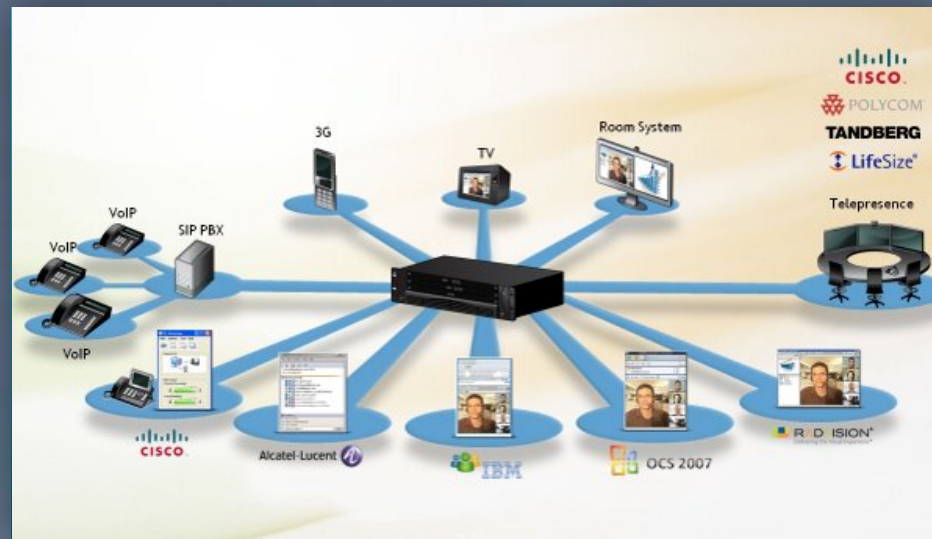


# IT SERVICE PRESENTATION OF POSSIBILITY CISCO VIDEO CONFERENCING SYSTEM



3 – 4th October 2013, Nis

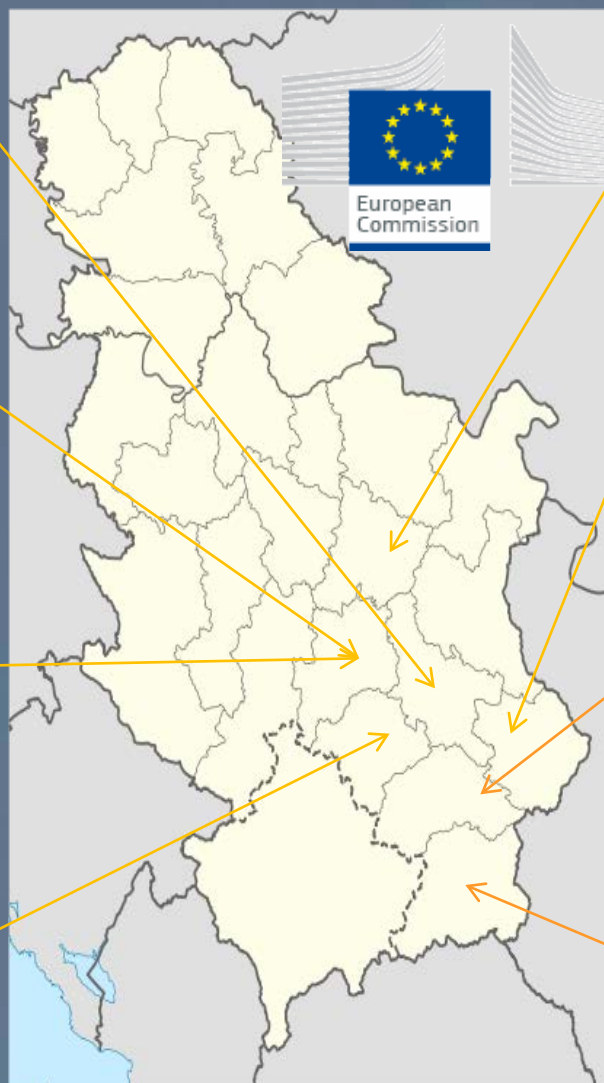
# Project Participants

The Higher Technical School of Professional Education Nis

The High Education Institution for Professional Education of Preschool Teachers in Krusevac

The School of Higher Chemical Technology Education in Krusevac

The College of Agriculture and Food Technology Prokuplje



High Medical School of Professional Studies in Cuprija

The School of Higher Professional Education for Preschool Teachers in Pirot

Vocational School for textiles in Leskovac

The School of Higher Applied Professional Education in Vranje



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# IMPORTANCE OF THIS PROJECT

# Present State

- Only protocol communication between Higher Technical Professional Education Schools
  - communication is only at the highest level
  - very rare



# Present State

- There is no knowledge transfer between:
  - lecturers
  - students
- Limited knowledge database
  - School libraries don't share hard copy and e-books between them



# Present State

- **Not unique quality control**
  - There is no synchronization between:
    - Study programs
    - Evaluation of pre-exam requirements
    - Student evaluation
    - Student questionnaire
    - Price school services





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# Solution



# INTEGRATION

- Integration through a common information system





# Benefits of Integration

## ● Synchronization

- study programs, student evaluation, student documentation

## ● Efficiency

- online trainings, lecturers, meetings

## ● Better Performance

- sharing scientific papers, books and scripts through common e-system

## ● Cost Reduction

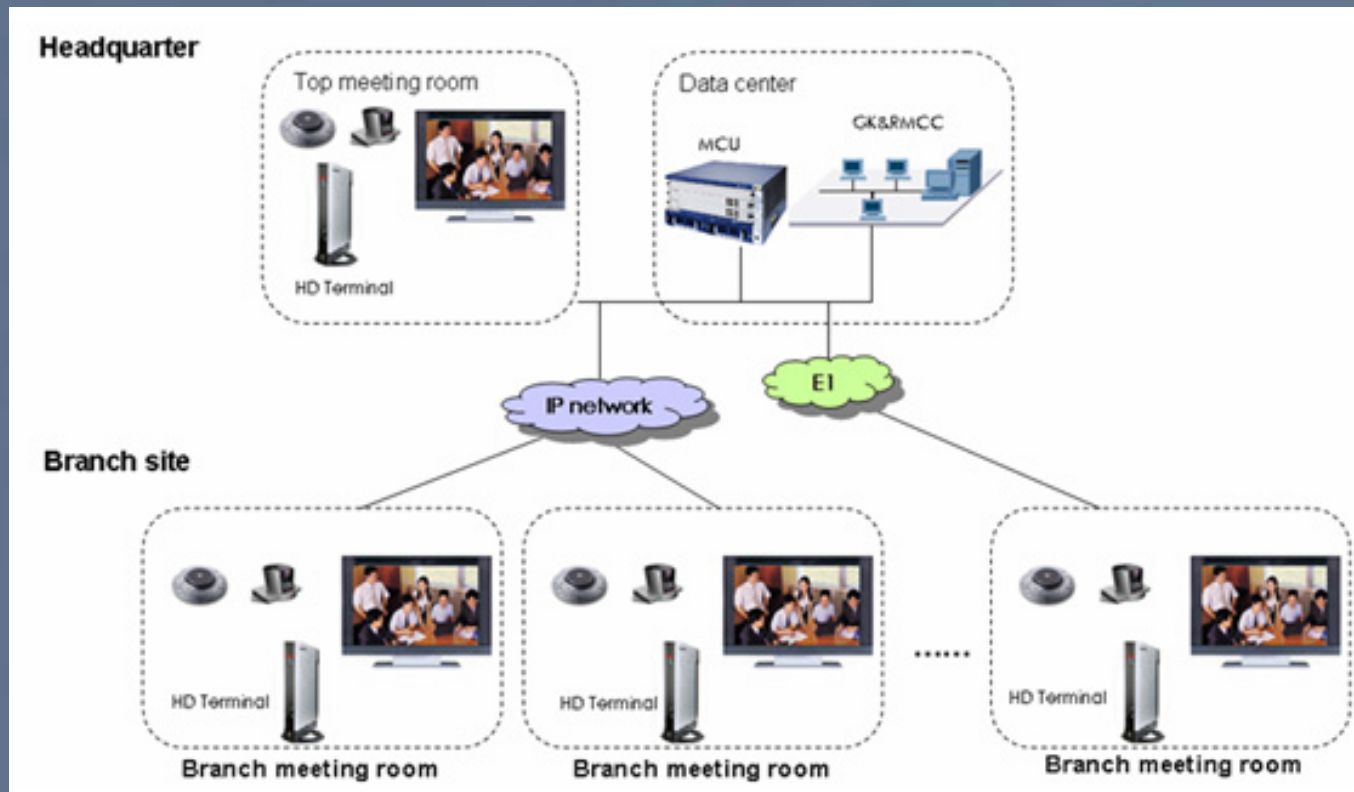
- communication over Internet

# Lectures and meetings via video conferencing



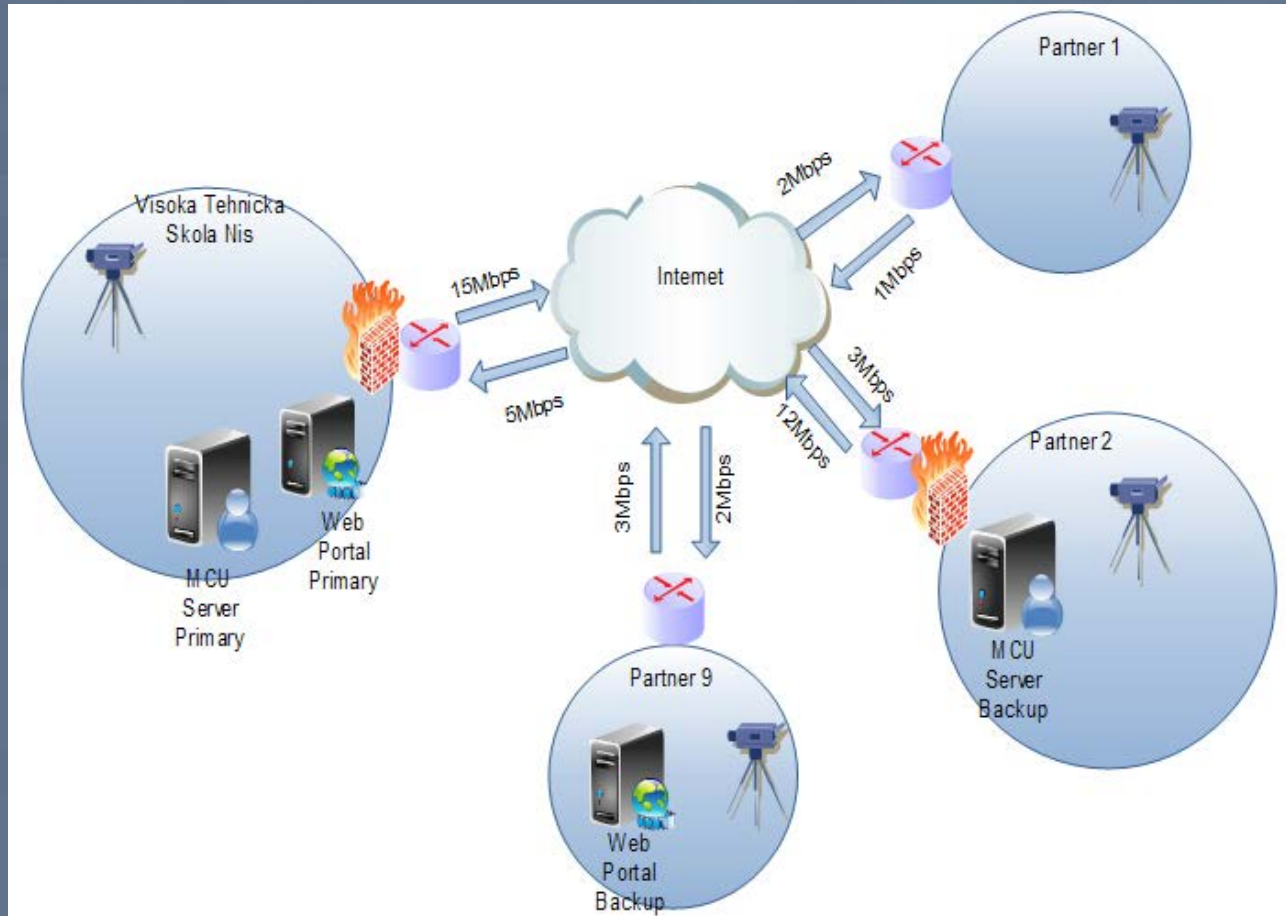
# IMPLEMENTATION

## *Hardware & Software*



# Network Infrastructure

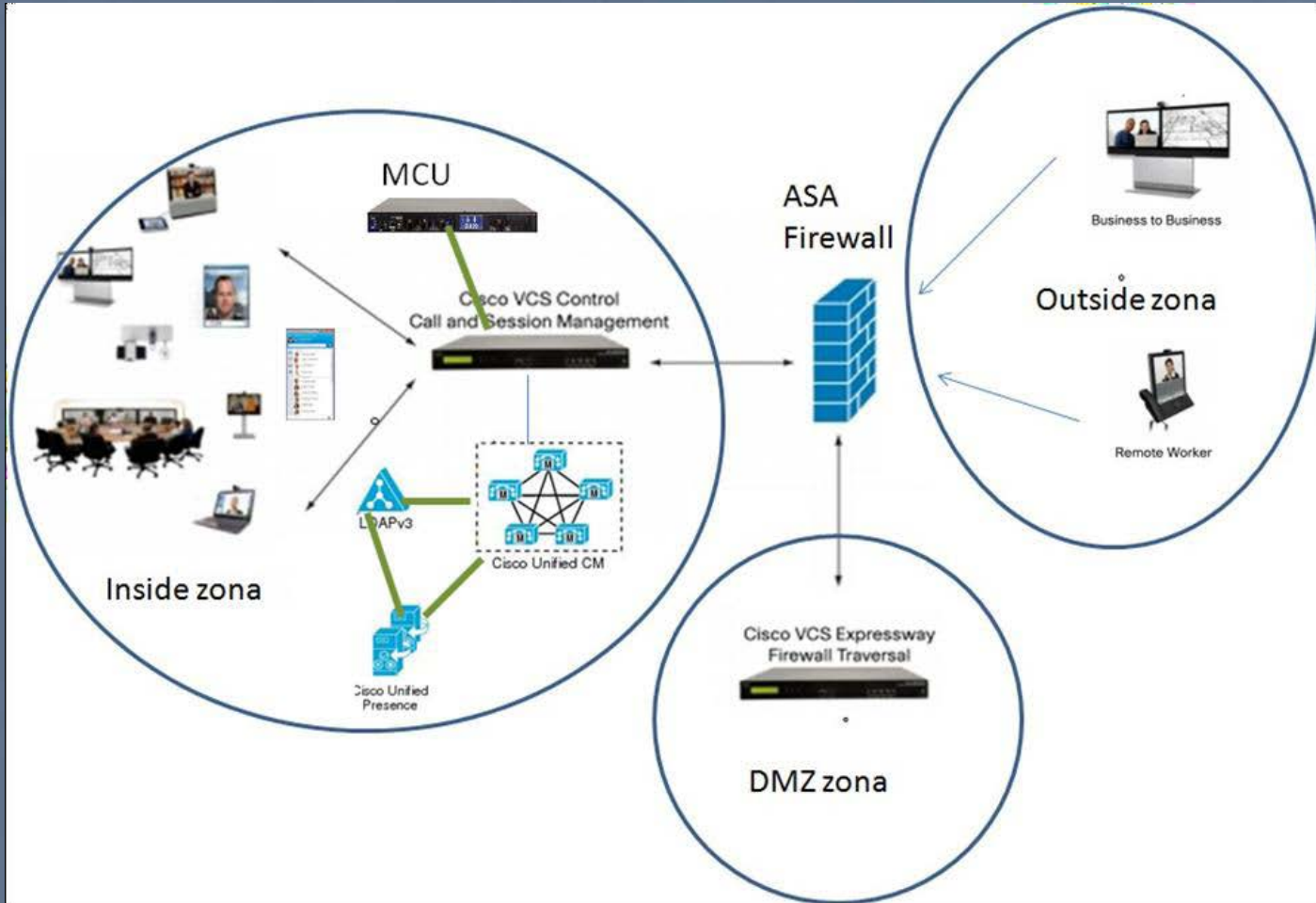
## Conceptual Plan



# Minimal requirements

- Bandwidth requirements for central location:  
15 Mbps video traffic
- Bandwidth requirements for other location: 2  
Mbps video traffic
- Supporting equipment
  - routers, switches
- Some location don't meet this requirements

# Cisco Solution for Video conferencing



# Why Cisco Video Conferencing system?

- **Scalability**

- System can be easily upgraded with more video conferencing locations

- **IP telephony support**

- Cisco Call Manager 9.1

- **Education**

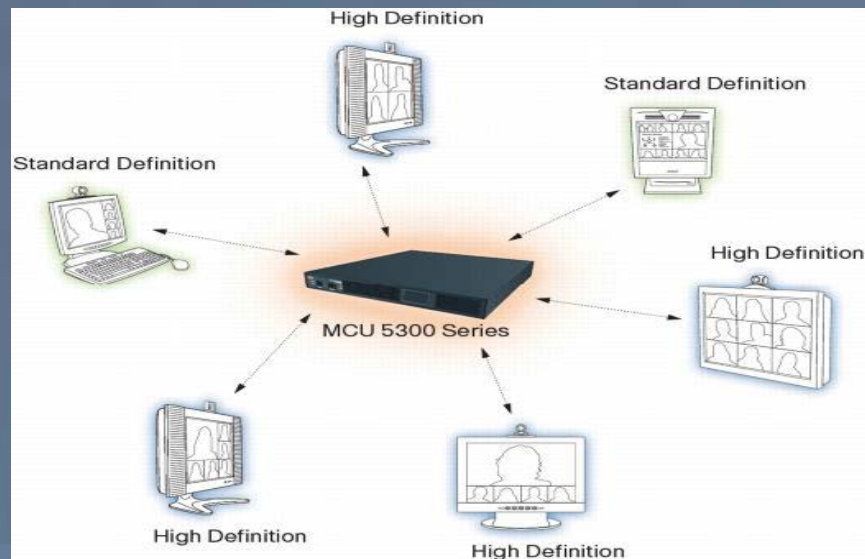
- IP telephony implementation course

- **Attractive price**

- some hardware components are with great discount

# Scalability

- System can be easily upgraded with more video endpoints
- The capacity of this MCU is:
  - 5x Full HD simultaneous users in Video Conferencing session
  - 10x HD simultaneous users in Video Conferencing session
  - 20x SD simultaneous users in Video Conferencing session
- Capacity can be increased with stacking technology





# IP telephony support

- Cisco Call Manager 9.1
- Cisco Call Manager is Video and Call Processing server
- It is registrar server for Video End Points and IP Telephones
- It performs routing video and voice calls based on the route pattern
- It specifies the type of codec and bandwidth for video and voice calls



# Upgraded to network infrastructure

## Software Solution

### ● Web portal

#### ● Student service

- Database of graduated students with their skills
- The database would be available to employers
- Companies would be able to advertised jobs totally free on this web portal
- Student forum

#### ● Professor service

- Database of scientific papers



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***THANK YOU!!!***