

Securing Remote Production for the Women's Super League

Overview

Vivid Broadcast, a leading company specializing in OB facilities and cinematic broadcast, provides multi-camera live broadcasts on a global scale for clients such as BBC, Sky, National Theatre and Amazon Prime. After securing a multi-year contract to cover the Women's Super League (WSL) with Aurora Media they decided to make a major investment in a remote production solution.

The engineering team required a comprehensive and future proof platform, versatile enough to cover their full scope of business from large scale

live football, through to high-end cinematic theatre. Ten different contribution solutions were evaluated.

The Challenge

As a global company working with production in remote locations, sometimes without access to fiber and with unpredictable Internet connections, Vivid Broadcast needed a robust solution. Delivering the WSL, which features up to six concurrent matches in a single weekend, required absolute transport reliability.

A critical technical requirement was maintaining latencies of less than one second to avoid the experience of production delays during long-distance broadcasts.

"Remote Directors don't want to feel remote, and Presenters don't want to feel in a different location", Rory Springthorpe, Founder and Director of Vivid Broadcast.

Furthermore, they had to take feeds from different organizations and distribute them to many takers. Multi-vendor interoperability was critical for handling these stream hand-offs.



Vivid Broadcast searched for a platform that could guarantee stability, super-low latency, and high bitrate efficiency, while seamlessly ingesting third-party feeds to maintain stable transport streams regardless of the source encoder.

Zest Technologies, a leading company in video contribution solutions and Intinor's UK broadcast partner, played a key role throughout the project, bringing its local market expertise and understanding of Vivid's operational requirements to the solution design, equipment supply, deployment and ongoing support.

The Solution

Following their evaluation, Vivid Broadcast selected Intinor technology, working closely with Zest Technologies and Intinor to develop and implement the solution. Zest helped ensure that the resulting platform met Vivid's demanding requirements for reliable, low-latency remote production across the WSL and its wider broadcast operations.

Vivid Broadcast deployed a fleet of Intinor hardware, including seven high-density Direkt routers and a Direkt receiver. The choice was driven by Intinor's software-defined scalability, proven resilience and frame-accurate stream synchronization capabilities. The Intinor roadmap, with ongoing feature development for standards like SMPTE ST-2110, ensured a future-proof investment.

One aspect that also impressed the team was Intinor's wide feature set outside of their immediate requirements, such as Netvideo inputs, 4:2:2 chroma subsampling, 10-bit color depth, HDR, and ST-2110, which could be utilized in the future.

To protect the primary broadcast in the WSL setup, Intinor's Bifrost™ Reliable Transport is used for transmission over the public Internet, providing total network redundancy. Transmission is made across two independent Internet connections at

the football ground, utilizing receiver bonding across dual ISP paths at the Vivid production center. Video is transported using low-latency HEVC at 25Mbps (4:2:0 8-bit), maintaining strict visual fidelity while managing bandwidth efficiently.

To manage external feeds, the Intinor Direkt router acts as an open, bi-directional IP video gateway. Vivid Broadcast routinely ingests SRT feeds from third-party broadcasters, such as the BBC, directly into the Direkt router before processing the video and distributing it to the cloud for various WSL clubs.

A great benefit for Vivid Broadcast with the Intinor solution, is the ability to set a fixed latency and synchronize all camera feeds using a common NTP time source. This ensures every feed arrives perfectly aligned at the master control room (MCR) for clean camera switching.

The platform's flexible SDI architecture allows engineers to transition units between encode and decode configurations directly in the IDM (Intinor Direkt Management) online interface. This means that a single unit easily can shift from 8 encode channels to 8 decodes, eliminating the need for duplicate equipment at the arena. This has been really beneficial and had a direct financial impact.





The Result

Vivid Broadcast now successfully executes highly resilient remote productions with a standard glass-to-glass latency of about 0.7 seconds.

"Being able to run business and fashion events to a drop below a second is a big breakthrough that Intinor made possible," Francis Cousins, Broadcast Guarantee Engineer, Vivid Broadcast

For real-time monitoring and management, Vivid relies on the online interface Intinor Direkt Management (IDM). It provides actionable data directly to the MCR. If an SDI signal flickers or a network link degrades, operators can isolate and address the issue instantly through the web interface without requiring external transport stream analysis tools.

"The monitoring pages in IDM have been very helpful, and the time-based streaming view is hugely beneficial," notes Francis Cousins. "We also like the engagement from the support team, the responses have been phenomenal. When an email gets sent at 7am on a Sunday, we get a response. We really appreciate that."

The platform decision was not driven by cost, it had to be a solution that could deliver. "We could have gone cheaper, but then we would have suffered in features and support," Francis Cousins points out, "Working with Intinor has been very positive, we have not had any issues. This is the first year we could walk away happy for the encoding and decoding solution.

"We usually say 'Let's throw it in the Intinor and see if it works. If it works in the Intinor, it will work anywhere.'"

Vivid Broadcast is now looking to provide services to the National Theatre, using Intinor technology to provide multi camera remote production to enable the capture of regional productions.

The close collaboration between Vivid Broadcast, Intinor and Zest Technologies was fundamental to successfully delivering the project.

"We chose the best professional solution that could stand up to scrutiny by our Broadcast takers and Intinor gave us that"

Rory Springthorpe, Vivid Broadcast