



**BUSINESS CONTINUITY
SECURITY
EMERGENCY MANAGEMENT**



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Comparison Report: Voice Recovery Service Providers

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Executive Summary

Timely recovery and restoration of voice communications systems and network services is essential following a disaster. To ensure rapid recovery of voice services, either at a firm's primary office or one or more alternate locations, it is necessary to activate specialized voice recovery services. Several options are available to help businesses recover vital voice communications systems and infrastructures. CPM *Global Assurance* is pleased to present a comparison report that describes the key aspects of voice recovery systems (VRS).

We invited the following companies to respond to this survey:

Gema-Tech www.gematech.com
TeleContinuity, Inc. www.telecontinuity.com
VoiceGard www.voicegard.com
Voice Response Systems www.voiceserv.net

After numerous attempts and follow-ups, we received and validated responses from TeleContinuity and VoiceGard.

The following sections describe the survey questions, and your responses will be used to compile comparison tables of all available offerings.

Description of Items Covered in Survey

To understand all the relevant issues with voice response systems, we asked each vendor the following questions about their products and services. In some cases the question will be self-explanatory; in others we will clarify our enquiries.

Product name – Provide the name of product or service

Type of system – Describe how the product/service works, e.g., premises-based system, web-based system

Number of customers – Provide current count of customers

Number of customers who have used the service in an actual recovery – This indicates how often the service has been used in a recovery situation

Company – Provide company name

Address – Provide address, city, state, province, postal code, country

Contact – Provide primary business contact

Phone – Provide main phone number

Fax – Provide appropriate facsimile number

Toll-Free – Provide toll-free or free-phone number

Web site – Provide primary web site address

E-mail – Provide primary email address for enquiries

Distribution channels – Describe how products/services are sold, e.g., direct, by distributors, OEM vendors, etc.

Warranty – Describe the primary warranty, supplemental warranties, and any other guarantees

Service Level Agreement – Specify if SLAs are available or if customer-proposed SLAs will be considered

System environment – Describe the technology environment in which the system/service operates, e.g., server-based, PC-based, network connectivity elements, external network requirements

Network environment – Describe the network requirements, e.g., Internet / POTS / T-1 connections, wireless connections, need for carrier/operator-based call redirection services

System/service pricing – Describe primary pricing elements, e.g., monthly costs, installation costs, equipment costs, software licensing fees, other fees

Training – Describe system/service training program provided, e.g., on-site, off-site; training materials provided; availability of post-cutover follow-up training

Documentation – Describe all documentation provided, e.g., printed manuals, CDs, electronic (email) bulletins, electronic follow-up content

Maintenance – **Describe maintenance service provided, e.g., baseline level of service, upgraded maintenance programmes**

Installation process – Describe level of support provided for ordering basic network services, special service arrangements, hardware and software, pre-installation testing, carrier/operator coordination, vendor coordination, post-cutover follow-up; customer satisfaction assurance

Minimum/maximum number of standard PBX/key/hybrid stations supported – Provide minimum/maximum ranges

Minimum/maximum number of ACD/call centre agent stations supported – Provide minimum/maximum ranges

Minimum/maximum number of POTS/DID/DDI/T-1/E-1/PRI lines supported – Provide minimum/maximum ranges

System configuration – Describe how the product/service is configured, e.g., standalone product connected to existing system, value-add product layered on top of existing system

Network connectivity – Describe how system/solution connects to carrier/operator/client networks, e.g., use of T1, E1, IP, POTS service; support for industry standards, support for EIA/TIA standards, support for ANSI standards

Carrier independence – Describe how your service is/is not dependent on established primary/alternate carrier/operator infrastructures for the provision of service

Maximum POTS, T1/E1/PRI, other channels – Describe the number/type of channels needed to implement the service; e.g., number of channels may vary dependent on size of system

System, database setup – Describe the effort needed to design, program and implement the system and associated database(s)

Imported data – Describe the need for any externally provided data to implement the system, e.g., database of all phone system extensions, names of internal/external contacts

Site of system “engine” – Specify where primary system processing element is located, e.g., customer site, vendor site, carrier/operator exchange office

Equipment installed on site – Describe hardware configured in a typical installation, e.g., servers, routers, hubs, IP phones, standard phones

Equipment installed in recovery site – Describe hardware configured in a typical recovery site installation, e.g., servers, routers, hubs, IP phones, standard phones

Software installed on site – Describe software, e.g., clients, utilities, special packages installed in primary site

Software installed in recovery site – Describe software, e.g., clients, utilities, special packages installed at designated recovery site

System installation duration – Provide range of installation time including data gathering, planning and design, configuration design, network service installation and testing, system installation and testing, cutover acceptance testing, and system handover to customer

Recovery facilities – Describe any operations centre or other facilities that are integrated into your solution

Technology survivability – Describe how your technology and solutions are protected from disaster situations, e.g., power supplies, diversely configured network infrastructure, use of multiple carriers/operators, hardened buildings

Disaster notification process – Describe how customers contact you to initiate a recovery, e.g., phone, email, web browser, mobile phone

Recovery activation process – Describe how customers recover their services using your solution

Call redirection options – Describe the technology options available for connecting calls in the aftermath of a primary voice system technology disruption, e.g., telephones, mobile phones, PDAs, IP phones

Network service bypass capabilities – Describe how your service recovers around traditional carrier/operator-based local access networks or other specialised networks that may have been disrupted

Support for call centres – Describe how your firm supports emergency call centre requirements

Support for voice messaging – Describe how your firm supports emergency voice messaging

Additional features – Describe additional features of your solution, e.g., voice conferencing, 800 service redirection, VoIP support, web portal, emergency message notification, email notification, wireless technology support

Customer customization – Describe the level of customization available to customers

Administrative services – Describe human-machine interface services provided

Reports available – Describe basic and optional reports available

Connectivity to PBX/ACDs – Specify PBX/ACD systems supported by your solution

Connectivity to Centrex systems – Specify if your system is compatible with Centrex technology

Connectivity to business continuity software products – Specify if your system is compatible with business continuity software products, e.g., from companies like IBM, HP, Strohl Systems

System security provisions – Describe how your solution is secured from cyberthreats, e.g., hacking, spam

Other important features – Describe other features and support capabilities offered by your service

Product Comparisons

The following pages provide detailed responses from TeleContinuity and VoiceGard, the two respondents, to the questions asked in the survey.

Enquiry Item	TeleContinuity, Inc.	VoiceGard
Product Name – Please provide the name of your product or service	TeleContinuity Service.	VoiceGard (TCRS) Telecommunications Continuity Restoration Service / (ERS) Emergency Response Service
Type of System – Describe how the product/service works, e.g., premises-based system, web-based system	Survivable backup telecommunications system to maintain call continuity during disasters or evacuations. A hosted service.	Web Portal; Customer defines critical numbers for recovery; VoiceGard works with carrier, calls are directed to VoiceGard recovery network, calls directed to predetermined end point as described by the plan. End points include: cellular, pots, VoIP; delivery mediums used include PSTN, IP, Satellite and other alternative methods.
Number of customers	20	Not disclosed
Number of customers who have used the service in an actual recovery	None yet	One declaration; restoration successful
Company – Company name	TeleContinuity, Inc.	VoiceGard
Address – Address, city, state, province, postal code, country	9700 Great Seneca Highway Rockville, MD 20850	1951 Old Cuthbert Rd Suite 206 Cherry Hill, NJ 08034 USA
Contact – Provide primary business contact	Roy Pinchot	Jim McFadden
Phone – Provide main phone number	240-543-6235	1-866-331-4273 ext 647
Fax – Provide appropriate facsimile number	240-597-0503	1-856-669-5200
Toll-Free – Provide toll-free number		1-866-331-4273
Web site – Provide primary web site address	www.telecontinuity.com	www.voicegard.com
E-mail – Provide primary email address for inquiries	rpinchot@telecontinuity.com	Sales@voicegard.com
Distribution Channels – Describe if product/service is sold direct, by distributors, OEM vendors, etc.	Sold direct and through channel partners: MCI, SIA, and others.	Direct and indirect sales channels. Strategic alliance for VARs
Warranty – Describe the primary warranty, supplemental warranties, any other guarantees	Service is fully warranteed	Not applicable with this service
Service Level Agreement – Specify if SLAs are available or if customer-proposed SLAs	SLA is provided with client contract	Restoration service SLA's range from one half hour to 24 hours depending upon selected services

Enquiry Item	TeleContinuity, Inc.	VoiceGard
will be considered		
System Environment – Describe the technology environment, e.g., server-based, PC-based, network connectivity elements, external network requirements	Server based with gateways provisioned from both PSTN and Internet.	The VoiceGard solution takes advantage of a secure IP based network, utilizing both MS and Linux server based solutions.
Network Environment – Describe the network requirements, e.g., Internet / POTS / T-1 connections, wireless connections, need for carrier-based call redirection services	Network includes PRIs, Internet	The VoiceGard Recovery Network consists of Internet / PRI /T1 connectivity and utilizes carrier redirect services to import designated calls onto the VoiceGard Recovery Network.
System/Service Pricing – describe primary pricing elements, e.g., monthly costs, installation costs, equipment costs, software licensing fees, other fees	Pricing is monthly by the covered telephone line. Set up fee is a one-time charge.	Pricing includes: Implementation costs per location, monthly recurring costs, user licensing, declaration costs, applicable usage charges
Training – Describe training program, e.g., on-site, off-site; training materials provided; post-cutover follow-up training provided	Training is provided for telecom managers with extensive online help provided.	VoiceGard orientation program includes: Internet based training for interactive web portal, dedicated engineering staff to assist with implementation, certification, and ongoing testing of the recovery plan.
Documentation – Describe all documentation provided, e.g., printed manuals, CDs, e-bulletins, electronic follow-up content	There are online manuals and quick startup guides	VoiceGard Web Portal User guide, electronic informational package, electronic declaration notifications. Secure online storage through the web portal is available to each customer for emergency procedural documentation.
Maintenance – Describe maintenance service provided, e.g., baseline level of service, upgraded maintenance programs	Maintenance is provided for internal network, etc. but as there is no client equipment there is no maintenance requirement for customer side.	There is no customer premise equipment required. The IP Phone for VoIP services, is provided, maintained and supported by VoiceGard.
Installation Process – Describe level of support provided for ordering basic network services, special service arrangements, hardware and software, pre-installation testing, carrier coordination, vendor coordination, post-cutover follow-up; customer satisfaction assurance	Installation is extremely simple. Client supplies spread sheet with covered number, name of user and email address.	There are several phases involved with setting up a customer for telecommunication recovery. Each customer is assigned to a VoiceGard POC to coordinate all facets of the configuration and setup process. Carrier coordination and configurations are also handled by the VoiceGard Operations Center. Upon declaration, the VoiceGard Operations Center will assist in the recovery and restoration efforts up to and including the return of normal business operations.
Minimum/Maximum Number of Standard PBX/Key/Hybrid Stations Supported –	N/A	VoiceGard offers a scalable solution and is agnostic to the customer premise equipment.

Enquiry Item	TeleContinuity, Inc.	VoiceGard
Provide minimum/maximum ranges		
Minimum/Maximum Number of ACD Agent Stations Supported – Provide minimum/maximum ranges	N/A	VoiceGard offers a scalable solution and is agnostic to the customer premise equipment.
Minimum/Maximum Number of POTS/DID/T-1/E-1/PRI Lines Supported – Provide minimum/maximum ranges	N/A	VoiceGard Recovery Centers are collocated within Carrier facilities and are scaled to support the communication requirements of the customer.
System Configuration – Describe how the product/service is configured, e.g., standalone product connected to existing system, value-add product layered on top of existing system	TeleContinuity does not have any physical connection on the client’s premises. All equipment and processes are in TeleContinuity facilities. Clients have extensive Web interfaces for command and control.	VoiceGard inserts itself as a virtual PBX in the event of a customer emergency/declaration. All desired numbers designated during the setup phase are forwarded to the VoiceGard Recovery Network. The calls are then sent to end user devices as noted in the web recovery plan.
Network Connectivity – Describe how your system/solution connects to carrier/client networks, e.g., use of DS1, E1, IP, POTS service; support for industry standards, support for EIA/TIA standards, support for ANSI standards	TeleContinuity connects via PRI and DS3	Carrier connectivity is provisioned over PRI circuits that adhere to all industry standards. Customer connectivity may include PSTN, Internet and Satellite services based upon solution provided to achieve the customers communication requirements.
Carrier Independence – Describe how your service is/is not dependent on established primary/alternate carrier infrastructures for the provision of service	TeleContinuity is not dependent on any single carrier as it utilizes all carrier (PSTN) and Internet facilities – operating over whatever networks are still in operation during a disaster.	VoiceGard interfaces with all carriers and ISPs. In the event that carrier facilities are unavailable, VoiceGard ERS can be utilized to provide Internet connectivity and VoIP via satellite.
Max POTS, T1/E1/PRI, Other Channels – Describe the number/type of channels needed to implement the service	Number of channels is a function of the number of lines contracted for coverage.	VoiceGard is a scalable solution and will support the necessary communication requirements of the customer.
System, Database Setup – Describe the effort needed to design, program and implement the system and associated database(s)	Not required.	There are two components to the database: the client information and the telecom service information. The customer has access to a secure portal designed for input of corporate recovery information, and the VoiceGard Recovery Centers have systems that require telephony configurations maintained by the VoiceGard Recovery Center.
Imported Data – Describe the need for any externally provided data to implement the system, e.g., database of all phone system extensions, names of internal/external	Setup is extremely simple. Client supplies spread sheet with covered number, name of user and email address and carrier call forwarding options if any.	Customers can import a .txt (tab delimited) file with email addresses of users to automatically setup user accounts and send out notification to the end user. Information can also be exported to 3 rd party DR plan

Enquiry Item	TeleContinuity, Inc.	VoiceGard
contacts		software packages.
Site of System “Engine” – Specify where primary system processing element is located, e.g., customer site, vendor site, carrier switching office		The VoiceGard Recovery Centers are collocated in secure, carrier facilities, taking advantage of emergency power and interconnect options. The VoiceGard web portal is located and maintained as an ASP.
Equipment Installed On Site – Describe hardware configured in a typical installation, e.g., servers, routers, hubs, IP phones, standard phones	No equipment is installed on site.	No additional hardware is required. Should a Customer select an IP based recovery solution, all remote IP Phones are provided by VoiceGard.
Equipment Installed in Recovery Site – Describe hardware configured in a typical recovery site installation, e.g., servers, routers, hubs, IP phones, standard phones	No special equipment is installed in recovery site. Clients use their standard telephones, cell phones or laptop/computers.	The VoiceGard Recovery Center maintains the highest level of security in a routed/switched environment supporting the VoiceGard telecommunication systems.
Software Installed on Site – Describe software, e.g., clients, utilities, special packages installed in primary site	No software is installed on site.	None Required
Software Installed in Recovery Site – Describe software, e.g., clients, utilities, special packages installed at designated recovery site	No software is installed at recovery site.	None Required
System Installation Duration – Provide range of installation time from data gathering, planning and design, configuration design, network installation and testing, system installation and testing, cutover acceptance testing, system turnover to customer	TeleContinuity can be active in 5 days depending on volume.	Once the customer has identified all necessary corporate recovery information, a typical service implementation can require up to 45 days. This includes the network and customer certifications as well as partitioning services with the appropriate carriers.
Recovery Facilities – Describe any operations center or other facilities that are integrated into your solution	N/A	VoiceGard will work with any recovery facility that the customer has contracted with.
Technology Survivability – Describe how your technology and solutions are protected from disaster situations, e.g., power supplies, diversely configured network infrastructure, use of multiple carriers, hardened buildings,	TeleContinuity needs only a working device and connection to either the PSTN or the Internet to be able to deliver and initiate calls.	VoiceGard’s Recovery Network is located in hardened facilities taking advantage of emergency power, multiple carriers and redundant systems. All VoiceGard systems are monitored 24x7 and alerts are sent via email and text paging.
Disaster Notification Process – Describe how customers contact you to initiate a	Customers can activate service by internet, telephone, email or SMS.	A call is made to the VoiceGard 800 Disaster declaration number which is manned 24x7. Once the

Enquiry Item	TeleContinuity, Inc.	VoiceGard
recovery, e.g., phone, email, web browser, cell phone		call is validated, the recovery plan is invoked.
Recovery Activation Process – Describe how customers recover their services using your solution	Once activated, all incoming calls are rerouted to the new location and device of user.	The solution is designed based on customer requirements. Once the VoiceGard recovery plan is invoked, the designated numbers are routed to the VoiceGard Recovery network and sent to the planned destination device (IP Phone, Cell, POTS, Other)
Call Redirection Options – Describe the technology options available for connecting calls in the aftermath of a primary voice system technology disruption, e.g., telephones, cell phones, PDAs, IP phones	TeleContinuity will reroute calls from all voice networks and VoIP, as well as over all talking devices during or following a disaster: POTS phone, cell phone, IP phone, laptop, PC, PDA.	The customer designates their recovery numbers which get redirected at the carrier level to the VoiceGard Recovery Network. The call is then directed to the appropriate end user device. Supported devices include but are not limited to: VG IP Phone, Cell, POTS, PDA
Network Service Bypass Capabilities – Describe how your service recovers around traditional local access networks or other specialized networks	If there is a local central office outage, calls placed through the client’s TeleContinuity supplied toll free number will avoid the damaged local loop and deliver calls to the subscriber’s new location and device.	Multi-carrier integration at POP level. By bypassing the local carrier loop most carrier service disruptions are avoided. VoiceGard ERS can further be implemented to provide Internet connectivity and VoIP via satellite.
Support for Call Centers – Describe how your firm supports emergency call center requirements	TeleContinuity can back up call center operations by rerouting calls to other locations.	Supported – Customized solutions for enhanced recovery services are available. Robust Call center applications include items such as: Reporting, Priority Routing, Queueing, CLID, Intelligent Recordings, Agent Help Functions, Supervisor Support, Web based Supervisor and Agent Reporting.
Support for Voice Messaging – Describe how your firm supports emergency voice messaging	TeleContinuity provides voice messaging for subscribers during the activation period.	All VoIP users receive voicemail as part of the standard recovery package.
Additional Features – Describe additional features of your solution, e.g., voice conferencing, 800 service redirection, VoIP support, web portal, emergency notification, email notification, wireless support	TeleContinuity also provides Company specific emergency web portal, conference calling, speed dialing, voice mail, messaging via internet.	Features included with VoIP are voice conferencing, for up to 8 people, extension dialing, free on net calls. All services include web portal, online support, 24 x 7 call center support.
Customer Customization – Describe the level of customization available to customers	TeleContinuity will customize auto attendant messages, interfaces and most other elements of the TeleContinuity service.	VoiceGard will work with each customer to develop the best plan for their requirements.
Administrative Services – Describe human-machine interface services provided	TeleContinuity provides an extensive dashboard allowing the telecom manager full control over the enterprise’s phone system during an emergency as well	The VoiceGard web portal is designed to securely store the customer’s recovery information. An automated email including the web-link and initial user credentials

Enquiry Item	TeleContinuity, Inc.	VoiceGard
	as providing graphic information about operation of the entire TeleContinuity network.	can be generated to solicit information required to complete individual corporate user profiles. VoiceGard operations staff works with both the customer and carriers to implement the desired recovery plan.
Reports Available – Describe basic and optional reports available	Extensive reports are available detailing activations, minutes used, etc.	Reporting is available from the VoiceGard web portal, and through call usage reports provided by VoiceGard.
Connectivity to PBX/ACDs – Specify PBX/ACD systems supported by your solution	Utilizing a gateway, company PBX can receive incoming calls via a CSP when the cable is cut or central office is down.	VoiceGard is voice system agnostic. We become the customers virtual PBX when they invoke their recovery plan.
Connectivity to Centrex Systems – Specify if your system is compatible with Centrex systems	TeleContinuity is compatible with Centrex.	Centrex is fully supported
Connectivity to Business Continuity Software Products – Specify if your system is compatible with business continuity software products, e.g., from companies like IBM, HP, Strohl Systems	TeleContinuity is fully compatible.	VoiceGard web portal information can be exported into a txt (tab delimited) file. VoiceGard currently partners with Strohl Systems and TAMP for voice recovery module integration.
System Security Provisions – Describe how your solution is secured from cyberthreats, e.g., hacking, spam	TeleContinuity utilizes all available COTS security software and hardware, and in addition has its own security staff with proprietary software deployed. In a denial of service attack on a POP, that POP will be automatically cut out of the network and calls will flow to a still secure POP in another location.	The VoiceGard Recovery center utilizes several 3 rd party products to secure and monitor the network. The web portal uses encryption and authentication credentialing for customer secure access. System alerts are sent via email and text pages to VoiceGard staff 24x7 for immediate response.
Other Important Features – Describe other features and support capabilities offered by your service	The TeleContinuity network has no single point of failure in the system and is geographically dispersed across the country to ensure survivability during any disaster. TeleContinuity can handle any volume of telephone lines, has bandwidth available at all times to handle client emergencies, and is priced to afford survivable backup communications for an entire enterprise – not just a few key executives.	Conference calling, network DSS/BLF, CLID, extension to extension calling, free on-Net calling, voice announce paging, group paging