

A350
TECHNICAL TRAINING MANUAL
MAINTENANCE COURSE - T1+T2 - RR Trent XWB
Cabin Systems

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CABIN SYSTEMS

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CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS) DESCRIPTION (2/3)

CIDS Functions

The CIDS has the functions that follow:

- Communication
- Passenger Address (PA)
- Cabin interphone
- Service interphone.
- Cabin lighting and passenger lights

The CIDS controls all the connected illumination devices in the A/C cabin, also through direct control commands (for the special light devices at the seats). The cabin illumination is controlled independently in the different cabin zones and rooms.

- Cabin ready signaling-system

The cabin ready signaling-system is used by the cabin crew to tell the flight crew about the cabin ready condition on takeoff and landing.

For this function, an area ready signal is started on each related Flight Attendant Panel (FAP). The area status of all the areas is shown on a display page of the FAPs. Thus, the purser can make a decision about the status of the full cabin and send a cabin ready signal, which is then shown on the CDS.

- Emergency (EMER) Evacuation (EVAC) signaling-system

The CIDS controls the EVAC signaling system in all the cabin areas and in the cockpit.

The EVAC signaling system can be activated from:

- The cockpit
- The FAPs
- The Additional Attendant Panels (AAPs).
- Lighted signs (standalone signs)

The CIDS processes the normal and automatic operation of the signs that follow:

- No Smoking (NS)
- Fasten Seat Belts (FSB)
- Return to Seat (RTS)

- No mobile sign
- Return to cabin
- No Portable Electronic Devices (PEDs).
- Passenger (PAX) call

The passengers can make calls from their seats and from the lavatories, which activate different acoustic and visual signals in the A/C cabin.

The CIDS supplies these signals to some cabin zones or to the full cabin in relation to the cabin layout.

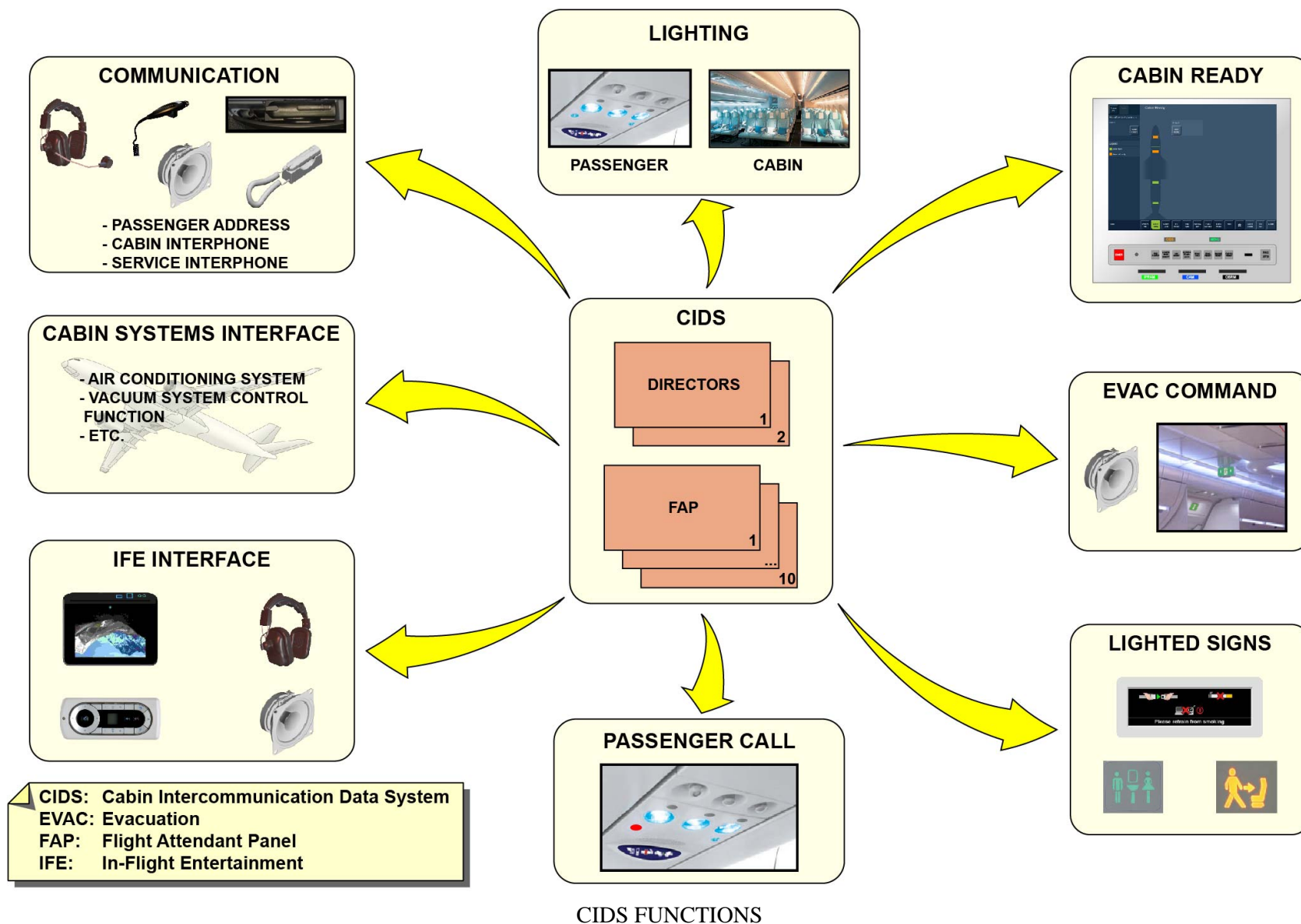
- In-Flight Entertainment (IFE) interface

The CIDS monitors and controls the status of the IFE system through the exchange of several control commands with the IFE.

The CIDS supplies the audio part of announcements through the cabin loudspeakers and the headsets at the passenger seats, and sends audio signals to the IFE. The CIDS also receives the audio part of video announcements from the IFE to send it to the cabin loudspeakers.

- Cabin systems interface

The CIDS has interfaces with different systems which are linked with the cabin operation (e.g.: Air Conditioning System (ACS), vacuum system control function, to control and give the status of the vacuum toilet system and the potable water system).



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CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS) DESCRIPTION (2/3)

CIDS Description

The CIDS is a customized server-based system used to do the functional control, operation, data transmission, testing and monitoring of the different cabin systems.

The CIDS hosts and processes software from different ATA chapters. The CIDS is modular, which means that the number of installed components can be adapted to the cabin layout and functional requirements. A controller, bus lines and a network concept are the basis of the general CIDS architecture.

CIDS directors

For redundancy reasons, the CIDS has two identical CIDS directors, which are the central part of the system.

When one of the two CIDS directors operates, the other one is in standby mode.

The active director controls, operates and monitors passenger and cabin crew related functions. For this purpose, the active director exchanges data with the cabin support systems (cabin temperature control, lighting, etc.) through the onboard CIDS network or directly. The two CIDS directors also have connections to:

- Some cockpit controls and indications and to the cabin control panels (FAPs) to give control to the cockpit and cabin crew.
- Some A/C systems to start some of the CIDS functions automatically. To do their functions, the CIDS directors host some applications related to the connected systems (i.e.: Electrical Load Management (ELM), Cabin Pressure Control System (CPCS)).

DEU type A

The interface between the active CIDS director and the passenger related functions is done through the Decoder/Encoder Units (DEUs) type A.

The active director controls each DEU-A. The DEUs-A are connected to the directors through a top line data-bus. The connection between the DEU-A and the top line data-bus is done through a connection box.

Each connection box has a coding switch, which gives the address for the location of the DEU-A. The last connection box includes a termination resistor (for impedance matching) and is called termination box.

The passenger related functions are the cabin lighting and all the Passenger Service Units (PSUs) functions (PAX individual lighting and buttons, PAX signs and calls, and loudspeakers).

DEU type B

The interface between the active CIDS director and the cabin crew related functions is done through DEUs type B.

The active director controls each DEU-B. The DEUs-B are connected to the directors through a middle line data-bus. The connection between the DEU-B and the middle line data-bus is done through a connection box.

Each connection box has a coding switch, which gives the address for the location of the DEU-B. The last connection box includes a termination resistor (for impedance matching) and is called termination box.

The CIDS uses each DEU-B to control the Area Call Panels (ACPs), Attendant Indication Panels (AIPs), optional AAPs, handsets and lavatory signs.

Memory cards

The directors host non-volatile memory, which includes:

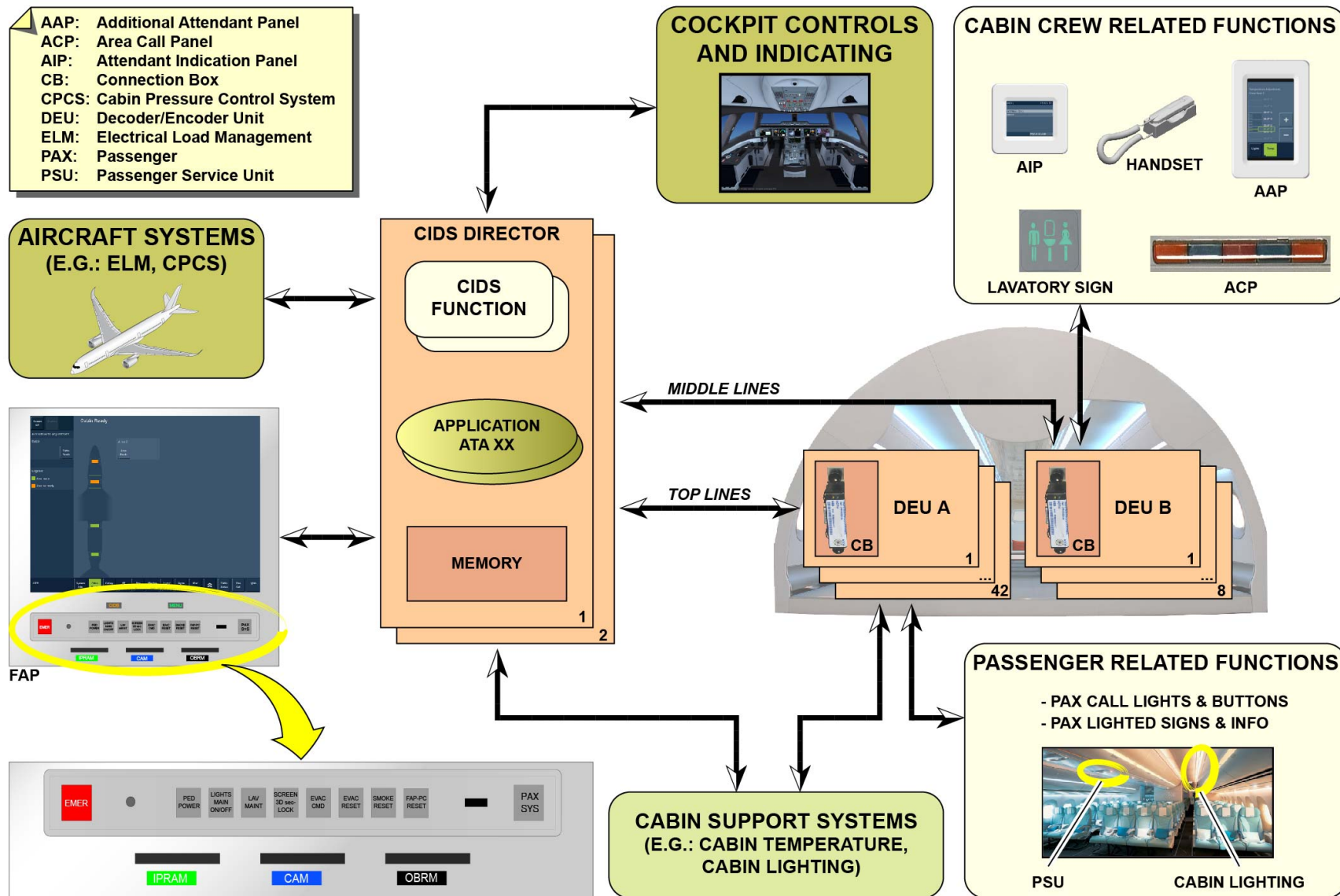
- Mandatory layout, which:
- Contains the basic cabin-layout data
- Is an integrated part of the operational director software.
- Cabin assignment data-memory, which:

- Stores the customer configuration data and the system properties data
- Is modified by the Cabin Assignment Module (CAM), which is in the FAP.

The front panel of the chief purser FAP has three slots that contain different memory cards. During operation, they stay in the related slot of the chief purser FAP.

These memory cards are:

- The CAM, which contains the customized configuration data of the modified cabin layouts.
- The Integrated Prerecorded Announcement Module (IPRAM), which stores prerecorded announcements, boarding music audio and announcement audio files.
- The On Board Replaceable Module (OBRM), which is a fixed integrated data module for the software and configuration data in the chief purser FAP. It operates as the CIDS data repository for all loadable CIDS components.



CIDS DESCRIPTION - CIDS DIRECTORS ... MEMORY CARDS

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CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS) DESCRIPTION (2/3)

CIDS Communication Functions

Passenger address

The CIDS transmits the PA announcements to the related cabin loudspeakers and Passenger Control Unit (PCU) (if the IFE system is installed) from the:

- Cockpit
- Attendant stations
- Prerecorded Announcement and Music (PRAM)
- IFE system.

The cockpit and cabin crew use the handset to make PA announcements.

The cockpit crew can also make PA announcements through the acoustic devices (boomset, microphone and boomset from the oxygen mask).

Cabin interphone

The cabin interphone is used for the communication between:

- The cabin crew stations
- The cockpit and the cabin crew stations.

One or more calls can start at the same time.

In the conference mode, the communication is possible between many stations (up to 24 interphone stations).

From the cockpit, the interphone communications are possible through:

- The cockpit handset
- The cockpit call panel
- The cockpit acoustic devices (boomset, microphone and boomset of the oxygen mask).

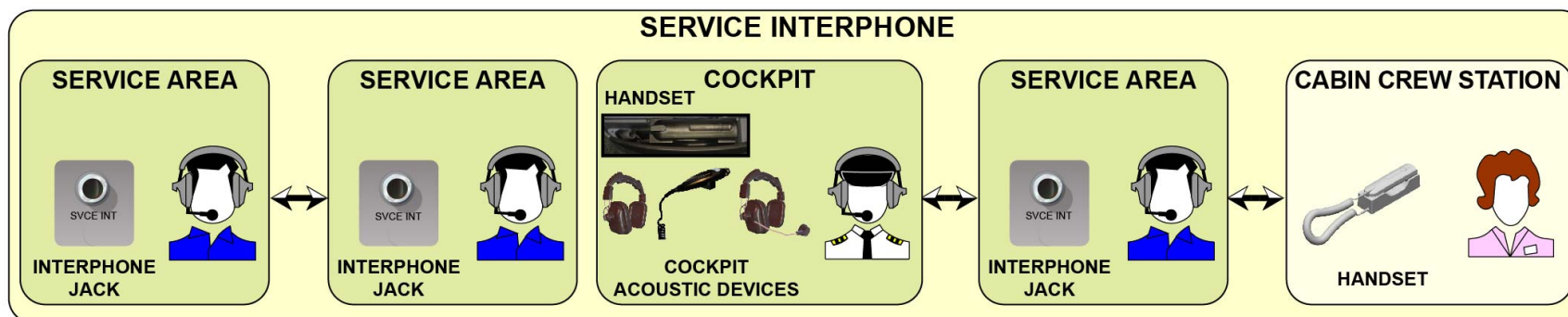
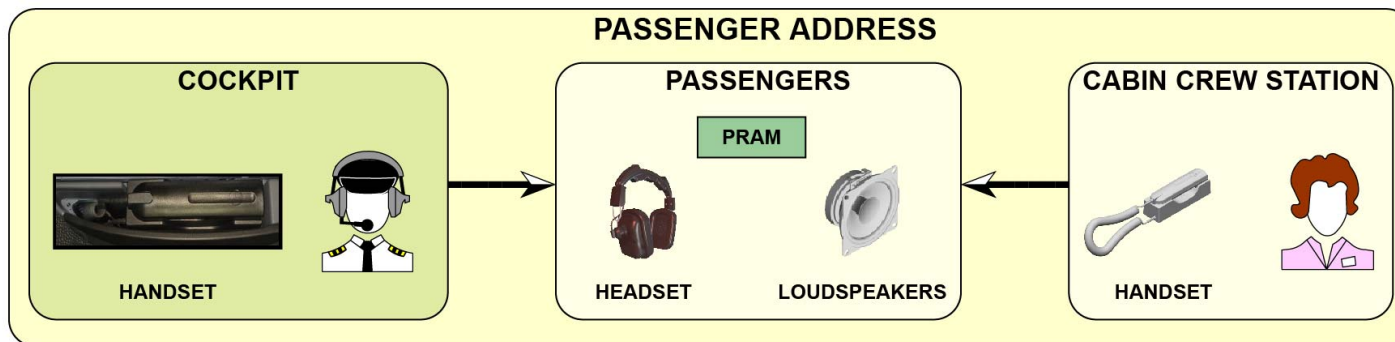
Service interphone communication

The service interphone system is used for the communication between:

- The service areas
- The cockpit and service areas

- The service areas and cabin crew stations.

Note: interphone jacks are installed at service areas (i.e.: hydraulic ground-service panel, engine air intake, etc.).



PRAM: Prerecorded Announcement and Music

NOTE: SERVICE INTERPHONE JACKS ARE PART OF ATA 23

CIDS COMMUNICATION FUNCTIONS - PASSENGER ADDRESS ... SERVICE INTERPHONE COMMUNICATION

CABIN INTERCOMMUNICATION DATA SYSTEM (CIDS) DESCRIPTION (2/3)

CIDS Interfaces

Description

The CIDS has interfaces with the following:

- **Smoke Detection Function (SDF) (hosted by the directors)**
- Audio Management Units (AMUs)
- A/C systems (e.g.: trolley lift, ice protection and control, ELM, galley cooling, doors/slides, vacuum-system control function, emergency lighting power-supply)
- IFE system
- Slat Flap Control Computers (SFCCs)
- LGERS
- Propulsion Control system (PCS)
- Cockpit Door Locking system (CDLS).

SDF

The SDF of the CIDS directors has direct interfaces with the smoke detectors of:

- Lavatories
- Cargo compartments
- Main avionics compartment
- Flight Crew Rest Compartment (FCRC)
- Cabin Crew Rest Compartments (CCRCs)
- In-Flight Entertainment Center (IFEC).

The cabin-smoke signaling function is hosted in the CIDS directors, on a different hardware with its own Controller Area Network (CAN) bus for the smoke detectors.

The CIDS controls the visual and acoustic smoke signaling in the cabin.

The CIDS gives audible and visual alerts if there is smoke in the cabin through the DEUs-A, Passenger Service Adapter (PSA), smoke indicator light and FAPs (optional ACPs and AIPS).

AMUs

The audio outputs (PA and cabine (CAB)) of the CIDS must be connected to each AMU through analog links.

The mike and Push-to-Talk (PTT) outputs of the two AMUs are connected to the related CIDS input through analog and discrete links respectively.

When a call is made from the cabin, the attendant call indication is sent by the CIDS to the AMUs (through a discrete link) to give a flashing indication on the Radio and Audio Management Panels (RMPs). The call attendant reset-data sent from each AMU are connected to the CIDS through a discrete link and activated when the crew answers the call.

When a call is made from the cabin attendant station, the CIDS sends these data to the AMUs, RMPs (through the AMUs) and FWS to start the aural alert (buzzer).

Each CIDS have interfaces with the AMUs for the PA function and cabin interphone links.

SFCCs

The CIDS receives the position of the flaps lever from the SFCCs to give cabin audio and visual announcements (i.e.: the cabin ready logic or the passenger lighted signs system controls the PED and the following signs of the director: NS, FSB, RTS, no mobile and return to cabin signs). The interface will be made using a discrete link from both SFCCs to the CIDS directors.

IFE

The CIDS monitors the status of the IFE system. The CIDS director receives and transmits the audio signals and the PA related announcements from and to the IFE system.

The CIDS transmits its status to the IFE system to show and announce the passengers lighted signs of CIDS (e.g. FSB).

The CIDS also:

- Transmits more A/C system data (such as parameters from the FWS, Oxygen (OXY) system and Door and Slide Control System (DSCS)) to the IFE system.

- Gives data to the IFE system about:

- The layout change
- The cabin zoning modification
- The status of the general illumination for control of display intensities.

Each CIDS director and IFE system are connected via Ethernet bus.

CDLS

When the cockpit door is opened, the CDLS sends a door status to the CIDS directors through the Avionics Data Communication Network (ADCN) to dim the related lights in the forward entry area to predefined values.

LGERS

The CIDS receives the L/G status (A/C on ground) from the LGERS through hardwired discrete signals and the AFDX network.

On ground, the functions that follow are available:

- All lights of the cabin illumination, which can be switched on or off by using the MAIN ON/OFF key from the FAP
- BITE interactive mode
- System software loading function
- Activation of the service interphone.

Note: the CIDS consolidates the ground or flight status with the engine shutdown and ground status data from the PCS. The CIDS considers that the A/C is on ground only if the two systems supply the A/C on ground status data.

PCS

Each CIDS unit receives engine running status from the PCS to automatically increase the PA volume when an engine running is detected.

Emergency EVAC signaling-system

The emergency EVAC signaling-system controls the evacuation signaling in all the cabin areas and in the cockpit. It is activated from the cockpit or from the cabin control panels (e.g.: FAP or AAP) during an emergency evacuation.

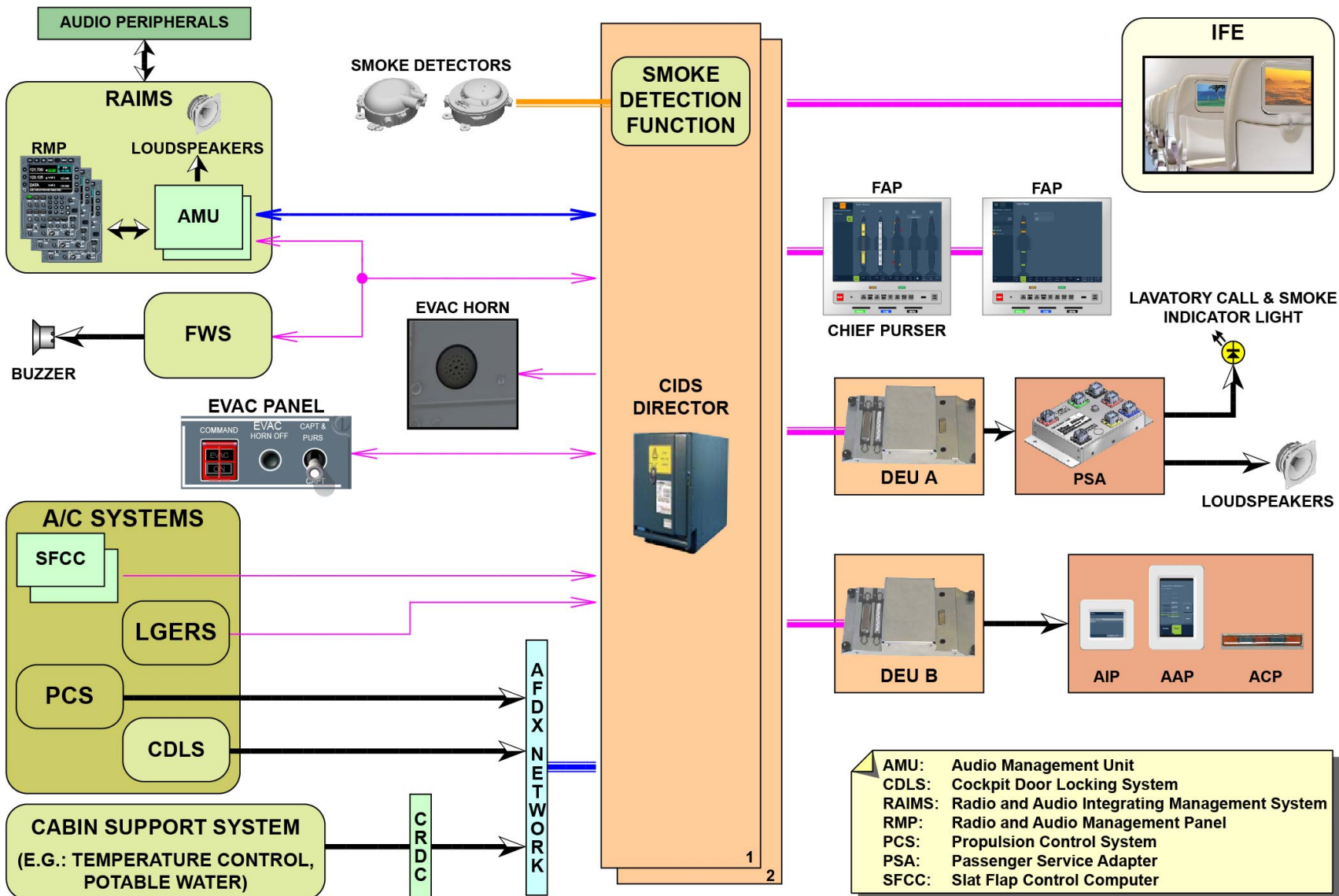
When the EVAC command is started from the cockpit or from the cabin control panels, different acoustic and visual attention getters are activated. The acoustic indications are done by EVAC tones and emitted through the loudspeakers. The visual indications are done by the illuminated buttons, ACPs and messages on AIPs.

When the EVAC command is started from the cockpit or from the cabin control panels, a signal is sent to the director.

The active director transmits the signals to start the related acoustic and visual indications to:

- The connected equipment in the cockpit
- The equipment connected to the DEUs-B.

A signal is also sent to the DEU-A that sends a signal through the PSA to the loudspeakers, where the related tone is emitted.



CIDS INTERFACES - DESCRIPTION ... EMERGENCY EVAC SIGNALING-SYSTEM

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INTERNAL VIDEO MONITORING SYSTEM (IVMS) DESCRIPTION (2/3)

IVMS General

The cabin crew can select the CDSS or the CVMS to show images on the FAP from an applicable control page.

The IVMS includes the Cockpit Door Surveillance System (CDSS) and the Cabin Video Monitoring System (CVMS).

The CVMS and the CDSS have interfaces with the Cabin Intercommunication Data System (CIDS).

The cockpit and cabin crew use the CDSS and CVMS:

- To have respectively an overview of the area in front of the cockpit door
- To monitor various areas in the cabin.

The CDSS lets the flight crew:

- Identify a person who requests entrance to the cockpit (and also in night conditions)
- Detect somebody hidden in the area in front of the cockpit door and the cross section of door 1.

The cameras have infrared light-emitting devices to guarantee the CDSS function at night.

The Area Distribution Unit 1 (ADU1) gets the camera video signals and transmits the video images for the display on the CDS (SD page) through the Concentrator and Multiplexer for Video (CMV).

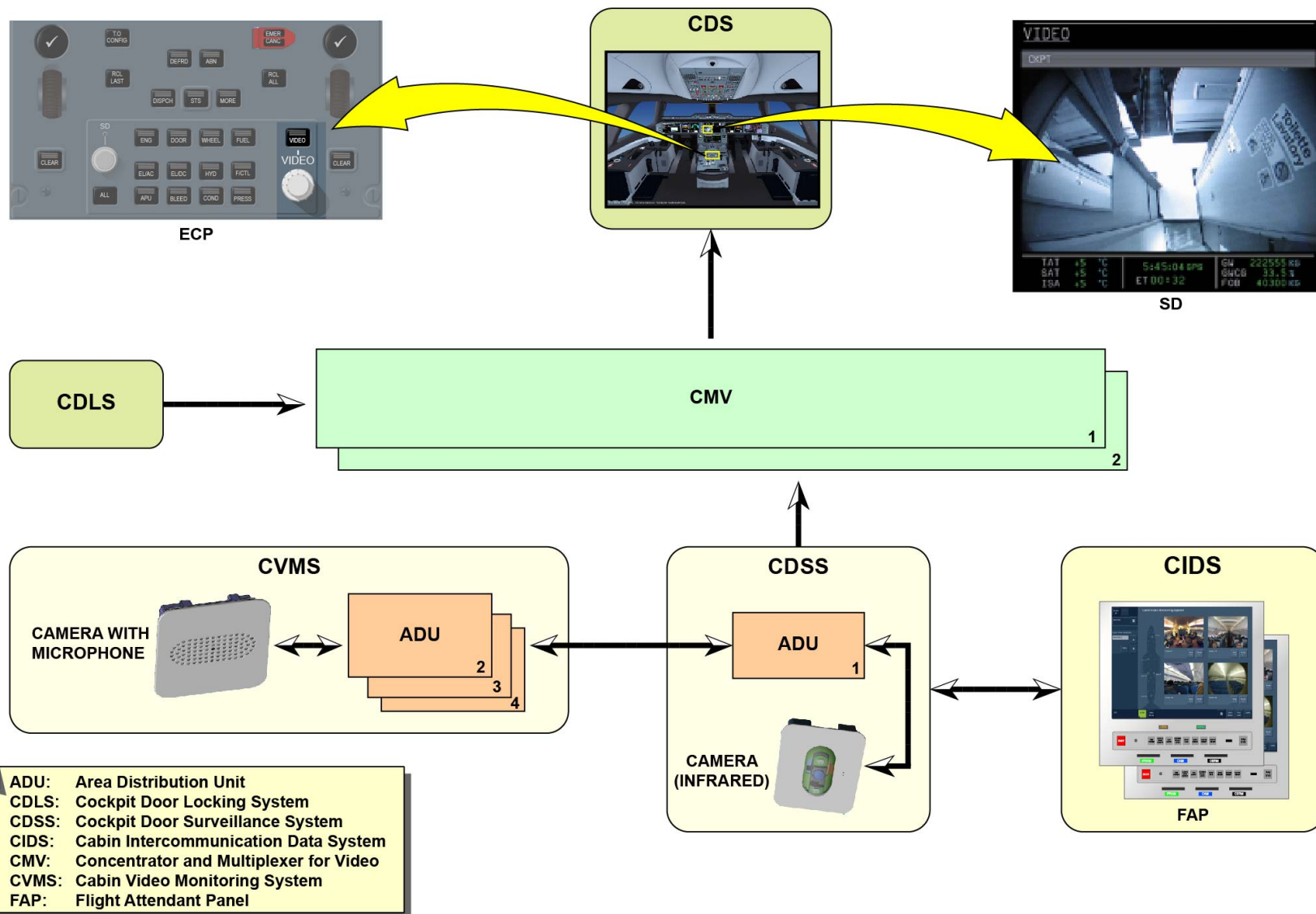
The CDSS display can be operated automatically by the Cockpit Door Locking System (CDLS) if a request for entry is made.

The CVMS lets the flight and cabin crew monitor a possible cabin event through cameras.

The cameras have integrated microphones and are installed in the cabin (as an option in cargo areas). Up to three ADUs get the camera signal (video and audio) and provide the camera with power supply. The three ADUs send the camera signal to ADU1 to show images on the CDS and Flight Attendant Panels (FAPs).

The flight crew can select the CDSS or the CVMS to show images on the SD of the CDS page through the VIDEO key and two concentric rotary knobs.

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IVMS GENERAL

INTERNAL VIDEO MONITORING SYSTEM (IVMS) DESCRIPTION (2/3)

IVMS Function and Description

The CVMS and the CDSS have some cameras (for the CVMS, 10 to 20 cameras maximum and for the CDSS, 3 to 4 cameras). They digitize the video and audio signals and do an encoding (MPEG). Then, the signal is sent to ADU2, ADU3 and ADU4 for the CVMS and to ADU1 for the CDSS.

The Ethernet protocol is used for the general communication of the CDSS and CVMS.

CMV1 sends the requested video images to the SD page of the CDS through optical fiber connections. CMV2 receives data from ADU1 and send them to CMV1 through interconnection.

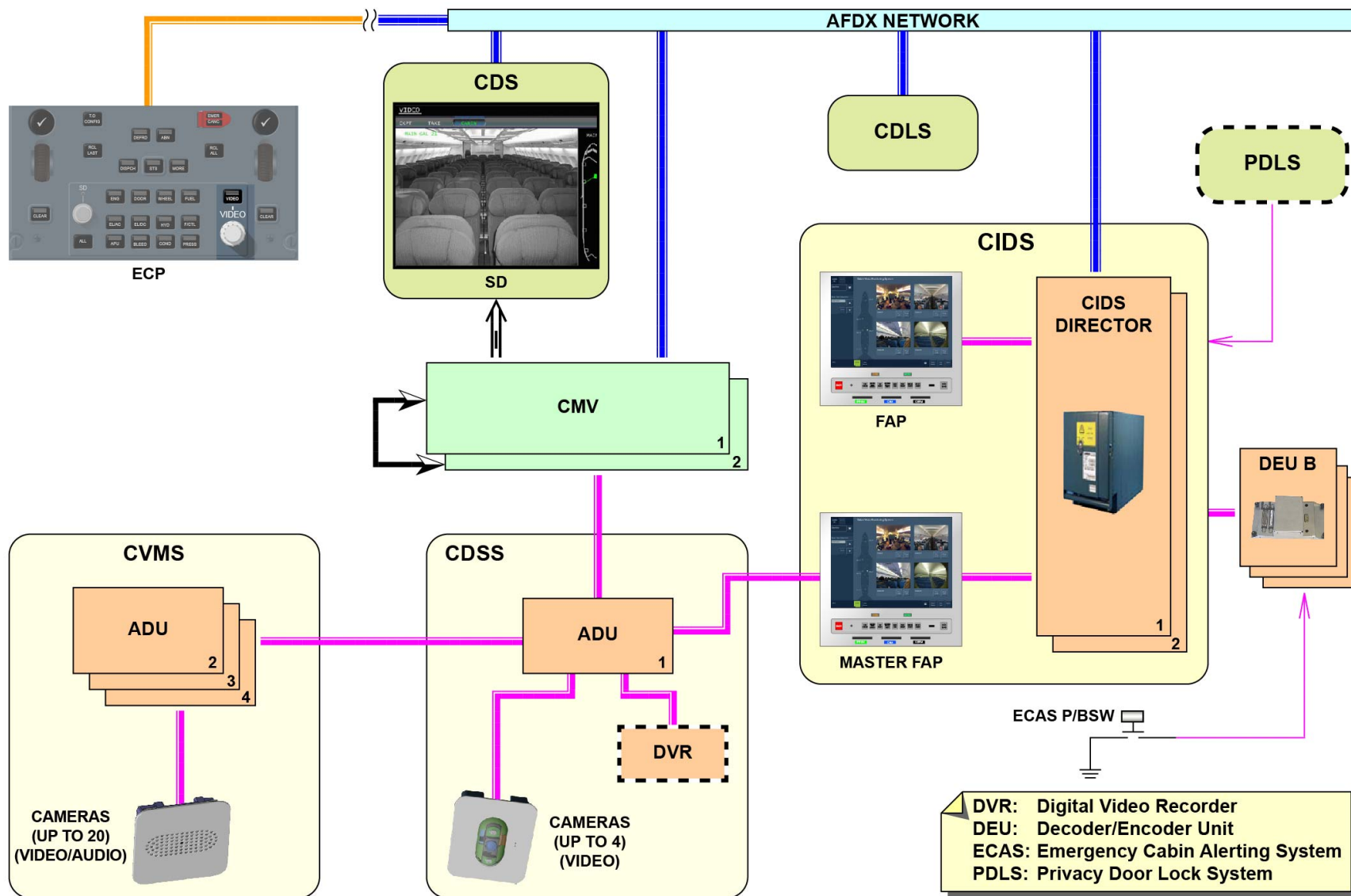
ADU1 sends video/audio signals to the FAPs for the cabin crew.

The CDSS is automatically started if someone tries to go into the cockpit with the keypad of the CDLS or from the privacy door locking system (optional).

For a manual activation, the cockpit crew uses the VIDEO key on the ECP to show the video on the SD page of the CDS.

As an option, the Emergency Cabin Alerting System (ECAS) includes hidden P/BSWs which are installed at different locations in the cabin for the cabin crew. If the cabin crew pushes an ECAS P/BSW, a signal is sent to the local Decoder/Encoder Unit B (DEU-B) that sends the status to the CIDS. Then the data is sent to the CMV and CDS through the AFDX network for automatic display on the SD page.

An optional Digital Video Recorder (DVR) can be connected to ADU1 for the video and audio recording.


IVMS FUNCTION AND DESCRIPTION

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IN-FLIGHT ENTERTAINMENT (IFE) EXTENSION DOMAIN DESCRIPTION (2)

IFE Introduction

The extension domain usually named IFE has the functions that follow:

- Menu ordering
- Downloadable games
- On-demand movies
- On-demand audio
- Interactive moving map
- Integrated telephone
- Internet access
- Intranet browsing
- Laptop power supply at the seat
- Passenger Address (PA) override
- Video announcements
- Boarding music
- Emergency announcements
- Satellite television (with provider).



**PROVIDING MULTIPLE ENTERTAINMENT
AND COMMUNICATION OPTIONS**

PA: Passenger Address
VA: Video Announcements

IFE INTRODUCTION

IN-FLIGHT ENTERTAINMENT (IFE) EXTENSION DOMAIN DESCRIPTION (2)

IFE Architecture Overview

A modular design is the basis of the IFE system architecture. This system gives a platform for different entertainment systems from different vendors. It gives flexibility and adaptability to the customer configuration.

The primary parts of this system are:

- The In-Flight Entertainment Center (IFEC) rack
- The IFE control panel
- The cabin distribution network.

The In-Flight Entertainment Center (IFEC) rack

The IFEC has interfaces with A/C systems (e.g.: external video system for the External and Taxiing Aid Camera System (ETACS) and landscape cameras, SATCOM system, etc.).

The IFEC has also an interface with the Cabin Intercommunication Data System (CIDS) directors, for example as a basic system requirement for the cabin PA announcements to be distributed by the IFE system to the seats in the zones to which the PA announcement is addressed and at a priority level higher than any audio that is being broadcasted.

IFE control panel

The location of the IFE control panel components can be different for the different A/C configurations.

The components of the IFE control are:

- A Flight Attendant Panel (FAP)
- A Cabin Work Station (CWS) and a Remote Control Center (RCC)
- Power switches:
 - PAX SYS switches, which stop the power supply of the IFE system
 - CWS main power switch, which supplies power to the CWS equipment.

The FAP monitors and controls the power supply of the IFE units.

The RCC and the CWS can contain more equipment to give services to the passengers (e.g.: credit card reader, DVD player).

The IFEC contains many of the IFE systems head-end electronics (e.g.: computers, video/audio sources, file servers, third party equipment, telephone function, etc.).

The overhead display units are wall-mounted and show video entertainment from the IFE.

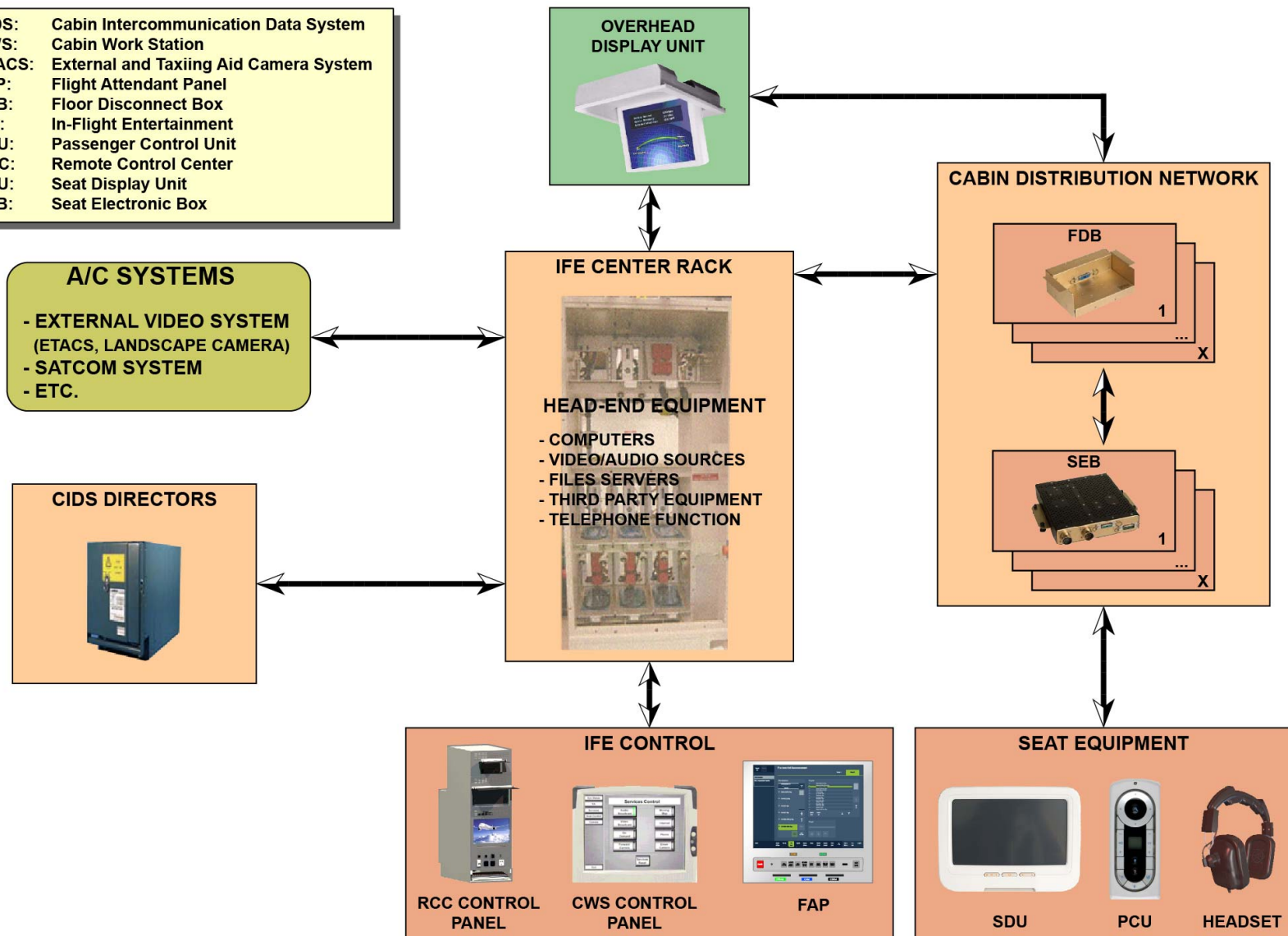
Cabin distribution network

The Floor Disconnect Boxes (FDBs) make the data interfaces between the IFEC and the Seat Electronic Boxes (SEBs) for:

- Network data
- Interactive data
- Database information
- Audio and video
- Telephone
- Service data.

The SEBs supply network data and digital audio/video distribution functions for the passengers and seat equipment.

CIDS: Cabin Intercommunication Data System
CWS: Cabin Work Station
ETACS: External and Taxiing Aid Camera System
FAP: Flight Attendant Panel
FDB: Floor Disconnect Box
IFE: In-Flight Entertainment
PCU: Passenger Control Unit
RCC: Remote Control Center
SDU: Seat Display Unit
SEB: Seat Electronic Box


IFE ARCHITECTURE OVERVIEW

IN-FLIGHT ENTERTAINMENT (IFE) EXTENSION DOMAIN DESCRIPTION (2)

IFE Primary Components

Seat equipment

- The Seat Display Unit (SDU) is a touch screen unit. It shows video selections to the passengers. The SDU has an external USB port for passenger USB sticks (e.g. game controller) and an Ethernet port for passenger laptop.
- The Passenger Control Unit (PCU) is the main passenger interface with the IFE system. In relation to the airline configuration, the PCU can have:
 - A telephone
 - A keyboard
 - The game controller functions
 - The power supply system controls.
- The In-Seat Power Supply Unit (ISPSU) and outlet unit change the voltage and the frequency (115VAC/380 - 800Hz to 110VAC/60Hz) for the passengers. They give power to a Portable Electronic Device (PED) (e.g. passenger laptop).

The ISPSU can supply a maximum of two AC outlet units. The AC outlet unit is a socket that supplies alternative current to the equipment of the passenger.

RCC

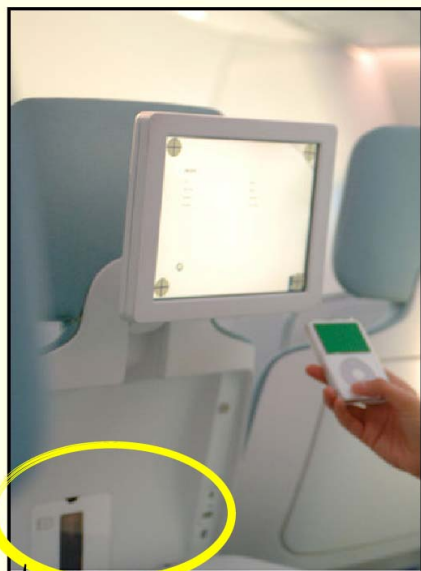
In the RCC, there is an IFE control panel. The RCC gets the IFE control from a location different from the CWS. For each A/C configuration, the equipment and location of the RCC can be different. The RCC has an interface with the cabin distribution network.

Examples of RCC equipment:

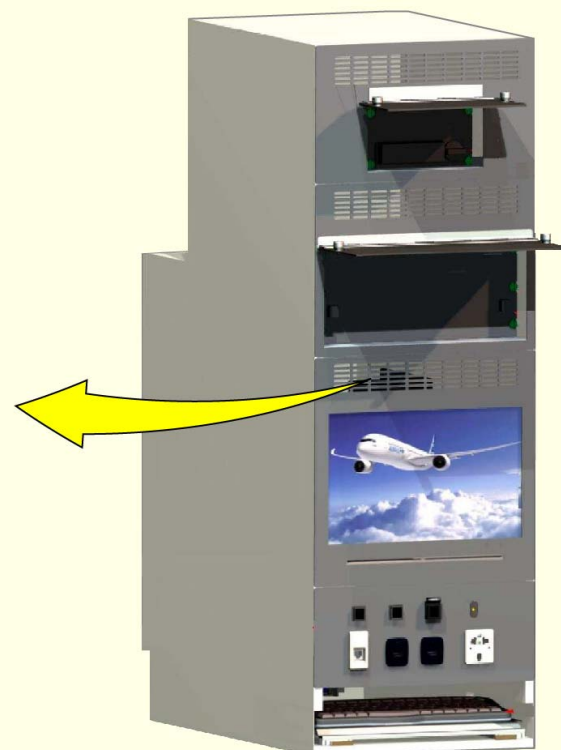
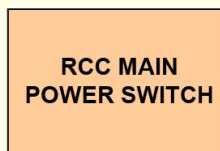
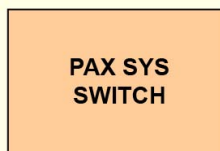
- PAX SYS switch
- RCC main power switch which supplies power to the RCC equipment
- IFE control panel
- Credit card reader
- On-board media loader

- Keyboard.

The RCC power switch does not stop the power supply of the IFE system.



EXAMPLE OF SEAT EQUIPMENT



EXAMPLE OF RCC EQUIPMENT

IFE PRIMARY COMPONENTS - SEAT EQUIPMENT & RCC

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IN-FLIGHT ENTERTAINMENT (IFE) EXTENSION DOMAIN DESCRIPTION (2)

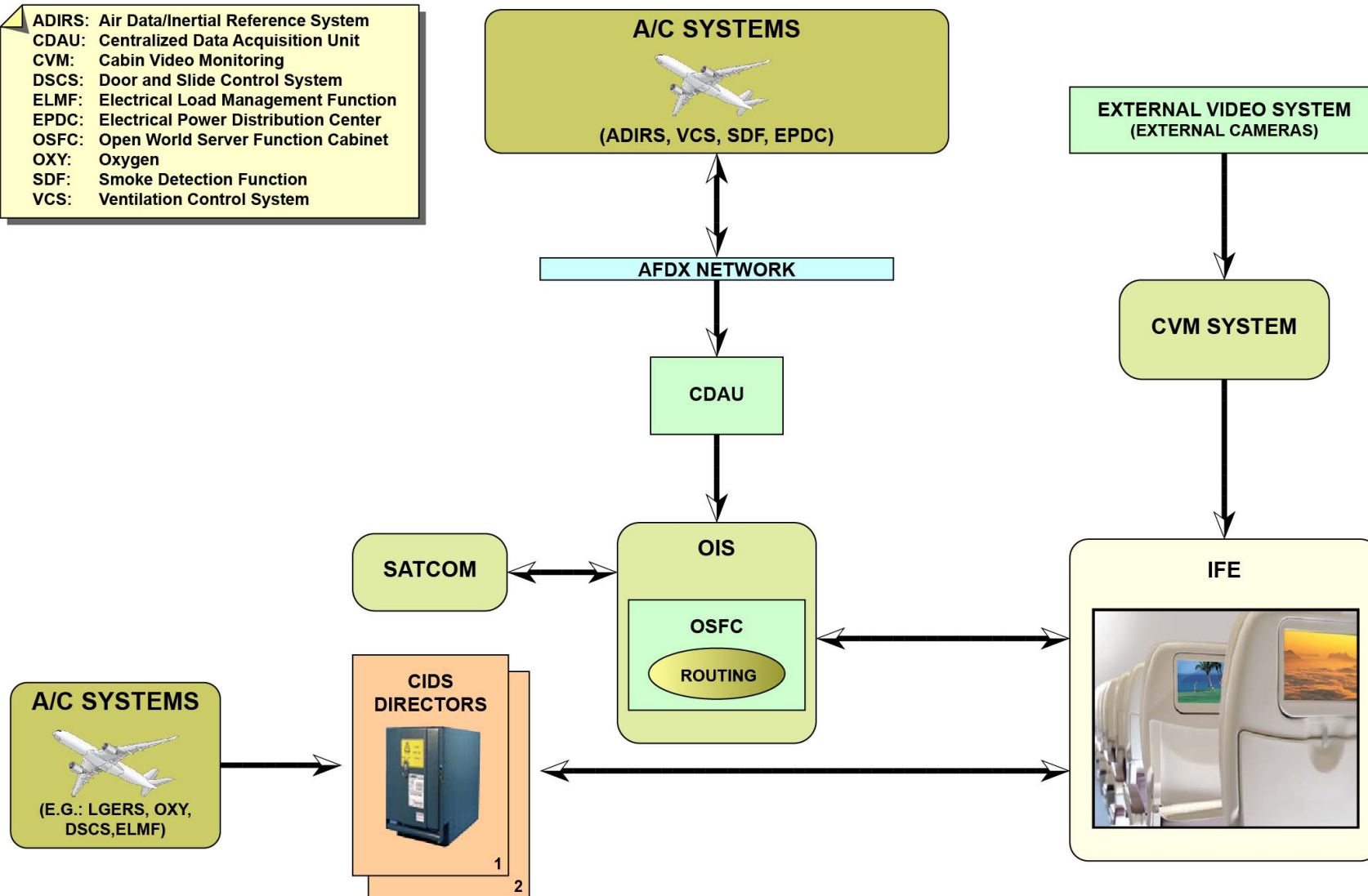
IFE Avionics Interface Units

The IFE system has direct or indirect data interfaces with the systems that follow:

- Direct connections:
 - The camera systems (landscape camera, cabin surveillance, ETACS) through the Cabin Video Monitoring (CVM) system
 - The CIDS (i.e. PA priority).
- Indirect connections:
 - A/C systems through CIDS directors, i.e.:
 - The LGERS (A/C ground/flight status)
 - The Oxygen (OXY) system (during a decompression, an acoustic emergency warning announcement is automatically started)
 - The Door and Slide Control System (DSCS) (door status indication and emergency escape slides)
 - The Electrical Load Management Function (ELMF) (electrical load shedding).
 - The IFE also exchanges data with the Open world Server Function Cabinet (OSFC) of the OIS through the routing application:
 - The SATCOM (passenger communication and services (Internet)).
 - The IFE receives avionics-data centralized by the Centralized Data Acquisition Unit (CDAU), i.e.:
 - The Air Data/Inertial Reference System (ADIRS) and the Flight Management System (FMS) for airshow function
 - The Ventilation Controller System (VCS) (the ventilation loss leads to IFE shutdown)
 - The Smoke Detection Function (SDF) (the IFEC smoke detection leads to IFE shutdown)
 - The Electrical Power Distribution Center (EPDC) (electrical power management).

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ADIRS: Air Data/Inertial Reference System
CDAU: Centralized Data Acquisition Unit
CVM: Cabin Video Monitoring
DSCS: Door and Slide Control System
ELMF: Electrical Load Management Function
EPDC: Electrical Power Distribution Center
OSFC: Open World Server Function Cabinet
OXY: Oxygen
SDF: Smoke Detection Function
VCS: Ventilation Control System



IFE AVIONICS INTERFACE UNITS

V2414251 - V00T0MM0 - VM44D3IFE002301

IN-FLIGHT ENTERTAINMENT (IFE) EXTENSION DOMAIN DESCRIPTION (2)

IFE Cabin Distribution

The FDBs support the data interfaces between the IFEC and the SEBs for:

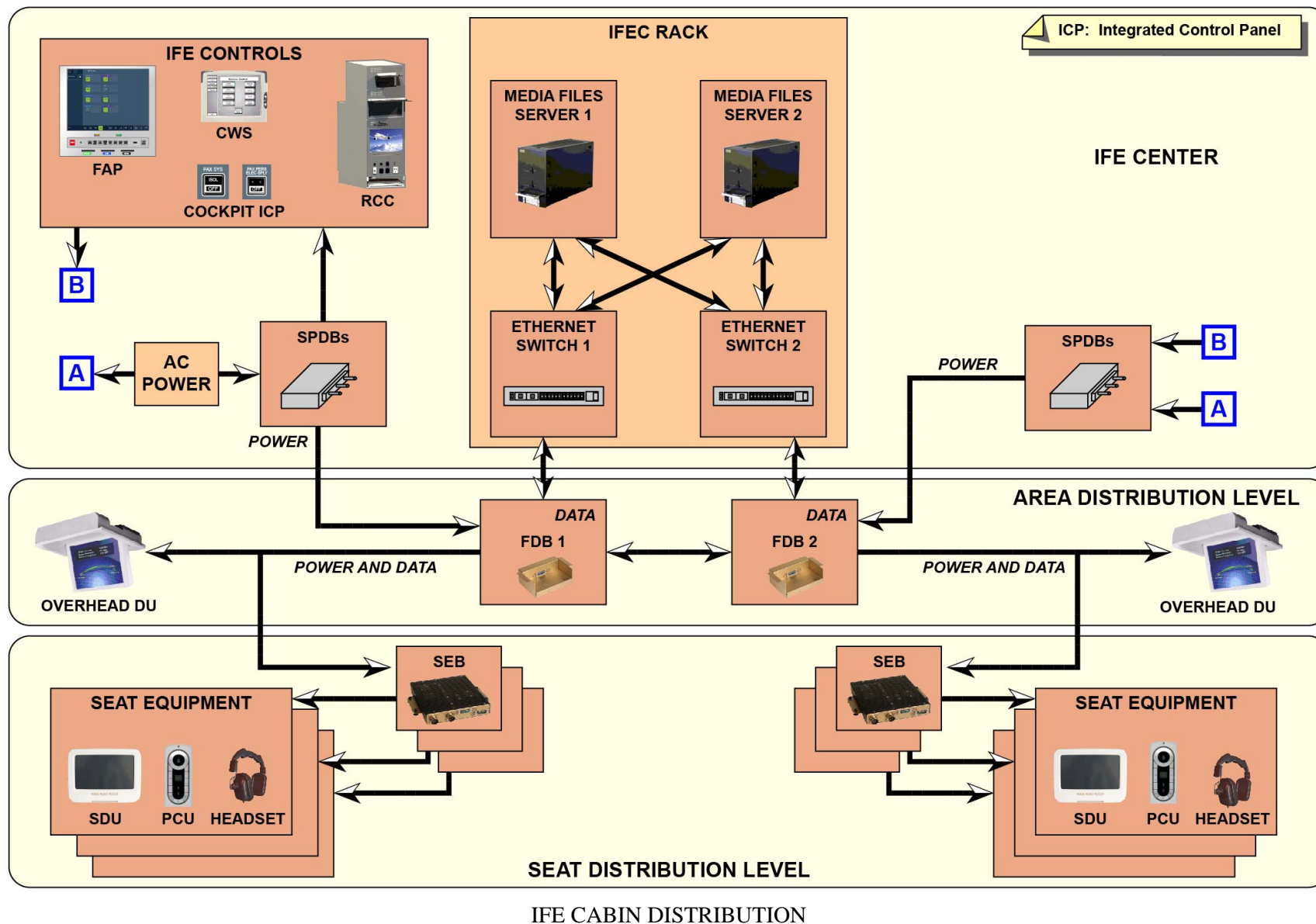
- Network data
- Interactive data
- Database information
- Audio and video
- Telephone
- Service data.

Some Secondary Power Distribution Boxes (SPDBs) supply power to the FDBs, then the FDBs supply power to the SEBs.

The controls and indicating are available from the cockpit (Integrated Control Panels (ICPs)) and/or the FAPs.

The SEBs supply network data and digital audio/video distribution functions to the passengers and the SDUs.

The IFE center has a level of data redundancy to increase the reliability of the system. This redundancy covers the failure of a server, a switch, a FDB, a SEB, etc. At each level of the architecture, each piece of equipment receives the data from the media servers of two different sources.



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CABIN SYSTEMS CONTROL AND INDICATING (2)

Cabin Signs (2)

Call Panel (2)

The cabin interphone system is used for the communication between cabin crew stations, and between cockpit and cabin crew stations. One or more links can be initialized at the same time. In conference mode, communication is possible between more than two and up to 24 interphone stations.

From the cockpit, interphone communications are achieved using cockpit handset or the cockpit call panel and the cockpit acoustic devices (boomset, microphone and oxygen mask). The following functions are available to call the cabin from the cockpit call panel:

- EMER call (to call all cabin crew stations in emergency mode),
- ALL call (to call all cabin crew stations).

When a call is initiated, it activates visual (AIP, ACP) and aural indications (cockpit buzzer and cabin loudspeakers).

EVAC Function (2)

Emergency Evacuation Signaling (EVAC)

Evacuation commands can be initiated by the pilot or by the cabin crew. Reset authority of the EVAC signal is configurable by the Cabin Assignment Module (CAM) for the cabin crew. The pilot has authority to reset the EVAC condition under all circumstances.

EVAC command from the cockpit

EVAC is activated by a push button with integrated indicator. In case of activation the EVAC tone is audible in all assigned areas. Depending on the CAM configuration the EVAC condition is indicated on attendant workstations by a flashing light on the EVAC/RESET button and on AIP's and/ or ACP's.

EVAC selector switch in CAPT+PURS position

EVAC is activated by pushing the button on an attendant workstation and is indicated by the command button light at the initializing station workstations (and by a flashing light on the EVAC/RESET button and on AIPs and ACPs if assigned by CAM).

EVAC condition is also indicated by the indicator at the EVAC command switch and EVAC tone is audible in all assigned areas. If assigned by CAM the Crew Call Buzzer and EVAC horn is activated.

EVAC selector switch in CAPT position

Pressing the EVAC button at any attendant workstation only requests an EVAC condition in the cockpit. This is indicated by the steady command button light at the initializing station and a flashing/steady light (depending on configuration in CAM) at the pilot control switch. Pressing the button for a second time (at the initializing station) switches off the request signaling. Pressing the Cockpit EVAC Command button leads to the activation.

EVAC selector switching with EVAC request

When the request signal is active, switching the pilot's selector switch to CAPT+PURS activates the EVAC condition. When EVAC condition had been activated by the cabin crew, switching the pilot's selector to CAPT resets the EVAC condition, and the former activation is changed to the "request condition".

EVAC reset command from attendant workstation

Pressing the EVAC/Reset button at any panel switches off the EVAC Tone in the assigned areas and the indications. The EVAC/Reset button light still remains flashing, until the initial station cancels the EVAC command.

EVAC reset if EVAC function initiated from the attendant workstations. When EVAC command has been performed by an attendant workstation the EVAC command switch needs to be activated in the cockpit first before it can be reset the second key press. Pressing the "Horn Off" switch switches off the EVAC in the cockpit only.

EVAC reset if EVAC function initiated from the cockpit

When the initiation of the EVAC command has been performed by the cockpit switch, pressing the EVAC command switch again releases the EVAC function.

Signal transmission

The EVAC signal is sent to the Director and transmitted to the connected equipment in the cockpit and to the equipment connected to the DEUs type B to initiate the related acoustical and visual indications. Furthermore a signal is sent to the DEU type A, which sends a signal via the PSA to the loudspeakers.

Service Interphone (2)

The service interphone system allows the telephone communication between ground (maintenance) crew, cockpit crew and cabin crew. The Cabin Interphone is automatically switched to a Service Interphone mode, if the landing gear is extended or external power is available.

If the automatic activation of the Service Interphone function is not performed, a manual activation is possible by the Service Interphone Override Switch which switches on/off the Service Interphone Mode. The override status is indicated by the Service Interphone Indication in the cockpit.

FAP Memory Modules (2)

The front panel of the MP-FAP has three slots that contain different memory cards. These cards are:

On Board Replaceable Module (OBRM)

The OBRM is representing the CIDS internal memory for software storage which is placed in the Master-FAP. It serves as the CIDS data repository for all loadable CIDS components and systems. In the case of a data loading procedure the content of the OBRM will be fetched from DLCS and then in a second step the data will be distributed from OBRM to each end system where in fact the data has to be updated.

Cabin Assignment Module (CAM)

The customer modified CIDS configuration (modified layout) is stored in the Cabin Assignment Module (CAM). It is possible to store one

modified layout for each existing constant layout. It includes the cabin configuration, e.g. for:

- Cabin zoning information,
- Audio levels
- Light definition data

Integrated Pre-recorded Announcement & Boarding Music (IPRAM)

The integrated PRAM mass memory card is a programmable storage medium for pre-recorded messages/announcements and boarding music audio data.

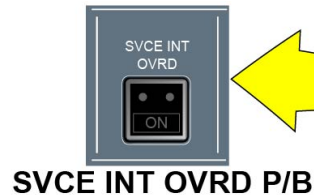
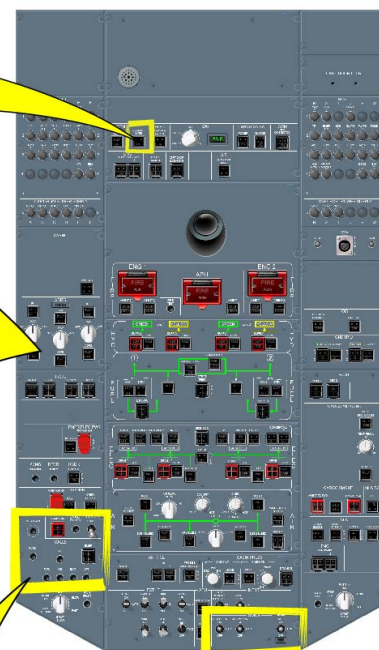
The removal of the Cards (CAM, OBRM, IPRAM) may also be protected by an access code (CAM dependent).

CIDS Reset (2)

CIDS directors can be reset via the reset CB in the cockpit overhead panel. If a power interruption is longer than 5 sec, the CIDS software performs a system software reset and all components of the system are set to the predefined status. In case that a failure of the active Director is detected, the hot-standby Director gets automatically activated without any manual interaction (E.g.: Reset or Circuit-Breaker actuation).

IFE Power Control (2)

PAX SYS: There shall be a standard installed PAX SYS switch in the cockpit enabling the cockpit crew to immediately remove all electrical power from the entire Extension Domain (and by definition, the IFE System, SPSS and the IFEC), thereby also removing all Extension Domain functions. The switch shall be a latched bi-stable device installed on the overhead Integrated Cockpit panel (ICP), "ELEC".


LEFT RESET PANEL

SVCE INT OVRD P/B

RIGHT RESET PANEL

CAPT RMP

CABIN SIGNS (2) ... IFE POWER CONTROL (2)
RMP: Radio Management Panel

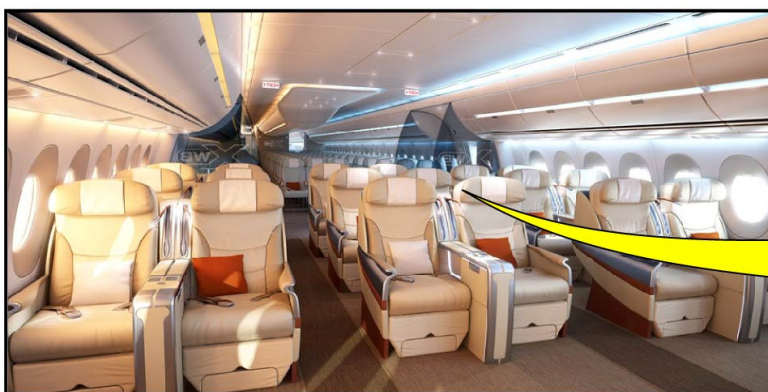
SIGNS PANEL

V2414251 - V00T0MM0 - VM4411000002301

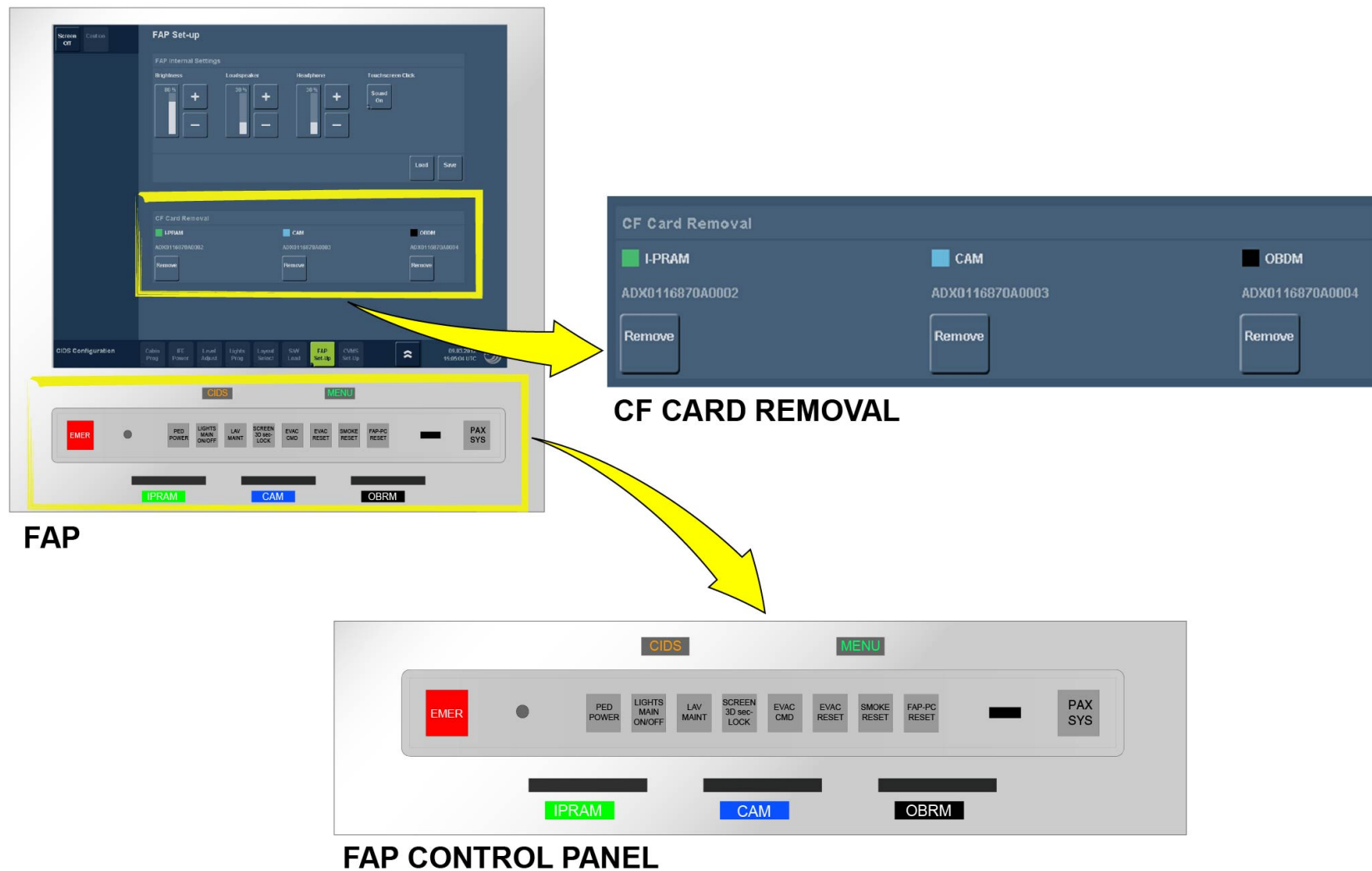


CABIN SIGNS (2) ... IFE POWER CONTROL (2)


CDS / SD

ECP (135VM)

FAP: Flight Attendant Panel

CABIN SIGNS (2) ... IFE POWER CONTROL (2)



CABIN SIGNS (2) ... IFE POWER CONTROL (2)



CABIN SIGNS (2) ... IFE POWER CONTROL (2)

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