Enterprise Control Systems Ltd (ECS)
Specialist design through innovation and technology

ECS has developed and supplied COFDM encrypted links for more than 10 years and now has a customer base which includes police, military and surveillance units across the globe.

The team at Enterprise Control Systems Ltd has ground-breaking industry expertise in surveillance and microwave link technologies. These applications are being used to develop innovative system solutions to counter ever increasing security threats.
ECS has been at the forefront of the design of microwave downlinks for fixed and rotary wing airborne platforms since the first concept demonstrator back in the early 1990s.

A dedicated Customer Support team provides frequent customer contact before and after sales. This team of experienced engineers ensures that the customer receives a system appropriate to their requirements and provides installation, commissioning and training to meet those requirements.

ECS provides a number of covert systems for military and police surveillance use. These systems provide high link continuity allowing for superior range whilst being contained in small, covert housings.

ECS has experience of using its comprehensive range of microwave equipment to provide links for maritime use. Ship-to-ship microwave communications have enhanced situational awareness.

As a highly focused and professional company, ECS is able to react quickly to a customer’s requirements and dedicate resources to providing bespoke turnkey solutions.

ECS has a worldwide reputation for its supply and continuous improvement of COFDM microwave links. The supply of equipment is backed up by our commitment to system support and customer advice.

A dedicated Customer Support team provides frequent customer contact before and after sales. This team of experienced engineers ensures that the customer receives a system appropriate to their requirements and provides installation, commissioning and training to meet those requirements.
ECS has been in the forefront of COFDM technology ever since its first helicopter downlinks in 2001, and has supplied COFDM microwave links for many different rotary and fixed wing platforms both manned and unmanned.

In 2007, ECS was awarded the prestigious Queens Award to industry in the Innovation section for its secure COFDM microwave systems. These secure links can be used to transmit full motion video, data and audio reliably up to ranges in excess of 200nm.

In 2011 ECS launched an Internet Protocol (IP) enabled, encrypted, bi-directional COFDM link for air surveillance called Evenlode.

Having great sensors, on flexible aircraft flown by capable people is now common place. Swiftly and reliably getting relevant information out of these sensors and to the people that need it has traditionally been the greatest challenge. Evenlode does this and more importantly, in harnessing the connectivity of the Internet, enables those people, wherever they are, to choose what they want to look at and see it in real time.
COFDM Diversity Receiver in Flight Case
ECS has developed a High Definition (HD) broadcast-quality microwave link using high-grade encryption and COFDM technology. COFDM ensures a robust link with superior range. The system has the capability to uplink tactical information such as real-time video, images, data and telemetry control. ECS is able to offer a full range of remote viewing terminals including static base station equipment, briefcase receivers and handheld receivers depending on the customer’s requirements.
ECS COFDM ground equipment is optimised for surveillance use. An extensive range of covert transmitters is available in both High Definition (HD) and Standard Definition (SD) enabling ECS to provide surveillance solutions for a wide range of scenarios.

Ground COFDM digital equipment includes uplinks and downlinks, fixed base stations, briefcase and handheld receivers. All ECS receivers are compatible with air uplinks and downlinks providing our users with flexibility when selecting the correct system for a given operation.
The ECS digital ground transmitters vary in size and power output. Ground links can be used in a multicast mode using omnidirectional antennas or in a point-to-point mode using directional antennas. Typically, ECS ground transmitters are used to send data directly to a ground station or via an airborne transmitter for re-broadcast.

All of our covert products are built to a high ingress protection (IP) rating, allowing the units to be body worn or deployed into a tactical area of interest.
The utility of a robust COFDM link at sea allows ECS to offer system solutions to aid distributed situation awareness for port protection, enforcement patrol and coast guard use. ECS are able to provide inter-vessel video, audio and data links.

All shipborne ECS digital receiver equipment is compatible with ECS COFDM airborne downlinks allowing situation awareness between sea and air assets.
From small patrol craft to the command vehicle, ECS is able to provide Full Motion Video (FMV) via transceiver equipment. Protected to a high ingress protection (IP) rating allowing telemetry control of the remote system.

Link range can be extended using a switched sector tracking antenna.
ECS has a team of highly experienced microwave communication system engineers able to offer planning advice, design and implementation of both fixed and mobile microwave networks.

ECS engineers have significant experience of turnkey solution design; ECS is able to engage with customers to provide turnkey solutions for a variety of scenarios including system planning, path prediction analysis, system design and the ability to integrate into a customer’s existing network equipment.
Milestone turnkey solutions include Commonwealth Games Manchester Police, G8 Gleneagles Summit and the 2008 Beijing Olympics.

ECS provides a network voting system designed to cater for multiple air platforms. The voting technique is used to select the best real time data signal available from multiple receiving sites. The signal is converted to Internet Protocol (IP) and delivered securely across a network to a viewing point of the customer’s choosing.
ECS maintains a strong focus on providing customer satisfaction from the design stage to installation, commissioning and training. ECS is able to provide through life engineering support from pre-sales system design. ECS offers a warranty on all products and services sold, backed up by a dedicated after-sales support package.

Our Customer Support team provides an important function in the support of deployed equipment. A dedicated team of engineers with excellent field support knowledge are able to provide a range of tailored services to meet specific customer support requirements.
As part of ECS’s pre-sales commitment, all customers are encouraged to discuss their requirements for installation, training and support. A site survey may be appropriate for some installations. ECS is able to provide technical information such as COFDM path predictions, guidance on technical solutions and system architecture. ECS can provide and assist in obtaining link information frequency allocation from the appropriate authorities.

Following equipment delivery, ECS can undertake installations as agreed during the survey. On completion, the engineer will commission the system and provide a comprehensive hand over of the system.
ECS can provide extended warranty and maintenance support packages for all its products. Customer Support manage all maintenance support contracts offering frequent visits to customer sites to ensure the correct operation of installed equipment. Service Level Agreements (SLA) for maintenance support are tailored to specific customer requirements and may include 24-7 call out.

Training can be delivered at ECS or at a location of the customer’s choice. User and system manuals are provided with equipment as necessary. Tailored training packages can be provided.
about
Enterprise Control Systems Ltd

Constantly moving forward, ECS opened its Technology Park in 2007 to operate alongside its existing engineering and production departments. The Technology Park includes a state-of-the-art EMC chamber for rigorous testing of all of its products. The introduction of the Technology Park has enabled ECS to expand its entire operation.
Founded in 1988, ECS placed growth and development at the forefront of its operations. ECS has increased steadily in size to its current operation of over 80 employees.

The engineering team combines some of the most experienced individuals in communication engineering. A developed graduate training programme ensures a constant input of new, young designers and engineers with the keenness to be amongst the best in the surveillance and security technology sector.

The success of ECS is attributable to the ability to design all products in-house with emphasis on long-term reliability through proven quality management processes.

One third of the company’s workforce is dedicated to product development, ensuring that ECS consistently produces leading designs and is able to react quickly to a large range of requirements.