Powering the Met Police's shift to a future-ready network

Transitioning the UK's largest police force to a fully upgraded all-IP network, built for reliability, resilience and long-term performance.

The Met Police

Solutions:
- A robust IP network backbone
- Insight through detailed inventory
- Safe, controlled soft-cease rollout
- Protecting edge use cases
- Voice to virtual (Teams) integration
- Environmental & peripheral line upgrades

The overview

To keep Greater London safe, the Metropolitan Police Service (Met) rely on secure, resilient communications. Their legacy ISDN and analogue systems were ageing, rigid and becoming harder to support – a modern upgrade was essential. Even more so with the PSTN switch-off fast-approaching.

The Met have continuous dialog with their BT account and BT service manager. This allowed MPS to plan investment in new technology well ahead of service end dates. Thanks to the investment the Met have made in IP platforms, they are well prepared for the move to all-IP ahead of the end of the traditional phone network.

We partnered with the Met to deliver a fully digital, all-IP network, including SIP trunking, a modern voice core, and IP connectivity across hundreds of sites. Our role went beyond technology – we helped shape the business case, define technical requirements, and manage multiple projects simultaneously to ensure a smooth, coordinated transition.

The Met led the overall programme direction, while we acted as subject matter experts, supported by a team of dedicated project managers to keep everything on track. The result is a resilient, future-ready platform that supports day-to-day operations, and safeguards 999 and 111 services. This enables the Met to confidently focus on protecting Greater London.

The challenges

Complex networks and a failing foundation

In 2018 The Met Police faced a high-stakes upgrade. Their legacy infrastructure at that time included:

- **68 analogue circuits and 23 Kilostream challenges**
- **Over 200 Megastream circuits**
- **ISDN circuits**
- **EFM (Ethernet First Mile) connections across 168 sites**
- **4,743 PSTN lines across hundreds of locations**

Ensuring uninterrupted service for critical functions — such as emergency calls (999 and 111), lift phones, alarms, and remote agency sites — was paramount. Migrating these to all-IP solutions had to be seamless, despite the challenges posed by ageing infrastructure and ongoing operational pressures.

Ofcom's Connected Nations 2024 report showed a 45% rise in PSTN incidents, underlining how fragile the network had become. More outages, more faults and more risks for the Met. In February 2025 the Met successfully moved their 999/101 call platforms from ISDN30 to IP telephony trunks.

The Met's network relied on nearly 5,000 PSTN lines and over 1,500 ISDN2 circuits.

Solutions & turning points

Building a stable, future-ready network you can trust

Modernising the Met's communications meant safely upgrading network, voice and other mission-critical systems across the force. From planning and technical design to phased deployment, our solutions tackled legacy complexity, safeguarded critical services and futureproofed the force's infrastructure.

A robust IP network backbone

BT implemented an IP Connect MPLS network across all Met sites, building a strong, scalable foundation for their all-IP transformation. It enabled advanced trunking and modern voice services, empowering the Met to maintain seamless communication throughout the transition.

Insight through detailed inventory

We provided comprehensive, actionable data on every line and circuit, including inbound call volumes, channel utilisation, real-time provisioning visibility, broadband, and Red Care usage. This visibility allowed the Met to prioritise, plan and track migrations accurately, reducing risk and ensuring nothing was missed.

Safe, controlled soft-cease rollout

- Introduced soft-cease capability to suspend services temporarily without full disconnection, allowing quick restoration when needed.
- Four soft-cease batches were trialled, starting with 500 lines, scaling to approximately 1,000 between two pilots and two commercial runs.
- This approach resulted in minimal reconnections, safely accelerated decommissioning and reduced false positives. It was so effective that the Met is now expanding soft-ceases to other critical or low-traffic lines.

Solutions & turning points

Protecting edge use cases

- Safeguarded critical but unusual services, such as lift emergency phones and other specialist lines, using Pre-Digital Phone Lines (PDPL) and phased migrations. Around 20% are already complete, keeping systems fully operational.
- Designed and deployed a new voice core system, rolling it out in phases across London control rooms January-March 2025.
  - This meant seamless migration of 999 and 111 calls via SIP trunks, removing reliance on older ISDN30 circuits.
  - We provided on-site support during cutovers and 24/7 monitoring for two weeks post-go-live at each control room, resulting in zero downtime during critical emergency migrations.

Voice to virtual (Teams) integration

Over 1,500 legacy handsets were retired and replaced with Teams-integrated softphones. This gave staff more flexibility, simplified the voice estate and aligned day-to-day communications with modern, cloud-friendly tools.

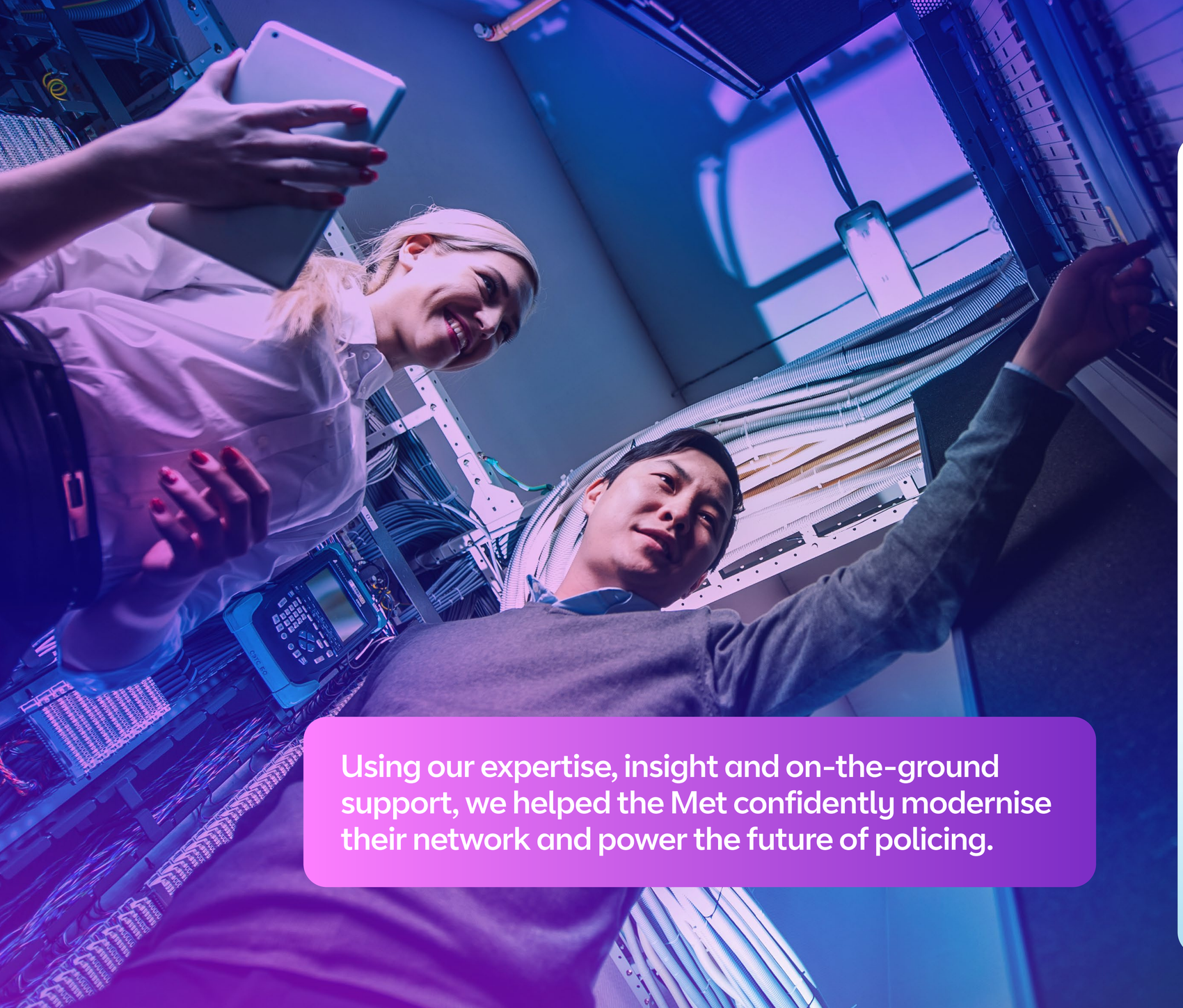
Environmental & peripheral line upgrades

- **Replaced ageing yellow weatherproof phones** with rugged 4G-enabled units. Around 30% are already live, equipping staff with dependable, high-performing tools.
- **Migrated broadband lines** for building management, HVAC systems and fuel pumps, working alongside the Met's Property Services team to futureproof key building systems and critical infrastructure.
- **Upgraded Red Care alarm lines** to radio-based or secure broadband solutions, helping retire over 400 legacy lines safely and efficiently.
- **Transitioned fuel depot systems** from PSTN to modern all-IP platforms, keeping essential operations running smoothly.
- **Identified and removed more than 50 legacy analogue phones,** freeing up space and easing future maintenance.

Delivering a modern, resilient all-IP network, BT helped the Met keep critical services running, streamline daily operations and prepare for the future.

"Openreach's decision to retire ageing analogue systems required the Metropolitan Police to replace decades-old infrastructure. BT's technical expertise enabled a full transformation, modernising services from fax to critical 999 voice connectivity, ensuring resilient, future-proof communications for essential public safety operations."

Ian Pountney, Director of Core Infrastructure | Platforms | Digital Data and Technology | Metropolitan Police Service



Using our expertise, insight and on-the-ground support, we helped the Met confidently modernise their network and power the future of policing.

Why partner with BT

Technical expertise

We designed and built the Met Police's voice core system and SIP infrastructure, rolling it out across hundreds of locations, all without disrupting critical services.

Actionable insights

Our detailed inventory reports gave the Met full visibility of every line and circuit, helping them prioritise migrations, spot redundancies and plan with confidence.

Minimised risk

The soft-cease approach let lines be paused safely before full decommissioning, reducing errors and keeping vital services running without interruption.

Hands-on delivery

From on-site support to 24/7 monitoring, our team was there every step of the way, providing reassurance and operational confidence.

Simplified procurement

Using Crown Commercial frameworks, the Met could source services efficiently, streamlining approvals and speeding up delivery.

Comprehensive capability

Beyond core infrastructure, we provided a variety of different solutions tailored to the needs of the Met police. From PDPL and Teams telephony systems, to rugged 4G phones and alarm system migrations, delivering a complete, end-to-end solution.

Standout moments

Massive scale, minimal disruption
We retired nearly 5,000 legacy lines across hundreds of sites, including 999 and 111 emergency services, with minimal downtime.

Soft-cease success
Our phased soft-cease approach safely flagged lines ready for retirement, reducing risk and speeding up decommissioning at scale.

Edge use cases covered
From lift emergency phones and vending machines to fuel depot monitors, we handled specialist lines to ensure no service gaps.

Modernised user experience
Over 1,500 legacy handsets were replaced with Teams-integrated softphones, simplifying communication and giving staff more flexibility.

Future-proof infrastructure
Rugged 4G phones, upgraded broadband for building systems and IP-based alarm lines are modernising the Met's network, enhancing reliability, performance and long-term capability.

A seamless migration at massive scale. Critical services protected, staff empowered and a next-generation network.

The PSTN switch-off marks the end of the traditional phone network. For organisations still relying on it, the time to plan is now. Moving critical services to all-IP is essential to avoid disruption — and BT is here to guide that transition with clarity, control and confidence.

Don’t wait for the switch-off, talk to your Account Manager now.

Or visit business.bt.com/public-sector

Offices Worldwide

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