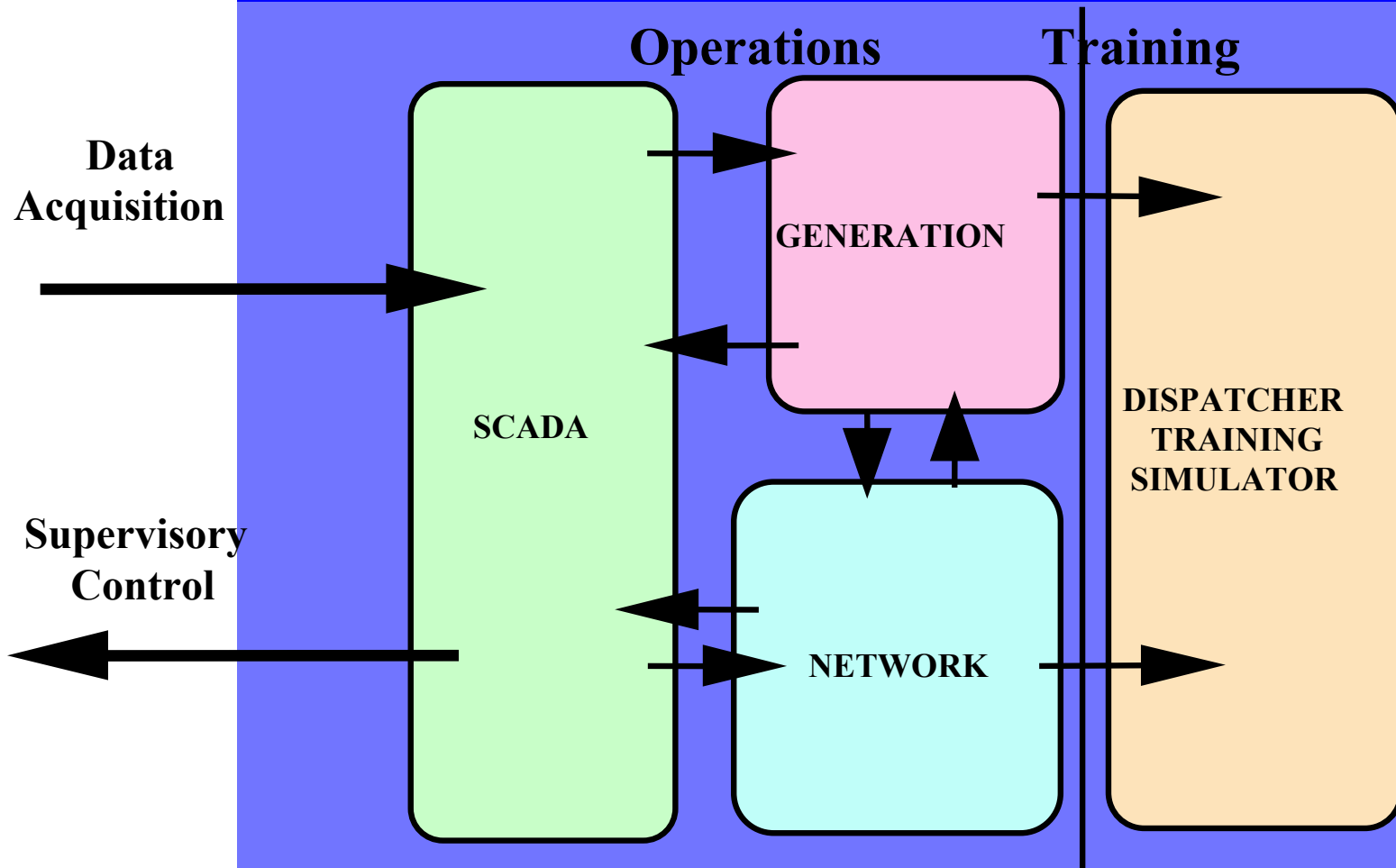
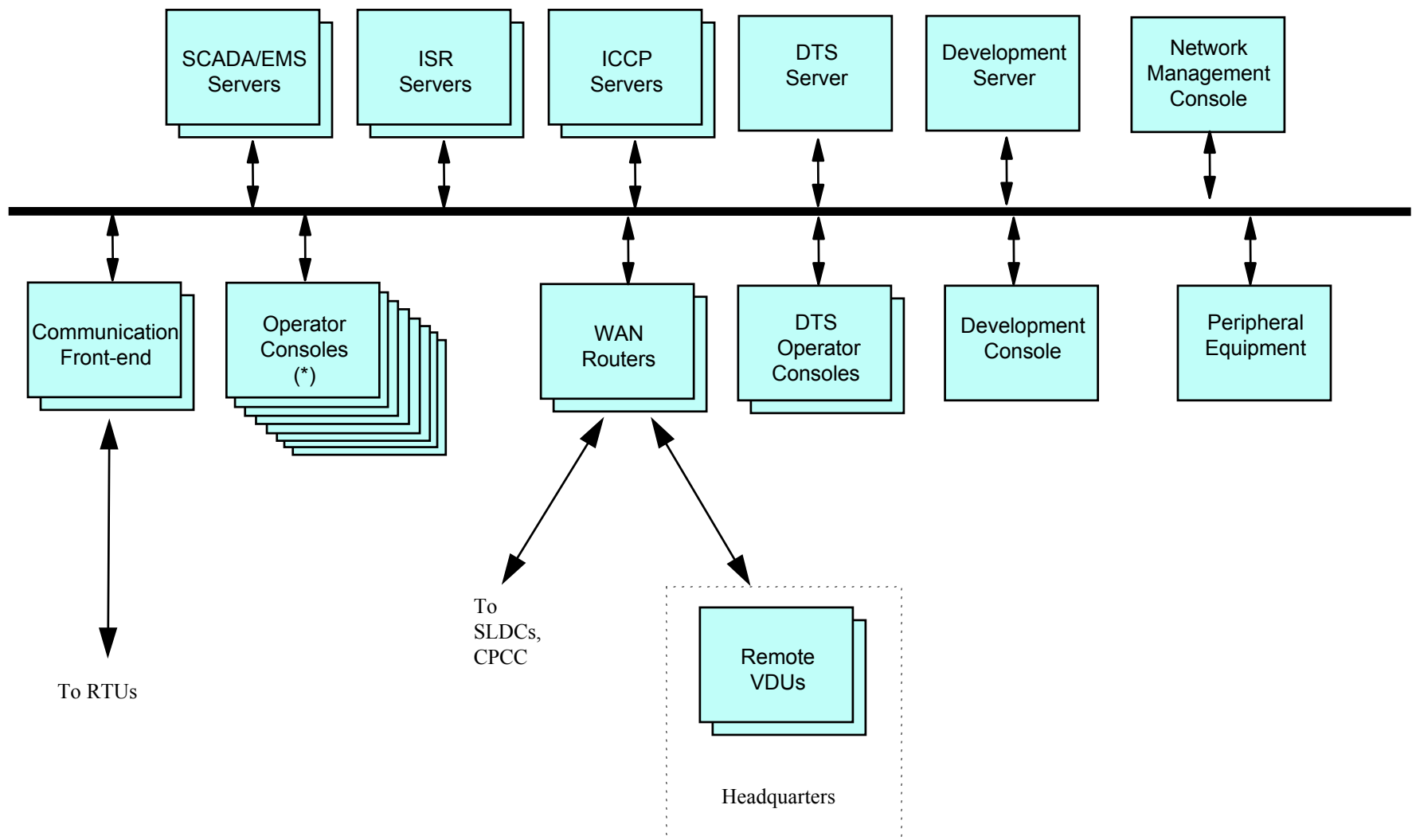


Operating System

Real-Time Control System Environment

Application Subsystems





(*) Five 2-CRT consoles, two 1-CRT consoles and one Operations Scheduling Console

SCADA/EMS server	
Subsystem	Functions
SCA	- SCADA - Disturbance Data Collection
NET	- Real-time Network - Study Network
GEN	- Real-time Generation - Study Generation
OPS	- Operation scheduling
RCSE	- HABITAT / Utilities - EMP utilities - GUI utilities

ISR server	
Subsystem	Functions
HIM	- Real-time database snapshot - Historical Information
RPT	- Information Retrieval - Report Generation

ICCP server	
Subsystem	Functions
OAG	- ICCP data exchange
RCSE	- HABITAT / Utilities - EMP utilities - GUI utilities

Network Management console	
Subsystem	Functions
NMG	- Network Management

Ethernet LAN

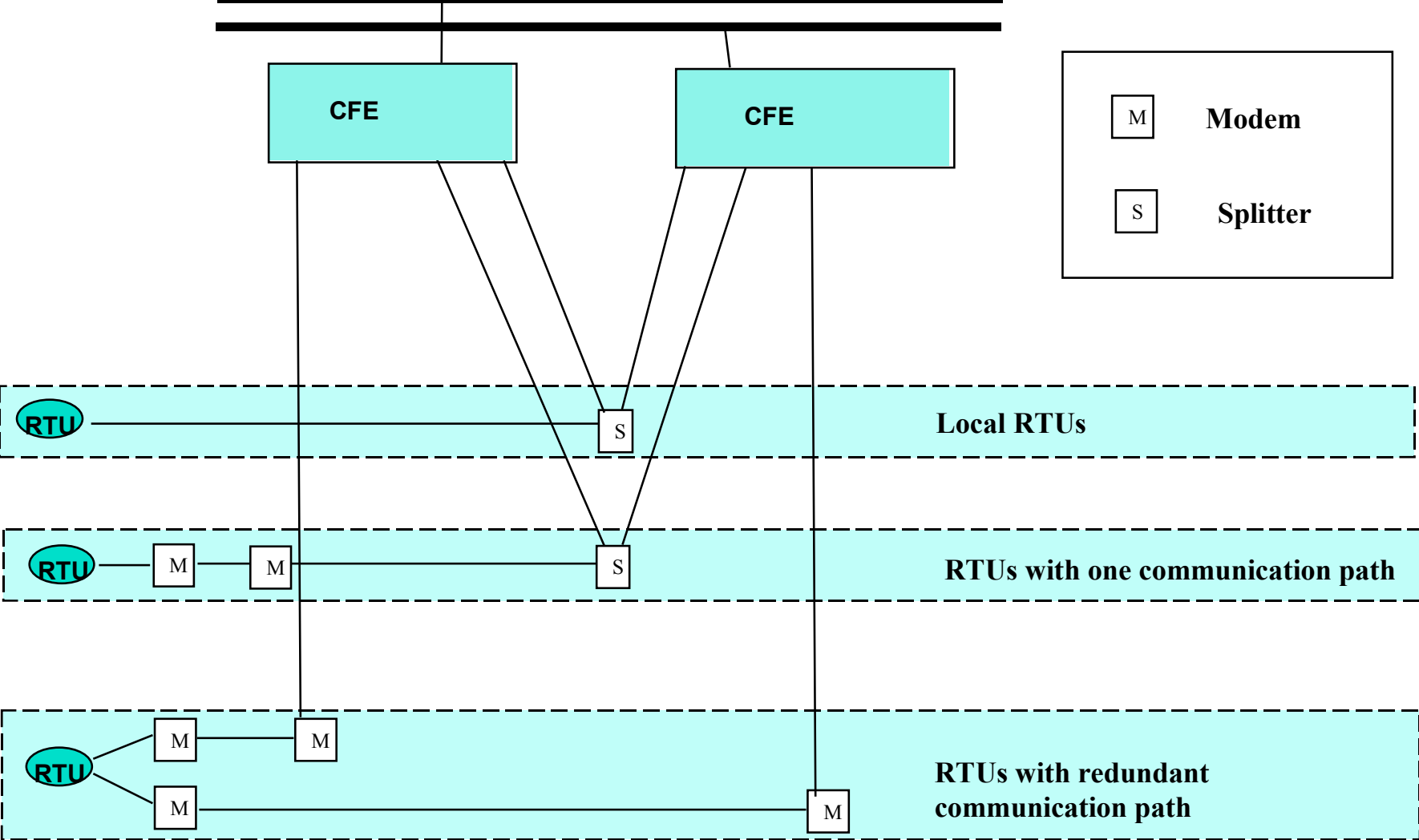
Operation Scheduling console	
Subsystem	Functions
OPS	- Operation Scheduling

Development server / Console	
Subsystem	Functions
DEV	- Software development - Display Generation - Database Generation
DTS	- Power System Model - Hydro System Model - Control Center Model - Instructor functions
RCSE	- HABITAT / Utilities - EMP utilities - GUI utilities

Training server	
Subsystem	Functions
DTS	- Power System Model - Hydro System Model - Control Center Model - Instructor functions
RCSE	- HABITAT / Utilities - EMP utilities - GUI utilities

SCA	SCADA
NET	NETwork applications
GEN	GENeration applications
OPS	OPERation Scheduling
HIM	HISTorical Information Management
RPT	RePORting
OAG	Open Access Gateway
NMG	Network ManaGement
DEV	DEVELOPMENT
DTS	DISpatching Training Simulator
RCSE	Real-time Control System Environment

Redundant Ethernet LAN



Real Time Control System(RCSE)

- HABITAT
- NETIO
- EMP Utility
- GUI Utility

HABITAT Utilities

- PHOENIX
- APPMGR
- CASEMGR
- PROCMAN
- PERMIT
- HABITAT Export/Import
- More>>

HABITAT Utilities

- LOGMAN
- TIMEDATE
- Rapport CG
- 100 Other APIs

NETIO Communication Utility

- Datapipe between two applications
- Transparent to node name or network path information
- Supports automatic failover of the paths and objects

EMP Utilities

- Configuration Manager(CFGMAN)
- BACKUP
- ALARM
- Time synchronisation(TIMESYNC)

GUI Utilities

- Console Management
- User Access to Functions
- Rapport FG
- HABCONNECT
- Operator Notepad
- MAPBOARD/VPS