



CASE STUDY

O2 Production Relies on Panasonic KAIROS for Broadcasting Top-Tier Football and Ice Hockey in Czechia

In November 2023, O2 Production secured exclusive broadcasting rights for the Czech First League and Czech Extraliga – the country's premier football and ice hockey leagues, respectively. With only a few weeks to prepare before the end of the year, it faced the challenge of managing up to eight simultaneous live broadcasts.

To meet this demand, a cutting-edge Remote Broadcast Centre was constructed in Prague's Brumlovka district, built entirely on the SMPTE ST 2110 IP-based protocol.

Client: O2 Production

"It aligned perfectly with our vision of modern broadcast management. We chose to base the entire centre on the ST 2110 IP protocol, which gives us the flexibility to scale our services in the future. The functionality and control system of KAIROS also impressed us. The centre is equipped with three Panasonic KAIROS AT-KC200 mainframes, with each supporting eight control stations. Compared to other systems, this offers an unbeatable price-to-performance ratio."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project

Adaptability and Functionality Key in Choosing KAIROS

O2 Production evaluated several systems from multiple suppliers, but after extensive testing, it selected Panasonic's KAIROS IP-based live video production platform.

The selection process took up to three months and included rigorous testing of not only the overheads but also the transmission systems – encoders and decoders – to ensure full compatibility. O2 Production spent six weeks testing the KAIROS solution alone.



"One of key advantages of Panasonic's KAIROS system is its unique logic, which differs significantly from competing systems offered by Sony or Grass Valley. This makes it highly modular and adaptable to the dynamic needs of our Remote Broadcast Centre. Whether we're broadcasting live football or ice hockey, each event has different signal processing needs; KAIROS allows us to configure and recall settings in just a few clicks."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project



Delivering Increased Flexibility

The Remote Broadcast Centre produces approximately 800 sports broadcasts per year, handling up to eight simultaneous broadcasts at weekends. However, it's still operating at around one-third of its total capacity.

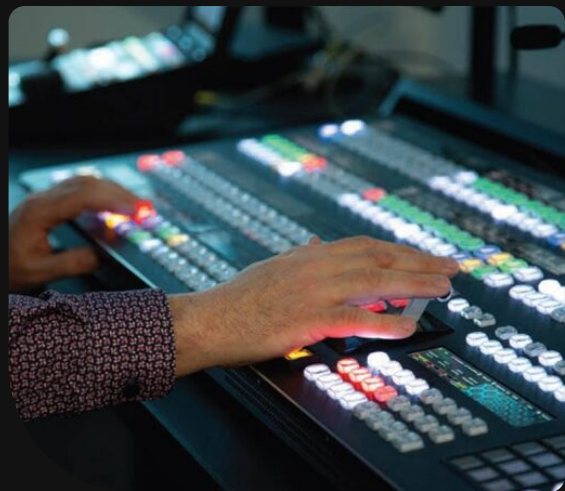
"The majority of our broadcast capacity is during morning and nighttime broadcast windows. In addition to Czech football and ice hockey, we also handle international events such as the Dubai Half Marathon. We're steadily receiving more orders and gradually expanding our services across Europe and beyond."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project

Enhanced Production Flexibility and Sustainability

Previously, a broadcast director would travel between venues and manage only one event per day. Now, thanks to the Remote Broadcast Centre, they can oversee multiple broadcasts daily. This is having a profound impact on sustainability and efficiency.



"The sustainability benefits of this approach are significant. We now send a maximum of two technicians to a sporting event – instead of seven or eight – drastically reducing our carbon footprint, costs and transport-related emissions. At the same time, this has also enabled us to triple our live production output. With travel and set-up time totalling around 16 hours – all for a three-hour broadcast – this previously required an overnight stay. Now, with a couple of people at the venue and approximately four staff managing up to eight broadcasts from the venue, this has resulted in major cost-savings, especially in staffing the broadcasts, which was becoming problematic, given the current labour shortage."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project



Seamless Configuration and Support

Integration of KAIROS was seamless due to its native IP-based design. “It was straightforward to connect and configure; the key was ensuring compatibility across all devices. Using the ST 2110 protocol, our centre is the first IP-based facility of its kind in Central Europe,” added Suslo.

Panasonic provided extensive on-site and remote support to O2 Production during installation, alongside regional integration partner, Syntex. The latter’s technicians, fully briefed by Panasonic, can help to address any hardware issues that cannot be resolved remotely.

Each football match uses eight cameras – with the centre also featuring Video Assistant Referee (VAR) capabilities – whereas ice hockey matches use four. On average, the centre manages 25 sports broadcasts per week, along with 12 to 16 VAR sessions monthly. All signals are pre-configured in KAIROS, with each server handling at least 30 Gbps of traffic. It immediately proved reliable and fit-for-purpose during continuous multi-day broadcasts.

"We were unsure how it would perform under full load, but it has exceeded expectations. Even at peak capacity, where KAIROS is handling eight broadcasts and 52 incoming signals, it runs flawlessly. Unlike hardware solutions offered by competitors, KAIROS is entirely software-based, with the only variable being server performance. We can map signals, process layers, and configure workflows without limitations. Once you understand its logic, it fits our needs perfectly."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project

"Panasonic's KAIROS solution enables me to design the workflow exactly as I need it, without being restricted by traditional input limitations."

Miloslav Malec

from integration partner, Syntex

Expansion Beyond Sports Broadcasting

While sports remain the primary focus, O2 Production's Remote Broadcast Centre is being considered for other types of live events. However, this all depends on the feasibility of strong network connectivity on-location.

Regardless, remote production and centralised broadcast hubs are becoming more prevalent, with the Remote Broadcast Centre expected to increase its output accordingly in the future. This is being driven by production requirements. For example, O2 Production handles all home broadcasts for the UEFA Champions League, with UEFA mandating production from an outside broadcasting (OB) vehicle.



"Football and ice hockey stadiums are well-equipped with fibre optic networks. However, if broadcasting from areas such as Wenceslas Square in central Prague, the first challenge would be establishing a reliable network connection. Depending on the number of cameras involved, 5G or fibre connectivity would be preferable, but you'd need at least 100 Mbps for a three-to-four camera set-up. This shift is part of a broader change in mindset as we understand the benefits that remote production can offer. The Remote Broadcast Centre isn't suitable for every type of broadcast, but it excels in recurring events from fixed locations, such as football and ice hockey. For one-off events, it always requires a case-by-case evaluation. That said, additional elements, such as a studio feed for a local broadcaster, can still be managed through the Remote Broadcast Centre."

Rostislav Suslo

Director of O2 Production and head of the Remote Broadcast Centre project

