

TRAINING REPORT


NGO VAN TINH

Vietnam Research and Education Network

National Agency for Science and Technology Information



CONTENT

- General information
 - Required quality level for Telemedicine
 - Telemedicine system
 - After work activities
- 

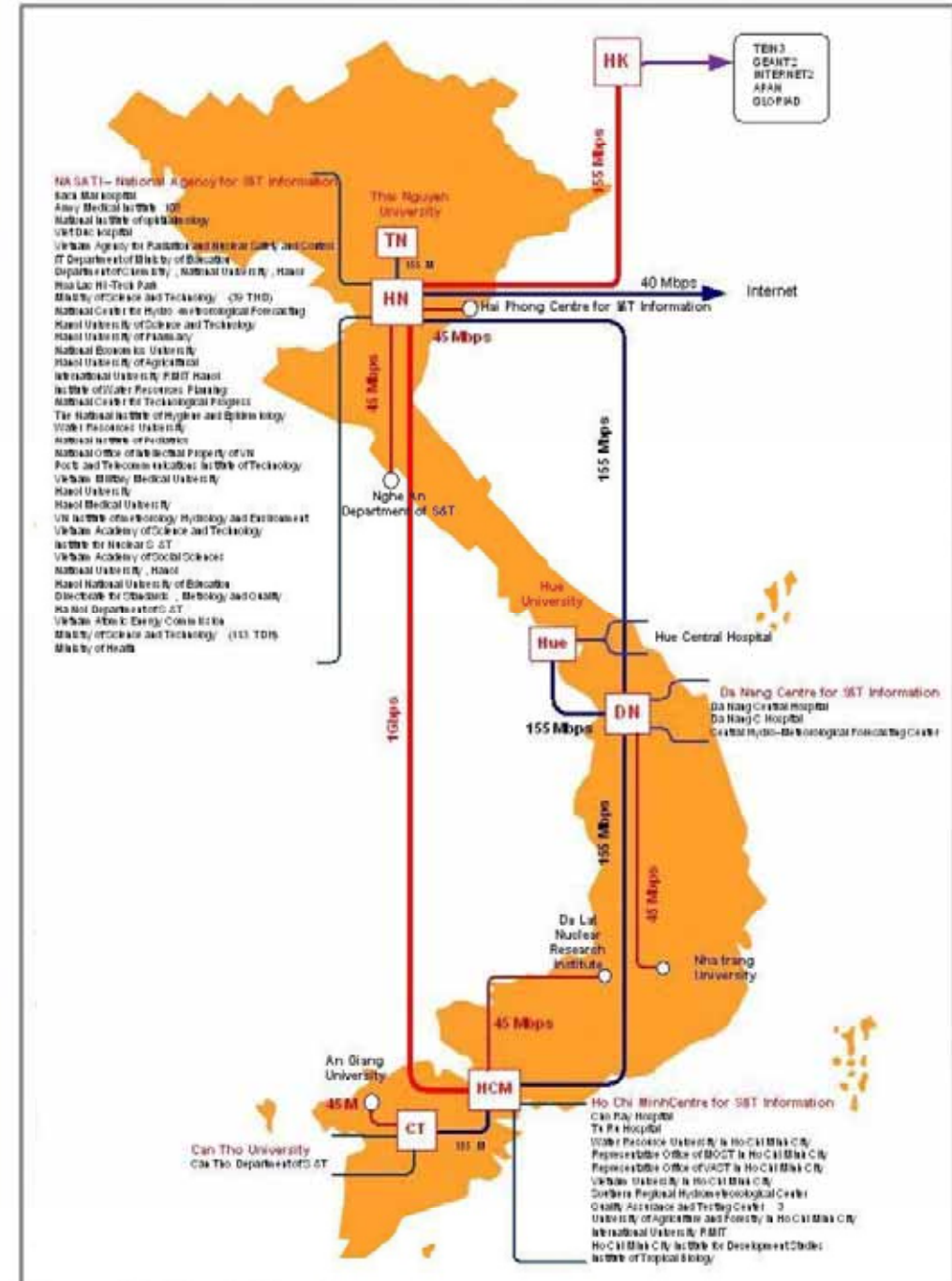
GENERAL INFORMATION

1. **Duration:** 1 month, 04/7/2015 – 07/8/2015
2. **Location:** Telemedicine Development Center of Asia,
Kyushu University Hospital, Fukuoka, Japan
3. **Content of training**
 - How is the Telemedicine event realized
 - Required quality level for Telemedicine
 - Teleconferencing systems
 - Technical preparations
 - How to work on problems
 - Connect between VinaREN and TEMDEC

VinaREN

- Established in 2007 by Vietnam government, Support by Tein
- International bandwidth 1 Gbps,
- Hanoi-Hochiminh backbone 1Gbps
- Main activities: network management, support member's activities (E-learning, Telemedicine, Disaster management, E-Culture, Grid computing), research S&T

Vietnam Research and Education Network – VINAREN International and National Connectivity 5/2012

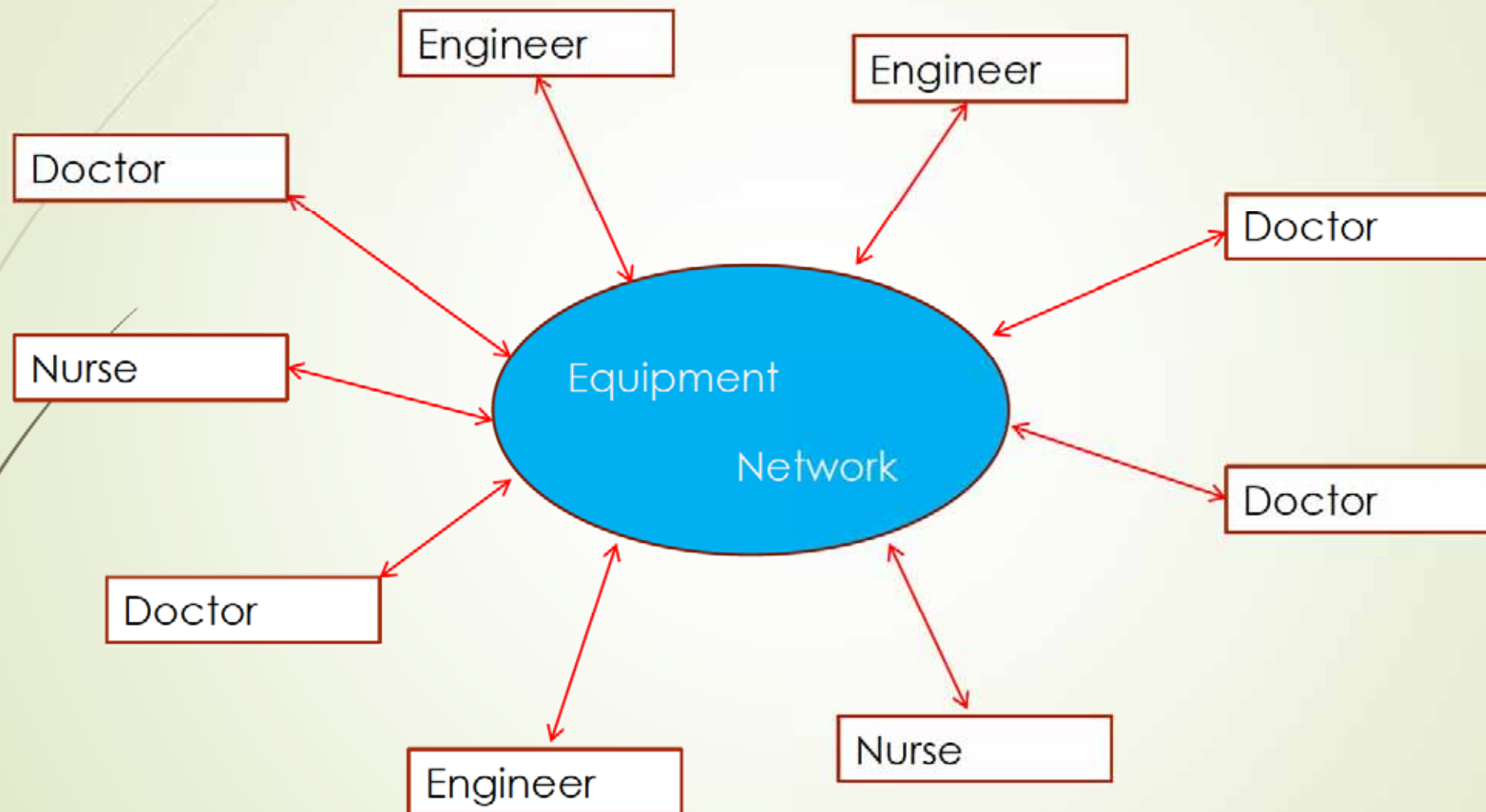




Required quality level for Telemedicine

- Acceptable video quality
- Clear and smooth content sharing
- Clear audio
- No interruption

Telemedicine



VIDEO CONFERENCE SYSTEMS

- **H.323 system**
- **Vidyo system**
- **DVTS system**
- **Control system**
- **Network system**
- **Input system: cameras, contents, medical devices**
- **Output system: screens, audio, recording system**



Lighting System



Camera System

Control System



Audio System



Display System



Recording System



TEMDEC Video Conference System

VPN

NREN

Internet



Medical system



Vidyo System



H.323 System



DTVS System



H.323 System

- H.323 devices
 - Polycom HDX 9000
 - Sony PCS-XG 80
 - LifeSize software
 - MCU Polycom RMX 1500
- 



Sony PCS-XG80
IP: 133.5.230.22



MCU Polycom
RMX1500
IP: 133.5.230.35

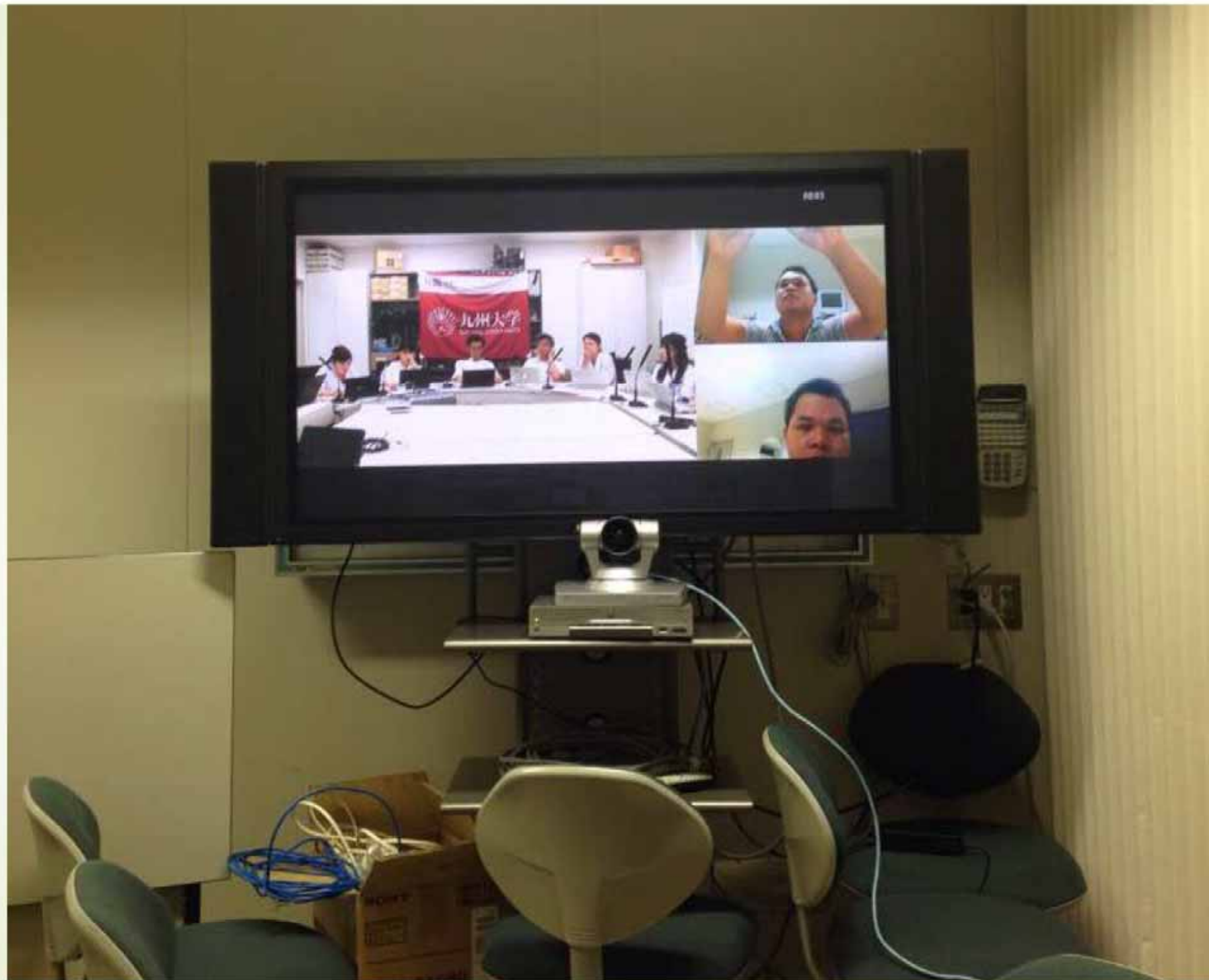


Polycom
HDX9000
IP: 133.5.230.30

Connection Test



Connection Test



MCU Polycom RMX1500 Controller

RMX Manager EMA-V8.5.3.182241 - MCU selected: 133.5.230.36(133.5.230.36)

Polycom | RMX Manager

View

133.5.230.36 Conferences (3) | Participants (EP:6 L:0 T:0) | 133.5.230.36 Address Book (10)

Chairperson Password: []

Refresh

MCU

- 133.5.230.36
- 133.5.230.36
- 133.5.230.36

APAN40-AIG Properties

- > General
- > Advanced
- > Gathering Settings
- > **Video Quality**
- > Video Settings
- > Audio Settings
- > Skins
- > Information
- > Recording
- > Site Names
- > Message Overlay
- > Network Services
- > Layout Indications

Display Name: APAN40-AIG

Duration: 12 : 00 ☐ Permanent Conference

Conferencing Mode: CP (Continuous Presence)

People Video Definition

Video Quality: Sharpness

Max Resolution: CIF

☐ Video Clarity

☐ Auto Brightness

Content Video Definition

Content Settings: Graphics

☐ AS SIP content

☐ Multiple Resolutions

Transcode to: ☒ H.264 ☐ H.263 ☐ H.264 Cascade

OK Cancel Apply

Find: []

Type	Name	IP Address/Phone
	ATS-day2	133.5.230.32
	DefaultEQ(141)_	152.92.89.172
	Houkabe	133.5.230.32
	TEMDEC	
	Vidyo-ASAN2	133.5.230.32
	vidyo-kuricom	133.5.230.32
	vidyo-temdec01	133.5.230.32
	プリンストンテスト-2	221.186.105.52
	プリンストンテスト箱	124.96.0.11



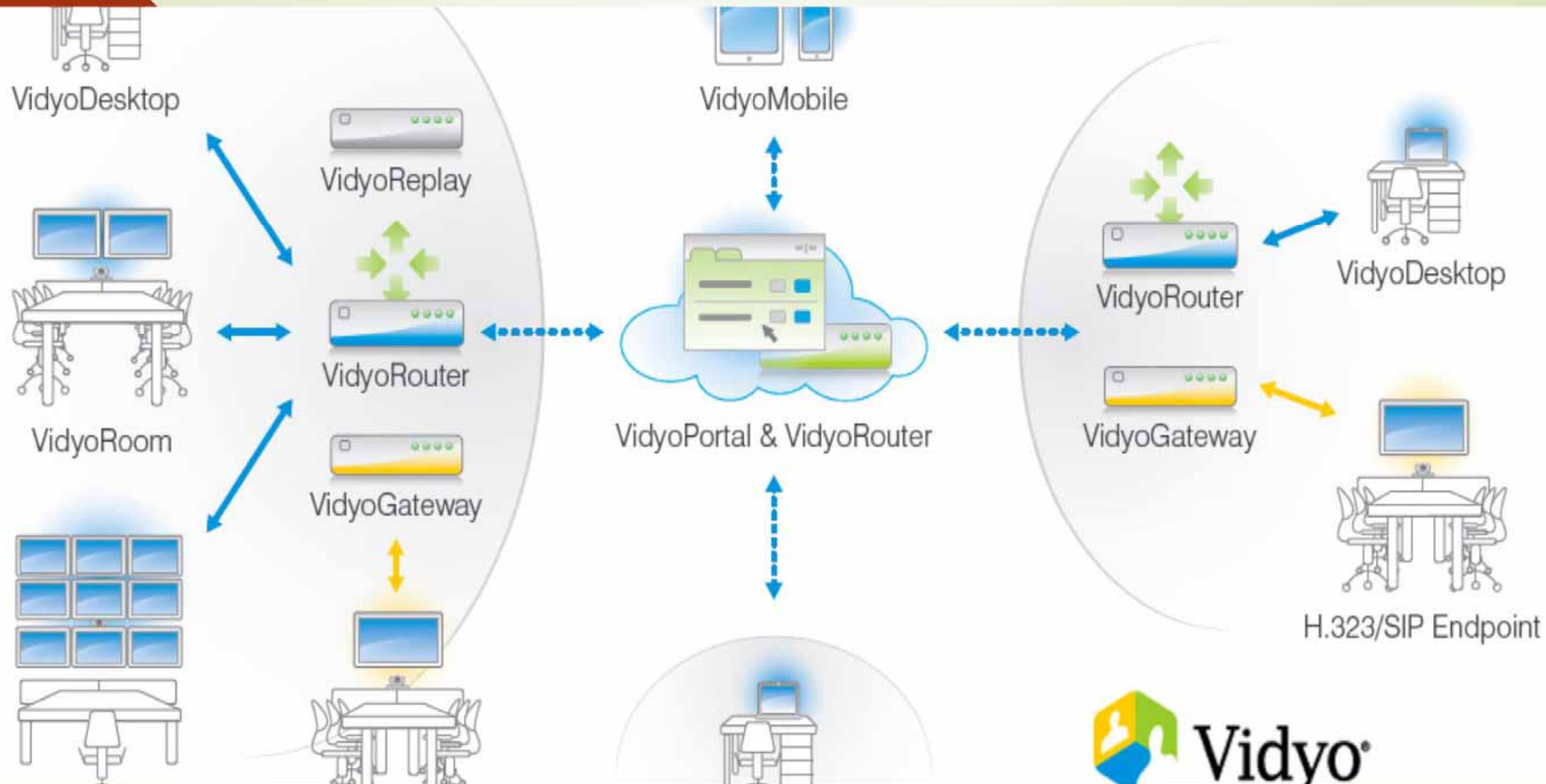
Advantages of H.323 system

- Easy to setup, connect, control
- High quality video and audio (HD)

Disadvantages of H.323 system

- Endpoint is expensive
- HD Multipoint connection needs expensive MCU
- Need skill and experience setup system
- Need public IP

Vidyo System in TEMDEC





Advantages of Vidyo system

- High quality video and audio (HD)
- Mobility
- No need Global IP
- Easy connect

Disadvantages of Vidyo system

- Need to buy whole system
- Video content needs hardware equipment(Vidyo Room)
- Setup, control needs skill

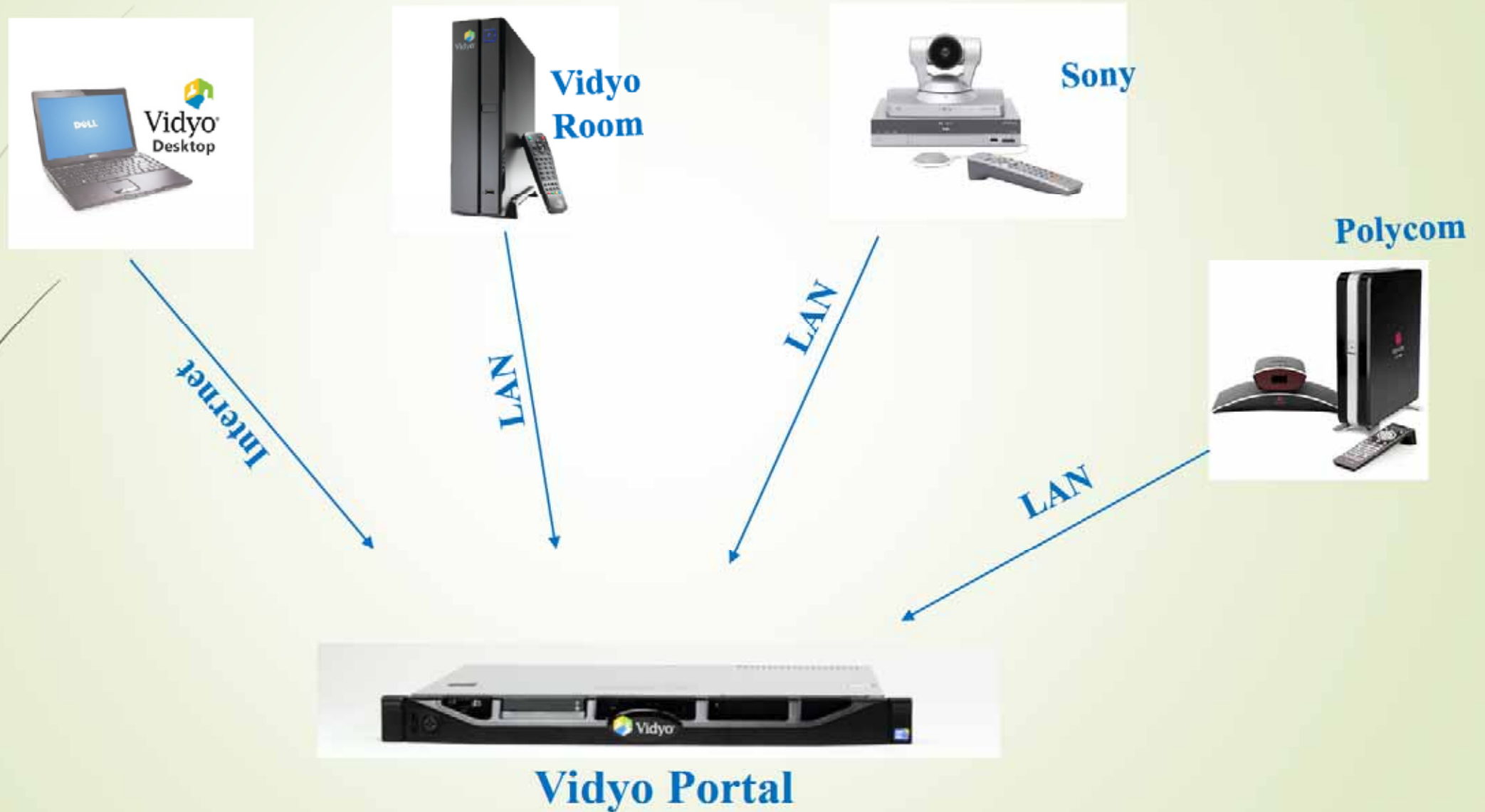


Connect Vidyo and H.323 devices

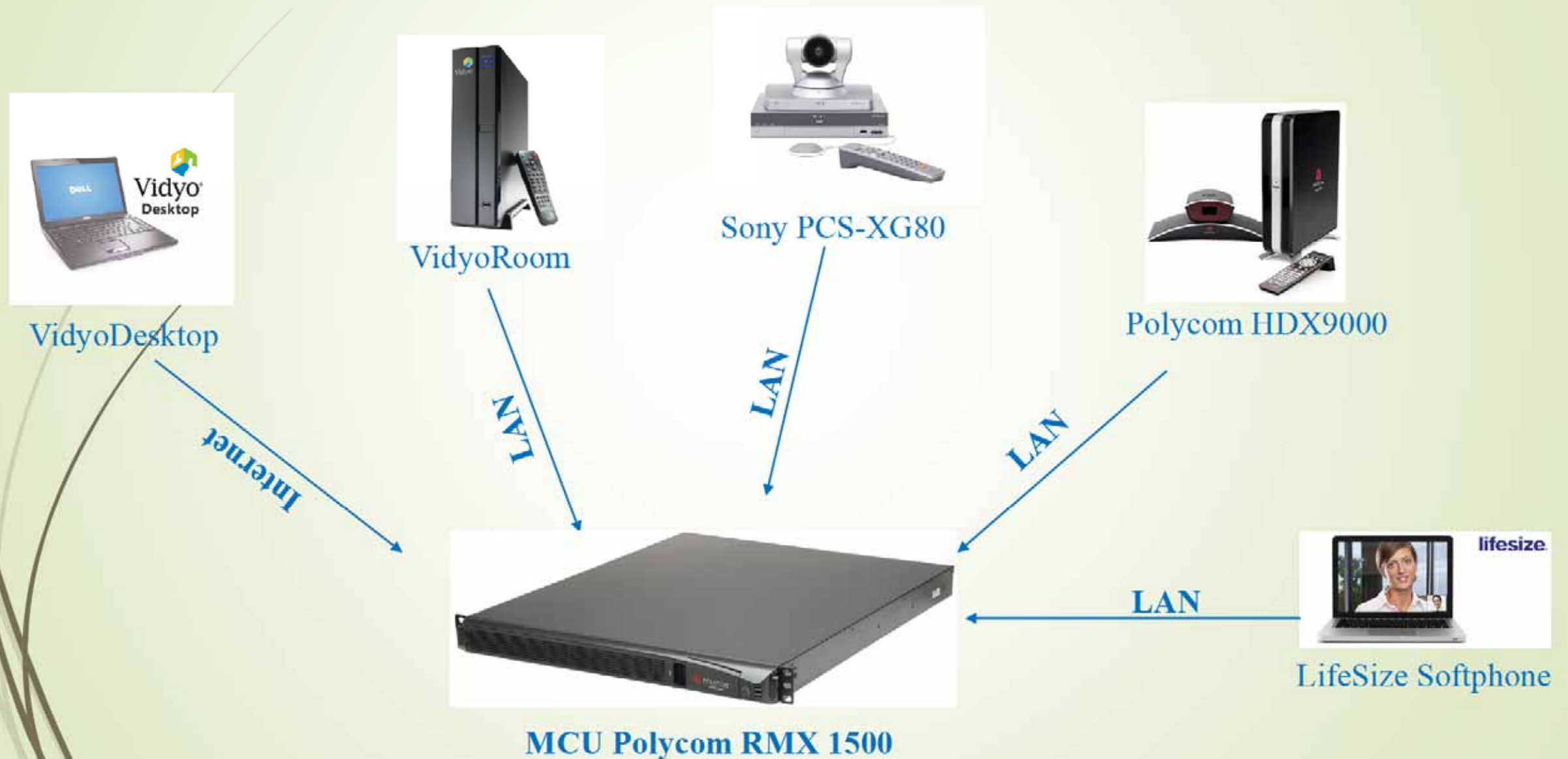
Vidyo Portal

- Vidyo Desktop
- Polycom HDX9000
- Sony PCS-XG80

Case 1: Vidyo system connect to H.323



Case 2: Vidyo endpoint connect to H.323 MCU



Demo



Demo



DVTS Setup

Microphone



Camera



Audio Mixer



AVDC

Send Computer



Receiver Computer



DVTS System

1. Definition

- is software
- can transfer digital video (DV) signal through IP network using video cameras connected to personal computers with an IEEE 1394 cable

2. Advantages

- High quality transmitted images (same original source)
- Low cost
- Minimal time delay

3. Considered

- 30 Mb network bandwidth
- Required skill and experience setup
- Multipoint limits 4,8 point and needs skill to control



Telepointer

- Is a software
- Client install for PC and connect to server
- Use for DVTS system
- Useful for surgery in medical
- Sharing cursor location

Some conference joined



Some conference joined



After work activities

➤ Sightseeing



After work activities

➤ Sightseeing



After work

➤ Sightseeing



After work activities

Events



After work activities

➤ Foods



After work activities

➤ Foods



After work activities

➤ Foods



After work activities

People



Thank you!



Fukuoka, Japan