



HRVATSKA AKADEMSKA I ISTRAŽIVAČKA MREŽA

How to use videoconferencing

... in education

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... SEP 29th 2004

Q & A

- > Do you really-really need VC
- > What kind of VC do you need
- > What kind of VC can you have
- > How to prepare yourself
- > How to give best of yourself
- > How to run VC
- > How much does it cost – in time/money/nerves

Outline

Part one: Tech mumbo-jumbo ...

- > Welcome to any-conferencing
- > VC, TCR, H.323 ... and other (un)useful abbreviations
- > Get your resources together

Part two: How to present yourself

- > Prejudices and misconceptions
- > Good preparation is a mother of all successes
- > Technology is your friend
- > You gonna be a star!

Part I: Tech mumbo-jumbo ... (&1/3)

Part one: Tech mumbo-jumbo ...

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Welcome to any-conferencing

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 almost '*plug and play*'

Welcome to any-conferencing

> 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

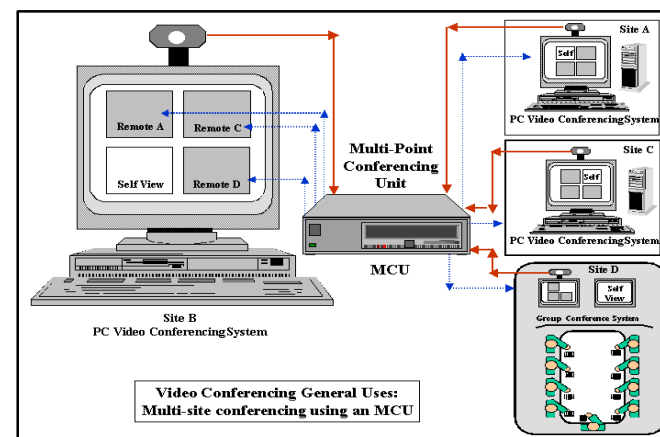
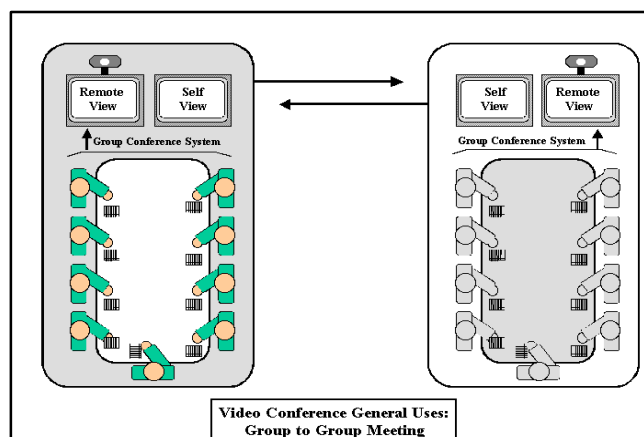
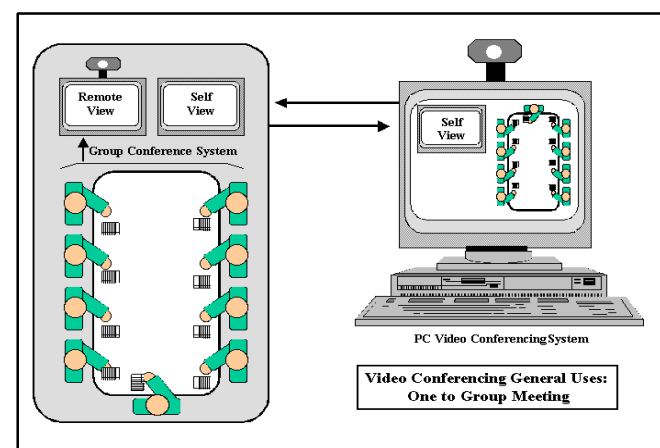
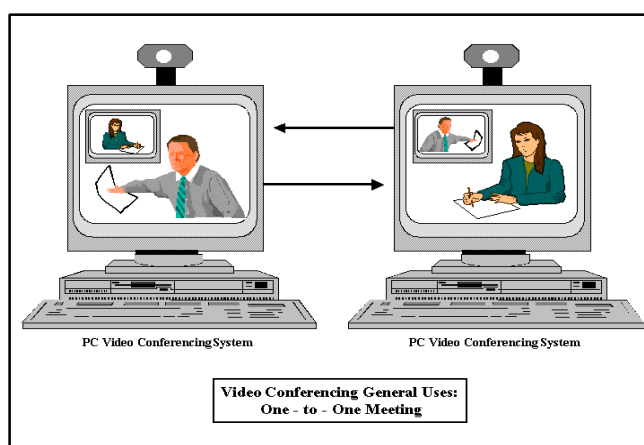
Welcome to any-conferencing

- ▢ Why and where teleconferencing
 - economy
 - industry
 - medicine
 - justice

- and of course ... education
 - distance lectures
 - critical places
 - collaboration
 - multiple sites meetings

Welcome to any-conferencing

> Videoconferencing in education – distant lectures



Welcome to any-conferencing

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 !?)

Part one: Tech mumbo-jumbo ... (&2/3)

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VC, TCR, H.323 ... and other (un)useful abbreviations

Types of teleconference (&1/6)

- According to interactivity
 - Conference
 - two-site or multi-site active communications
 - Streaming (!)
 - plus: less bandwidth, cheaper equipment, adjustable
 - cons: one-way communication, low(er) quality

VC, TCR, H.323 ... and other (un)useful abbreviations

Types of teleconference (&2/6)

▸ According to tools used (&1/2)

▸ audioconference

- audio, application and data sharing
- vs. videoconference: less bandwidth
- minus: visual communication
- vs. phone: multi-site, quality, application and data sharing, logistic, etiquette

VC, TCR, H.323 ... and other (un)useful abbreviations

Types of teleconference (&3/6)

> According to tools used (&2/2)

- ▶ videoconference
 - video, audio, application and data sharing
 - minus: bandwidth
- ▶ webconference
 - video, audio, application and data sharing
 - server based, software codecs
 - plus: desktop requirements
 - minus: quality

VC, TCR, H.323 ... and other (un)useful abbreviations

Types of teleconference (&4/6)

▢ According to number of participants (&1/2)

▸ Desktop conference

- few participants per site
- from PC
- web cam, headset
- hardware or software



VC, TCR, H.323 ... and other (un)useful abbreviations

Types of teleconference (&5/6)

▢ According to number of participants (&2/2)

▸ Room conference

- 'unlimited' number of participants
- hardware
- TCR - Teleconferencing Room



VC, TCR, H.323 ... and other (un)useful abbreviations

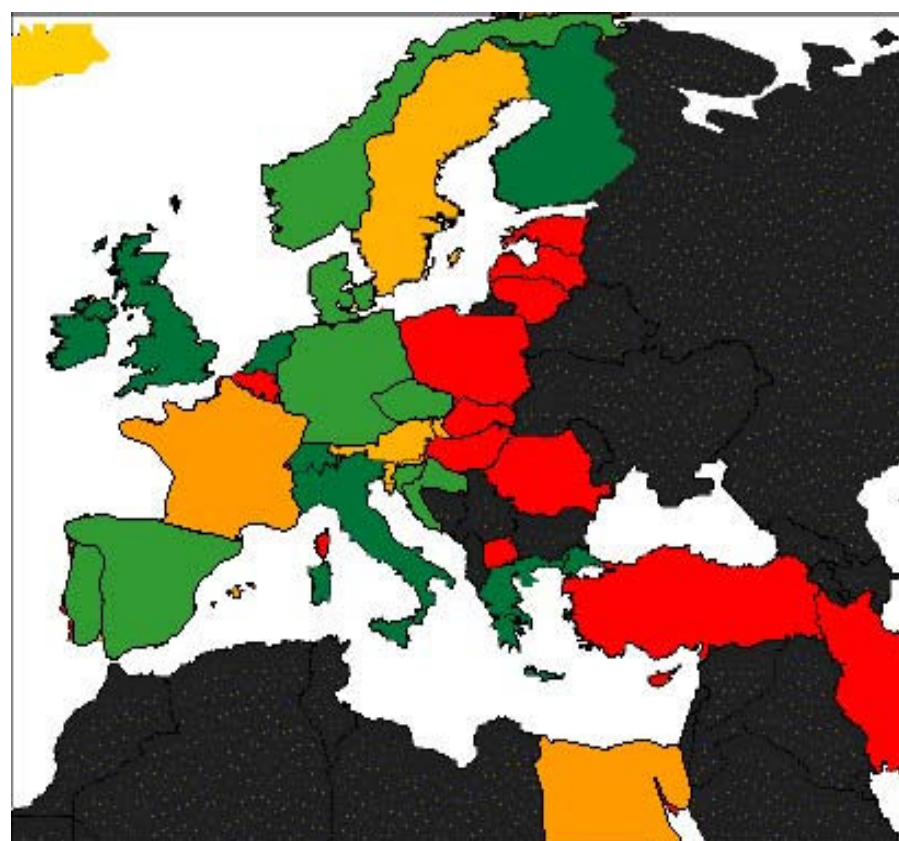
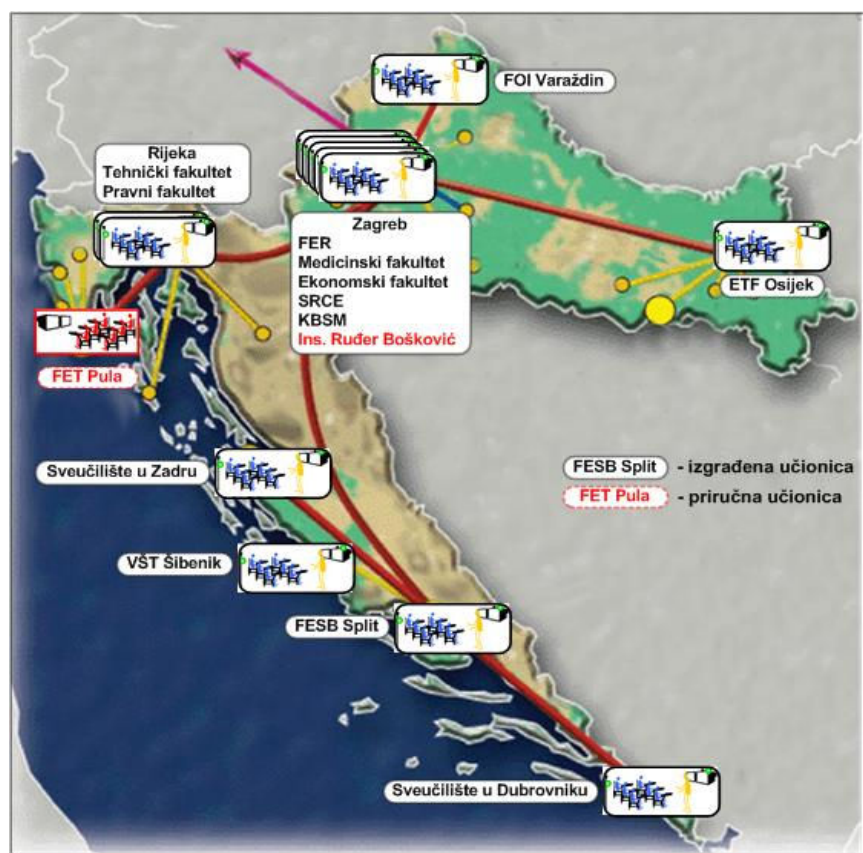
TCR – Teleconferencing Room

- ▢ Specialised room
 - technical requirements
 - comfort requirements
 - acoustics, light
 - location

- ▢ non-mobile equipment
 - infrastructure – network, power
 - audio equipment
 - video and presentational equipment
 - computing and communications

VC, TCR, H.323 ... and other (un)useful abbreviations

Academic videoconferencing infrastructure in HR and EU



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VC, TCR, H.323 ... and other (un)useful abbreviations

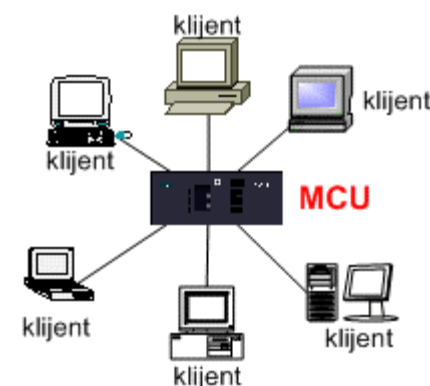
Types of teleconference (&6/6)

> According to infrastructure used

- ▶ IP – H.323 standard
- ▶ ISDN – H.320 standard
- ▶ ATM – many standards – M-JPEG, MPEG-2, H-310

> According to connectivity

- ▶ Point-to-point
- ▶ Multi-point



Part one: Tech mumbo-jumbo ...

(&3/3)

Part one: Tech mumbo-jumbo ...

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Get your resources together

Do you need videoconferencing at all?

- ▢ define your organisational needs
 - dislocated departments?
 - guest lecturers?
 - member of international institutions?
 - project collaboration with international teams?
 - critical places?
 - ... or you'd like just to send a message

Get your resources together

So, you need it ... but, do you need your own system?
(&1/2)

- big investment – evaluation needed
- define your technical needs
 - ▶ potential number of participants
 - room system?
 - maybe is desktop enough
 - ▶ potential number of sites
 - ▶ degree of interactivity
 - single speaker
 - multiple speakers
 - ▶ importance of voice, video, data
 - ▶ place and team needed

Get your resources together

So, you need it ... but, do you need your own system? (&2/2)

- pick a technology and demonstrate it
- train your team
 - ▶ technicians - how to handle it
 - ▶ users - how to use it
- "... and why don't you just walk up to the closest TCR and use it?"

Part two: How to present yourself... (&1/4)

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How to present yourself

- > how individuals appear, perform, leverage their time
- > once failed on VC or poor experience – no more VC?

... but! ...

VC industry state today = HQ, almost as F-t-F meeting

... therefore ...

- > new habits are needed – hardest thing to change

Prejudices and misconceptions

Misconceptions

- > same as in-person meeting, but from distant locations
- > use it because you have it
- > preparation is the same as for in-person meeting
- > just show up and work effectively with equipment
- > what I hear/see is just the same on their monitors

Prejudices and misconceptions

Tips & ideas to treat them ... (misconceptions)

- think twice
 - 'to use it or not to use it, that is the question'
- NNNI – an old YU saying 'ništa nas ne smije iznenaditi'
 - think your actions in advance
- know your enemy
 - get friendly with technology
- I'm the man!
 - maximize your presence

... and it's easy, just ...

Prejudices and misconceptions

Important statements ... before we go on

- > never out of view in VC – exhausting
- > negative expressions and body language – amplified
- > meeting cyberspace is not a success simply because it took place – brutally true
- > holding VC is not necessarily better than no meeting at all – brutally true again
- > face-to-face meetings remains here for ever!

Prejudices and misconceptions

No, really ... when videoconferencing?

- > no need to shake everyone's hand
- > same informations on different locations in real time
- > save time and travel costs
- > in-demand speaker difficult to get here
- > necessary to see peoples expressions
- > you would like to record it
- > publicity and press likes it!

Prejudices and misconceptions

But what remains to face-to-face then?

- > security and privacy
- > critical issue
- > dialogue is important
- > 'I'd prefer to see you in person'

Part two: How to present yourself... (&2/4)

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Good preparation is a mother of all successes

You better be prepared

- > what is the purpose of my VC? -> I need 'this' equipment
- > what equipment is available? And other side?
- > is it available when I need it? ... schedule it!
- > any tech support?
- > how many participants? experienced?

Good preparation is a mother of all successes

Interesting agenda

- > VC = borrrrrring!
- > use more than one camera, if possible
- > do not speak for too long – 5-7 min
- > presentation – divide into short segment, 15 min
- > use graphics – WB, etc.
- > set your personal agenda - prioritize!

Good preparation is a mother of all successes

Get a great start

- > wave hello, complement other side
- > have well-thought-out intro – grab attention
- > introduce everyone, no matter time spent, including those off-screen
- > in streaming – greet all distant sites
- > spell agenda and time frame

Good preparation is a mother of all successes

Moderator – in general

- do not dictate – lead protocol
- follow the rule of the group
- mark all sites
- introduce the rules at the beginning
 - ▶ length of speaking time allowed
 - ▶ timing and breaks, if any
- take notes

Good preparation is a mother of all successes

Moderator – question handling

- ▢ loud and clear, repeat if necessary
 - poor audio, accent, translation
- ▢ hostile question
 - repeat it, minus hostility, without comment
- ▢ accept it via e-mail, messenger, ...
- ▢ give people a task
- ▢ involve other sites

Good preparation is a mother of all successes

Moderator – watch your time!

- > everything takes longer in VC
- > spontaneity is lost
- > use/be time keeper
- > start on time
- > do not put it at beginning of the day – traffic, latency
- > important things first
- > do not review for those who are late
- > leave enough time for reactions and feedback
- > be scrupulous

Good preparation is a mother of all successes

International meetings

- > check local times
- > acknowledge those who are there in non-office time
- > allocate more time than usually
- > respect the culture ... you're on camera!

Good preparation is a mother of all successes

Strong closing

- > do the summary or ask someone to do so
- > summary – what, who, when, how
- > thank everyone
- > say goodbye and leave – do not wait for disconnection
- > follow – up
- > solve unanswered question – right after a meeting
- > add a human touch – e-mail or phone after VC about summary

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Technology is your friend

Speaking about technology ...

Murphy's law:

'If anything can go wrong, it will'

Equipment is your friend, but also enemy

Technology is your friend

Sound and microphones

- many types of microphones
- smaller ≠ less volume!
- multi-directional – every (EVERY!) sound is picked up
- transmission delay
 - ▶ 'I'll conclude...'
 - ▶ 'I'll end here'

Technology is your friend

Microphones – how to use it

- > test it ... gently!
- > reduce background noise ... every noise! (ball-pen, paper ...)
- > do not lean over it – ask about power ... ('p', 's')
- > speak in your normal voice – do not shout
- > place lapel model ('bug') correctly
 - ▶ do not wear it into the bathroom!
- > mute it when out of air

Technology is your friend

Picture and cameras

- > look into camera!!! - 'eye contact'
- > where is your camera?
- > adjust camera in advance – no pan-zoom-tilt
- > document camera is a great help
- > voice-activated camera – reaction/switching delay
- > local-distant audience – speaker should see auditorium
- > mark your 'on-camera' zone
- > never watch yourself on the monitor!

Technology is your friend

Lighting

- > camera adds 5 kilos ... to everyone, so watch the light
- > head-down light only is bad! ... have some upward
 - nose, double-chin, eyes
- > avoid large white background – face should be the lightest
- > windows
 - keep curtains, blinds ... closed
 - if any, sit facing the window
- > adjust contrast and brightness on camera
- > check your image on the monitor

Technology is your friend

Documents in VC

- > VC requires different graphic for presentations
- > use big type, font 36
- > limited amount of information per slide – 5-6 lines
- > keep it simple, no animation
- > careful with colours – dark letters on light background
- > ALL CAPITAL LETTERS ARE HARD TO READ
- > use simple fonts – sans serif, Arial

Technology is your friend

Back to Murphy ...

- > if anything can go wrong – it will!
- > system can go down on one side
- > no visual or no audio
- > insufficient bandwidth on one side
- > out-of-sync voice and video
- > firewalls

Technology is your friend

... but can Murphy be beaten!?

- > When in doubt – reboot!
- > have a 'Plan B'
- > patience and humor helps!

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You gonna be a star!

Behave your self!

- > everything gets amplified!
- > framing
- > do not eat or chew – take a break
- > do not hold a glas ... glas = alcohol = you are not working!
- > do not smoke
- > sit up taller, lean forward, do not move your legs

You gonna be a star!

Patterns and colours

> patterns

- ▶ no fish-bones, close stripes, Hawaiian
- ▶ moire effect and strobe effect

> colours

- ▶ avoid red, blue is beautiful
- ▶ white only partially
- ▶ dark colours fade in, light come forward
- ▶ clothing colour different from the background

> jewellery

- ▶ avoid bright and shining

You gonna be a star!

Control your emotions

- emotions – amplified!
- avoid anger and negative emotions
- control nervousness
 - ▶ visit VC room in advance
 - ▶ prepare for presentation
 - ▶ look 'through' camera, not 'at'
 - ▶ relaxing exercises
 - ▶ be yourself!

You gonna be a star!

Additional add

- > use plants and flowers – it softeners
- > declare off-camera distractions (someone opens doors, etc ...)
- > assume you're always live – watch your actions and remarks
- > be on time – no power on being late on VC

You gonna be a star!

How can it look like ... in real life



<http://mediaserv.unc.edu:7070/ramgen/telability/videos/bestPracticesT1.rm>

... and remember:

In case of any situation concerning
any technical matter of any part of videoconferencing,
as very first and very important thing:

DON'T PANIC!

... HHGTtG

Go and have videoconferencing!

Thank you!

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Would you like to teach others about how to use VC?

Experienced or willing to learn?

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<http://edupoint.carnet.hr/>