

A. Competition is finally here: 9KB/sec CDPD service from Verizon Wireless is being shut down and three different higher-speed technologies from the 6 national cell carriers are here or coming:

1. CDMA-based systems (built on Qualcomm chips and technology) from Verizon Wireless and Sprint
2. GSM-based systems from AT&T Wireless, Cingular, and T-Mobile
3. Nextel's Data technology

B. Each technology has a quick growth path to increasingly higher data-speeds and functionality

	Now	Late 2004	Later	Adoption
1. CDMA:	1XRTT 60K	EVDO (Boston) 150-300K	EVDV 1.4MB	US, Korea...
2. GSM	GPRS and EDGE 60K and 120K		UTMS 1.4MB+	Worldwide
3. Nextel	?		Wireless BB	US

C. Considerations for police agencies

1. Be thoughtful in leveraging the advantage that competition brings public safety!
2. Purchasing options are more detailed and varied. The key here is real consideration of per MB plans over unlimited, pooling, and
3. Future-proof yourselves as much as possible to reduce the costs of transitioning to the higher speed offerings. Simple example: install a dual-band external antenna now so that when VZ offers EVDO at 1900 MHz you don't have to change out a 800/900 MHz-only antenna
4. Study the experiences of early adopters (e.g., Brookline getting first bunch of VZ 1XRTT Aircard 555's) to see how its going (are the AC-555's rugged enough? Does the little antenna get knocked off?)

5. Whereas CDPD in NE was on a dedicated system; these services share backbone with voice users. For example, 1XRTT has no dedicated data channels at a site and no PS priority; you won't connect if the site is loaded...

#### D. The race between Verizon Wireless and AT&T Wireless

VZW says:

1. They are CJIS approved with Mobile IP
2. Can get free Sierra Wireless Aircard 555's if sign on for 3 years (otherwise pay \$200/ea.)  
NOTE: you can buy a Panasonic laptop with an inbuilt SB-555 card that will do Mobile IP  
(Can also get AudioVox card as well says Joe Nixon on 6/17)
3. They plan to offer (Summer 2004) a \$39.99/mo. plan that allows 60MB/mo service and fleet pooling
4. They plan to also offer 100MB with pooling at \$49/mo.
5. They will not allow "overage-protection"
6. MP-555 trunk-mount modems (with GPS-built-in) are about \$550/ea for public safety.
7. EVDO service is to be offered in the Boston metro area in late 2004 (they are expanding to 10 more metro areas from San Diego and Wash DC)
8. More:

Issues: How to upgrade to EVDO modems and what will it cost??  
How to coexist with voice users  
Need to install Antivirus clients on all laptops...  
Others:

AT&TW says:

1. They will be CJIS approved with Mobile IP soon
2. Can get free Sierra Wireless MP-750 GPRS ruggedized modem if you give them a MP-200  
NOTE: you can buy a Panasonic laptop with an inbuilt SB-750 card that will do Mobile IP
3. They plan to offer a \$49.99/mo. Unlimited plan
4. EDGE is available now and its faster than 1XRTT
5. They are obviously eager to break into the market; thus are primed to offer good deals...

Issues: Need to get EDGE modems for free, or have good way to upgrade  
MP-750 to EDGE technology  
How to coexist with voice users  
When is UTMS coming  
Need to install Antivirus clients on all laptops...  
Others:

Nextel says

1. They are close to CJIS-approval?
2. They have "Wireless Broadband" working in NC county