

How to organize and run audio/ videoconference

Zlatko Jelačić

CARNet Room Videoconferencing System

Zlatko.Jelacic@CARNet.hr

Q&A



- Do you really need VC?
- What kind of VC do you need?
- What kind of TCR do you need?
- How to organize the resources?
- How to prepare yourself for VC?
- How to run VC?
- How much does it cost?

Outline



- Introduction in teleconferencing
- How to organize room VC system
- How to run audio/videoconference
- Planning VC
- VC tips

Outline



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Introduction in teleconferencing



What is teleconferencing?

- transmission of image (video) and speech (audio) back and forth between two or more physically separate locations
- use of cameras, video displays, microphones, speakers
- standards, openness, interoperability
- currently not '*plug and play*'

Introduction in teleconferencing



Past:

- two groups:
 - those who could afford technology and network to establish meeting rooms
 - those who are able to travel to teleconferencing enabled location

Today:

- less expensive, more flexible technology
- 1996. - H.323 standard

Introduction in teleconferencing



Why and where teleconferencing:

- economy
- industry
- medicine
- education

Introduction in teleconferencing



What to expect from teleconferencing?

- from top audio and video ...
(Wow, it's like you're sitting right here with me!)
- ... to good audio with poor video
(Is that a new hair or is something wrong with your camera !?)

Introduction in teleconferencing



Types of teleconference:



According to interactivity:

- conference
 - two-site or multisite active communications

- streaming (!)
 - pros: less bandwidth, fittable
 - cons: one-way communication, low quality

Introduction in teleconferencing



Types of teleconference:



According to tools used:

- audioconference
 - audio, application and data sharing
 - pros: vs. videoconference less bandwidth
 - cons: visual communication
 - vs. phone: multisite, quality, application and data sharing, logistic, etiquette

Introduction in teleconferencing



Types of teleconference:



According to tools used:

- videoconference
 - video, audio, application and data sharing
 - pro: video
 - cons: bandwidth, codec requirements

- webconference
 - video, audio, application and data sharing
 - software codecs
 - pros: desktop requirements
 - cons: quality

Introduction in teleconferencing



Types of teleconference:

 *According to number of participants:*

- desktop conference
 - few participants
 - from PC
 - web cam, speakers, microphone
- room conference
 - 'unlimited' number of participants
 - TCR

Introduction in teleconferencing



Types of teleconference:

 *According to meduim:*

- ATM
- IP
- ISDN

Introduction in teleconferencing



Types of teleconference:

 *According to connectivity:*

- point-to-point
- multipoint

Outline



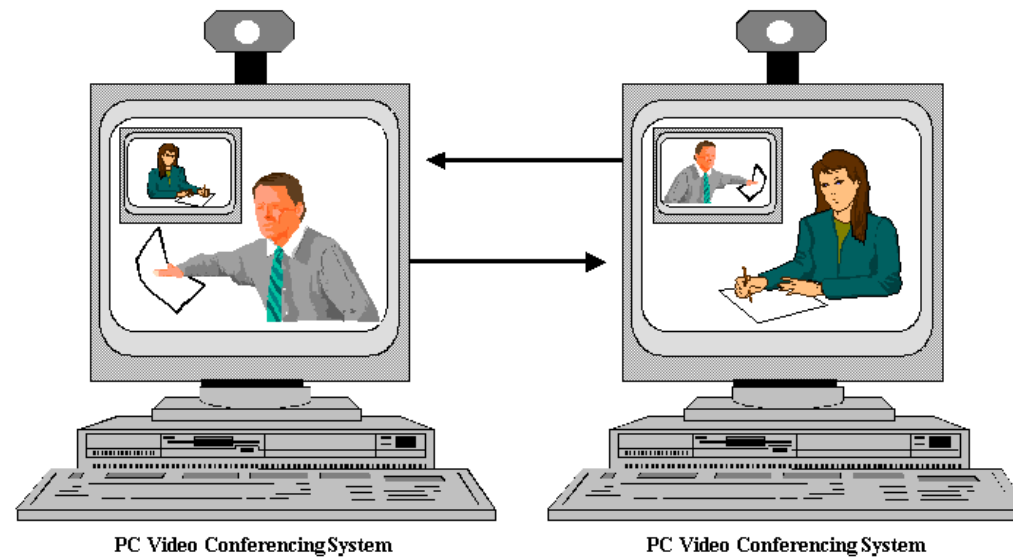
- Introduction in teleconferencing
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How to organize VC system

How to establish room VC system:

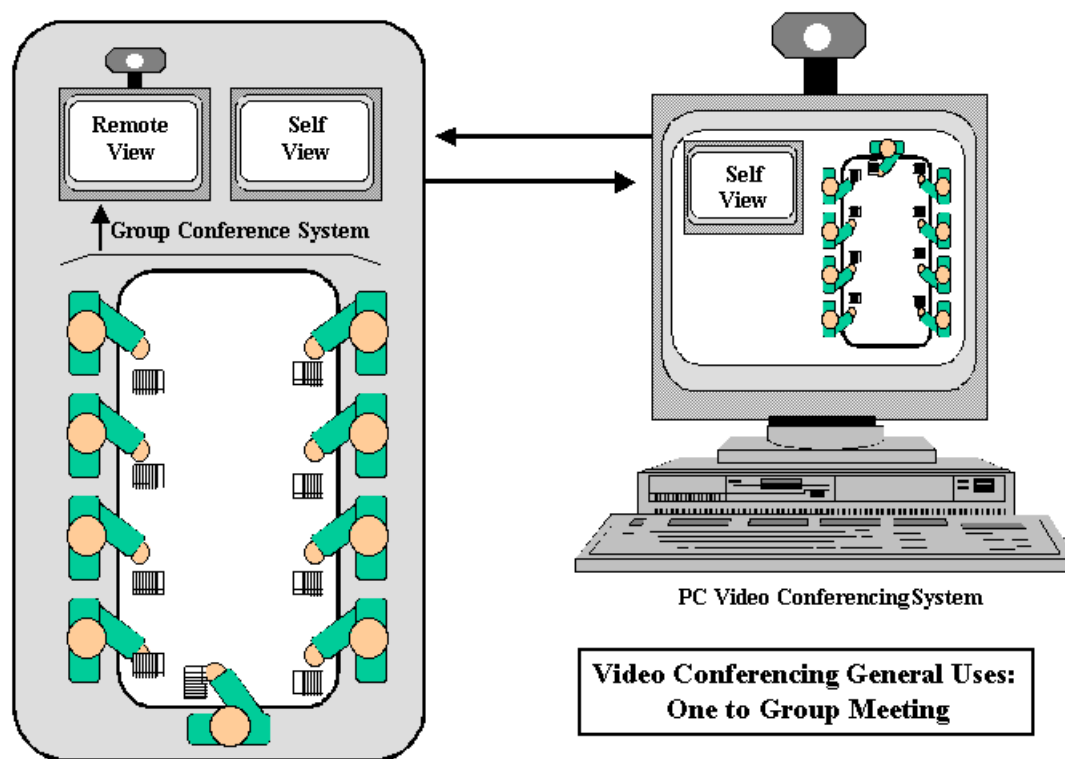
☰ *When room VC?*

- meetings

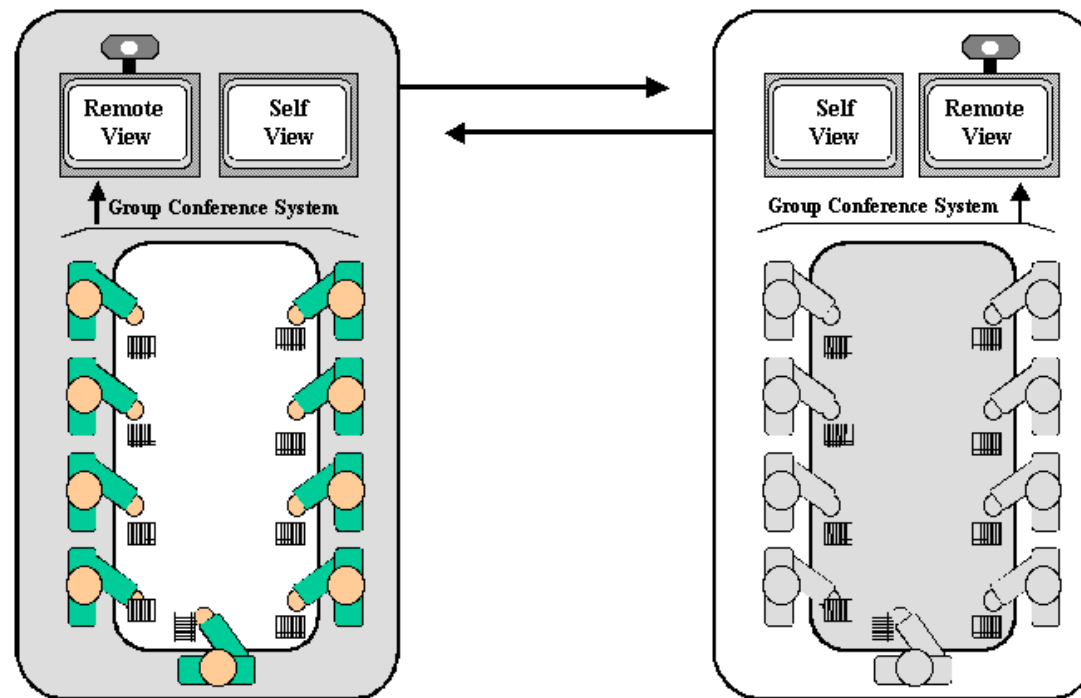


Video Conferencing General Uses:
One - to - One Meeting

How to organize VC system

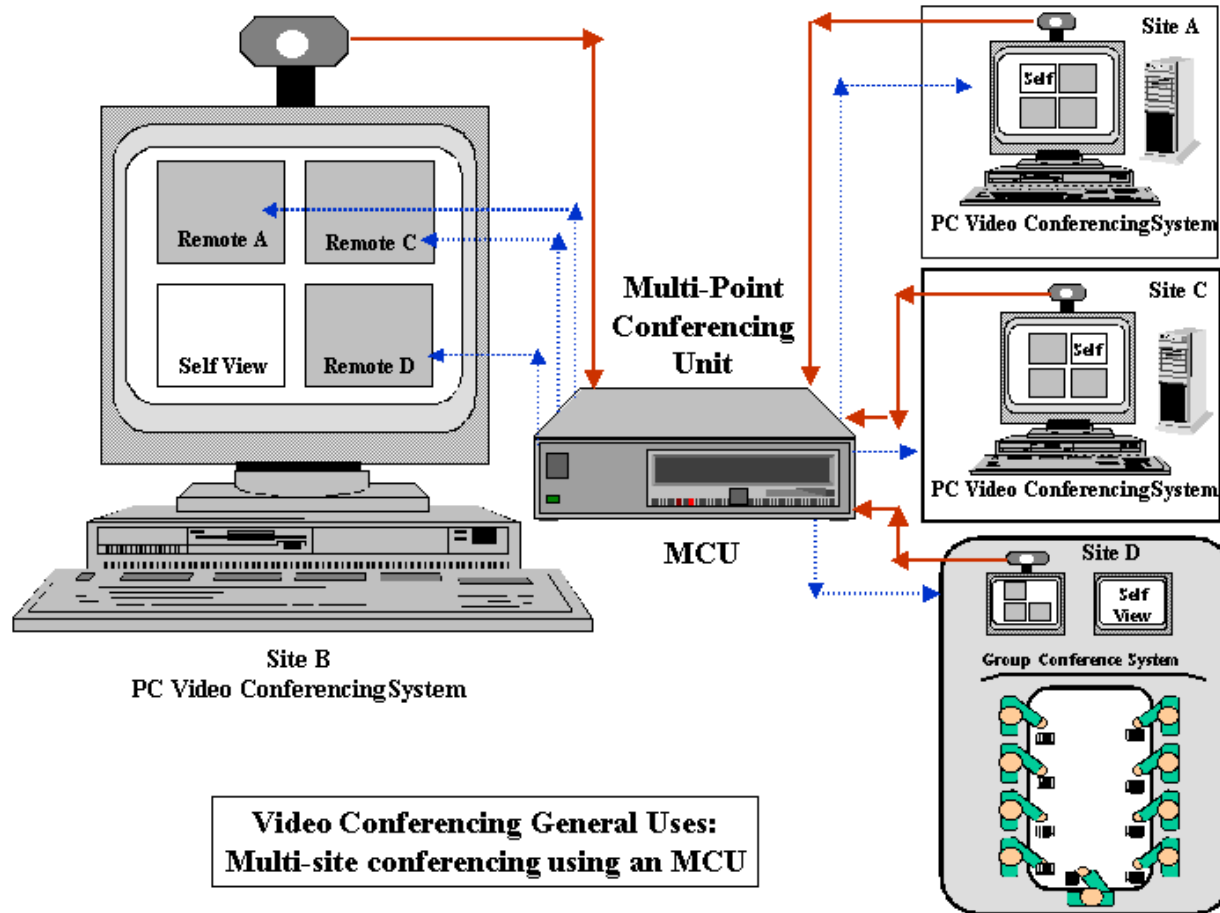


How to organize VC system



**Video Conference General Uses:
Group to Group Meeting**

How to organize VC system

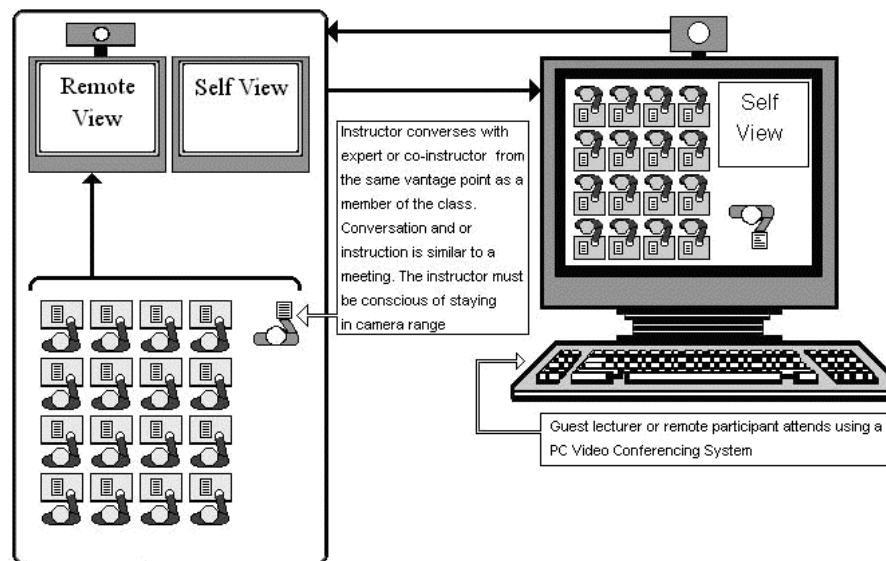


How to organize VC system

How to establish room VC system:

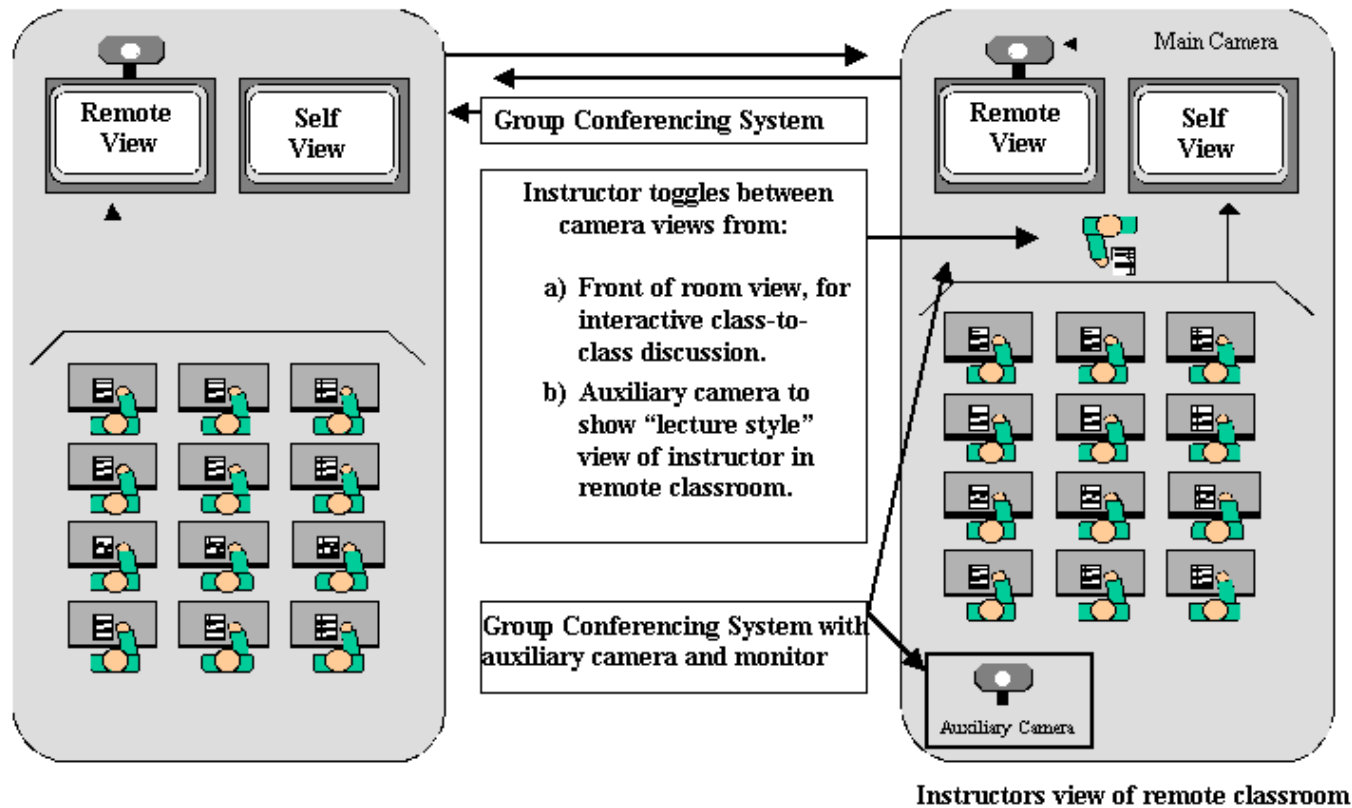
☰ *When room VC?*

- classrooms



**Video Conferencing in the Classroom:
Guest Lecturer, remote Co-instructor, or remote Attendee**

How to organize VC system



Video Conferencing in the Classroom:
Single Instructor with Local and Remote Classrooms

How to organize VC system



How to establish room VC system:



When room VC?

- Collaboration
- special applications
 - telemedicine
 - telecommuting
 - judicial applications
 - surveillance and security
- 'fly on the wall'

How to organize VC system



How to establish room VC system:

 *When room VC (in education)?*

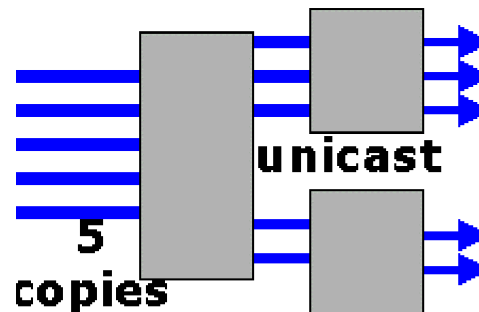
- distance lectures
- critical places
- collaboration
- multiple sites meetings

How to organize VC system

How to establish room VC system:

☰ *Define the needs:*

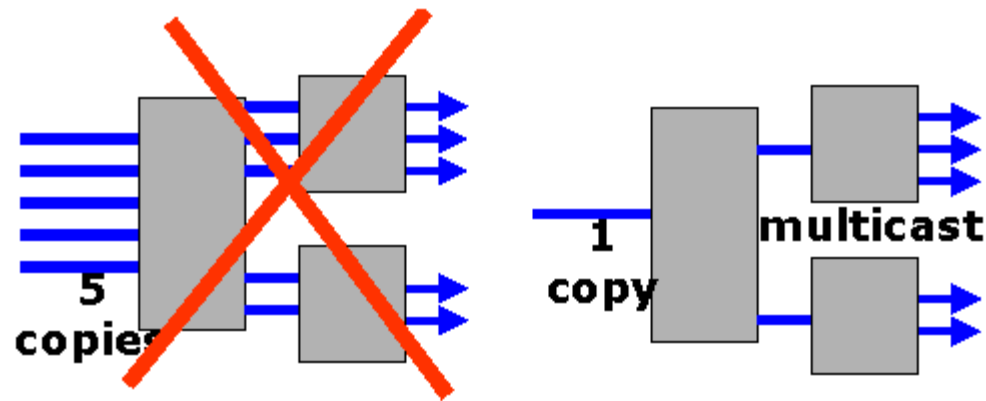
- big investments - evaluation needed :
 - number of sites in conference
 - ⇒ MCU - *Multipoint Control Unit*



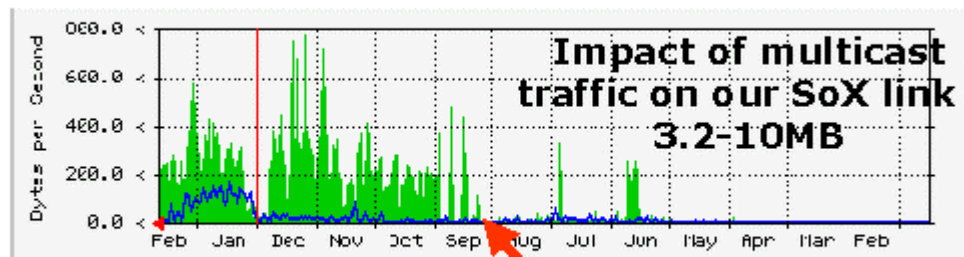
⇒ multicast

How to organize VC system

Unicast vs. multicast:



Impact of uncontrolled multicast traffic could be severe.



Can you tell when we began receiving native multicast traffic? YES!

How to organize VC system



How to establish room VC system:



Define the needs:

➤ environment

⇒ desktop - office

→ low requirements

⇒ conference room

→ video requirements

→ audio requirement

How to organize VC system



How to establish room VC system:



Define the needs:

- gateways
 - ⇒ H.323 - H.320 - ATM
- degree of interactivity
 - ⇒ single speaker - all participants
- importance of voice, video and data

How to organize VC system



How to establish room VC system:

 *Pick a technology and demonstrate it:*

- market research
 - web, discussion list, conferences, journals, colleagues
- selecting manufacturer
 - service and support, training, documentation, maintenance
- streaming - MS NetMeeting - web conferencing - hardware codec

How to organize VC system



How to establish room VC system:



Organize the resources:

- place and equipment
 - establish TCR - types, requirements
 - surveillance - scheduling, rules

- team
 - technicians - training with equipment
 - users - how to use it

How to organize VC system



How to establish room VC system:



Maintenance:

- administration
 - scheduling
 - sistem tracking
- expansion and growth

How to organize VC system



How to establish TCR:

 *TCR - Teleconference Room:*

- specialized
 - technical requirements
 - comfort requirements
- non-mobile equipment

How to organize VC system



How to establish TCR:



Technical part:

- location
- infrastructure
 - electrical
 - network
- acoustics
 - noise (inner and outer) and reverberation
 - isolation

How to organize VC system



How to establish TCR:



Technical part:

- light
 - opposite camera and projectors requirements
 - inner - outer light
- audio equipment
- video equipment
- presentation equipment
- codec
- computing and communications equipment

How to organize VC system



How to establish TCR:



Organisational part:

- access policy
- reservation procedure
- duties

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How to run audio/videoconference



When to use audio/videoconference:

- necessary to see people's expressions
- real time presence is required
- meeting announced too late for travel
- travel expences too high
- short meetings
- presence of all important persons is required, travel expences too high

How to run audio/videoconference



How to run efficient audio/videoconference:

- prepare an agenda in advance and distribute it
- arrive 10 min early and start on time
- time keeper
- introduce all participants
- clearly define objectives and expected duration of the meeting

How to run audio/videoconference



How to run efficient audio/videoconference:

- keep on scheduler and on track
- divide presentations into short segments - no longer than 15 min
- ask for questions after each part
- leave enough time for reactions and feedback

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Planning VC



- arrange date and time in cooperation with all participants
- send scheduler with date and time to all
- clearly indicate what is expected from each participant (preparation, materials ...)
- don't forget about time zones

Planning VC



- schedule meetings as far in advance as possible
- incline all lecturers and participants with phone numbers
- get IP and phone numbers of all locations involved in conference
- check confirmation from all participants

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VC tips



Technical preparation:

- windows - keep curtains, blinds, etc. closed
- check lights, speaker position
- check signal levels in your system
- adjust cameras in advance - no zoom, pan, tilt
- adjust window on the speaker
- speaker should see auditorium

VC tips



Technical preparation:

- reserve rooms in advance as possible
- arrange bridging if needed
- mute your system when dialing in on a multipoint call and during presentation
- prepare the room at least 15 min. prior to scheduled time
- prepare a test of a video equipment

VC tips



Participants tips and etiquette:

- wear medium blue or pastel colors, avoid white
- avoid clothing with overly detailed patterns
- avoid wearing bright , flashy decoration and jewelery that reflect lights
- arrive on time
- speak in your normal voice

VC tips



Participants tips and etiquette:

- be yourself, look in a person you're addressing
- be aware of the transmission delay
- avoid side conversations
- don't rustle papers, tap pens, rock your chair, slide the microphone around table - it distract audience
- use agenda, stay on schedule

VC tips



Moderator tips:

- inspect the room
- acquaint yourself with equipment
- check if material are distributed
- have list of participants and agenda
- start on time, don't repeat for those who are late
- shortly call each distance location on the beginning
- determine schedual, if it's not in advance

VC tips



Moderator tips:

- introduce all participants and their roles
- involve distant locations, call them in a discussion
- in audioconference - ask everyone to introduce himself before speaking
- repeat conclusions, decisions on the end
- leave enough time for reactions
- summarise decisions and action items

VC tips



Proper graphic and PowerPiont presentations:

Videoconferencing requires different graphic for presentations than if the presentations were viewed locally!

VC tips



Recommendations to make your presentations readable in a videoconference:

- font - use simple and clear fonts
- colors - for background use middle or royal blue, best letters are yellow and white, don't use red or black
- page layout - use landscape or horizontal mode
- format - minimum information, max 6 lines with 5 words per slide

VC tips



Recommendations to make your presentations readable in a videoconference:

- bullets are easy to read, pie and bar charts too if kept simple
- font size - 36 (whole slide), 18 (part of slide)
- ALL CAPS ARE HARDER TO READ

Thank you!

zlatko.jelacic@carnet.hr
<http://www.carnet.hr/sobne-vc>