# UNIFIED COMMUNICATIONS SUITE

Enabler of Digital Transformation

ST Engineering

# Unified Communications Suite

Our IP-based Unified Communications Suite (UCS) integrates disparate voice sub-systems to provide seamless voice interoperability across heterogeneous networks.

The UCS facilitates collaboration among multiple user groups by providing communications services to different clients and terminals such as professional mobile radios, IP telephones, analogue telephones, application client software on computers and smart phones.



## Key Features

**Complete System Suite**
Centralised platform to manage end-to-end VoIP / RoIP communications

**IP-based**
Distributed architecture, geographic redundancy, high availability, pay-as-you-grow scalability

**Virtualisation**
Hardware agnostic and supports commercial-off-the-shelf (COTS) products

**EUROCAE ED-137 Adherent**
Interoperable with other vendor's equipment

## Core Components

The UCS can be customised and configured to meet different operational requirements.

## Integrated Dispatch Console



The Integrated Dispatch Console is a user-friendly integrated dashboard that provides a single point of access to manage all communications resources (e.g. radio, telephony) and can host fixed and ad hoc conferences. It supports

- Point-to-point and conference call, radio monitoring and access
- Radio-Over-IP (RoIP) sessions and radio coupling group
- Line conference monitoring and access
- USB stereo headset and speaker

**Recommended Specifications**

- Intel Core i5 processor
- 8GB RAM
- 256GB storage
- USB 2.0, 15" touchscreen display at 1920 x 1080 resolution
- Windows 10 Professional (64-bit)

## Radio Gateway



The Radio Gateway bridges communications between analogue radio networks and IP-based system.

**Key Features**

- ED-137 adherent 8-port radio gateway with analogue audio and control interfaces
- Support EUROCAE-extensions (local port loopback)
- Support radio remote control (optional)

**Specifications**

- Dimension: 442mm (W) x 44.45mm (H) x 207mm (D)
- Weight: 2.5kg
- AC power adaptor: 110V to 240V, 50/60Hz
- FCC Class B Part 15

## Smart Mobile Application

The Smart Mobile Application provides seamless interoperable communications for users on different radio channels. Its Android based application enables users to provide on-the-ground situation awareness.



**Key Features**

- Secure communications
- Access to line calls and radios with monitoring function
- Workgroup set up
- Chat messaging and transfer of media files (photos/videos/voice recordings/documents)
- Video and audio conference call
- User account management
  - Access rights and security configuration
  - Pre-defined contact list and dynamic workgroup
  - Remote account management

## Communications Software Suite

The Communications Software Suite offers an array of communications software services. It leverages a Call Manager and Media Server that are

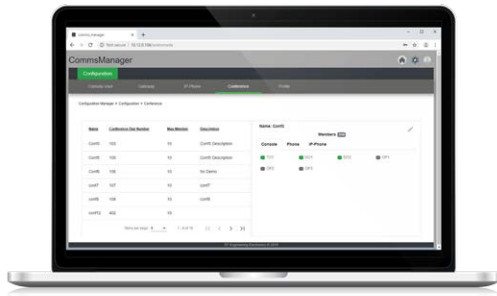- ED-137 adherent
- RFC 3267 SIP compliant

It provides

- RoIP / VoIP communications
- Preset line conferencing
- Server based ad hoc line conferencing

**Recommended Server Specifications**

- Xeon Processor (8 Cores) or equivalent
- 16GB RAM
- 1TB storage
- VMware ESXI

## Communications Management Suite

The Communications Management Suite provides centralised system administration and configuration for seamless integrated communications.



**Key Features**

- Configuration Manager – configure devices and calls (dial numbers)
- Log Manager – view call history
- Status Monitor – view Integrated Dispatch Console operator log-in and device VOIP connection status
- Audit Trail – record changes that are made to the system

# Accessory Components

The UCS supports a wide range of IP-based devices such as

## Telephony / Cellular Gateway

Can be connected to PSTN to provide telephony servcies [via cellular network or Foreign Exchange Subscriber (FXS) / Foreign Exchange Office (FXO) interfaces]

## IP Phone

Can be deployed as terminals for line calls and radio access in addition to the Integrated Dispatch Console

*Note: Diagrams are for illustration purpose only. Specifications are subject to change without prior notice.*

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