



CASE STUDY | TRANSPORT & INFRASTRUCTURE  
**NORTHERN ACCESSIBLE W/C**

---

Intercom communication and security system for disabled access toilet

## BRIEF PROFILE

Northern Trains Ltd is a subsidiary of the Department for Transport's public sector owning group, 'DOHL.'

They play a vital role across the North by providing reliable and friendly train services that help hundreds of thousands of people with their daily commutes.

Northern are continually looking to create solutions to make their stations, trains – and wider network – as accessible as possible, and to make a positive difference to the communities it serves.

They've introduced an entire fleet of state-of-the-art trains that include free WiFi, power sockets at every seat and digital screens.

They're building easier and quicker ways to buy tickets and are more committed than ever to making customer journeys as safe and comfortable as possible.

## PROJECT DETAILS

### Technical Data

- OD5 (External) - Intercom showing vacant and engaged status. Communication via audio message when a customer approaches to inform them how to access and use the facilities
- ID5 (Internal) - Intercom that announces the W/C layout and also to call the operator CSC if required.
- 2 pull cords at either side of W/C for customer in need of assistance.
- 4 Panic buttons to contact the CSC if assistance is needed.
- External and internal, over-the-door indicator in ticket office to indicate there is an issue.
- Reset button to acknowledge after the incident is resolved.
- All incidents are recorded via Studio and scheduled to lock down from 23:00H – 06:00H.

## THE CHALLENGE

Northern have 477 stations in the domain and wanted to modernise 346 stations to have a state-of-the-art baby changing/disabled/toilet facility. that focussed on safety and efficiency.

They wanted a bespoke solution that would be encouraging to all passengers with disabilities and make their travel experience easier. They also wanted to include features such as ticket reading, a call button to alert the Central Service Centre (CSC) to open the door as well as providing the facility with a radar key to gain access when needed.

The client also wanted to include automated messaging that would describe the layout of the room to someone once inside for those with specific difficulties and needs.

Finally, the client wanted to include pull cords for passengers to use if they were in need of assistance. They requested a solution to help people if they were under attack or had fallen and couldn't reach the pull cords but could still alert attention and get the correct help.

For Commend, we wanted to achieve a W/C that would provide safe and convenient usage for all passengers. Our OD5 touch screen, located on the outside entrance of the facility, can provide access to the toilet either via a radar key or by scanning a QR code found on passenger's E-tickets. This communication device also includes a call button feature that allows for calls to be directed to personnel in the CSC customer experience centre, based in Sheffield, in case further assistance is required.

Once inside the facility, an automated announcement sounds in order to inform the blind and visually impaired passengers where all the facilities are situated in the room.

Overall Commend's aim was to achieve safety for all passengers and reassurance that there are facilities on each station in the Northern Domain.

## THE SOLUTION

We provided the OD5, positioned outside the W/C and the ID5 for inside the W/C. We included two pull cords, and four panic buttons that are screen printed with 'press and hold for 5 seconds'; this is to prevent false alarms.

There is also a reset button, however the Central Service Centre (CSC) will acknowledge the alarm and then the reset button will be pushed from their end.

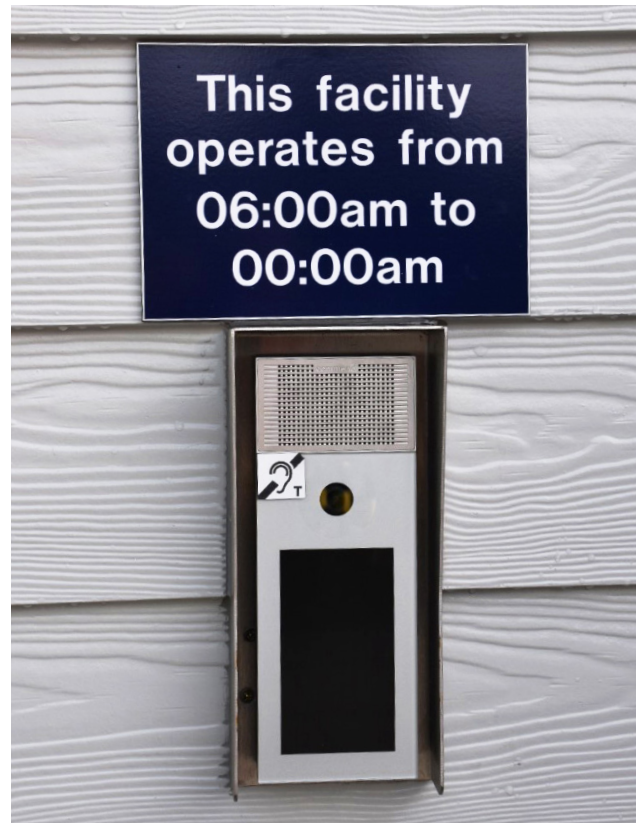
In parallel, we included an over-the-door indicator on the outside of the access door, with a second one inside the ticket office at each station that has them. This is to make sure that the local staff are aware if there is someone requiring assistance inside the facility.

We used PLC logic to achieve the 'Engaged/Vacant' messaging on the outside of the facility and audio description on the inside, as well as remotely opening the W/C door via our central CODA system when a ticket QR code is scanned on the screen.

There are two pull cords and four panic buttons inside the facility as well as our ID5 device. An additional feature that we added included a scream alarm feature - so that if a passenger is not able to reach the pull cord or panic button, screaming or shouting can generate a call directly to the Northern Customer Service Centre.

Another feature that we added was the ability to lock down the facility from 23:00H to 06:00am which is achieved via our PLC scheduling software. We used a remote-controlled Commend contact to an outer lock which shuts and locks the facility down out of hours.

We used Comwin - Reporting and Scheduling to send activity reports and record all calls and e-mail reports to the CSC Manager.



## NEXT STEPS

Off the back of this successful project for Northern, we are scheduled to roll out a program of works on a further 287 sites, subject to survey. The works on these sites will vary from complete, new facilities to re-fits of existing equipment.

The client has also requested and specified to have one of these state-of-the-art W/C facilities in every new train station they operate in, providing a safer and more accessible travel experience for all passengers.



**NORTHERN**



## CHRIS JACKSON

Regional Director  
Northern

”

“We are delighted to have worked with Commend to introduce these modern and brand-new accessible toilets.

Not only do they provide fantastic facilities for everyone on our network in Greater Manchester, but they are packed full of innovations, safety measures and technology that helps and protects rail passengers, whatever their needs.

The new W/C at Guide Bridge and Bolton are now operational and we look forward to introducing them across our Greater Manchester stations in the near future.”

## SECURE COMMUNICATION SYSTEMS BY COMMEND

Can you imagine a system that millions of people rely on every day, where every word has to count? This is the world of Commend! Secure, reliable communication is our passion.

As global market leader with over 45 years' experience in developing voice technology, we have integrated video and interfaces to third-party equipment that complies with international norms and standards. Commend is the natural choice for hands-free voice communication systems all over the world.

**One of our employees will be happy to provide further information.**