



Provision of services

iDirect is one of the companies engaged in the provision of welfare services to troops serving all over the world. Helen Jameson talks to Joe Bender and Karl Fuchs to find out more about what type of services are made available to those so far from home.



Karl Fuchs, Director of Engineering.

About iDirect

iDirect Technologies, a subsidiary of Vision Technologies Systems, designs, develops, and markets satellite-based broadband access solutions targeted at the enterprise, government, carrier and educational sectors that have the need for fast, flexible, and geographically dispersed two-way internet/intranet access. The company has developed technology solutions that combine high performance, worldwide availability, and ease of installation, high reliability, and low cost to end customers. In addition, iDirect solutions offer unprecedented efficiencies, increased revenue opportunities and higher per customer gross margins to satellite network operators. iDirect was awarded the 2005 World Teleport Association Teleport Technology of the year, the Innovation & Technology of the Year by The ISCe Advisory Board, and named number one in the Deloitte & Touche Virginia Technology Fast 50 list of the fastest-growing US technology companies. iDirect operates its corporate headquarters in Herndon, Virginia and has regional offices in Europe, Asia, and covering Latin America.

Question: Thank you for your time today. Would you kindly introduce yourself to our Readers?

Joe Bender: I am Joe Bender. I am senior sales representative for iDirect to the Army and the Air Force and I bring over 30 years of communications experience to the position.

Karl Fuchs: My name is Karl Fuchs and I am Director of Engineering and I lead a team of system engineers and one of our primary jobs is to design networks for the military including morale and welfare networks.

In the field of war, it is obviously very important for soldiers to have the means to keep in touch with family and friends.

Question: What solutions does iDirect offer to the armed forces to help them maintain this contact?

Joe Bender: One of the solutions that we support is a morale, welfare and recreation network that is sponsored by SPAWAR Europe out of Stuttgart. This is a network of 240 locations that provide availability of voice over IP, video and Internet connectivity so that the service personnel can have access to communications and can keep in touch with their family and friends. It is a service that they pay for, but it does give them ready access to those technologies to allow them to stay in touch.

Karl Fuchs: The reason that iDirect is so successful in providing these services is that the iDirect technology enables the VSAT network to secure high quality of service and has very tight characteristics to allow high quality voice and video.

Question: Is the system very easy to deploy and operate?

Karl Fuchs: One of the main reasons that

the iDirect system has been chosen is that the soldier in the field needs to have no knowledge of either satellite or IP protocol in order to direct the antenna and make it operational, and also to make one of these systems available to soldiers as suits their needs from location to location.

Question: Is quality of service a problem you have experienced in developing the technology required to keep in touch? How is high QoS maintained?

Karl Fuchs: Yes, we certainly have experienced some quality of service problems, especially when we initially started to deploy the system. We were being told that less voice traffic was being used than actually was until we ultimately found out that the main communications source that the soldiers wanted was the ability to make telephone calls back home. More than surfing on MySpace or more than any of the other Internet-based services voice is the primary killer application. And as a result we had to take some fairly intelligent steps to be able to design a network that supported the quality of service needed for that amount of voice traffic. The quality of service is maintained primarily by vigilance and understanding the traffic code files of the network and ultimately, because we are changing bandwidth characteristics, ensuring that the network resources are in place to carry voice and video and data traffic loads.

Question: What about security? How can you ensure that personal information being exchanged is kept secure?

Joe Bender: Well the system employs advanced encryption services to ensure that the satellite link and the information going across the satellite link is encrypted between the two end points so there is no way, even as though the transmission is going over the



air, no way for anyone else to have access to it or to read it. Additionally, there's a recent future set within the iDirect platform called Transmission Security (Transec) that is stronger than Advanced Encryption Security (AES) that allows for complete security of just about any application run on the network.

Question: In terms of recreation, what can satellite technology offer to serving troops?

Joe Bender: Satellite technology can offer VoIP, video-teleconferencing with family members, and the ability to surf the Internet as though the troops were at home.

Question: Where in the world is iDirect currently working with the military to provide communications for the use of serving troops?

Joe Bender: Six of the seven continents. Southeast Asia, Middle East, Africa, the Continental United States, South America. Virtually any place the United States Army, Air Force, Marine Corps or Navy goes we go with them.

Karl Fuchs: And our allies as well. It's important to note that a number of other military organisations apart from the US do use

our equipment as well.

Question: What new trends and developments do you see emerging in communications technology for those deployed in war zones?

Joe Bender: The two biggest applications that we are beginning to support and that are required of us by the military organisations are battlefield video and COTM.

Karl Fuchs: I do want to point out something that Joe had mentioned earlier. In all cases you're not going to be sending highly secure transmissions over a morale and recreational network. However, Transec's objective is to keep from the adversary any traffic engineering information.

The reason it's become important in morale, recreation and welfare is you don't want to give the adversary any idea about troops strength or location because if the bad guys see a whole bunch of phone calls home over a certain period of time, they will know that something is going on they may not know what, but they will understand that something is going on.

The Transmission Security keeps the information secretly in codes that the adversary cannot break or access any traffic engineering information.

Question: Can you please give us details on the supply chain network that iDirect provides to keep soldiers safe?

Joe Bender: The Combat Service Support Network otherwise known as CSS VSAT is a supply chain communications network. It provides connectivity from the battle theatre to supply chain application servers at the soldier's home base with the security over the satellite links. The CSS VSAT network application eliminates the need to physically drive requisitions to a centralised communications hub therefore reducing the potential for exposure to IEDs (improvised explosive device). This improves both efficiency and maintains information flow throughout the fulfilment process of providing supply and requisition for the troops in the field.

This is deployed worldwide. However the vast majority of the systems are in South-west Asia but it is a global network in support of army logistics. ■

"The Transmission Security keeps the information secretly in codes...."

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