mobile internet service launched
- 24 million mobile internet subscribers (Dec. 2001)

Limitation of mobile internet

- High tariff : 0.8~0.85US\$/10min
- Low Speed : 64 K ~ 2.4Mbps (384 Kbps on the move)
- Basic PCS : Small display panel & simple function

Emerging need for high speed & reasonably priced wireless internet service

Mobile Broadband Service Motive (terminal)



- Users demanding more applications
- Terminals are getting smaller & smarter

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A scenic landscape featuring snow-capped mountains in the background and a lake in the foreground. Several colorful kayaks (yellow, red, blue, green) are docked along the shore. The text is overlaid on the center of the image.

Part III. NESPOT, PWLAN Service in KOREA

KT- NESPOT

● Business Objective

- To meet the increasing demand for mobile internet
- To develop a 'Front-end service' by combining the massively deployed broadband and wireless solution
- > Convergence between fixed-line broadband internet and mobile internet

● Business Framework

- High-speed, low-tariff wireless internet service
 - IP backbone + xDSL/L.L. + Wireless LAN : indoor wireless internet
 - 1x-EVDO or W-CDMA : outdoor mobile internet

Strong points of KT NESPOT

o Big target market

- broad band subscribers : 10 million
- customer having notebook PC or more than 2 PC
- enterprises who want clean office or broad band mobility

o Easy structuring NESPOT infra

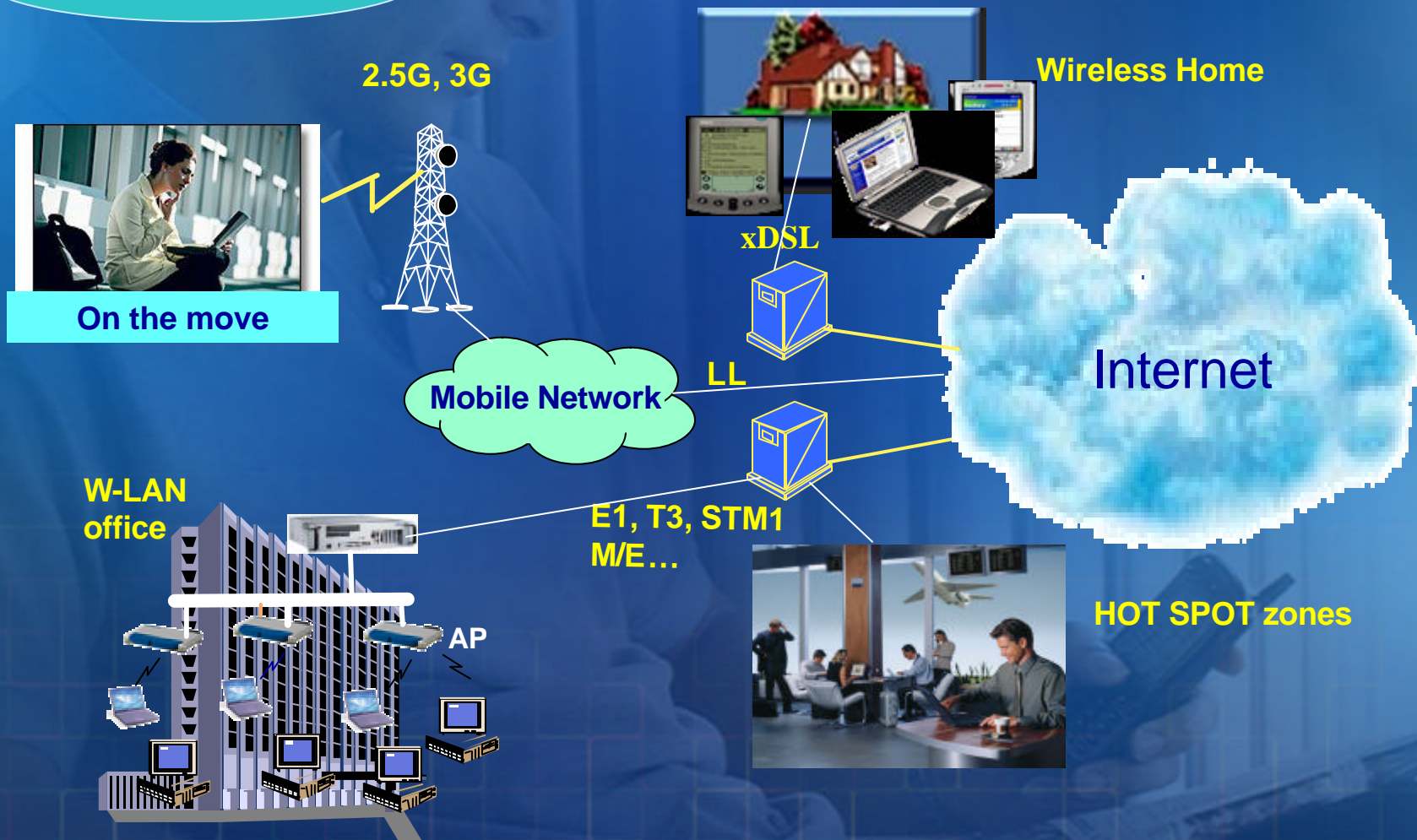
- Hot spot with xDSL
- Inexpensive network elements
 - > AP (including ADSL modem) : ~140 US\$
 - > NIC (WiFi) : ~60 US\$

o Back end systems

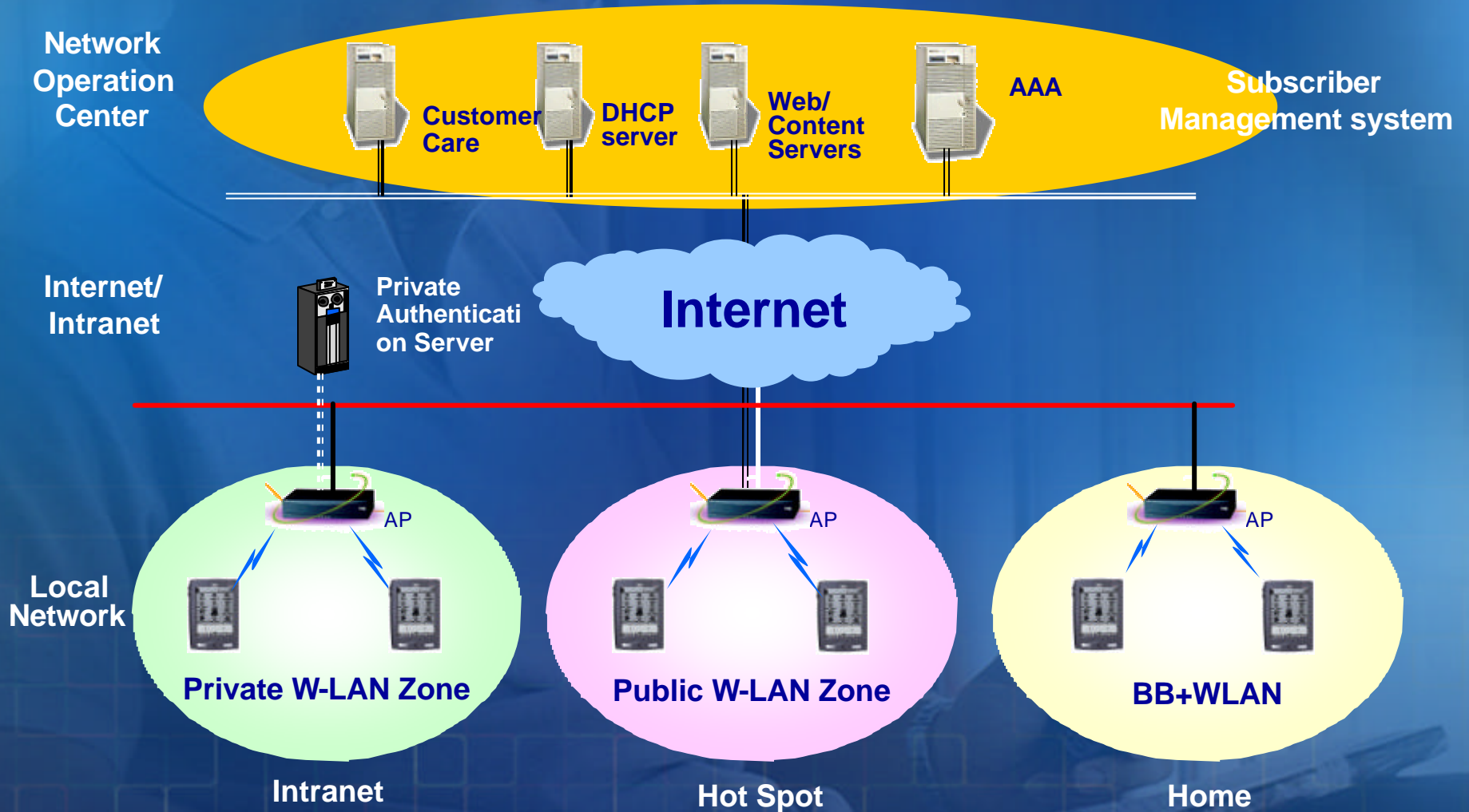
- AAA servers
- APNMS etc.

Features of Fixed-Mobile Convergence Service

2G/3G + WLAN



Network Structure of KT-NESPOT Access



KT-NESPOT Status

❖ Subscribers

unit : # ID (2002.10.10)

products	Enterprise	Hot spot only	xDSL + WLAN	xDSL+WLAN (waiting)	total
#	1,875	32,301	27,736	3,553	65,465

❖ Application service open (www.nespot.com)

- Basic service : e-mail, SMS, community
- Value added service : entertainment, VoD, VoIP, MMS, e-book

❖ Hot spots coverage

- 5,277 sites open(2002.9.30)
- About 7,000 Hot Spots available by the end of 2002

PWLAN in KOREA(others)

Hanaro	service	<ul style="list-style-type: none">- 2002.2.1 (HanaFos Anyway)- No. of users : several hundreds(2002.7) (estimated)- No. of hot spot: about 200 (estimated)
	Business Model	<ul style="list-style-type: none">- targets mostly homes and business customers? similar business model with KT
SKT	status	<ul style="list-style-type: none">- providing trial service- try to utilize its own mobile network(e.g. EVDO) providing W-LAN service
others	status	<ul style="list-style-type: none">- Thurunet, Dacom trying PWLAN business- as additional service of broadband internet access service at homes(inactive investment on constructing hot spots)

Hot Spot (KT NESPOT Zone) Status (I)

❖ NESPOT Zone

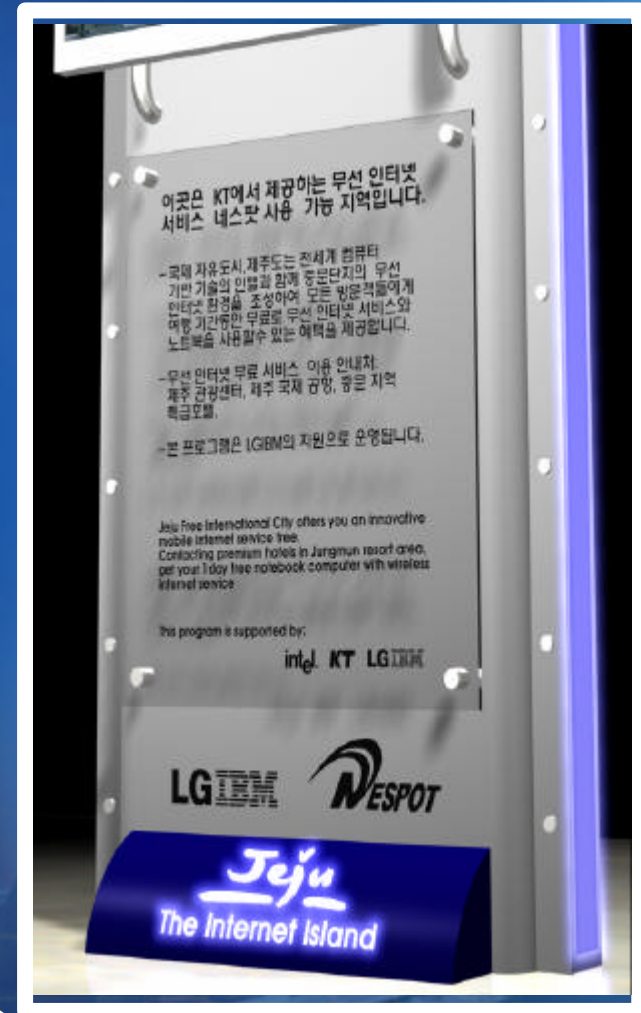
- Public Hot spot for NESPOT users
- 5,277 sites in KOREA
- Plan to expand 7,000 sites in 2002

❖ Competitive Advantage of NESPOT Zone

- Cost Efficient Network Investment ;
using nationwide ADSL network

❖ Target Site Priority for NESPOT Zone

- In & Around University
- Complex Mall (exhibition center, theater,
shopping center, subway station, concert hall)
- Hotel (1st class)
- Franchise (McDonald, Hollys coffee shop)
- Bank, Stock Marketplace..



NESPOT Zone Kiosk
in Jeju Int'l Airport

A man in a light blue polo shirt and glasses is looking at a mobile phone. The image is overlaid with a blue grid pattern. The text "FIN" is centered in the middle of the image.

FIN

THANK YOU