

Nextel's Public Safety & Homeland Security Vision

TIEMS Workshop
Seoul, South Korea

February 12-13, 2004

Address Feedback to:

Yonho.Shin@motorola.com

Topics

- Background on Nextel Communications
- Nextel’s Vision for Public Safety Communications
 - Ready Now.
 - Instant Communications.
 - Interoperability.
- Nextel’s Emergency Response Team

About Nextel

Nextel Communications, Inc. is the **only national (United States) provider** of:

- Fully Integrated
- Multi-functional
- All Digital Wireless Service
 - Direct Connect
 - Interconnect
 - Messaging
 - Packet Data

Nextel network and handset technology is 100% iDEN (Integrated Digital Enhanced Network)

Nextel Milestones



1987 - Fleet Call, Inc. Nextel's predecessor, founded.

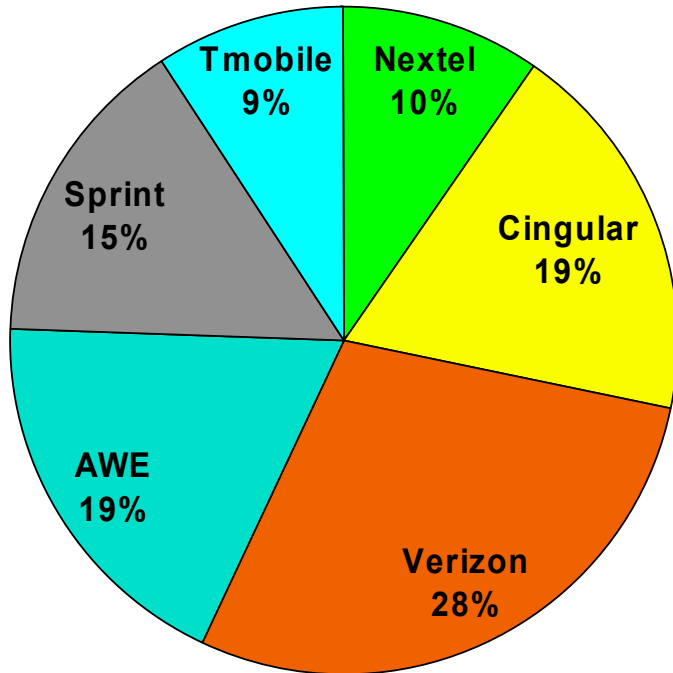
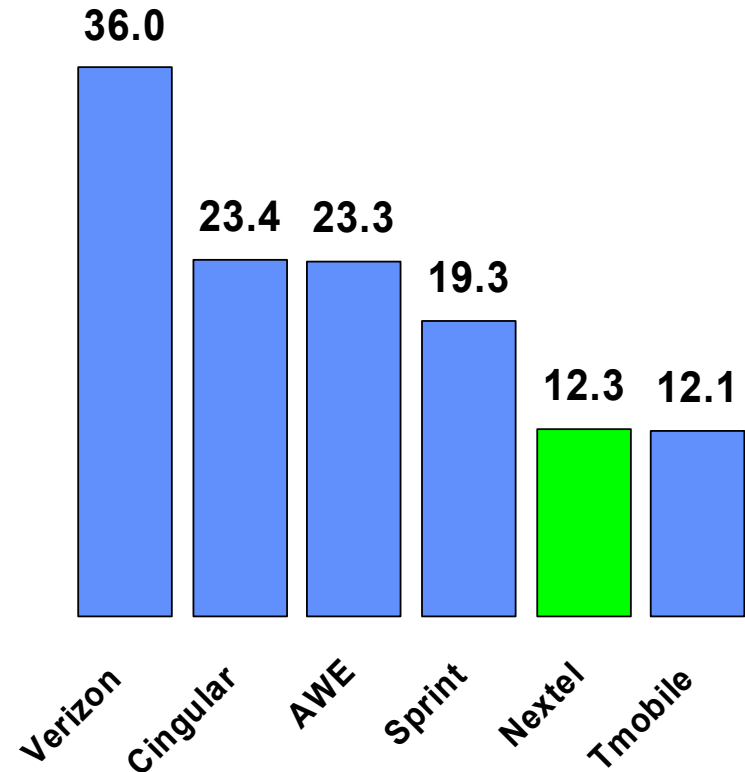
1993 - Fleet Call, Inc. changed name to Nextel Communications, Inc.

1994 - Nextel agreed to buy all of Motorola's SMR radio licenses in the United States, providing Nextel with significant spectrum rights in each of the top 50 U.S. markets.

1996 - Nextel introduced Motorola's all-in-one iDEN digital wireless technology, the first to combine enhanced digital cellular, two-way radio and text/numeric paging in one phone - the Nextel phone.

2000 - Announced Nextel OnlineSM, the wireless Internet solution for business: an "always on" wireless packet data solution and Nextel WorldwideSM, the largest all-digital wireless coverage in the United States and in more than 70 countries around the world.

2003 - Nextel reached twelve million subscribers.

The US Market – The Competitive Landscape**Wireless Market Share****# of Subscribers (millions)**

Nextel’s Support for Public Safety Communications

- **Nextel has a history of responding to nationally declared emergencies and major events/National Special Security Events (NSSE) since 1995**
- **Supporting natural disasters such as fires, floods, tornadoes, hurricanes & winter storms; supporting non-natural disasters including plane crashes, the Oklahoma City bombing and 9/11 in both New York & Washington, DC**
- **National Special Security Events such as the 2002 Winter Olympics in Salt Lake City, 2000 Republican National Convention in Philadelphia, NATO 50th Anniversary in 1998**
- **Responding to the needs of federal, state and local public safety agencies, and meeting the needs of disaster relief agencies (American Red Cross and Salvation Army) who require basic communications systems to coordinate resources and infrastructure for event support**

Nextel Communication’s Public Safety Vision

US Government users need reliable and Interoperable communications for EMS and Public Safety responders now – not in 3 to 5 years.

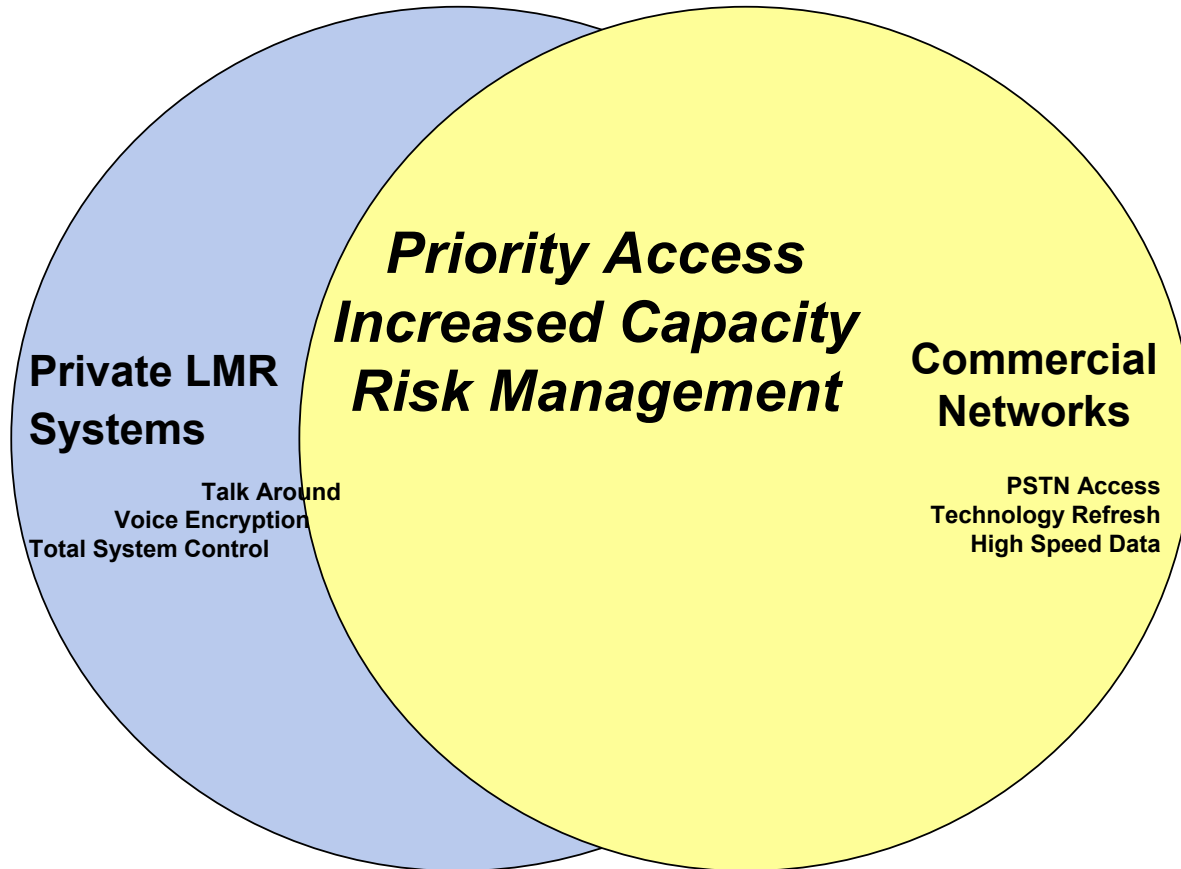
- **Requires no capital investment**
- **Flexible – System upgrades are the responsibilities of Nextel**
- **No annual system maintenance costs**
 - *Repairs*
 - *Personnel*
 - *Tower Rent (Real cost or opportunity cost)*
 - *Linking Circuits – T1 lines*
- **Enhances Interoperability**
- **Planning, Funding, Implementation cycle is short**
 - *No consultants required*
 - *Contracts are in place*
- **The Nextel solution is reversible**

A Total System Solution

An Integrated Digital Wireless Communications System that combines the strengths of private LMR systems with the strengths of commercial systems to yield the best total system solution at less cost.

- *Increased capacity*
- *Higher data speeds (WiDEN)*
- *Connectivity to PSTN (efficient connectivity)*
- *Data Encryption*
- *Inherent redundancy in infrastructure*
- *Technical support to system grows exponentially*
- *Technology refresh comes faster and cheaper*
- *Risk mitigation*

A Total System Solution



Addressing Limitations of a Public Network

Nextel's iDEN technology addresses many of the concerns and requirements related to utilizing a public communications network.

- **SHARING NETWORK RESOURCES WITH CONSUMERS**
 - *Wireless Priority Service*

- **SUSECPTIBILITY TO COMMERCIAL OUTAGES**
 - *Direct Connect not routed through PSTN*
 - *Power Generation and battery back-up equipment*

- **INTEROPERABILITY WITH LMR SYSTEMS**
 - *Consoles available to interface with iDEN*

- **PRIVATE SYSTEM FEATURES**
 - *Talk-around solution available mid-2004*
 - *Voice encryption product being developed for est. 1Q 2005 delivery*

Public Safety Strategy

The Nextel strategy focuses on supplementing existing and proposed Land Mobile Radio systems and being the commercial part of an integrated system solution.

- *Priority Access on Nextel's Network*
- *Ready Today Solutions*
- *Interoperable Solutions*
- *Data Solutions*
- *Emergency Response/Relocation Solutions*

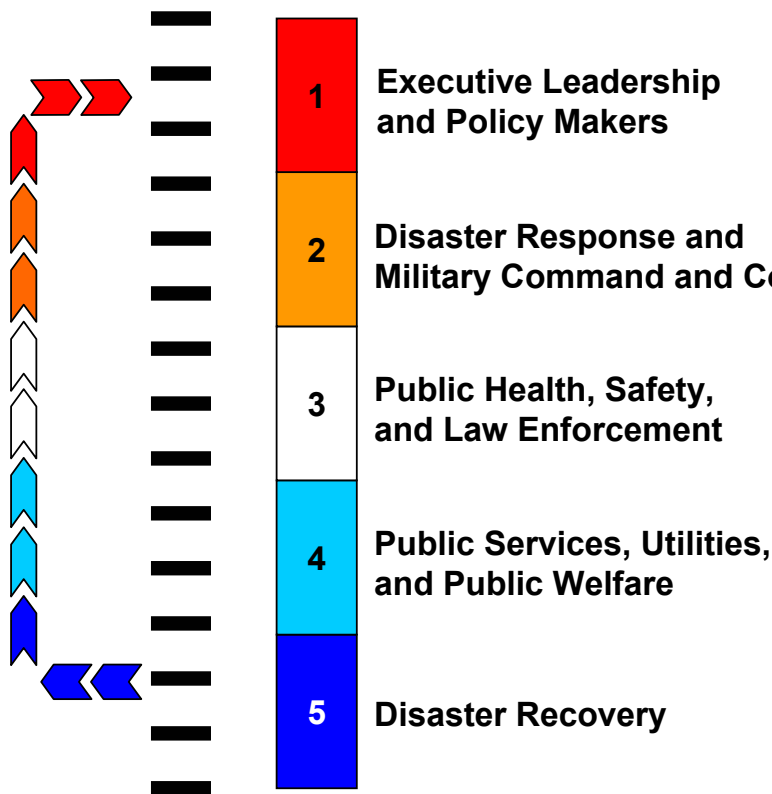
Wireless Priority Service (Direct Connect vs. Interconnect)

- **Public Safety radio users get priority access on the Nextel network creating a public safety communications net which co-exists on a commercial network.**

- **Nextel’s iDEN system architecture allows both priority queuing and ruthless pre-emption.**
 - ***Priority Queuing (next available channel) is consistent with existing Wireless Priority Service (WPS) requirements and criteria established by National Communications System (NCS)***

 - ***Emergency Group Call (ruthless pre-emption) immediately seizes the lowest priority channel and terminate another user if necessary***
 - ***offered on selected models of handsets that are equipped with a ‘man down’ button***

Unique Network Capabilities



➤ Priority Queuing (next available channel)

➤ Emergency Group Call (ruthless pre-emption)

Interoperability

Nextel facilitates interoperability by mitigating the principle causes

➤ **Technical Barriers**

- *Wide band vs. Narrow band*
- *Analog vs. Digital*
- *Cross-banding*
- *Conventional vs. Trunked*
- *Proprietary Standards*

➤ **Spectrum Barriers**

- *Safety lacks the spectrum to grow in existing bands*
- *Single-banding requires major re-farming of spectrum*
- *Console Patches and/or JPS type interoperability switches tie-up channels*

➤ **Cost**

- *Unit cost of portable radios limits the deployment of this equipment*

Data Solutions

Robust data capability is an emerging requirement for Public Safety organizations.

Nextel delivers customized data solutions with our strategic partners

- NCIC, Motor Vehicles, Local Warrants, Restraining Orders etc.
 - Emergency notification system
 - Criminal photograph transmission
- The most often used data applications currently running on Mobile Data Terminals can be transmitted to iDEN phones
- Java as a data platform greatly enhances data capability

Nextel's Emergency Response Team



ERT Mission Statement

***Provide World Class Services and Support to
Nextel’s Most Extreme Clients When
Communications Are Critical.***



ERT Operational Responsibilities

Provide a national, centralized organization within Nextel to –

- **Coordinate resources and infrastructure for**
 - *Federal & state declared emergencies (Disaster Support)*
 - *Field Training Exercises*
 - *National Special Security Events (NSSE)*

- **Design and implement process and procedures with all primary functional support groups within Nextel to ensure timely and effective deployments**

- **Utilize existing products & services, develop new remote and out-of-footprint capabilities**

- **Partner with Public Safety agencies in need of a secure, stable, interoperable communications platform**



ERT Core Team Members

ERT core members have extensive military experience in tactical communications as well as Federal Law Enforcement and public safety communications

- Federal Law Enforcement (*FBI, USSS, USOPM*)
- US Military (*White House Communications, Signal Corps, Electronic Warfare, Base Operations LMR*)

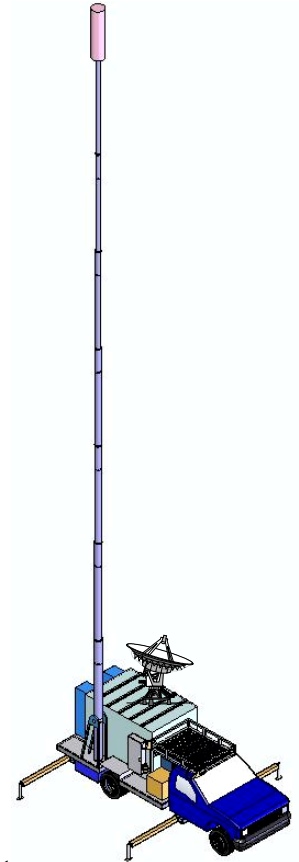
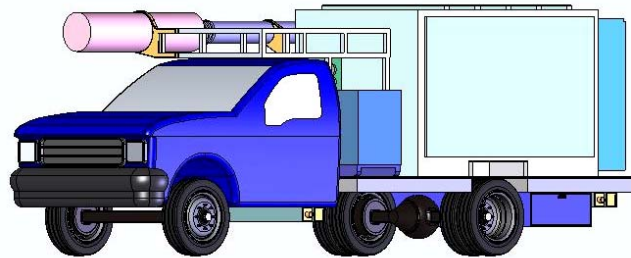
ERT is comprised of a core group of members that have over 27 years of combined Nextel employment



ERT Operational Program Development – SatCOLT

- Satellite based Cell-On-Light-Truck
- Rapidly deployable in remote and/or disaster environments
- Full cell site capable of supporting thousands of group dispatch users in a given area
- Connect them back into the larger Nextel Network

Self-Propelled Fully Retracted



Configured For Air Transport:

F550-Super Duty 4X6

Length - 284.5 Inches

60 ft retractable pole

Shipping Weight – 17,000 lbs

Width – 96 Inches

15 kW Diesel Gen-Set

1.2M KU satellite dish

Height – 104 Inches

(2) 2 Ton HVAC units



Disaster Support: Natural Disaster Response

OREGON FIRES: 08/02



– Supported 15 federal, state and local agencies managing the largest fire in Oregon history.

MISSISSIPPI TORNADO: 11/02



American Red Cross



– Support of American Red Cross deployment in Presidential Declared Disaster areas. Deployed within 18 hours

ERT has supported 12 Presidential Declared Disasters since starting in August of 2002.



HURRICANE ISABEL: 10/03

– Supported multiple state, local, county agencies, utilities, the American Red Cross and the Salvation Army prior to and after the storm



Disaster Support: High Profile Events Response

ERT has supported a number of high profile events and non-natural disasters.



- Baltimore City Police Department
- Bureau of Alcohol, Tobacco & Firearms
- Fairfax County Police Department
- Federal Bureau of Investigations
- Fredrick County Sheriff's Department
- Maryland State Police
- Metropolitan Police Department
- Montgomery County Police Department
- Prince Georges County Police Department
- Prince William County Police Department
- Spotslyvania County Sheriff's Department
- US Capitol Police
- US Marshals Service
- US Park Police
- US Secret Service

- Supported 10 federal, state and local public safety agencies as the primary means of interoperable communications to resolve the incident



Supported the FEMA declared emergency for shuttle recovery efforts by NASA OIG, National Disaster Medical System, FEMA, Texas Department of Public Safety, US Forestry Service, City of Lufkin Fire, Police and Sheriffs Departments

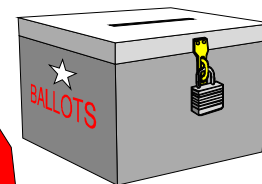
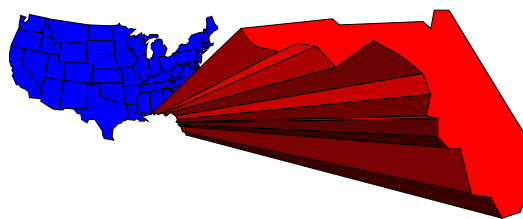


Agency Specific Event Support: Pre-Planned

ERT has provided effective support to agencies that manage pre-planned events.



- Supported Global Air Chiefs Conference in Washington DC to coordinate command staff, technical support, transportation, logistics and security



- Support police command centers in 553 polling stations throughout Miami Dade County. Polling stations were able to stay open 100% of the time because of messaging support for technicians, first time in county history to have 100% up time.



- Supported US Air Force and 27 NATO Security Teams as the primary means of interoperable communications at the event



National Security Special Events – High Profile



-Deployed thousands of radios and infrastructure to support 90+ federal, state and local Public Safety agencies through the Utah Olympic Public Safety Command
-Ensured the multi-agency organization provided world class security for over 5 million attendees.



- Thousands of units, infrastructure and personnel were deployed to support multi-national event. Provided interoperable communications for event operations, public safety at federal, state and local levels.

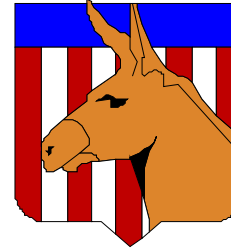


Agency Specific Event Support: National Security Special Events in 2004

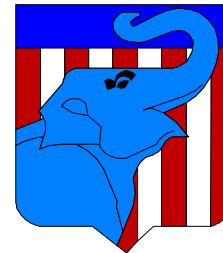
ERT is coordinating corporate-wide resources and support for three national events in 2004.



- Supporting Public Safety customers at the Federal, State and Local levels, GAM, Managed Services and Federal Programs & Homeland Security



*-Supporting the Host Committee for the Democratic National Convention in Boston
-Working directly with the federal law enforcement agencies, state and local public safety entities and City of Boston.*



-Working with Strategy team members to achieve similar corporate goals for the RNC as have been achieved for the DNC.



Homeland Security/Public Safety Require a Higher Level of Support

- **A 24 X 7 customer care unit devoted entirely to public safety**
- **In building coverage installation for key facilities**
- **Priority Access on our secure nationwide dispatch network**
- **ERT Core team with over 3000 ERT Reserve support personnel nationally**
- **Inventory of over 5,000 units available at ERT Operations Facility in Dulles**
- **Special Pricing**
- **Emergency Response Capability**
- **FTX or Agency Specific Event Support**
- **Business Continuity Solutions**
- **Focus Groups for Product Development**

SUMMARY

- Public Safety organizations will continue to rely on traditional private LMR radio systems as well as public networks

- Nextel's unique iDEN technology sets them apart and makes them the best public network solution to address Public Safety needs