



The DSX Integrated Communication Control Systems (ICCS) provides the mission-critical communications hub of our Control Room product range, designed to facilitate voice communications between different technologies using a single touchscreen control.

As the UK market leader in its field, the DSX product has a pedigree stretching back to 1991 with the introduction of the first generation DS1000 system and is a product which has continually evolved to meet the needs of our customers right through to the present, third generation DS3000.

Designed to meet the demanding needs of providing resilient and secure communications the DSX has been deployed in projects worldwide to support Emergency Services, major sporting events, oil & gas production facilities and critical national infrastructure.

The DSX ensures that users can efficiently manage radio and telephony voice communications whilst being able to easily access other technologies or systems. These may include digital trunk and analogue PMR radio systems, call handling systems, digital and analogue telephony, CCTV, voice recorders, intercom systems and alarms.

Due to the integrated nature of the system, based on the use of open standards, it is easy to cross connect the different types of communications seamlessly. Something that is not easily possible with separate telephone and radio solutions. The DSX is the leading ICCS solution in the UK market by the number of customers and the breadth of organisations covered which include Police, Fire, Ambulance as well as Nationals Agencies.

The DSX is the only ICCS solution that is being used to fully support countrywide operation in the UK, by agencies such as Maritime and Coastguard Agency, National Highways, British Transport Police and MoD Police.

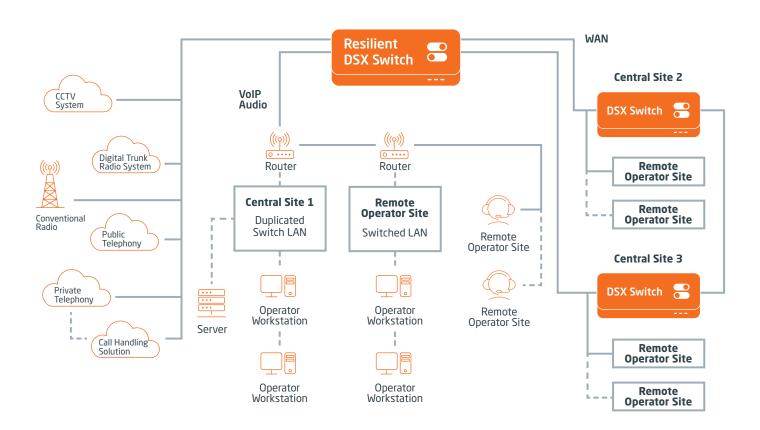




# **DSX ARCHITECTURE**

Central to the deployment of a DSX is a fully resilient switch (hot standby). This coupled with fully resilient network and duplicated server architecture provides a system design which ensures the highest levels of availability.

A modular approach means that it is easy to integrate control of other systems such as CCTV and Voice Recording solutions into the operator console.





Integrations with TETRA networks (Motorola Dimitra), Analogue (VHF, UHF, MF) and more lately 4G/LTE Mission Critical PTT 3GPP standards interface (currently in development for UK ESN infrastructure). Allows actively monitoring of up to 20 talkgroups at a time with the wider GUI allowing display of up to 60 different talkgroups with an easy toggle between them to navigate and search.

# Telephony integrations and operator call control

Integrations with SIP trunks, TDM Trunks (ISDN 30, Q.SIG, DPNSS), Analogue FXS/FXO circuits and other 3rd party telephony solutions. Provides basic call routing (ACD) functionality using native SIP capability. Provides agents with a wide variety of call control features such as transfer, hold and conference. Through the integrated Voice Recorder facility.

# Supervisory functions

Management have full control room visualisation of Operator status from a single screen (Dynamic Operator Screen) in addition to having multiple supervisory call functions available to them such as eavesdrop, monitor, barge, whisper and ambient listening.

# **Event logs**

All inbound and outbound communications on the DSx are recorded in the call logger feed providing easily accessible metadata on all events. The metadata then can then be used for reporting purposes by 3rd party Management Information Systems. The metadata relates to telephone, MF/VHF radio, Tetra radio, user terminals, automatic call distribution, start and end date of communications as well as describing any user activated events on the DS3000.

# Playback of events

Events which take place on the DSx are recorded with the ability to replay both telephony and radio voice calls using the instant playback recorder, including, whilst the call is progressing. The instant playback recorder is easily accessible from the DSx main screen.

# Wider control room integrations

Integrations with our products to allow call control to be driven through the CAD user interface ensuring call taking and dispatch can be achieved through a single screen.

# Complex audio preferences

Complex audio algorithms allow different audio streams to be routed to multiple end points based on the configuration chosen.

# **KEY FUNCTIONALITY**

#### Radio functionality

- Analogue and digital radio networks including TETRA, MF, VHF, ESN 4G/LTE
- Full group / individual call functionality including callback
- Display up to 60 talkgroups
- Ability to stun/enable a radio remotely
- · Ambient Listening
- Connect groups allowing interconnecting audio from radio channels, talkgroups and telephony

#### Telephony integration & management

- One-touch dialing with hot key support
- Call queue list for immediate visualisation of calls
- Automatic call distribution or ability to cherry pick calls from queue at an Operator level
- Integration with 3rd party call handling solutions
- · Skills Based routing engine

#### Fully integrated browser

- CCTV Presentation
- Presentation of any customer web-based information

#### Other system integrations

- Public Announcement (PA) / intercom
- · Integrated instant replay voice recording
- · Radio alarm display
- Ancillary equipment control
- CCTV camera control
- · Equipment / sensor fault reporting

# Networking/Architecture

- 99.999%+ system availability for mission critical environments
- Dual resilient system with immediate failover

#### Supervisory

- Overview of Control room activity via Dynamic Operator screen
- Monitor calls and operators
- Barge and Coach to assist Operators in critical situations
- Terminal Override allowing takeover of calls

#### System management

- System configuration fully manageable
- User profile configured features











