RFP CHECKLIST: VOIP

INDUSTRY ANALYSTS AND EXPERTS recommend agencies consider the following issues when formulating an RFP. Many recommendations are also detailed in **Voice Networks Generic Switching Requirements** published by the Defense Information Systems Agency. Get it at **www.gcn.com**, Quickfind 530.

- ❑ Specify your **quality-of-service expectations**, including different service levels (such as priority or critical) for certain classes of users. You can ensure adequate quality of service by insisting that vendors describe their hardware's quality monitoring features—such as a "blame feature" that helps assign clear responsibility for failures. Such features typically measure network traffic indicators such as jitter, buffer sizes and latency.
- ❑ Make sure there are **alternative transmission paths** that add redundancy and allow subsecond failover. Without these, you might lose phone service in a disaster or other emergency.
- ❑ Continuity-of-operations planning requires alternate sites with phone and data systems that employees can use almost like their own. **VOIP requires data "rollover"** from headquarters to the alternate site; ask prospective vendors how they'll handle this.
- ❑ Ask the vendor to **demonstrate that its equipment interoperates** with other vendors' hardware **at both the data (Layer 2) and network (Layer 3) levels.**
- ❑ **Beware products that are merely Session Initiation Protocol-enabled, not SIP-compliant.** Some vendors only offer a partial implementation of the new standard, relying more heavily on the older H.323 standard.
- ❑ Ask vendors how they might handle **a VOIP pilot**. The answers will tell you a lot about their **grasp of your legacy infrastructure** and possibly reveal holes in their solution, or quality-of-service problems such as delays on your data network.
- ❑ Absolutely **demand Power over Ethernet.** It avoids expensive dedicated wiring. While most available products have POE, a few older models do not. Look for solutions that have the IEEE standard for POE (802.3af) coming out of the closet from an "end span" switch, the best setup for powering new devices as the network expands.
- ❑ Make sure the proposal includes a **backup uninterruptible power supply** that can keep all the phones running for at least the DOD-standard two hours.
- ❑ Section 508, the federal law requiring information systems to be accessible to the disabled, applies to VOIP. Ask vendors if their products are **fully 508 compliant, not just 508 capable.**
- ❑ **Consider leaving out any mention of VOIP**. Specify the number of communications lines you need for your agency and leave it up to the vendors to choose the technology.
- ❑ Get **detailed licensing information** that spells out how much you'll pay for phones, servers, data ports and software—both now and in the future. Some vendors have been known to triple their license fees in a single year.

—David Essex

VOICE OVER IP SYSTEMS

VENDOR	REPRESENTATIVE PRODUCT(S)	NOTES
3Com Corp. Marlborough, Mass. (800) 638-3266 www.3com.com	VCX V7000 IP Telephony Solution	This carrier-class SIP server can support up to 10,000+ devices; supports Diffserv and other networking standards
Adtran Inc. Huntsville, Ala. (256) 963-8000 www.adtran.com	NetVanta 7100	Adtran calls this an "office-in-a-box," with intgrated IP-PBX, 24-port Power over Ethernet switch and IP router; includes firewall, quality-of-service and virtual private networking best suited to branch offices and small agencies
Alcatel USA Inc. Plano, Texas (800) 252-2835 www.usa.alcatel.com	OmniPCX Enterprise	A 3U rackmount IP-PBX for medium to large enterprises supports Web-based soft phones, unified messaging, Diffserv and other quality-of-service standards; can scale to 50,000 users
Avaya Inc. Basking Ridge, N.J. (866) 462-8292 www.avaya.com	G700 Media Gateway, S8000 Series Media Servers, 4600 Series IP Telephones, Communication Manager	The G700 enables IP/TDM environments and can be integrated with an S8300 Media Server for internal call control; company's phones support H.323, and SIP Communication Manager provides the underlying call processing platform
Cisco Systems Inc. San Jose, Calif. (800) 553-6387 www.cisco.com	Cisco Integrated Services Routers, 7800 Series Media Convergence Servers, 7900 Series IP Phones, Cisco CallManager	Cisco has a line of gateways that support voice traffic; the Media Convergence Servers can support up to 30,000 IP phones in a single CallManager cluster
NEC Unified Solutions Inc. Irving, Texas (800) 240-0632 www.necunifiedsolutions.com	Univerge NEAX Voice Systems	Family of IP-PBX systems includes models for various enterprise sizes; NEAX 2400 IP Exchange also support peer-to-peer switching
Nortel Government Solutions Inc. Fairfax, Va. (703) 679-4900 www.nortel.com	Business Communications Manager, Communication Server 1000/2100, Multimedia Communication Server 5100	BCM is designed for small and midsize offices and includes VOIP, unified messaging, routing, firewall and wireless support; Server 1000 supports H.323, Server 2100 handles H.323 and SIP, and MCS 5100 supports SIP
Siemens Corp. New York (800) 743-6367 www.usa.siemens.com	HiPath 4000 Series	A SIP-based IP-PBX for midsize to large enterprises; supports up to 12,000 users with quality-of-service call rerouting, trunking, unified messaging and other features