



# EVENT ORGANISER DEPLOYS MOTOTRBO™ CAPACITY MAX AND WAVE PTX™ AT MAJOR GLOBAL SUMMIT

FOR FAIL-SAFE MISSION-CRITICAL COMMUNICATIONS ACROSS MULTIPLE SITES



## COP26

The 26<sup>th</sup> United Nations Climate Change Conference, more commonly referred to as COP26, was held at the SEC Centre in Glasgow, Scotland, from 31<sup>st</sup> October to 13<sup>th</sup> November 2021. The result of COP26 was the Glasgow Climate Pact, negotiated through consensus of the representatives of the 197 attending parties; this pact was the first climate deal to explicitly commit to reducing the use of coal and included wording that encouraged more urgent greenhouse gas emissions cuts, whilst promising more climate-related finance for developing countries.

## IDENTITY

Identity is a full-service, creative production agency with over twenty years' proven pedigree in the delivery of major, high-profile events in the UK and globally. Identity was selected by tender as event supplier to COP26 and, as part of this remit, it had to provide fail-safe radio communications during the conference, from initial build to final shutdown.

## CHALLENGE

Roadphone NRB had been working with Identity since 2019, having previously collaborated successfully on various high-profile UK events, such as the NATO summit in Watford and the G7 summit in Cornwall. Therefore, it was no surprise that, when Identity was named as supplier to COP26 in Glasgow, it again approached Roadphone NRB to supply a stand-alone mission-critical radio system for this summit. Roadphone NRB started planning for COP26 four months before the event. Identity's key requirement was that it needed absolute mission-critical communications, with no single point of risk of failure. So Roadphone organised site visits, to test and work out the best places to position the repeaters and antennas to ensure the whole area had the maximum coverage possible. The Scottish

Event Campus (SEC)\* in Glasgow was hosting COP26 and Roadphone needed to provide robust radio coverage across its combined area of over 22,000m<sup>2</sup> including the SEC Centre, which houses five interconnected exhibition and meeting spaces, the iconic 3,000 seat Armadillo and the OVO Hydro. Identity also virtually doubled the size of the exhibition centre, by setting up a huge marquee in the car park. This also had to be covered by the network, along with the various off-site requirements, including links to airports, other transport hubs and alternative venues across Scotland, such as Glasgow's Kelvingrove Art Gallery and Museum, which hosted a dinner reception for Heads of State and members of the British Royal family.

\*Previously the Scottish Exhibition and Conference Centre (SECC)

## CUSTOMER PROFILE

### Organisations:

- 2021 United Nations Climate Change Conference (COP26)
- Identity

### Partner:

Roadphone NRB

### Industries:

Event Management

### Location:

UK

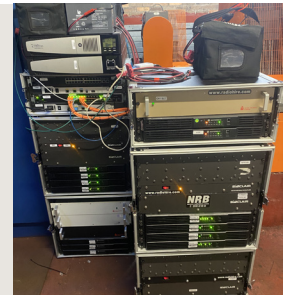
### Motorola Solutions Products:

MOTOTRBO Capacity Max system comprising:

- 2 x Capacity Max System Servers (CMSS)
- 33 x SLR 5500 Two-Way Radio Repeaters
- 1750 x DP4801e Portable Two-Way Radios
- 60 x DP3661e Compact Portable Two-Way Radios
- 20+ x DM4600e Mobile Two-Way Radios
- 2 x TRBOnet Voice Recorder

**“Having worked with Roadphone in the past, we know they can deliver the large-scale, high-performance radio communication systems we need for huge summits like COP26. And we’ve used these temporary MOTOTRBO systems with integrated WAVE PTX successfully a few times now; they work and, most importantly, they can be installed to ensure complete fail-safe redundancy, which was absolutely essential for us when delivering this summit.”**

Simon Dunnell, Executive Project Director, Identity



## SOLUTION

Roadphone deployed a small two-repeater Capacity Plus system for the initial stages of site build (and subsequent site break post event); then it deployed the main systems six weeks prior to the start of the summit. For the Capacity Max system, 15 SLR 5500 repeaters were set up in the main repeater site to enable coverage of the site, venues and a large proportion of Glasgow. A further 14 repeaters were installed in three other locations around the site to provide full resilience to the main Capacity Max system. In this way, in case of a technical or physical failure, such as a fire, they could switch seamlessly to an alternative system. Roadphone had run a range of comprehensive simulations and on-site tests prior to the summit start, to ensure communications would continue despite any incidents. The final two repeaters were deployed in Capacity Plus mode at Kelvingrove for the reception.

The main system included a Capacity Max System Server (CMSS), a TRBOnet Server (for voice recording for traceability) and a WAVE PTX Radio Gateway in the 24/7 data centre. However, Roadphone also established a full duplicate system of these servers in a secondary data centre in one of the alternative locations, to provide absolute redundancy, in case of failure of any components of the primary system. The system was monitored both on-site and remotely 24/7 by three Roadphone engineers (the nine-person Roadphone team comprised a Head of Operations, a Head of Engineering and System Build Manager, a Project Manager and Lead, and six Engineers). Roadphone was on-site for over 11 weeks in total, with its wider team also distributing, managing and monitoring radio and accessories during the summit and providing any training or assistance users needed.

The main operational teams, including Identity (own staff and contractors, furniture, PA and audio-visual suppliers, for example), Roadphone, the Foreign Commonwealth and Development Office (FCDO), Government (HMG) Events and the United Nations (UN), were all equipped with MOTOTRBO DP4801e handsets with a selection of RSMs, earpieces or headsets. However, the Roadphone and Identity project team leaders were also using the WAVE PTX Mobile application on their smartphones, so they could stay permanently linked in to operations when off-site. Companies responsible for providing transport for Heads of State and HMG and UN officials, meanwhile, used a mix of DP4801e and compact

DP3661e radios, as well as the WAVE PTX TLK 100s and the WAVE PTX Mobile application, so they could stay reliably in contact with their teams when out of network range – for example, when collecting Heads of State from Glasgow or Edinburgh airports.

Following Identity’s requirements, Roadphone established and tested 120 talk groups spread across eight different zones: Identity, FCDO, Transport (who all also had WAVE PTX integration), the UN events team, Green Zone (used predominantly in the Glasgow Science Centre (GSC) by the Cabinet Office Events Team and the production company operating inside GSC), Venue & Security (used exclusively by SEC security and the Police), and finally Suppliers and Infrastructure Suppliers (15 and 9 separate companies, respectively). The network was used extensively, with approximate figures as follows: over 125,000 calls during the 6-week build, an average of 8,000–10,000 calls daily during the summit, and over 50,000 post-event calls.

## BENEFIT

Matt Bostock, Head of Operations, Roadphone NRB, summarises: “The solution we designed for Identity included maximum resilience, eliminating a single point of failure, and even involved backup RF sites to ensure that radio communications were never interrupted. Everything ran smoothly and we never had to utilise any of the redundant architecture, but the Motorola Solutions Capacity Max network allowed us to build in resilience, giving ourselves and our client peace of mind. This was one of the biggest temporary systems we have ever installed, certainly in terms of system capacity, and I’m really proud of our whole team who have, once again, proved that we have the capability to deliver what’s needed – from equipment and manpower, to experience – for fail-safe communications at such high-profile events. We know that we can rely on the MOTOTRBO technology; and more recent enhancements such as WAVE PTX just add to the flexibility of our offering.”

## Motorola Solutions Products Continued:

Broadband Push-To-Talk communications comprising:

- WAVE PTX
- 2 x WAVE PTX Radio Gateways
- 125 x TLK 100 WAVE PTX Portable Radios
- 6 x WAVE PTX Mobile Application on iOS devices

Accessories:

- 250+ x Remote Speaker Microphones (RSMs)
- 2000 x Earpieces and Headsets, including Tubes, D-Shell, Lightweight and Heavy-Duty
- 120+ x 6-way chargers

## Benefits:

- Huge temporary deployment: extensively used, with over 300,000 calls being made over the network
- Bespoke system: installed to precisely meet the complex requirements of the summit and the wide range of users
- Full redundancy: to ensure absolutely fail-safe communications with no outages during the whole event
- Crystal-clear audio across all venues: with the robust WAVE PTX interoperability providing reliable, connected off-site coverage too

