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November 23, 1992

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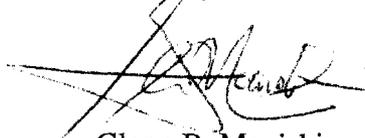
Ms. Donna Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: *Ex Parte Presentation*
ET Docket No. 92-100 (Narrowband PCS)

Dear Ms. Searcy:

On November 23, 1992, counsel for PageMart, Inc. met with Bruce Franca, Carl Huie and Thomas Derenge of the Commission's Office of Engineering & Technology in connection with the captioned rulemaking docket. Pursuant to Section 1.1206 of the Commission's Rules, two copies of the written materials presented at this meeting are attached.

Sincerely,



Glenn B. Manishin

GBM:me
Enclosure
cc (w/o encl.): Bruce Franca

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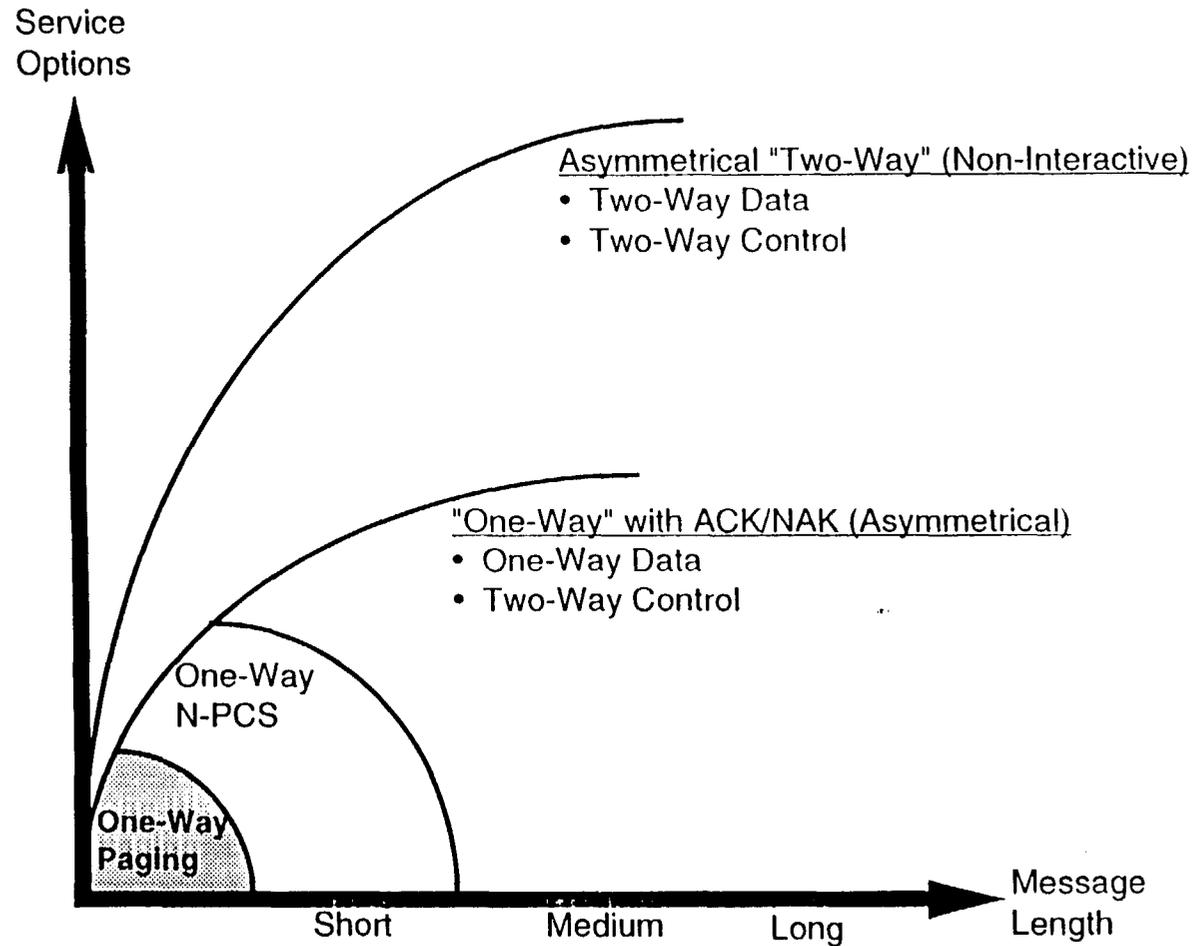
NARROWBAND PCS

Advanced Messaging Services

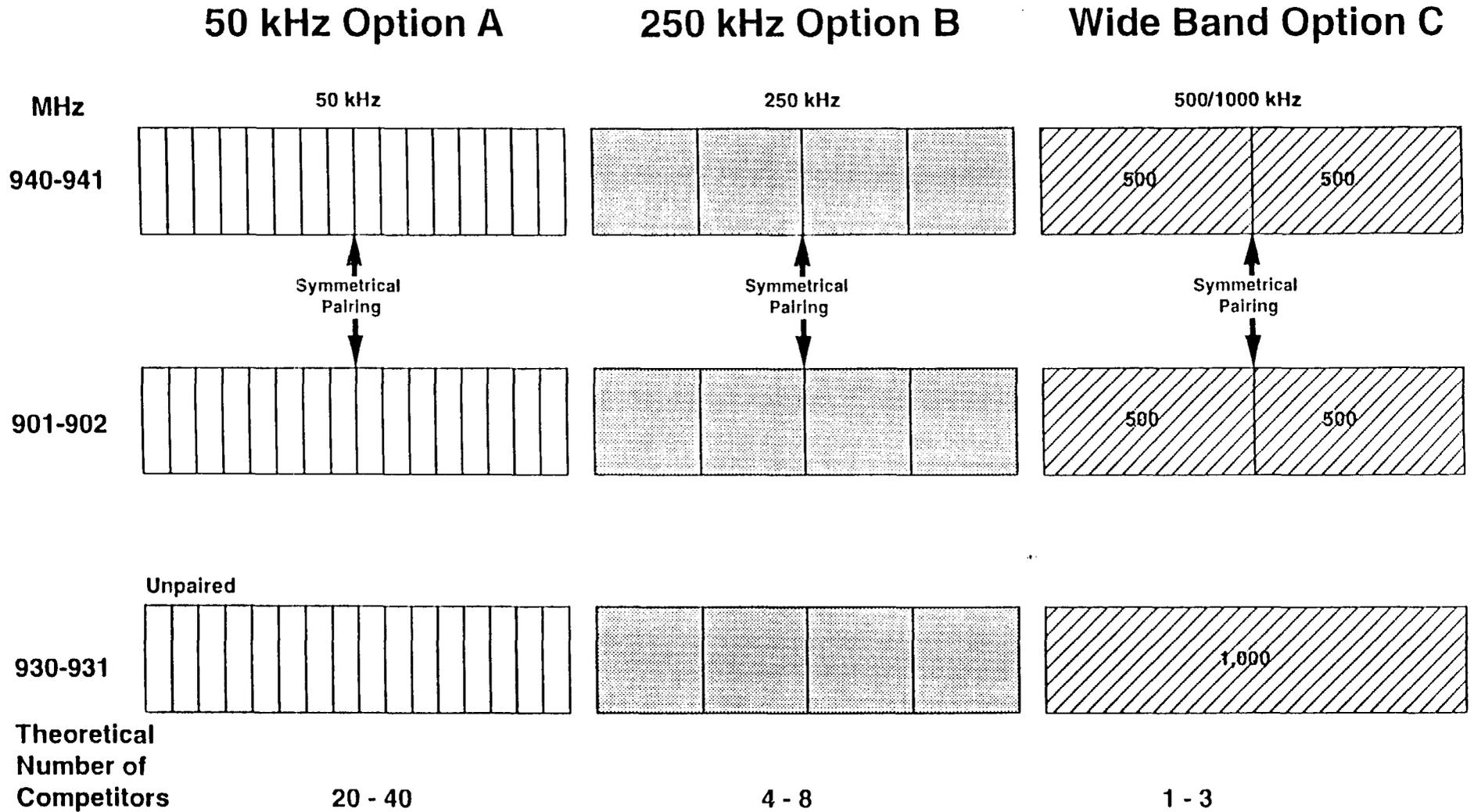
@ 900 MHz

Page
11

Asymmetrical Messaging Provides Most Service Options

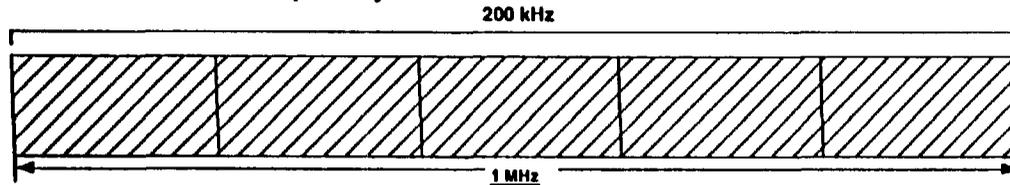


FCC Proposed 900 MHz Allocation Options



900 MHz Band Plan Structures Based on Pioneer Preference Applicants

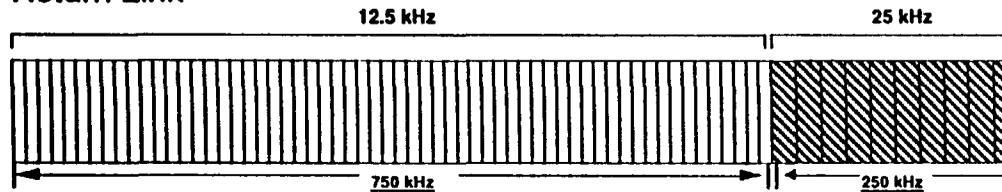
Multichannel - Frequency Reuse



940 - 941 MHz

5 - 200 kHz data channels for multichannel messaging systems, with two-way capability, to be paired with one 25 kHz polling channel in 930 - 931 MHz band and one 25 kHz return link channel in 901 - 902 MHz band for a total of 250 kHz per licensee.

Return Link

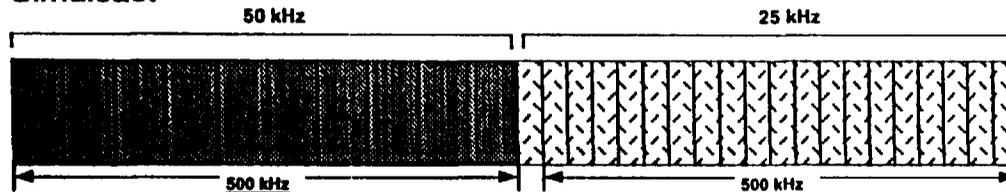


901 - 902 MHz

10 - 12.5 kHz return link channels for acknowledgment paging. 50 - 12.5 kHz channels for acknowledgment paging when paired to conventional paging channels in 931 or 929 MHz bands.

5 - 25 kHz channels for symmetrical two-way messaging (including narrowband two-way). 5 - 25 kHz channels for multichannel messaging systems.

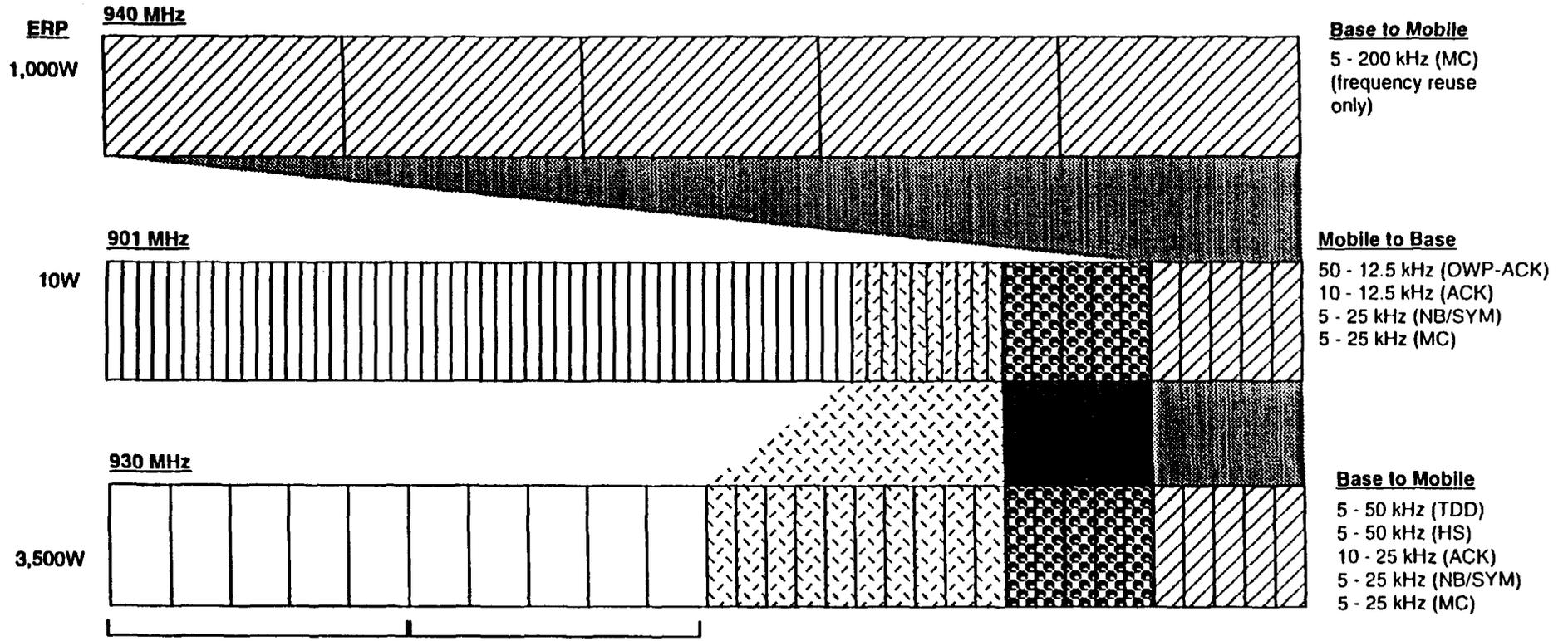
Simulcast



930 - 931 MHz

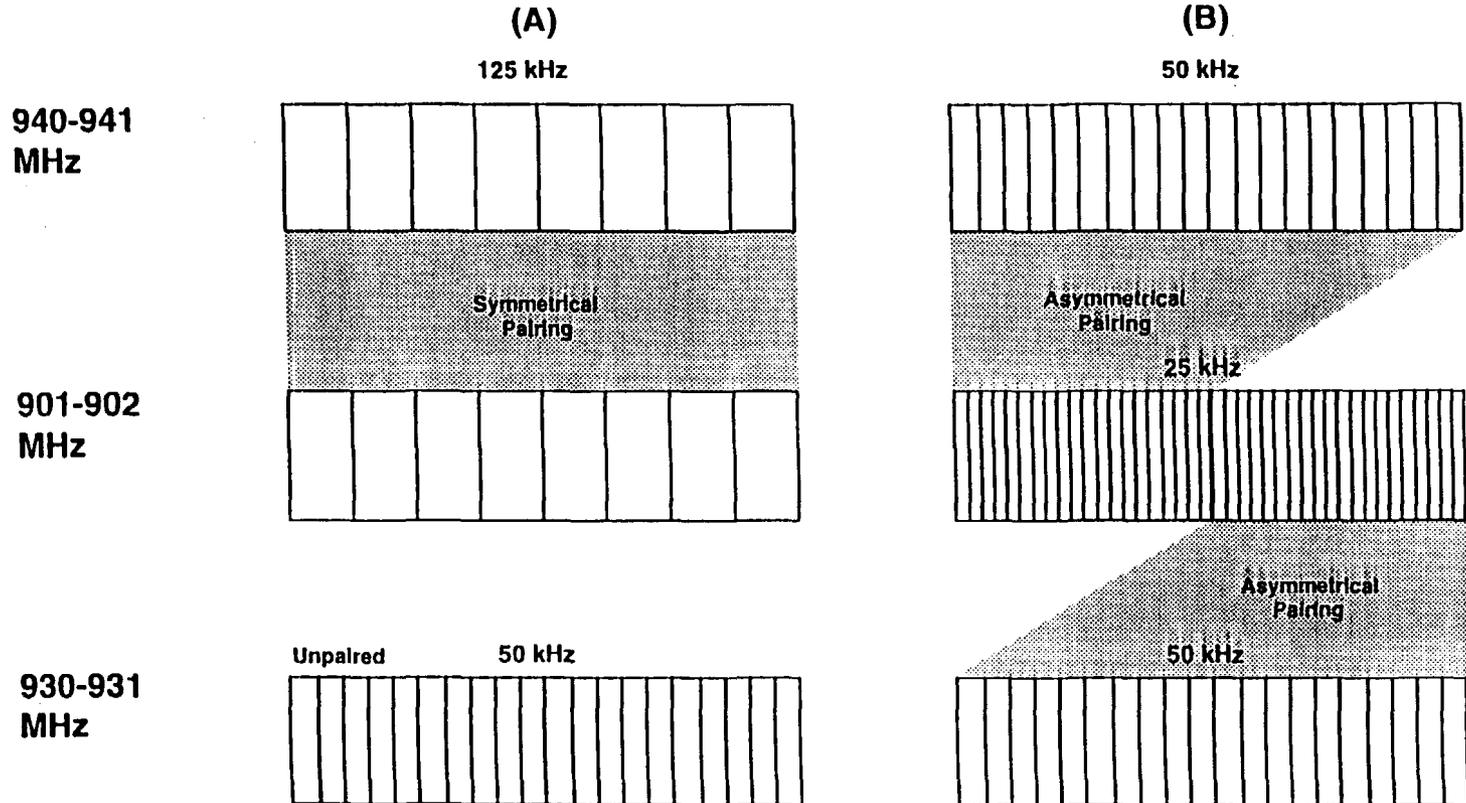
10 - 50 kHz channels. 5 for Time Division Duplex Applications including MTel and 5 for one-way high speed messaging. 20 - 25 kHz channels for acknowledgment paging, symmetrical two-way and multichannel messaging systems.

900 MHz Band Plan Structures Based on Pioneer Preference Applicants (Cont.)



- Legend**
- ACK - Acknowledgment Paging
 - MC - Multichannel
 - NB/SYM - Narrowband (25 kHz divided into 5 - 5 kHz channels) and/or symmetrical two-way
 - TDD - Time Division Duplex (e.g., MTel)
 - HS - High Speed Coding (one-way)
 - OWP-ACK - Acknowledgment link for existing one-way paging

Alternative 900 MHz Band Plan Structures



Theoretical Number of Competitors

8 - 28

Symmetrical Pairing

- (A) Interactive Two-Way:
 - 5 channel SMR-like system
- (B) Non-Interactive Two-Way:
 - 1-25 kHz forward link & 4-25 kHz data channels
 - 1-25 kHz return link & 4-25 kHz data channels
- (C) Separate loading requirements established for single versus multiple channel systems.

8 - 40

Asymmetrical Pairing

- (A) Single Channel: 50 kHz forward link and 25 kHz return link
- (B) Multiple Channels with frequency reuse: 2-25 kHz control channels and 4 to 8 - 25 kHz data channels (i.e. 3 to 5 - 50 kHz channels). **Only way aggregation is permitted is in conjunction with multiple channels, frequency reuse systems.**
- (C) Separate loading requirements established for single versus multiple channel systems.

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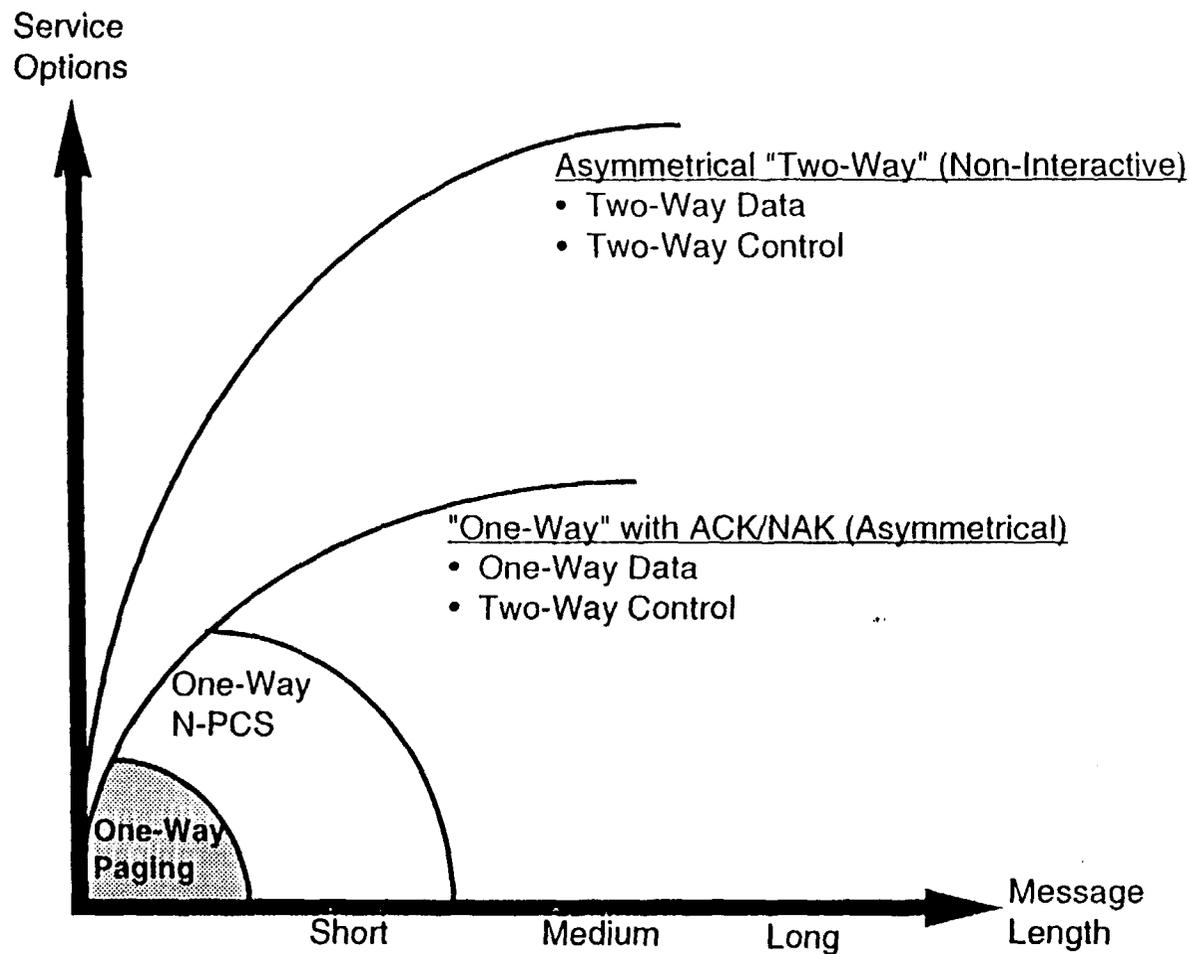
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NARROWBAND PCS

Advanced Messaging Services

@ 900 MHz

Asymmetrical Messaging Provides Most Service Options



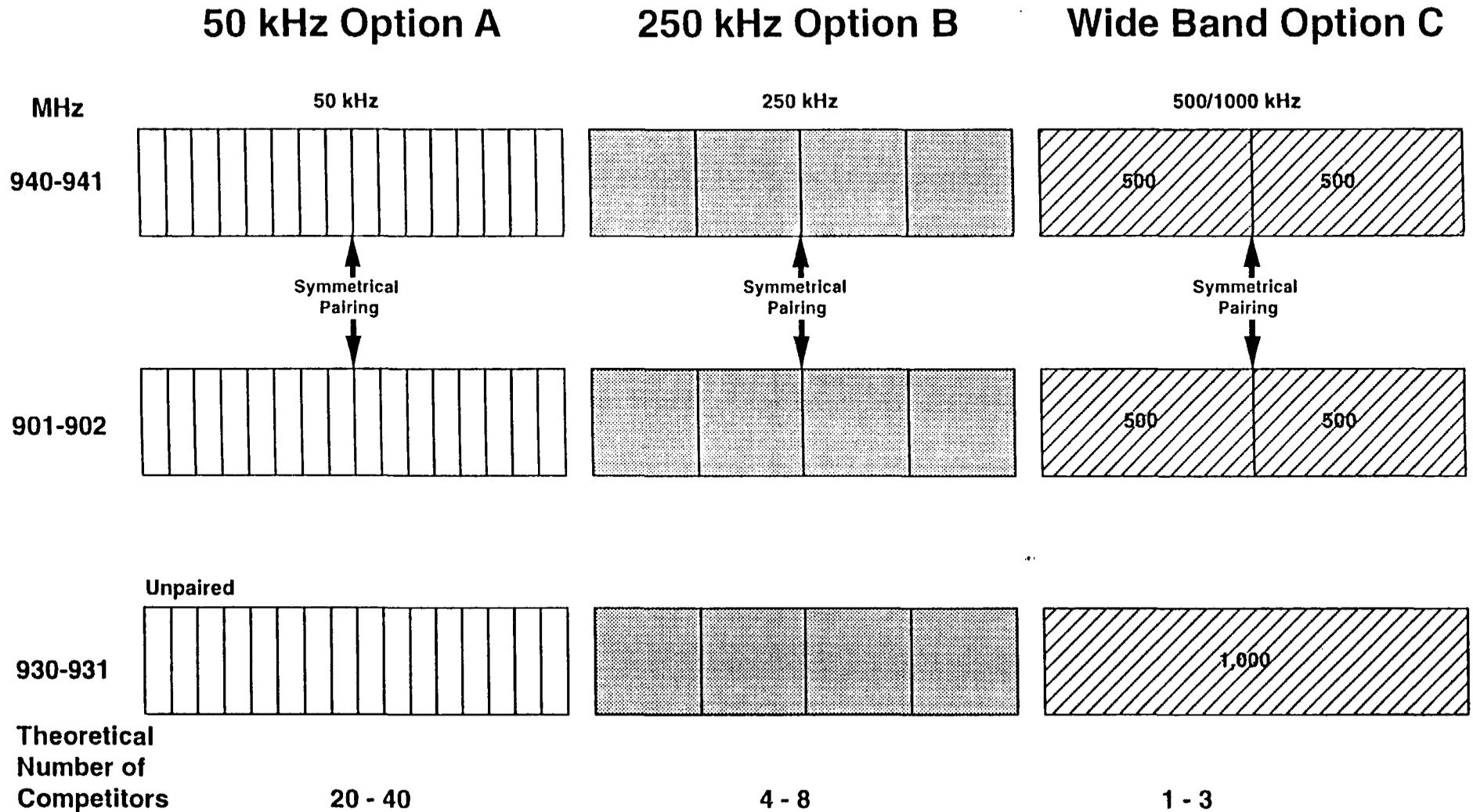
Narrowband PCS

Network Architecture Impact on Channelization (Pioneer Preference Applicant Examples)

Data Transmission Approach

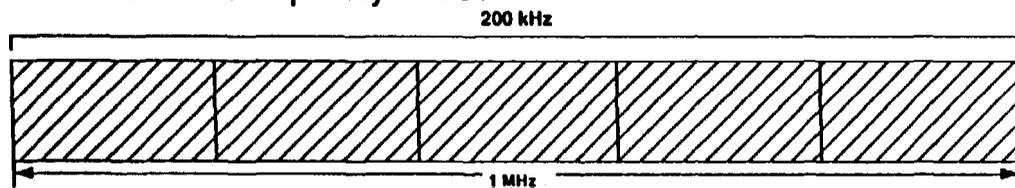
		<u>Data Transmission Approach</u>			
		Simulcast (Single Channel)	Frequency Reuse (Multiple Channels)		
<u>Mode</u> <u>of</u> <u>Communication</u>	O N E	Without ACK/NAK (Single Channel)	"HIGH SPEED" PAGING e.g. PacTel	Asymmetrical Messaging	
	W A Y	With ACK/NAK (Asymmetrical Pairing)	Acknowledgment Paging e.g. Dial Page		Digitized Voice e.g. PageNet
	T W O	Non- Interactive (Asymmetrical Pairing)	NWN (Time Division Duplex) e.g. MTel	- PIMS e.g. PageMart	Symmetrical Messaging
	W A Y	Interactive (Symmetrical Pairing)		SMR Data Cellular Data e.g. Echo	

FCC Proposed 900 MHz Allocation Options

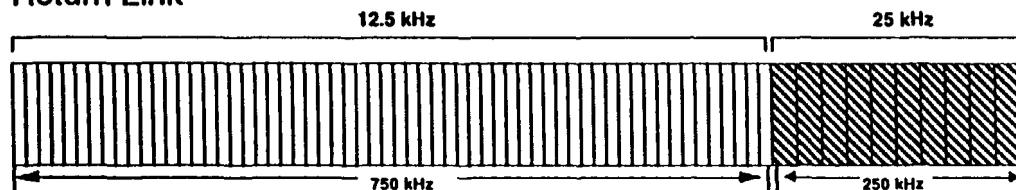


900 MHz Band Plan Structures Based on Pioneer Preference Applicants

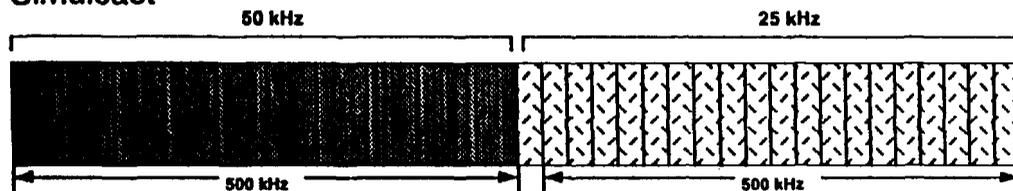
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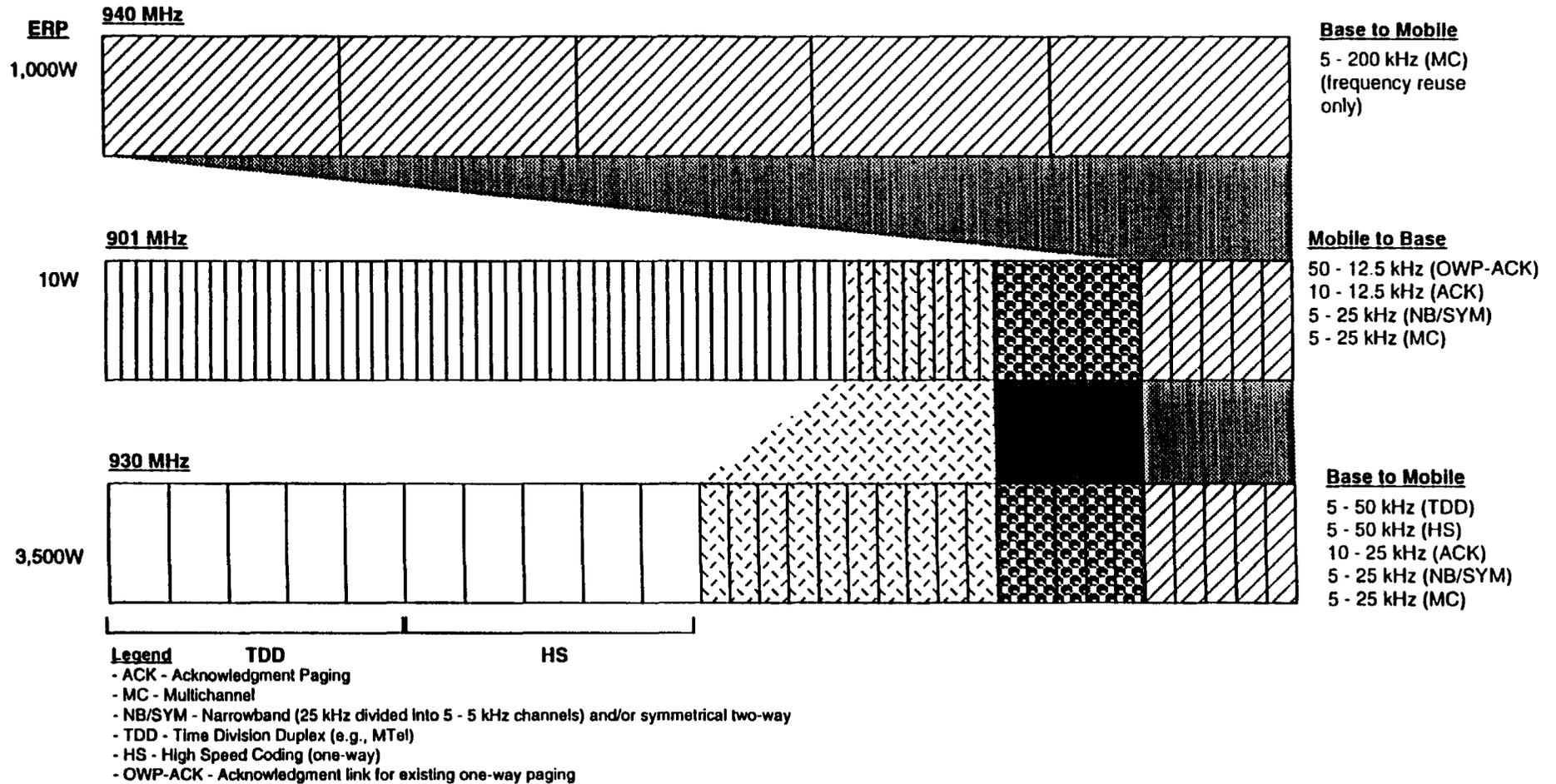
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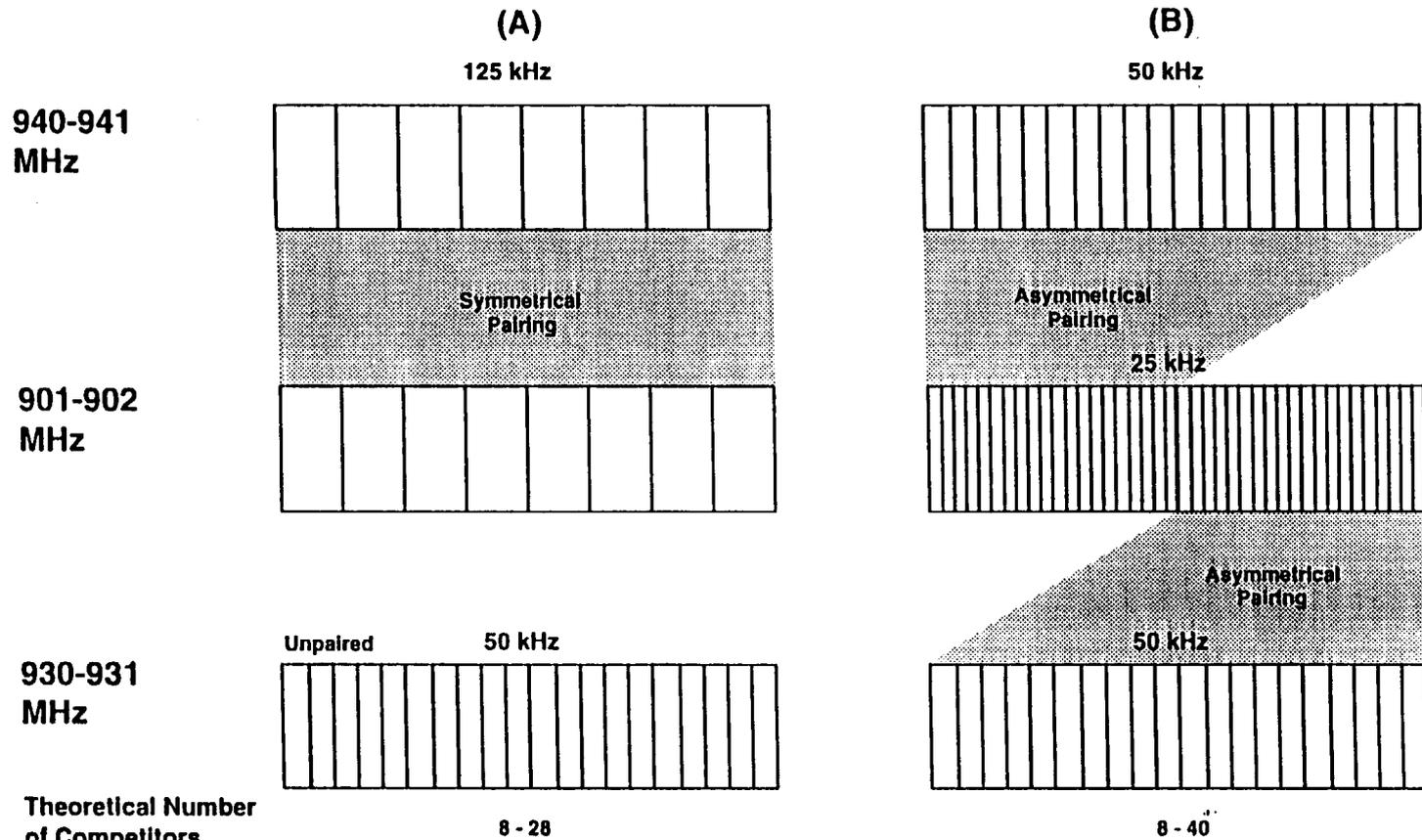
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