**Neopop** Case Study


# Neopop

Between August 7 and 9, 2025, Viana do Castelo hosted the 19th edition of the NEOPOP Festival, the largest and longest-running electronic music festival in Portugal.

Bringing together 31,000 visitors from several countries, the event reaffirmed its position as a European reference in techno, combining music, digital art, and technology across two main stages — Neo Stage and Anti Stage — equipped with large-scale audiovisual infrastructures and high-fidelity sound systems.

The lineup featured Charlotte de Witte, Klangkuenstler, Nina Kraviz, Jeff Mills, Ben Klock, Colin Benders & Lady Starlight & Sterac [live], and Sven Väth, reflecting the festival's international status.

Over its 19 editions, NEOPOP has established itself not only as a music event but also as a symbol of cultural and technological innovation, placing Viana do Castelo on the global electronic music map.

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| **Customer** | Made Of You Group |
| **Integrator Partner** | XBIN |
| **Location** | Viana do Castelo, Portugal |

## Implemented Solution

The network was structured into three interconnected sectors to ensure low latency and high transmission capacity throughout the venue.

The central point integrated a 42U open rack from BARPA's Pyxis range, housing the operator's handover point, main equipment, and structured cabling routing, ensuring efficient management and easy technical access.

The backbone consisted of single-mode OS2 fiber optic cable (G.652.D), interconnecting the central, intermediate, and final sectors. Between the main and secondary sectors, the connection was made via fiber optic cable (≈300 m). Between the secondary and final sectors, Cat.6A cable was used, ensuring bandwidths of up to 10 Gbps.

From each sector, Cat.6 branches were deployed to access points (APs) and operational equipment, positioned in critical areas such as production, ticketing, and access control.

To optimize traffic, a bandwidth control policy (QoS) was configured at the gateway.

The POS/Bars network was given full priority and unlimited bandwidth, ensuring low-latency payments. The General, Production, Access Control, Public Entities, and Artists networks were limited to 50 Mbps / 10 Mbps.

These policies guaranteed absolute priority for critical traffic, even during peak usage periods.

## Challenge

NEOPOP needed to ensure stable, secure, and high-performance connectivity to support all critical festival operations (ticketing, payments, access control, internal communication, technical production, and public services) in a temporary and highly dynamic environment.

The main challenge was to replicate the reliability of a permanent network within an infrastructure assembled in just a few days and exposed to adverse environmental conditions such as dust, humidity, temperature variations, and potential vandalism in a public-access venue.

Beyond technical robustness, it was essential to ensure fast installation, efficient management, and zero failures throughout the three days of the event, guaranteeing a continuous and secure experience for the audience, artists, and operational teams.

## Choosing our Partner

XBIN relied exclusively on BARPA, which was responsible for the full supply of materials used in the passive network infrastructure, including racks, patch panels, copper and fiber optic cables, among other components.

This collaboration ensured immediate material availability, technical consistency, and strict compliance with deadlines throughout all phases of assembly and operation.

With rigorous planning, high-performance components, and efficient execution, the XBIN + BARPA partnership demonstrated that a temporary infrastructure can achieve reliability standards equivalent to permanent installations, reinforcing NEOPOP as a European reference in technical event production.

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## Installation

**Method**

In the main backbone, a single-mode OS2 (G.652.D) fiber optic cable solution with polyethylene (PE) jacket was implemented, using a tactical fiber pre-assembled by BARPA's internal HIGGS production unit. This configuration ensured waterproofing, mechanical stability, high performance, and low attenuation. The entire network was designed in compliance with international standards EN 50173 / EN 50174, TIA/EIA-568, and ISO/IEC 11801, ensuring a reliable, scalable infrastructure prepared for high technological demands.

**Purpose**

To ensure stable and secure connectivity for all critical festival operations — ticketing, payments, access control, surveillance, and production — through a high-performance, rapidly deployable temporary infrastructure.

**Execution**

Installation was carried out in a sequential and controlled manner, meeting tight deadlines and complying with international standards EN 50173 / EN 50174, TIA/EIA-568, and ISO/IEC 11801. BARPA's HIGGS production unit supplied pre-assembled tactical fibers, optimizing installation and reducing the risk of failure. All backbone and copper links were tested and certified, ensuring system performance and integrity. The infrastructure remained fully operational and stable between August 6 and 10, fully supporting the festival's technical requirements.


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## Result

The installed network infrastructure fully met the technical and operational demands of the event, demonstrating high performance, stability, and reliability throughout the entire operation of NEOPOP 2025.

Neopop 2025 was one of the most consistent editions ever. The partnership between XBIN, BARPA, and the festival organization was decisive.

The network infrastructure demonstrated robustness, stability, and flawless performance, ensuring smooth and failure-free operation throughout the entire event.

**Hermano Cunha**
Operations Director • Neopop 2025