Table of Contents:

Site Planning................................................................. 3-7
Conducting a Successful Videoconference...................... 12-13
Learning Videoconferencing Etiquette............................... 14-16
About VSGi ................................................................. 17-18

Who to Contact

<table>
<thead>
<tr>
<th>Service</th>
<th>United States</th>
<th>International</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Inquiries</td>
<td></td>
<td></td>
<td>877-402-VSGi 703-848-8200</td>
</tr>
<tr>
<td>Service &amp; Support</td>
<td></td>
<td></td>
<td>888-VTCSERV 703-848-8210</td>
</tr>
<tr>
<td>24-Hour Bridging Reservations</td>
<td></td>
<td></td>
<td>866-758-7064 Opt 1 706-643-4170 Opt 1</td>
</tr>
<tr>
<td>24 Hour Bridging Support</td>
<td></td>
<td></td>
<td>866-758-7064 Opt 2 706-643-4170 Opt 2</td>
</tr>
</tbody>
</table>
Site Planning for Videoconferencing

This document is designed to help managers who have been given responsibility for implementing one of the most effective communication tools—videoconferencing technology. Understanding the value of face-to-face communication, your next step is to design the best meeting environment for your videoconferences. This should be an environment where people can work together from distant locations just as naturally and effectively as if they were in the same room.

VSGi will provide answers to ensure a successful implementation!

- Which Room Do I Use?
- What Connections Do I Need?
- How Do I Arrange The Room?
- How Can I Optimize The Room?
- Do I need any Additional Equipment
- Do you have Sample Room Arrangements?
- Where do I go from here?

Which Room Do I Use?

Most offices, conference rooms, and classrooms offer a comfortable meeting environment for videoconferencing. That's because a typical room that works well for ordinary meetings usually works just as well for videoconferences. If you plan to install a videoconferencing system for personal video calls, you can simply use your own office. If you plan to hold very large group events, you can easily set up in a classroom, lecture hall, or auditorium. For smaller videoconferences, a square room is acceptable. For larger meetings (6 or more people), a rectangular room is more desirable.

If you have a choice of rooms, consider the following criteria and suggestions to ensure the best audio and video quality. Your room does not have to be monochromatic but keep it simple.
Windows

Windows should either be behind the videoconferencing system or have the ability to be covered (blinds, window coverings, etc.).

Table & Seating

The room should comfortably fit all of the people who participate in a typical meeting. Wide-angle lenses may also be considered if the room is particularly wide. Soft surfaces on tables and chairs are preferred to reduce audio echo. Most surfaces are acceptable such as wood or laminate. Steer away from hard surfaces such as marble, as well as dark or patterned tables. Lighter colored tables will reflect light upward and eliminate dark shadows on faces.

Lighting

The room should be amply lit evenly across the table with indirect fluorescent lighting. Spotlights may cause dark areas in a camera view depending on adequacy of the lights.

Ambient Noise

The room should be secluded from noises that may interfere with the audio of your call. This would include excessive air handling noise, copy machines, or other ambient noises.

Walls

The best choice for wall color is a light blue. VSGi recommends Benjamin Moore paint numbers 1627 or 829. Avoid starch white since it creates too much of a contrast and casts deep shadows erasing facial features. You should also avoid dark colors or patterns on walls, chairs or clothing.

Power & Network

The system may require 2-3 electrical outlets – more for additional peripherals. All electric should be on a power surge protector. Both electrical and network connections should be close to where the system will be positioned to avoid lengthy cabling across the room.
The good news is that in most cases, you do not have to make changes to your room to hold successful videoconferences. Of course, you can always customize the room as you see fit. Consider these examples:

- Add your company name and logo to the wall
- Add accent lighting to give the room a warmer atmosphere
- Utilize existing a/v equipment such as VCR’s, DVD’s, projectors to further enhance your videoconferencing capability.
- Provision wireless audio and control panels to eliminate cables to the table

**What Connections Do I Need?**

**A Network Service Connection**
Before your videoconferencing system is ordered and deployed, you should order or provision a connection to a digital network service, such as an IP or ISDN service. For information about network services and equipment, talk to your local VSGi representative.

**A Lan Connection**
Most videoconferencing manufacturers offer the ability to manage a system remotely via your local area network through a PC browser. Depending on your network capabilities, you may also be able to videoconference using your IP network. A LAN connection will also provide you with the ability to access and display an internet connection during your videoconference.

**A Power Connection**
For electrical power, you need one standard duplex outlet, rated at 1,200-volt amperes. In most cases, you can use an ordinary wall outlet. Plan to locate the videoconferencing system within 6 feet (1.8 meters) of the outlet and be sure to use the outlet for the videoconferencing system only. Remember that you may need additional power outlets for network equipment, such as a network terminal adapter, or for any additional equipment that you plan to use during your videoconferences, such as a VCR, a computer, or an auxiliary camera.
Safety Considerations
To make sure that people can move safely around your videoconferencing room, plan to neatly route all system cables by either:

- Using cable runners
- Installing a cable conduit in the floor
- Routing the system cables over suspended ceiling tiles or along wall moldings.

How Do I Arrange The Room?

An important design goal to reach when you arrange your video conferencing room is to make sure that the videoconferencing system can see and hear all of your meeting participants.

Camera’s Field Of View
The first thing to consider as you plan your room arrangement is the camera’s field of view, which is the area that the camera sees. The camera’s field of view increases with the distance between the camera and your meeting participants. The more participants in your videoconference, the farther you need to place the camera from the participants.

For desktop videoconferencing, you’ll be sitting at your desk with the camera placed right on top of your computer monitor.

For group videoconferencing, arrange the room using this simple rule: For every participant that you plan to have in the camera’s field of view, add at least 2 feet (.6 meter) to the distance between the camera and the participants. For example, if you plan to have four participants facing the camera, locate the videoconferencing system at least 8 feet (2.4 meters) from the participants.

For large venues with fixed seating, you might want to locate the videoconferencing system on a raised platform or stage for better viewing. Remember that you can always use an auxiliary camera in your room, either mounted on a tripod or installed in the ceiling. An auxiliary camera can view anything that falls outside the field of view of the videoconferencing system’s camera, such as additional meeting participants, a whiteboard, or a flipchart.
Microphone Placement
Sound is just as important as the picture in videoconferences, so an important element is microphone placement in your room. If you have a desktop system, you’ll have a microphone or speakerphone on your desktop within arm’s reach. or you might have a headset or earpiece that has a microphone.

If you have a videoconferencing system for group meetings, consider the following:

- Place the microphone(s) on the table in front of the meeting participants. A standard microphone works well for up to four participants.
- Use a lapel or wireless microphone when someone is giving a presentation or moves about the room when speaking.
- If you plan to use a videoconferencing system in a very large room, lecture hall or auditorium, you might want to install ceiling microphones to pick up the entire room or audience responses.
- As a rule, the more microphones you have, the more background noise you could pick up. More than two microphones typically require a microphone mixer to accommodate the additional microphones as well as to provide gating. Gating will assist with the elimination of background noises and “gating” to the appropriately placed microphone for proper audio pick up.

Room Acoustics
In most rooms, the existing acoustics are fine for videoconferencing. If you have a room where people sound like they’re talking into a tin can, you can always make small modifications to the room to absorb the annoying sound reverberation. For example, if your room has large windows that can cause sound to reverberate, install curtains, drapes, or blinds. Tile floors and ceilings of hard materials can also cause sound reverberation. Consider installing a carpet and adding acoustic ceiling tiles.
How Can I Optimize the Room?

Videoconferencing systems usually work well without special room treatment or lighting. However, to get the best from your videoconferencing room, consider the following suggestions.

The Best Lighting
The best light source for videoconferencing is indirect fluorescent lighting, such as louvered ceiling lights set at a 45-degree angle. Indirect lighting minimizes shadows on participants' faces. The result? Everyone sees a more flattering image of your meeting participants. To get the truest skin tones, you can install fluorescent lights with a color temperature of 3500-degrees Kelvin.

If you want to measure the illumination in the room, use a hand-held light meter. Light intensity should be at least 70 foot-candles (740 lux) when you direct the meter at your participants' faces.

What should you avoid?
- Mixing fluorescent and incandescent lights that operate between 30 and 50 kHz.
- Variable light sources such as direct sunlight. Consider window treatments to control the lighting coverage.
- Strong light sources behind participants. It will cause people to appear as darkened silhouettes losing most of the facial detail.

The Best Decor
The autofocus mechanism in the camera uses vertical lines in an object or its edges to determine the correct focus. When participants are sitting in front of a strong patterned background, the autofocus mechanism may become confused. It could result in the camera having difficulty finding the right focus. The best decor for your videoconferencing room is plain and simple so try to keep the area in the camera's field of view as uncluttered as possible. This keeps the focus of your videoconferences where it should be - on your participants. The best wall color is a neutral non-white color, such as light gray, light blue, or beige.

What should you avoid?
- Distracting objects such as mirrors or artwork on the walls within camera range.
- Dark or patterned walls, chairs and tables.
The Best Tables
Most rooms have rectangular or circular tables, and these are fine for videoconferencing. If you have a choice, select a table that can show all of your meeting participants facing the camera. For smaller conference rooms, a trapezoid shaped table works well. It gives you the effect of a broadcast news desk. For large conference rooms, you can arrange three rectangular tables to form a U shape.

Do I Need Additional Equipment?
Just as you use equipment to enhance your ordinary meetings, you should consider using equipment shown below during your videoconferences. Remember to locate the additional equipment so that it is convenient to use but doesn’t obstruct the camera’s field of view. These examples are not required for videoconferencing but will add functionality to improve the quality of the meeting.

- A second monitor shows meeting participants and presentation graphics at the same time. Larger monitors may also be desirable for larger rooms and audiences. Monitor sizes range from 27” traditional monitors to 60” plasmas.
- A VCR or DVD player can play or record your meetings.
- A document camera shows presentation materials, drawings, 35mm slides or overhead transparencies, as well as objects.
- An auxiliary (or second) camera shows anything that falls outside the field of view of the main camera, such as a flipchart or whiteboard. It can also be specifically placed to capture an audience or podium view.
- A computer/laptop can be specially connected to show output from the computer screen during a videoconference.
- Wired or wireless touch control panels that controls the videoconferencing equipment, a/v accessories – even lights and window treatments.
Where Do I Go From Here?

Accommodating the User Groups
At this point, you have identified the applications to be fulfilled and the benefits your organization will gain with the use of videoconferencing technology. How well do you know how people meet in your organization? For example, does the CEO always present using PowerPoint – does he walk around the room when speaking – does he use a whiteboard to exhibit his thoughts? Watch a meeting without participating and take note. The deployment of videoconferencing should adapt to users’ needs – not the reverse. Ask and find the answers to the questions below to ensure that you accommodating all of your user groups. The more departments and personnel utilizing the technology, the quicker you reach your return-on-investment and attain the goals you set when deploying videoconferencing.

- Do participants access the internet or collaborate on a spreadsheet?
- Do participants exhibit documents, presentations, objects or overheads?
- Do participants collaborate on a whiteboard and need to save the finished product?
- Do meetings also include audio participants?
- Do they need to include additional video sites?
- Does the designated room’s layout get changed often?
- Could one system be moved around to 2 rooms to accommodate initial needs?
- Do you have existing monitors or projectors that can expand the effectiveness of videoconferencing in a particular room?

Training
Once the technology is deployed, everyone will immediately change existing behavior and travel schedules. Unfortunately, this is wishful thinking. While most people enjoy the benefits of technology, embracing a new method of communication can be challenging. Training is critical to ensure that your user groups transition the appropriate meetings to videoconferencing. Training should cover not only the system and how to conduct a call, but understanding the internal scheduling procedures, as well as the company’s goals for usage and ROI. Even more important is making sure that users know how to get help if they have a problem. That help needs to be available in the room. It can be something as simple as a helpdesk phone number for assistance, to providing in-room troubleshooting tip guide, etc.
Management
As usage of the systems increase, you will find that scheduling and the management of shared assets becomes imperative to managing growth and scalability. There are several software management tools available to assist users with scheduling. It will help administrators with launching calls, network management, updates to systems, as well as reporting. Reporting can include tracking usage for budget allocation, tracking usage for growth needs, and many other areas.
CONDUCTING A SUCCESSFUL VIDEOCONFERENCE

There are basic considerations when conducting a videoconference call that can improve the quality and effectiveness of your meeting.

General Meeting Tips
Below you will find a list of general comments and tips to set expectations for your first video experience.

- Launch your call 5-10 minutes prior to the meeting start time so your meeting begins as scheduled. If you have not connected to the far site previously, consider doing a test call prior to the scheduled meeting. If you will be connecting to this site frequently, add them to your address book.
- Do not be intimidated. Videoconferencing is a great replacement for face-to-face meetings. You should feel comfortable in the meeting, talk clearly and look into the camera.
- Position the camera properly so that all participants will be in view. Consider establishing camera pre-sets for alternate views such as capturing a speaker at a lectern, or a “zoom in” on a designated speaker.
- Speak normally, you need not speak any louder than normal conversation if microphones are positioned adequately.
- Do not touch the microphone. Shuffling of papers or the “drumming” of fingers near the microphone can project loud noises on the far end.
- Follow normal meeting etiquette. More details on Videoconferencing Etiquette can be found in the next section of this planner.

Presentations During Your Meeting
Videoconferencing also supports the ability to present presentations, access the Internet, or display documents, etc. When presenting data or other material, the following guidelines should be considered:

- Use a minimum 16 point font or bold in Landscape mode
- Allow 1-inch margins on all sides of presented materials
- Avoid creating busy or animated slides. While these are great for local presentations, they can be very distracting and cause problems for your videoconference. Basic presentations with dark backgrounds (blue works best) and light yellow or white fonts work well.
- If using a flip chart or whiteboard, make sure camera can easily be moved to show entire board. (You may want to set a camera pre-set for this).
Dress Code
Sometimes patterns and prints on your clothing can be distracting to the videoconference.

Do:
- Typically it is best to wear solid colors that are not too dark.
- Dress in medium blue or pastel colored shirts. These colors transmit better than white, which can create glare.

Do Not:
- Wear clothing with overly detailed patterns; stripes, plaids, polka dots, etc. These fabrics can create “vibration” and require additional bandwidth to constantly send your updated image.
- Wear big, bright flashy jewelry. Big necklaces can reflect light and interfere with the way the camera sends your image.
LEARNING VIDEOCONFERENCE ETIQUETTE

Good face-to-face meeting skills easily translate to good videoconference meeting skills.

Before the Meeting
Many of the same practices for a regular meeting apply to a videoconference. A little more preparation will ensure that the technology is used to its optimal performance.

- Set your objectives and desired results. Prioritize topics to be discussed in an agenda sent prior to the scheduled meeting.
- Confirm the persons participating in the meeting and their availability to attend. Invitations or reservations to utilize a videoconferencing system should be under a unified calendaring system with other meetings.
- Save the video numbers for the other sites into the Address Book.
- Prepare visuals and other supporting documents to enhance the impact of your objectives. Connect your PC/laptop to the system and verify the proper display of your materials.
- Choose a Chairperson for each participating site. They will have the responsibility to ensure the room is prepared, system is up and operable, materials are ready, etc. Ensure other sites are aware of how to connect – “who will call who.”
- Set the camera angle to give participants the best possible view of the meeting room. Establish camera pre-sets if you anticipate multiple camera views are necessary.
- If the meeting room has windows, make sure blinds are drawn or adjusted to reduce any glare.

As the Meeting Begins

Do:
- Make sure the microphone is placed in the center of the table at an equal distance from all participants.
- Verify that the other site can hear you before proceeding
- Introduce yourself and hold roll call for each location. Make sure any participants located off-camera are also introduced.
- Relax and be yourself. Imagine that the people on the other side are sitting across from you.
- Always speak clearly and naturally.
Do Not:
- Put microphone too close to speakers. This is not necessary – the microphone is sensitive and able to pick up voices and sounds from up to 25 feet.
- Place papers near microphone(s).
- Leave your cell phone on or near the microphone. If possible it is best to turn cell phones off.

During the Meeting
Do:
- Allow the on-screen speaker to finish before responding. There is a slight delay in transferring video through a network.
- Use the mute button. All sites other than the one speaking should use the mute button and un-mute when they wish to speak.
- State your name and location prior to speaking when participating in a large meeting so that all participants know who is speaking. This is extremely helpful in multipoint calls.
- Be aware of which camera is in use. If the camera switches to show visuals, remember to switch it back when you return to your discussion. Try to fill the screen with as much as possible with people instead of tables, chairs or walls.
- Make sure to alert the other site(s) before sending graphics. This not only eliminates sending simultaneous graphics, but will also keep the other sites informed of changing displays.
- Create more participation by asking questions.

Do Not:
- Do not cough into microphones, tap your fingers, or shuffle papers near the microphone. The microphones can and will transmit up all of these sounds clearly and more loudly to the other site.
- Do not hold side conversations, this can be very distracting to all participants and can be transmitted to the other site. If you need to, make sure your microphone is muted.
- Ignore latecomers. Just like a face-to-face meeting, welcome and/or introduce late participants to all sites.
- Move the microphone to close to other audio equipment such as speakers to avoid feedback or static.
Ending the Meeting

Do:
• Notify each site that you are disconnecting the call once the meeting is completed
• Disconnect each site – make sure each location ends the call on their end
• Add any frequently dialed numbers into your address book. At the end of a call, most systems prompt you to save any new numbers into the address book.
• Leave the remote control in the room with the system
• Notify the technical administrator or your vendor about any technical difficulties or problems with your system promptly.

Do Not:
• Turn off equipment – the equipment is designed to remain powered on. Most systems will go into “sleep” mode similar to computers.
• Re-arrange the peripheral equipment or put microphones away
• Do not change channels or volume on monitors

For an in-depth consultation for your organization’s requirements, VSGi has personnel located around the US to make specific recommendations.

You may also review our product and service offerings at www.vsgi.com, email sales@vsgi.com or contact one of our sales professionals toll-free at 1.877.402.VSGi (1.877.402.8744).
Corporate Overview
A leader in visual collaboration and network solutions

Visual Systems Group, Inc. is a premier end-to-end voice, video, and web collaboration company with an 18-year history in the video conferencing industry. With its experience in product integration, network management, and high quality, on-site customer sales and service, VSGi delivers a seamless conferencing solution.

Our Solution
VSGi offers a unified portfolio of best-of-breed products and services. We provide a single source for:

- Network Solutions - traditional ISDN and a video-ready, open IP network
- Product Integration - quality product portfolio that includes hardware and software solutions
- Service Solutions - industry certified support staff providing premium installation, maintenance & integration services
- Conferencing Solutions - voice, video and web conferencing services that meet any type of meeting requirement

Our mission is to provide our clients tools that enable time-efficient decision practices that help shorten business cycles. How we do that: To promote successful communication practices, we learn how our customers currently communicate and show them they how they can communicate better in the future. We call this our "Best Practices" Implementation Methodology - these are strategies we have learned by working with companies who implement successful video networking.

Our Process
It takes more than best-of-breed products and a team of technicians to be successful. That is why we have developed an implementation cycle. Whether it's an installation of 2 video endpoints or a global network deployment, VSGi handles each implementation with the same level of care and professionalism. Our implementation cycle is comprised of six phases: planning, design, implementation, training, monitoring and maintenance. If you are a first or fifth time customer, we will manage the entire process to your satisfaction.

Our Customers
VSGi's customer base is comprised of Fortune 500 companies, multiple state contracts, federal government agencies, universities, and health care institutions worldwide. Commercial customers include: Clorox, E*Trade, Stanford University, Morgan Stanley, Cable & Wireless, Goodwill, Aspect Communications, Caterpillar, and many others. Our state contracts include: Florida, Georgia, and Delaware as well as a nationwide contract with MICTA. We also sell to the US Department of Health, US Navy, Army, Air Force, INS, Department of Justice, Department of Treasury to name a few.
Our Products and Services includes:

### Video End-points
- LifeSize
- Polycom
- Tandberg

### Video Infrastructure
- Codian MCU, IP VCR
- Polycom MCU
- RadVision MCU
- Tandberg MCU
- Cisco Routers
- Adtran Access Devices

### Network
- vIPConnect - video-ready, open architected IP network for video, voice and data
- Visual DialTone - traditional BRI/PRI ISDN network

### Conferencing Services
- V-Connect Video Bridging and Gateway Services
- V-Connect Voice Conferencing Services
- Meeting Visuals Web Conferencing powered by WebEx

### Management Software Solutions
- LifeSize Control
- Polycom Global Management System (GMS)
- Polycom Path Navigator & Polycom Web Commander
- RadVision Gatekeeper
- Tandberg TMS, Scheduler

### Video Peripherals
- NTSC/XGA/HD Plasma Monitors
- LCD projectors
- Interactive Whiteboards
- Document Cameras

### Streaming Solutions
- Codian
- Starback
- Conferserv

### Education, Service and Maintenance
- VSGi University "Visual Collaboration and Professional Development Courses"
- Installation
- Maintenance
- Network Engineering
- Managed Services