

# Chapter I



[EGM] Company Overview





# 1. EGM Overview







### The Main Partnership













# Chapter II



# [EGM] Business Field

- Business Overview
- Business Field I: Network Integration System
- Business Field Ⅱ: Intelligent Building System
- Business Field Ⅲ: Intelligent Traffic System
- Business Methodology





# 1. Business Overview



# Successful [Consulting], [NI], [IBS], [ITS] System Construction



Work Speed Improvement through optimum system

Work Environment Improvement through high-tech system



Work Productivity Improvement

through customized system





Asset Value Increase through future-oriented system

### IT Consulting + Strategy

- Project Feasibility Analysis
- Project Plan Establishment
- Project Strategy Establishment
- Project Risk Analysis
- Differentiate Technique
- Operation Plan Suggestion

### Network Integration System

- Network Configuration Plan
- Optimum Network Suggestion
- Network Inspection
- Network Problem Solving
- Wired Network Technique
- Wireless Network Technique

# Intelligent Building System

- Building Total Management
- Tele-Communication System
- Building Automation System
- Office Automation System
- Total System Monitoring
- Total Facility Monitoring

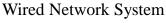
# Intelligent Traffic System

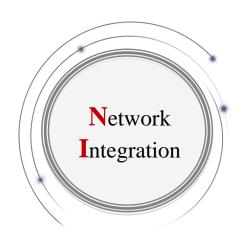
- Total Control System
- Total Management System
- Traffic Management System
- Traveler Information System
- Vehicle & Highway System
- Public Transportation System

# 2. Business Field I: Network Integration System











Wireless Network System



Security System

### Wired Network System

- 1 Gigabit/ 10 Gigabit Network
- 2 WAN Switch / IPCC
- 3 Next generation MPLS/ Core Network
- 4 Fiber Transmission : DWDM, MSPP
- (5) Cable Network : CMTS, DSG, DMC

### Wireless Network System

- ① Wireless Data : Mobile Office/ Telemetry
- Wireless Data: W-PKI/W-VPN
- 3 Mobile Internet
  - TRS / Satellite / Wireless Network

### **Security System**

- 1 Firewall, VPN / Virus Wall
- 2 Surveillance System
  - Intrusion Detection
  - Tracking System
  - Defense System



# 3. Business Field II: Intelligent Building System













<u>Total SI: System Integration</u>

1 SCS [Situation Control System]

2 FMS [Facility Management System]

- (3) CMS [Cabling Management System]
- 4 AMS [Audio Management System]
- 5 RCS [Room Conference System]























# BA Part: Building Automation

- 6 WCS [Water Control System]
- 7 PCS [Power Control System]
- **8** LCS [Light Control System]
- (9) SSS [Situation Surveillance System]
- 10 ECS [Entry/Exit Control System]
- 11) PMS [Parking Management System]
- (12) AMR [Automatic Reading System]
- (13) RMS [Room Management System]

### OA Part: Office Automation

- (14) BGS [Building Guide System]
- (15) BCS [Building Clock System]

# 4. Business Field III: Intelligent Traffic System

















Intelligent

**T**raffic

System















# : Traffic Situation Analysis System (1) ETC [Electronic Toll Collection]

ATMS (Advanced Traffic Management System)

- (2) AIM [Advanced Incident Management]
- (3) RLS [Red Light Surveillance]
- (4) ATE [Automatic Traffic Enforcement]
- (5) HVM [Heavy Vehicle Monitoring]

# ATIS (Advanced Traffic Information System)

- : Traffic Information Provision System
- (6) TIS [Traveler Information Service]
- (7) RGS [Route Guidance Service]
- (8) TRIS [Traffic, Road Information Service]

# APTS (Advanced Public Transportation System)

- : Public Transportation Information System
- (9) PTM [Public Transportation Management]
- PTIS [Public Transportation Information Services]

### AVHS (Advanced Vehicle & Highway System)

- : Intelligent Traffic Information System
- (1) AHS [Advanced Highway System]
- (12) AVS [Advanced Vehicle System]
- (13) HMM [Hazardous Material Monitoring]

# Chapter III



# [EGM] Main Project Case

- Case I: Construction and Housing Development Bank IBS System
- Case Ⅱ: The National Assembly Building AV System
- Case Ⅲ: The Hyatt Hotel IBS System
- Case IV: Yong-In Total Security System
- Case V: KIPI Network System
- Case VI: Daegu Cyber University HD Broadcasting Studio System
- Others





# 1. Project Case I: CHDB\* IBS System



\* Construction and Housing Development Bank

#### **Project Overview**



Construction and
Housing Development
Bank
IBS System
(Myanmar)

- Project Title: Construction and Housing Development Bank IBS System (Design & Construction)
- 2. Project Period: Sep.2013 ~ Feb.2014
- 3. Design & Construction System
  - Building Security System, Audio(PA) System
  - Access Control System, Conference System
  - IP PABX System, Fire Alarm System
  - CATV System, Structured Cabling System
- 4. Contract Amount: 3M USD

#### Building Security System



- Building area check (inside, outside)
- Intruder surveillance
- Fire alarm system
- Intrusion sensor
- Security or special zone surveillance

#### Audio (Broadcasting) System



- Auto emergency broadcasting
- Announcement broadcasting
- Panic button
- Control audio volume
- Auto dial system

#### Access Control System



- Unauthorized person check/control
- Property protection
- Visitor control
- Access control
- Access leveling (zone and group)

### Conference System



- High-quality Audio and video system
- LCD projector
- Screen (elevation)
- High-power speaker
- CCTV system
- CD/DVD system

#### IP PABX System



- All IP based PABX system
- PMS interface system
- IP phones
- Voice messaging and mail system
- Auto error sensing

#### Structured Cabling System



- Organized cabling structure system
- High-speed infra.
   communication
- High-performance wired network
- Simple maintenance

# 1. Project Case: CHDB\* IBS System\_cont.





### <u>Total SI</u>: System Integration

- 1 Access Control System
- 2 Intrusion Sensor System
- 3 CCTV System

### TC Part : Tele Communication

- 4 CATV System
- (5) IP PBX(IP-Phone) System
- 6 IDF System
- 7 UPS(AVR) System
- **8** Structured Cabling System
- 9 Network System

### BA Part: Building Automation

- 10 Fire Alarm System
- 11 PA System
- 12 HVAC(Air Condition) System
- 13 Fire Fighting System

### OA Part: Office Automation

- 4 Audio/Video System
- (15) Conference System

<sup>\*</sup> IBS : Intelligent Building System

# 2. Project Case: The National Assembly Building AV System



#### **Project Overview**



The National
Assembly Building
AV System
(Myanmar)

- Project Title: The National Assembly
   Building AV System (Design & Construction)
- 2. Project Period: July.2010 ~ Dec.2010
- 3. Design & Construction System
  - Audio / Video System / Display System
  - Total Control System
- 4. Contract Amount: 5M USD

### Audio (Conference) System



- High-quality voice broadcasting system
- High-intelligibility broadcasting system
- High-power speaker
- Overcome the audio reverberation

#### Audio (Broadcasting) System



- Auto emergency broadcasting
- Announcement broadcasting
- BGM broadcasting (Background music)
- Selection audio

#### Video (Conference) System



- Live high-definition video system
- Pan/tilt camera
- HD camera
- Video signal control
- Multi-PDP(display) video support

### Video (Monitoring) System



- Real-time monitoring
- Rapid response in the event situation
- Intelligent detection and monitoring
- Situation video data recording

#### Display (MPDP) System



- Ultra-thin screen
- Various screen division
- BIC Technique (Burn in compensation)
- AGAR Technique (Anti-Glare Anti-Reflection)

#### Control System



- Total management
- Situation monitoring
- Facility monitoring
- Building environment monitoring / check
- Prompt situation recognition

# 3. Project Case: The Hyatt Hotel IBS System



### **Project Overview**



Hyatt Regency Vladivostok Hotel IBS System (Russia)

- Project Title: Hyatt Regency Vladivostok Hotel IBS System (Design)
- 2. Project Period: Feb.2011 ~ Oct.2011
- 3. Design System
  - Audio/Video System, IP Television, IP PABX
  - LAN, Cabling System, Stage Lighting System

#### **Project Construction Process**

- Improving customer satisfaction thorough research and analysis of the clients' claims which leads to increase the design reliability.
- Planning the optimum system for the site with the on-the-spot survey based on the methodology.
- Providing the convenience for the operation and maintenance with the operation system suitable for the each site from anticipating and analyzing the hotel accessibility. (Improving the asset value)

#### Audio/Video System



- High-quality Audio and video system
- Auto emergency broadcasting system
- High-power speaker
- Touch screen system
- CD/DVD system

#### IP Television System



- Excellent HD equipment
- Customized UI for client operation
- Mainly IP based TV&MATV
- UPS system

#### **IP PABX System**



- All IP based PABX system
- PMS interface system
- IP phones
- Voice messaging and mail system
- Auto error sensing

#### LAN System



- High-speed infra. communication
- High-performance wired network
- Redundancy built within core switch
- 100Gbps bandwidth

#### Structured Cabling System



- Organized cabling structure system
- Gigabit Ethernet
- Qualified cabling system : CMS(cable management system)
- Simple maintenance

#### Stage Lighting System



- Multi purpose events lights system
- Interlocked with A/V system
- Coordinated batten system
- Convenient operation

# 4. Project Case: Yong-In Total Security System



### **Project Overview**



Total Security
System
of Yong-In City Hall
(Korea)

- 1. Project Title: The City Hall of Yong-In Security System (Design & Construction)
- 2. Project Period: Jun.2007 ~ Jan.2013
- 3. Design & Construction System
  - City/School/Park/Building/Life Security System
  - Total Security Control Center
  - Build over 1,000 CCTV cameras
  - Build Network Connectivity for all cameras
  - Build out door Poles & outdoor box
  - Build **Control center**( Display system, Server, Storage, Interior, etc)
- 4. Contract Amount: over 20 M USD

#### City Surveillance System



- City crime prevention
- Road surveillance
- Facility monitoring
- Rapid response in the event situation (fire, emergency etc.)
- Video data recording

#### School Surveillance System



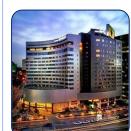
- Children protection from kidnapper
- School(children)zone surveillance
- Emergency bell operation in the event situation

#### Park Surveillance System



- Park pedestrian/user monitoring
- Flooding river check
- Park facility check
- Environment check
- Emergency situation monitoring

#### Building Surveillance System



- Building monitoring
- Building trespasser surveillance
- Perimeter security (fence and wall etc.)
- Intelligent detection and surveillance

#### Life Surveillance System



- Interior space check (corridor, elevator etc.)
- Intruder surveillance
- Facility monitoring
- Emergency bell
- Security or special zone surveillance

#### Access Surveillance System



- Unauthorized person check/control
- Property protection
- Visitor control
- Access control
- Access leveling (zone and group)

# 5. Project Case: KIPI Network System



### **Project Overview**



Network System of Institute of Patent Information (Korea)

- Project Title: Institute of Patent Information
   Network System (Design & Construction)
- 2. Project Period: Mar.2010 ~ Dec.2011
- 3. Design & Construction System
  - Network Configuration
  - Network Maintenance

#### **Project Construction Process**

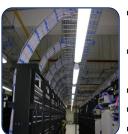
- Securing the reliability with appropriate operating network construction by pre-analyzing
- With network designed and constructed to be effective and stable, realizing the external service
- Constructing network environment in the Data Center suitable for patent browsing service, IP, integration center environment.
- Providing the stability by adopting high-performance and high-availability equipment.

#### [Search System] Network Configuration



- Backbone dualization
- Workgroup dualization
- Server dualization
- Firewall system
- Web-firewall system
- IPS system
- Router system

#### **Network Construction**



- Center network construction
- Office total cabling construction
- Cat.6 UTP
- OM3 fiber
- Network wiring

#### [IP Total Center] Network Configuration



- Total center network system of patent information service
- Inside network system
- DMZ network system
- Server farm system
- Network security

#### Network Maintenance



- Non-stop network maintenance
- Network equipment maintenance
- Security equipment maintenance
- Cabling maintenance

#### [Data Center] Network Configuration



- Data center network construction
- UPS system
- CRAC system (computer room air conditioner)
- FMS system (facility management system)

#### Main Equipment



- Backbone : Cisco 6509
- Server farm
- Cisco 4507R
- L4 switch
- Alteon 3408E
- Security equipment
- Future firewall
- Sniper IPS

# 6. Project Case: University HD Broadcasting Studio System



### **Project Overview**



HD Broadcasting
Studio System of
Daegu Cyber University
(Korea)

- Project Title: Daegu Cyber University
   HD Broadcasting System (Design & Construction)
- 2. Project Period: Aug.2010 ~ Oct.2010
- 3. Design & Construction System
  - HD Contents System / Broadcasting System
  - Virtual Studio / Lighting System

#### **Project Construction Process**

- Adopting the high-tech FULL HD equipment and operating technical variety to be commensurate with the state-of-the-art studio condition.
- Maximizing the equipment utilization with selecting the devices designed to the beginners according to the spot characteristic.
- Constructing the operator-centric high-tech system
- Adopted various equipment for producing broadcast contents to attract the user's interest.

### **HD Contents System**



- Full HD system
- Various contents environment provision
- Manless system
- Rapid video handling
- High-definition video
- Tapeless technique

### Broadcasting Recording System



- Multi-view system for easy operation
- 2D, 3D recording
- All in ONE system
- Real-time recording
- High-definition video recording

#### Virtual Studio System



- Virtual studio space/ environment provision
- Realistic broadcasting display (Background)
- Specialized studio lighting system
- High-tech camera

#### Real-time Live System



- Real-time Live broadcasting system
- Concurrent-access operation system
- Various codec support (wmv, avi, h.264)
- Multi-channel system

#### Broadcasting Editing System



- Professional editing program for various contents
- Real-time broadcasting editing system
- Simple operation to high-capacity video

#### **Broadcasting Lighting System**



- Multi-lighting system for various contents
- Move line lighting
- Lighting system for various effects
- Simple operation of lighting change

# 7. Project Case: Others



#### World Bank in LAO PDR



# World Bank Building in LAO.PDR

1. Project Title:

ELV Building for WorldBnk in LAO. PDR

- 2. Project Period : MAY.2014 ~ FEB.2016 (on progress)
- **3 System Description**

ELV contractor for make a new building

- Structured Cabling
- CCTV
- Access Control
- Fire alarm, AV system
- Network system & Connectivity
- 4. Contract Amount: 1M USD

### **Myanmar Congress**



Material Supply for Myanmar Congress

- 1. Title: Material Supply contract
- 2. No of Contract:

Average 12 contracts a Year

- 3 System
  - AV Materials
  - Display Materials
  - Access Control Materials
- **4. Contract Amount** : 1M USD (Summary amount)

# ICBC (Myanmar)



**Access Control System** 

- 1. Project Title:
  - ACS Building for ICBC in Myanmar
- **2. Project Period**: MAY.2015 ~ JUL.2015 (on progress)
- 3 System Description

ACS contractor for ICBC Myanamer

- Structured Cabling
- Access Control
- 4. Contract Amount : NDA

# 7. Project Case: Others



### KOICA for Nicaragwa



Material Supply

- 1. **Contract Title**: Material Supply
- 2. Contract Period : AUG.2014~ DEC.2014
- 3. System Description
- Material Supply for development of advanced agriculture
  - KOICA ODA FUND
- 4. Contract Amount: 0.3M USD

### Ministry of Security & safety



SI Project : <u>Situation Management system</u>

- 1. Contract Title:
  - **Building Situation Management system**
- 2. **Contract Period**: JAN.2015~5.2015
- 3. System Description :
  - Main Contractor as a System Integrator
  - Network Connectivity
  - Video Conferencing
  - Display System

Merge all offices & government for MSS

4. Contract Amount: 0.8M USD

### NamyangJu U-City



- 1. Contract Title:
  - Building u-City System
- Contract Period : Sep.2014~Feb..2015
- 3. System Description :
  - Sub Contractor as a System Vendor
  - Network Connectivity
  - IBM Servers
  - IBM Storage
- 4. Contract Amount: 1M USD

# 7. Project Case: Others



# INDONESIA Train Authority



1. Contract Title:

Wireless Network Connectivity for trains (#phase1)

On going project

2. Contract Period: Jul.2015~ Nov.2014

3. System Description

- Phase#1:

From Jakarta KOTA to Bogor station

(24 stations & railway)

- \* Wireless Network
- \* Mirowave System, Billing System, etc
- 4. Contract Amount: 3.6 M USD

