



Northgate is a leading provider of technology solutions for control rooms. Our products and services are used by the public and private sector to improve the operational effectiveness of their control and resource deployment activities. As traffic increases, and capacity expands, we can help you optimise the use of your current people, and substantially reduce the need to recruit further staff.

### Transport Control Rooms

## Keeping people moving forward



Our customers include:  
Network Rail  
London Underground  
Metronet  
Tubelines  
Manchester Metronet  
Nottingham Express Transit  
South Eastern Trains  
Virgin Trains  
Heathrow Airport Terminal 5

## Solutions for Transport Control Rooms

Transport companies can make significant cost savings by using Northgate's CallTouch software to improve communications. Our software lets control room and resource centre personnel communicate with individual staff and crews more efficiently. This means those staff in turn are able to do their job more efficiently, which can reduce your costs and decrease the potential for delays.

### Integrated Call Concentrator

Our CallTouch Integrated Call Concentrator (ICC) uses Computer Telephony Integration (CTI) to manage telephone calls from touch-screen terminals. You can make outgoing calls faster. For example, searching electronic staff directories can save minutes on each call. You can store the most frequently used numbers, either for roles or individuals, to allow instant one-touch dialling, and if these are stored in relevant pages (such as Stations) you can save even more time. In addition, the system also provides fast access to recently dialled, received and missed call lists.

CallTouch also helps you effectively deal with incoming calls. All incoming calls will appear in call queues, with an indication of the caller identity, and how long the caller has been waiting. Call queues enable calls to be dealt with more effectively, thereby optimising the time of resource centre staff.

Calls may be filtered to appear only to operators who can deal effectively with that caller. For instance, catering staff will only appear in the incoming call queues of those call handlers allocated to catering operations. Unlike call centre systems, where an agent has to take the next call they are

given, CallTouch gives an operator the choice to manually take a call from any point in the queue. If they are waiting for an urgent call from a member of staff, they may choose to take this call in preference to another which has been waiting longer. Furthermore, operators may assign a temporary high priority to a caller from whom they are expecting a call. When that person dials in, their call will automatically go to the top of the queue, providing immediate visibility, and reducing time to answer a priority call.

CallTouch also has a unique instant reply facility. This is available to all operators. Where a call was unclear or garbled, the message may be quickly replayed to clarify the detail.

### CallTouch ICC at Network Rail Manchester

Network Rail's new Square One facility in Manchester opened in June 2007. This consolidated their Manchester Control Centre with the train operator control functions of First Trans-Pennine Express and Northern Rail. Following its success in delivering other rail projects, Northgate was contracted to provide a 45 position CallTouch ICC system.

The system provides every control room user with access to incoming and outgoing telephony in a strictly partitioned environment. Each different group of users can only access the telephone lines and numbers to which they have been given access. When control room loads increase, due to unplanned incidents, operators can use speed dials and telephone directory features to rapidly mobilise their resources and restore normal service.



### CallTouch ICCS at Heathrow Terminal 5

Opened in March 2008, Terminal 5 is a £4.2 billion investment, which will cater for around 30 million passengers annually. Northgate has provided touch-screen control of telephone and intercom facilities throughout the new terminal using our CallTouch system. All intercoms and telephones are linked back to CallTouch, which enables calls to announce under individual button presentations and allows emergency calls to be prioritised. Even under intense call volumes, these screen presentations allow operators to efficiently handle all calls in the proper manner. The software also allows the flexibility of allowing any operator to sit in any position and to relocate to another building for business continuity. Control room personnel are able precisely tailor the user interface to their ergonomic requirements. CallTouch supports a wide range of communications interfaces, which allow the Airport Authority to integrate with the main command and control room (the Star Centre). CallTouch will also support the future integration of radio and CCTV video.

CallTouch's Short Messaging Services (SMS) can reduce the time you spend dealing with low priority calls. Text messages can be exchanged with groups of mobiles, providing an ideal way to communicate repetitive information, such as shift changes. Staff do not spend time waiting for operators to become free and also avoid voice calls, which tend to take longer than required to exchange basic information.

CallTouch helps supervisors ensure their staff are performing effectively at all times. Real-time monitoring helps a supervisor manage individual shifts by knowing what each operator is doing at any time. Statistical monitoring tools provide reports that show patterns of activity, which can be used to match staffing levels to demand. CallTouch also records an audit trail of all activity, and a time and date stamp confirms when each call was received and answered.

### Signal Post Telephone Call Concentrator

Sometimes communications on the railway can have safety implications. For instance a signaller may need to communicate with a train driver through radio or signal post telephone. For such circumstances we have developed a version of CallTouch specifically to meet the safety criteria of Network Rail, London Underground and other high profile transport organisations.

Even in such demanding environments, CallTouch will still retain the key benefits of a highly flexible user interface and the ability to link with a number of telephone platforms.

### Fully Integrated Communications Control

As a result of fragmented communications, many control rooms have limited functionality with many manual processes. Many operators will have separate radio consoles, fixed mobiles, dealer room panels and fixed telephone instruments on their desks. There is generally a lack of integration between systems, which leads to data inaccuracy, time consuming manual processes and lack of shared awareness about situations.

CallTouch brings these diverse systems into a single integrated presentation, which gives each operator access to all their resources at any time. The operator can link together a wide range of communications facilities. Internet Protocol (IP) voice communications at the heart of the system provide connections to a wide range of communication devices, such as telephony, UHF/VHF and TETRA digital radio, GSM-R and messaging. IP based communications enable control room staff to efficiently handle all inbound and outbound communications across multiple sites.

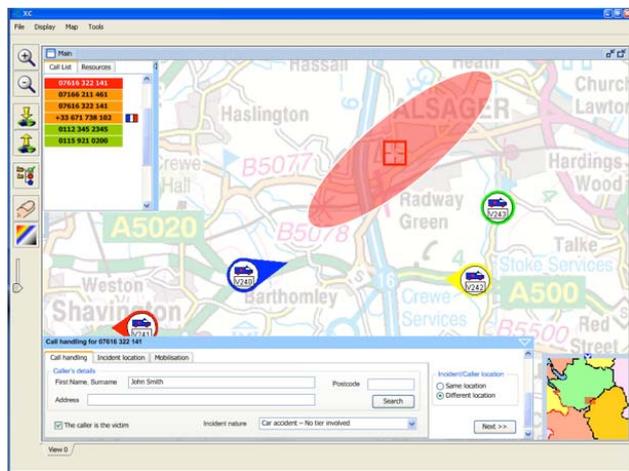
### Incident Management

CallTouch is part of Northgate's overall Integrated Incident Management suite, which includes a full range of control room applications. Geographical Information Systems can provide your organisation with a sophisticated, but highly configurable, mapping solution for the centralised management of resources and incidents.

In addition to wide area mapping, individual site plans or 3D displays of buildings can be viewed with dynamic information displayed within them. This allows resources and features to be monitored in routine operations, and managed during a major incident or crisis. A 3D display enables an operator to better visualise what is happening with respect to an incident.

### Resource Location

Resources equipped with GPS satellite locating capability (whether fixed in vehicles or personal handsets) can have their locations displayed upon the map display. This allows the nearest resource to a particular location to be quickly



found, as well as monitoring those not in the expected place. These techniques can help operators manage resources and incidents better, and can also be used to better meet demand for scarce resources by planning and monitoring their position both in real time and across a defined period.

### Integrated Map Communications

Any resource displayed on the map can be contacted by clicking its icon and choosing how to make contact - through GSM telephone, radio, pager, or GSM Text Message. Multimedia Messaging can also be used to exchange voice, picture and video information with resources in the field.

Fixed telephone points and intercom points can be displayed on the map so that incoming calls can be readily located, and so outgoing calls can be made by selecting the relevant location on a map, rather than having to lookup a resource or location in a directory.

CallTouch offers a very friendly user-interface, which is highly configurable, and is based on a highly resilient core which is designed to operate in today's 24x7 mission and life critical control environments.

CallTouch is available in a range of different guises, but it will consistently deliver excellent control of your communications, leading to enhanced control over your operations.

### Let's talk

With Northgate you get cost-effective innovation from public service experts. We help you increase efficiency and provide excellent service. Let's meet and discuss it.

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### About Northgate Public Services

Teamwork, transformation, results. These three words summarise what you get from Northgate. Most of all, results.

Northgate is a public services and utilities specialist that operates within strategic client partnerships to make change work for you. We help you transform your business processes, streamline the customer experience and reduce overhead.

Northgate clients achieve lower costs, less paperwork, better performance and more joined-up working. Northgate partners 80% of UK local authorities and every UK police force, as well as a host of other public service organisations.

Our technology processes over £12bn of revenues and benefits, drives the electoral administration systems for 18 million people, manages over three million local authority and housing association properties worldwide, enforces nearly 4m penalty notices every year, and screens 600,000 babies for hearing problems. The company was founded in 1969 and employs over 6,000 people.

[www.northgate-is.com/publicservices](http://www.northgate-is.com/publicservices)