

IRCS

Field-proven Integrated RoIP & Collaboration Services



Elbit Systems™

C⁴I and Cyber

IRCS

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Elbit Systems' IRCS is an advanced military communication system enabling direct voice and data communication among command posts and front-line forces. IRCS facilitates direct communication among a broad range of radios and communication devices including VHF, HF and Multi-Channel radio Relays, LAN, WAN, PABX, satellite and cellular networks. IRCS utilizes advanced VoIP (Voice over IP) and RoIP (Radio over IP) technologies.

Improved command and control – IRCS enables all echelons from high-ranking commanders down to the individual soldier in the field to directly communicate with anyone in the military network. The result is a dramatic improvement in both command and control and operational coordination, providing commanders and decision makers with a complete picture of operations and events in real time.

Seamless communications – With IRCS, all messages voice, video, e-mail and other data communications are automatically routed through the optimal communication hub. In order to establish a connection, all that is required is to key the requested station or enter its subscriber ID.

Every point to any point communications:

IRCS provides military personnel at all levels and at any location with direct command and control of every event

1 – An officer at General HQ can directly call and receive reports from Special Forces, operating thousands of kilometers away, with the use of an IP or analog telephone or the IRCS Access application on a PC.

2 – A tank commander using a VHF radio can send combat photographs directly to his commander's computer at division HQ. The command can also receive essential satellite reconnaissance images split seconds after they have been captured.

3 – A physician on a Medevac mission can directly report the types of injuries to the receiving hospital's medical personnel.

4 – Using any radio transceiver, a rapid intervention unit combatant can directly communicate and pass instruction and information to a wide range of operating forces and personnel including commanders at HQ, attack aircrafts, artillery units, battle ships, etc.

IRCS overcomes the slow and cumbersome networks which characterize existing military communications and provides fast, automatic and direct operational connectivity.

Integrated auto-routing Radio Communication System



IRCS services

Voice, data and video communications

- Seamless voice and data communications across all levels of the military network.
- Video sessions via broadband networks.
- Fast connection by selecting destination name or ID.

System management capabilities

IRCS remote control capabilities enable system administrators to:

- Conduct performance evaluation and built-in tests
- Update configurations
- Program radio parameters
- Manage and distribute encryption and frequency-hopping keys
- Automatic distribution of site data
- Maintain IRCS communication devices

All IRCS management functions can be performed from almost any element located within the system. Various management functions such as distribution of encryption and frequency hopping-keys can be executed automatically or at specified intervals.

IRCS' automatic communication logs, track and record every communication link made within the system, provide military commanders and other decision makers with essential information. These records can then be used to investigate a specific operation or event, improve command and control and maximize efficiency.

IRCS offers armed forces other essential benefits:

- Integrates the strategic and tactical communication needs of all branches of the military into one seamless system
- Enables user-friendly voice and data services based on a proven and already deployed operational system.
- Voice recordings and debriefings
- Integrates the military communication system with other operational networks critical for disaster recovery operations.
- Provides maximum communication flexibility, allowing real-time adjustment to meet changing operational scenario
- Saves resources and equipment by eliminating the need for multiple communication systems
- Maximizes the overall reliability and survivability; each communication hub serves as a backup for every other hub within the IRCS
- Operates with both modern, legacy and older-model radios
- Allows for gradual and scalable implementation
- Embeds cutting edge voice and radio IP (VoIP and RoIP) technologies and protocols

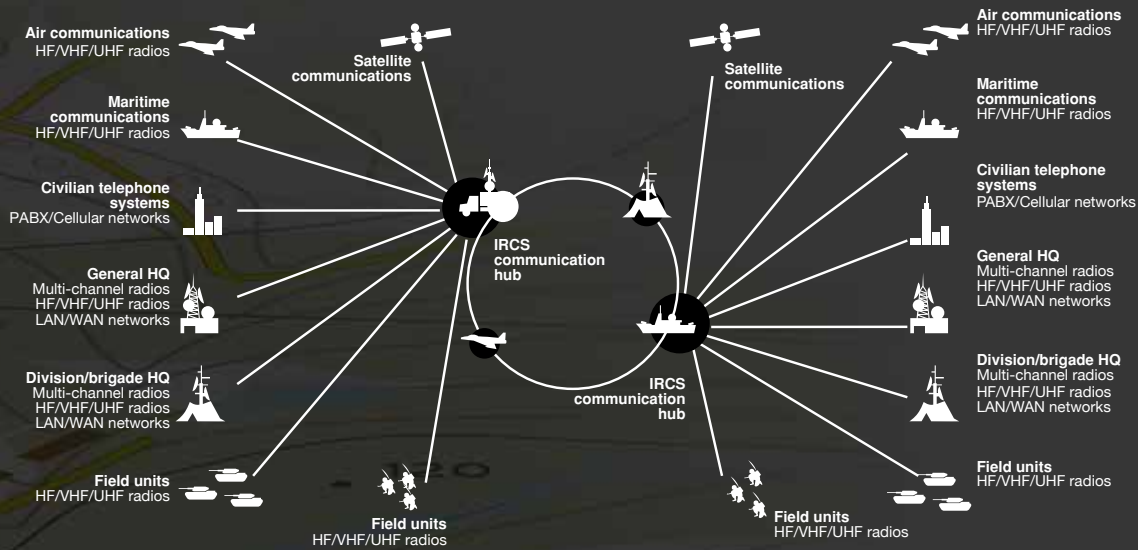
IRCS building blocks

- Elbit Systems' CCT (Communications and Control Terminal) / Tactical CCT
- Elbit Systems' NAT (Network Access Terminal) / Tactical NAT
- DTMF / cellular and IP telephones
- Satellite terminals
- Stand-alone radio equipment (HF, VHF, UHF)
- Elbit Systems' TMR (Tactical Multimedia Router for fixed or tactical environments)
- iTalk, iMail and iNMs applications
- VoIP technology and push-to-talk (PTT)
- Audio switching capabilities
- Voice conferencing
- Video and Chat
- Multicast groups management
- Voice relay between radio networks
- Simultaneous operation of multiple radio nets
- Enables full control over radio equipment
- Proven operating interfaces with more than 40 different types of radios worldwide



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IRCS enables commanders and soldiers at all levels, from top command down to the individual soldier in the field, to directly communicate with anyone else in the military network. As a result, it dramatically improves operational coordination, command and control, providing commanders and decision makers, in real time, a complete picture of operations and events.

With IRCS, all messages-voice, video, e-mail and other data-pass through communication hubs which automatically choose the optimal path for their transmission. In order to establish a connection, all that is required is to dial a number of the requested station or enter its subscriber ID. IRCS does all the rest.



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