

Making the most of LTE

Collaborate, communicate and connect with our cloud-based ICCS, Stream and Maps solutions

Cortex

Cortex is our software-only Integrated Communication Control System (ICCS) that places all your familiar hardware - radio, telephony, CCTV and talk groups - onto one screen.

Used in control rooms around the world, Cortex enables rapid communication by bringing radio, telephony, CCTV and more together on one screen, helping you do the things you do every day more easily and efficiently.

With Cortex you can choose an on-premise solution or go hosted and combine:

- Radio
- Marine radio
- UHF, TETRA and LTE
- Telephone, mobile and text
- Access control and CCTV
- Tannoy and alarms
- Websites.



The benefits of Cortex



Easy to learn and use

Cortex integrates all your different communications systems into one user-friendly hub - including radio, telephone, CCTV, access control and more - so you can save time and effort.



Make it suit you

Create a layout that suits you and the way you work. Drag and drop widgets to customise your screen to suit different roles. Not only that, but the interface is adaptive to laptops, desktops and tablets.



No hidden costs on top

There's no requirement to replace or buy new hardware. Instead, Cortex brings your current investments together and amplifies them. Servers can be virtualised and hosted and hardware costs are kept to a minimum.



Secure peace of mind

Cortex is designed for organisations that protect and preserve society, whether that be a police force, major airport or a city metro. Its fall-back mode ensures you'll maintain critical communications even in the toughest scenarios.



Use your existing systems

We already integrate to the major switches including Avaya, Cisco, Unify, Ericsson, Mitel and many more, so upgrading your ICCS has never been easier.



Work from anywhere

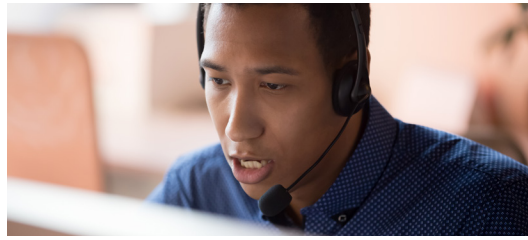
Cortex virtualisation gives you the flexibility to work from anywhere - all you need is a secure VPN connection.



Ready for LTE?

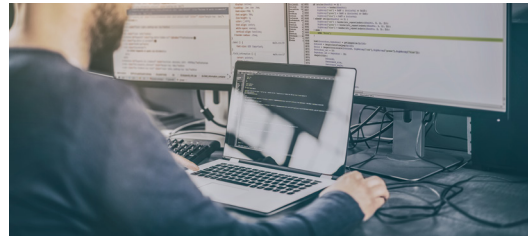
Cortex is already ahead of the game when it comes to LTE, but don't just take our word for it. Book a demo to see it in action.

Cortex in action



Supervisors

Cortex helps my team be more efficient and makes management and decisions easier. Listening to multiple talkgroups and patching them together when needed means we can communicate and coordinate those outside the control room with ease.



IT department

Cortex meets our resilience needs. I know we will always maintain business continuity through its fallback state. The option of going hosted has also made upgrading so much easier and frees up my time.



Dispatchers

Having everything integrated onto one screen including status, talkgroups and SMS messages allows me to manage incidents more easily. If needed, I can conference a team together to effectively deal with an emergency.



Remote workstations

With Cortex you can have workstation via VPN connection to manage large-scale events on site. Cortex doesn't tie you down to a single PC; any colleague can quickly jump on and start helping.



Call takers

Cortex allows me to be more efficient. Integrated telephones and access control all on one screen, with caller details such as name, address and GPS location, means I'm now even quicker at responding to calls.



Officers

Cortex gives me the support and confidence I need to do my job. The control room knows where I am and I can send them status updates and SDS/covert messaging if I need to. In an emergency, they have my back.

LTE integration

We've been at the forefront of integration with new LTE infrastructures and features, with deployed solutions directly connecting via dispatcher-level interfaces.

Supported LTE features include:

- Priority Dispatch
- Multi-Select Talkgroups
- Group Call
- Individual Call
- Patch and Regroup
- Stun/Un-stun
- Text Messaging
- Status Messaging
- Ambience Listening
- Emergency Alarms
- Callback Requests (with Priority)
- Aliasing (Static and Dynamic)
- Talkgroup Affiliations
- Eavesdrop, Intrude & Takeover
- PTT Override

We can support your control room in running in hybrid states too, if you need to operate LTE and another network together. Simply build your Cortex interface with the equivalent widgets from both networks, to sit side by side, or varied by role profile.

Telephony integration

Cortex is able to integrate seamlessly with your existing corporate-level telephone systems, thereby maximising existing investment and leveraging the provider's professional features. Cortex is compatible with a wide range of telephone systems and Automatic Call Distribution (ACD) solutions from the market-leading providers. Cortex supports TDM, IP and softphones. Cortex also interfaces with leading Intercom and Public Address (PA) systems used for airports, road and rail communications.

Supported telephony features include:

- CLI (phone number)
- Caller Details - name, address and GPS location (EISEC and PCOM)
- Multiple and Shared Line Presentation
- Priority Call Queuing
- ACD Agent
- Missed Calls, Ring-back
- Hold, Park, Mute
- Transfer (Supervised/ Forced)
- Intercom
- Conference (including with LTE)
- Public Address
- Eavesdrop and Whisper
- Intrude, Take-Over, Barge-in

Mission critical features

Our software supports your most critical communication needs.

Our integration supports the following features:

- Authentication as per 3GPP
- OIDC Authentication procedures.

Mission Critical Push to Talk (MCPTT)

- 1-1 call (private call)
- Group half-duplex call (prearranged group call)
- Emergency call and alert
- Emergency group call/alert
- Ambient listening
- Broadcast calling (one-way, high priority)
- Audio cut-in (supervisory override)
- Call re-join
- Emergency call - including multiple emergencies on a common talkgroup
- Emergency call - control room override
- Take floor control during an emergency call
- Multiple talkgroup monitoring including multiple audio sessions
- User-based group affiliation monitoring
- Group affiliation or real-time group attachment monitoring
- Remote Talkgroup Select (REGA).

Mission Critical Data (Messaging)

- MCDATA service authorisation
- Messaging (text only, not audio, not video, not file, not location)
- Private/group messaging
- Delivery receipts
- Operational status messaging
- Short Data Service (SDS) using SIP
- Broadcast Messaging (one-way).

User Group and Configuration Management

- Group document retrieval
- Configuration document management
- User role profile
- Subscription and notification.

Location Services

- Group-based
- User-based
- *Control room interface is a proprietary protocol and would require implementation-specific development.

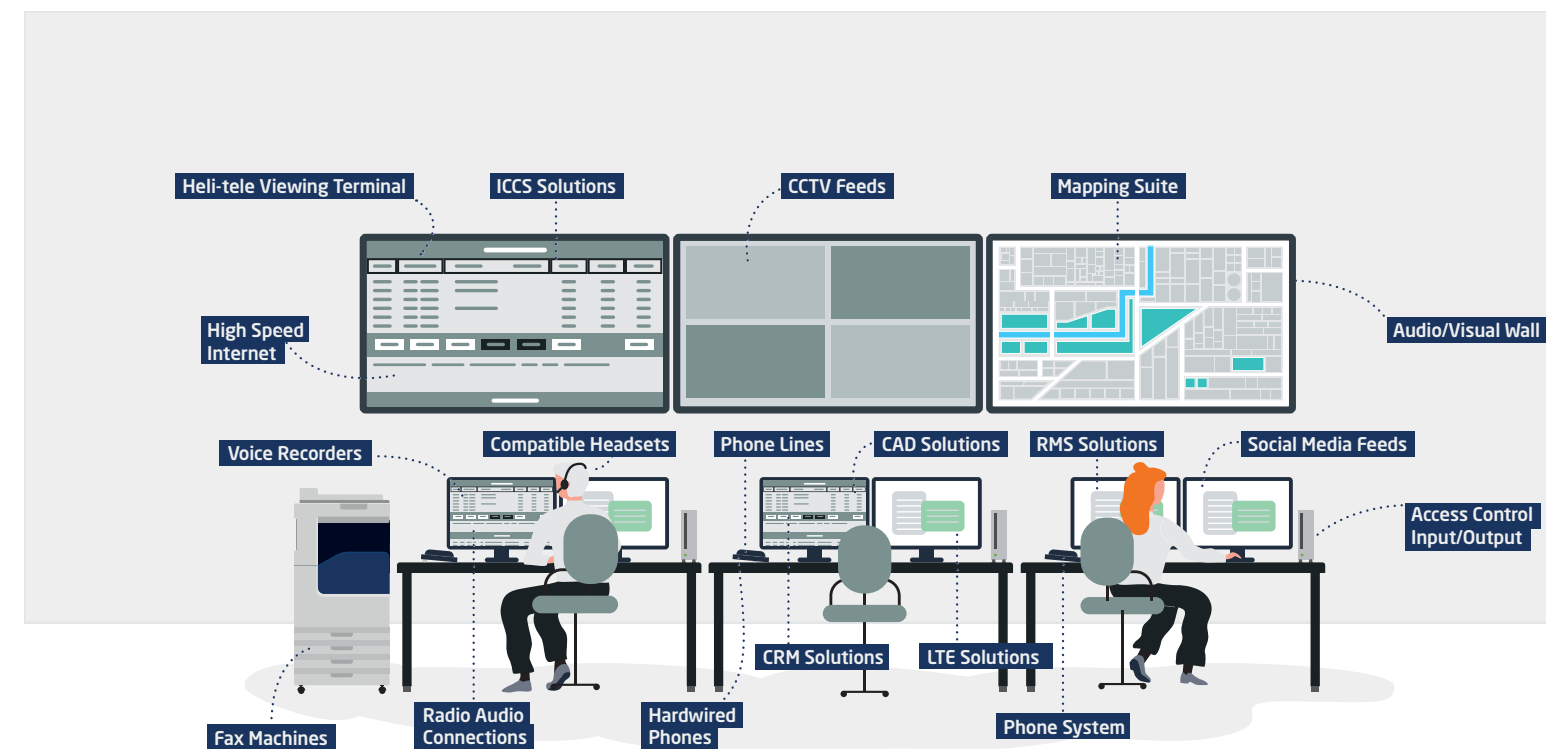


LTE enabling connected control rooms

Our LTE interface is a 3GPP-compliant interface and uses SIP messaging directly to the platform, rather than using vendor-specific APIs.

This means that you can integrate your full control room as you've always wanted, bringing together multiple services, feeds and intelligence. Integrating data brings what's most critical to the forefront of your operators' attention and supports decision-making that protects people.

What LTE means for you...



Stream

We do more than an ICCS. Meet our latest additions to the control room.

Stream footage from an incident live into your control room instantly.

No app or pre-existing account needed

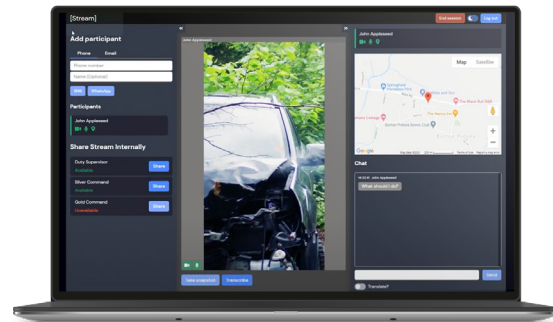
Send a link via SMS to instantly stream.

Opening up the lines of communication

An operator has instant visibility of what is happening on-scene, along with an updated map of location and a chat function to send messages back and forth.

Breaking down the barriers

Language translation on all chat messages, so the operator can talk in any language needed.



Object recognition

High-quality video footage with built-in object recognition to help pick out number plates, people or scene insights.

Internal sharing

Share what's happening with others in the control room quickly and easily - to exchange knowledge, offer insight and seek support. Enabling multiple chats and communications within the control room, as well as with the public.

The benefits of Stream



Simple to use

With no app, software or pre-existing account required, it's easy to connect with members of the public and live stream from their device - just send a secure URL link via SMS or email to start streaming instantly.



Language translation

Stream's built-in translation feature instantly translates text and voice messages from any language, removing language barriers that can slow down your response as well as enabling you to communicate with anyone on the scene.



Connect with witnesses

Privately converse with key witnesses to gather more details and speed up response times with the built-in chat feature, complete with an intelligent translation function to remove disruptive language barriers.



Automatic recording

Stream automatically records visual evidence to create a secure digital footprint and enhance your evidence gathering. Streaming data can be shared with other agencies to help you coordinate your response.



Maps

Optimise your emergency response with our world-leading mapping solution integrated with Google Maps.

Make the right call, fast

Get instant visibility on any location with what3words, street view, CCTV & highways integration as standard, helping you deploy the right resources to the right place, at the right time. Maps enables you to respond to incidents quickly, easily and accurately - so you can better protect the public you serve.

Your all-in-one mapping solution

Maps combines the best in mapping technology with the latest in security and quality to help you track officers, vehicles, incidents, callers and points of interest at any location, all in one place.

Providing an advanced level of situational awareness, Maps gives you the data and visibility you need to make accurate decisions more quickly, so that you can streamline your response and maximise efficiency.



Quickly respond to incidents

You need to respond to incidents as efficiently as possible to ensure the best possible outcomes for your team and the public.

With advanced locational tools and data including Eastings & Northings, postcodes and what3words, integrated real-time traffic information, live tracking and event replay, and satellite and street-view mapping, Maps helps you deploy the right resources based on proximity and skill sets, optimise directions on the ground, speed up investigations, and plot the quickest route to unfolding incidents.

The benefits of Maps



Easy to use

Maps is powered by world-leading Google Maps technology for ultimate simplicity and familiarity. There's no need to learn new software, meaning your team can adapt without time-consuming and costly training.



Complete visibility

Track officers, vehicles, incidents, callers and points of interest so you can see where incidents are occurring, make better dispatch decisions and identify key buildings to support resource deployment.



Multiple data sources at your fingertips

Maps brings together information from multiple data sources including CCTV, ANPR, highways cameras and street view to help you make more accurate and informed decisions.



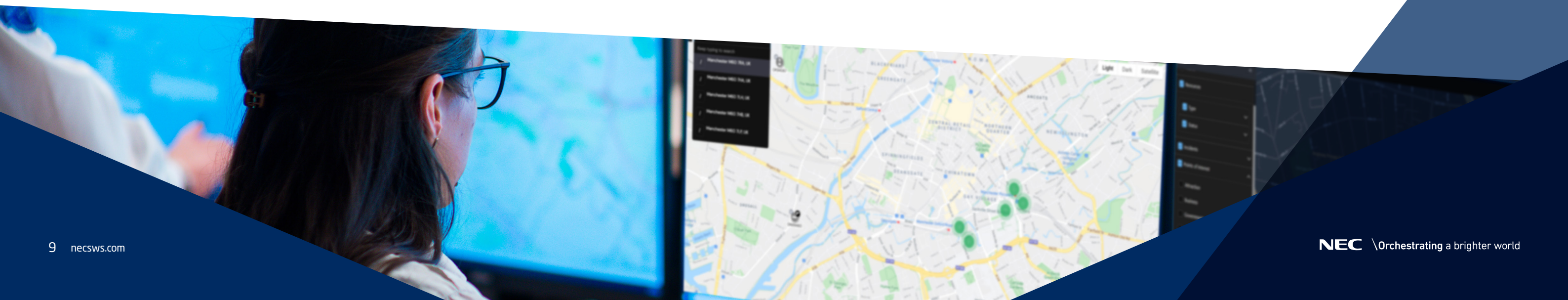
Powered by data

Cloud-based and built on the latest cutting-edge software, Maps offers complete security for your data - giving you peace of mind so you can focus on protecting your communities.

Mapping technology you know and trust

Because Maps utilises the latest, most up-to-date Google Maps software, it offers the level of quality and reliability you've come to expect from day-to-day mapping technology.

No more slow loading times or switching between apps - with our Maps solution, you have all of the data and information you need right at your fingertips, from one centralised source. We're helping you to optimise your emergency response, make smarter decisions, and save time, resource, and ultimately, lives.



Fully flexible solutions

Proven integrations

Cortex integrates different communication systems into one user-friendly portal with a consistent look and feel throughout. As Cortex has evolved and our customer base has increased, we have developed out-of-the-box integrations with numerous systems from a variety of providers. If we don't already have an existing interface, we have a team of specialist software engineers who can develop one - it's what we do.

Access control and CCTV

Live video feeds can be accessed and controlled from within the user interface. Cortex can be configured to automatically screenpop a specific video feed associated with an input, such as a door-entry button or telephone line. The Cortex operator can also activate associated outputs, such as raising a barrier or unlocking a door by simply touching the on-screen 'Activate' button. CCTV footage can be paused, magnified and saved for further review.

Flexible and intuitive user interface

The interface has been designed by users for users, supporting desktop screens and handheld tablets, with options available for both touch and keyboard/mouse control. The user interface can be customised and the user can dock and tab windows together to form tailored layouts. Windows can be undocked and floated across multiple screens or a combination of both can be implemented.

Simple yet feature-rich

Cortex is both feature rich and simple to use. Integrating with lots of different systems is just part of what our ICCS does; what's equally important are the features of Cortex. It's often the little things that turn good software into great software and enable the user to manage the technology effortlessly.

So now you've found out a little more about NEC, we'd love to hear from you...



Book a demo with us



Visit our website: necsws.com



Call us on: +44 (0)1482808300



Email us at: info@necsws.com



We look forward to meeting you and seeing how we can help you and your control room.



NEC

