

INSIDE SPORTS BROADCASTING

Live Commentary- Broadcasting
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SUMMER SEASON CALLS FOR SPORTS

Sports aficionados, rejoice! Summer 2024 is full of delightful promises, with European spotlights on Germany (UEFA Euro), England (Wimbledon tournament) and France (Paris games and Tour de France).

Also, this busy schedule is a big chunk for many: **sport arenas**, whether stadiums or swimming pools are gearing up to welcome athletes, supporters and the press.

The media are also honing their agenda, splitting the job between **field reporters**, tasked with capturing and sharing the enthusiasm and performances, while **studio journalists** and technicians are in charge of broadcasting the news to their remote audience.

At every step, Digigram and AuviTran solutions are involved, ensuring the professional transmission of audio messages: voice, emotion, security - we deliver.

1

LIVE COMMENTARY

This is happening now - the game, championship or world-class sport event you have been longing for - is today. Sports specialists, journalists, reporters are getting ready as the excitement is on the rise, light-hearted and work-focused while the crowd gathers. Either sitting in the arena or attending remotely, IQOYA TALK, Digigram's sturdy portable and reliable codec - awaits for action.

HEADSET & MICROPHONES

Broadcast quality microphones & headsets are a must for live situations to capture clear and detailed commentary.

MIXING CONSOLES

Digital mixers deliver precise control over audio levels, equalization, and other effects.

Remote control capabilities provide flexibility when adjustments need to be made from different locations within the venue.

COMMUNICATION SYSTEMS

IFB (Interruptible Foldback) and talkback systems enable inside, two-way communications between producers commentators/other crew members without being heard on the broadcast.

AUDIO TRANSMISSION

Reliable transport paths ensure robust and uninterrupted audio signals from the venue to the broadcast station.

The integration of redundancy systems is key to guarantee backup transport paths and equipment. This is the safest way to avoid any downtime during the broadcast.

RECORDING AND PLAYBACK

On-the-Spot recording with ad-hoc facilities to record commentary for instant replay or analysis.

Playback systems are a key feature for commentators to refer back to specific moments for detailed discussion.

MULTIPLE AUDIO FEEDS & SYNC

The handling of different language commentators, or sometimes alternative commentary tracks needs to be integrated and synced - when relevant - with TV and online broadcasts.

IQOYA TALK 'broadcast anywhere' and antenna diversity

LIVE COMMENTARY

As a radio or TV journalist, you are familiar with remote broadcasting and interviews. As a media professional, whether junior or seasoned, you know that live conditions are an open field where mostly anything can happen. IQOYA TALK has your back, whatever the circumstances.

When going live, there are situations you can bend as part of your job: extraordinary or dull games to comment, peculiar guests to guide or controversial topics to moderate. Once the mic is open, this is 'game on' – you know what to do.

When going live, there are technical situations you cannot control – remote locations with poor signal reception, crowded venues with uneasy transmission, interviews carried out in a dug-deep wine cellar or while riding fast on a train. And yet, this is live: immediate efficiency, reliability and swift setup are a must.

As you are getting ready for the show, you pull out your Digigram wireless IQOYA TALK of your backpack. Settings for this trustworthy companion are ridiculously easy and intuitive, plus it is battery powered for a greater peace of mind. You are ready to record, mix, broadcast in an eye blink.

IQOYA TALK embeds two cellular modules each equipped with two antennas - enhancing transmission reliability.

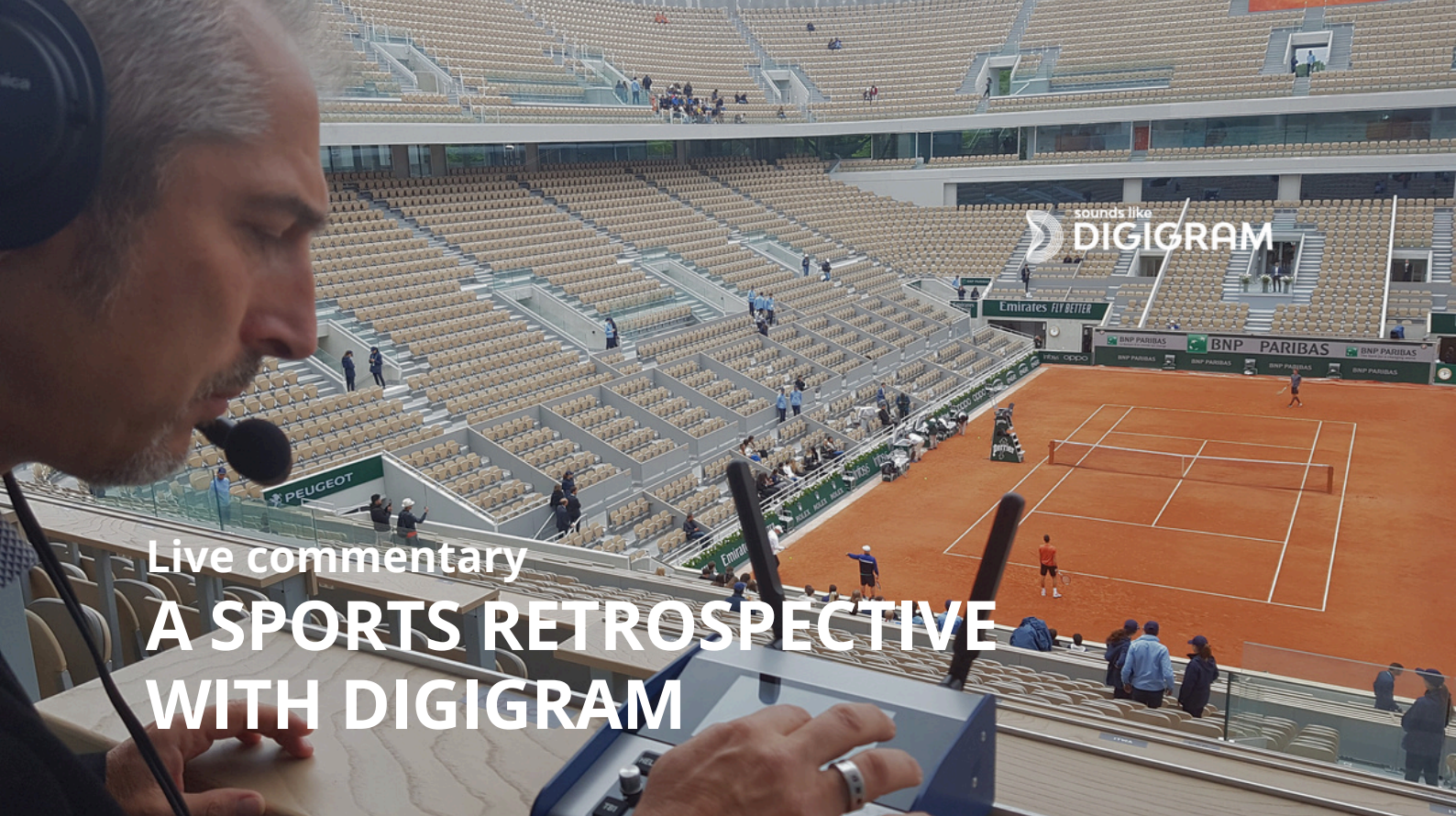
IQOYA TALK has smart tech inside. Focus only on your added value as a reporter.

Because signal transmission is the last-but-not-least brick that can make or break a show, we have focused on delivering the broadest coverage possibilities to ensure a smooth audio stream transmission while maintaining top-quality sound, regardless of the conditions.

With two 4G modules shipped in standard and with signal strength displayed on screen, you may opt to plug one or two antennas to multiply your signal transmission capacities for each cellular module.

Your interview partner is now arriving, you greet them with a smile, hand over mics and headphones. The game is on.





Live commentary

A SPORTS RETROSPECTIVE WITH DIGIGRAM

Season after season, sports calendars unroll their lots of competitions and games: we find ourselves experiencing the adrenaline, excitement and even awe when following our favorite athlete or team. Shivers, sheer joy, or even disappointment are often brought to us by journalists or reporters covering the event from the field.

Not all sports events are easily accessible to their fans: high stakes games, finals, remote venues – more than often, sports amateurs stay home, sit back and relax while watching their favorite game on TV, or listening to a radio broadcast (especially when you are on the move!).

The excitement in the reporter's voice delivering the commentary, the contributing guests sharing feedback about the game or performance, interviews on-the-go – all this is part of the entertainment.

If you are fond of the incomparable, muffled-yet-tense atmosphere of tennis courts, read on: picture Roland Garros's Central Court and the excitement of a Men's semi-final game.

Paris is bursting with spring, hot air and the arena is packed for the French Open.

The silence that can burst into a victory cry in an eye-blink. Up there, in the journalists' cabins overlooking the whole venue, commentaries are shushed to keep quiet and revert the actual atmosphere. And right on their desk, radio reporters are testing IQOYA TALK operating with 4G connection to deliver the most accurate, live message with no risk of losing the signal.

Forget the tech, all they have to do is focus on their core job of reporters for their respective radio stations.

Forget the media, all you have to do is jump out your seat when your favorite player wins the game.



Versatile, reliable & sturdy

IQOYA TALK

Outdoors sports Live commentaries are pretty demanding with uncertain weather conditions and connexions. A challenging environment calls for reliable equipment to guarantee the spotless live coverage of the event.

Let's get acquainted to another high stake sports event: the **Jumping International de Valence** (France): 270 top horse riders from over 20 countries, 700 incredible horses, 30 000 visitors, abundant sun and dust gathered in the outskirts of Valence, through a week of equestrian competition.

The show also counts media coverage and radio talk shows hosted by France Bleu Drôme, the regional outpost of French Public Radio, Radio France. Sitting with a journalist, guests and contributors were able to live share their passion and reactions from a single IQOYA TALK set outdoors.

Operating thanks to a LAN connection, IQOYA Connect and a third party codec, IQOYA TALK proved once more its stunning versatility and user-friendly character.



Budapest indoor Olympic swimming pool **LEN WATER POLO EUROPEAN CHAMPIONSHIPS**

The jaw-dropping architectural gem Duna Aréna hosts the event and the Hungarians, all-time favorites and world top teams, are under a lot of pressure to make this game a success story.

Throughout the tournament, Digigram IQOYA TALK will have proved its reliability, extreme user-friendliness and sturdiness in a wet environment while working long shifts to cover the event (extra batteries keep the reporters on the safe side).

Capitalizing on IQOYA Connect and a SIP infrastructure, all broadcasts, were successfully directed to radio stations in Russia, Malta, Croatia, Montenegro and Italy.

Whatever the sport, game, venue, circumstances, technical environment: Digigram supports the broadcast and media industry in tailoring the most efficient, reliable, cost-effective and stress-free solutions.

From interviews on the go, operated with a simple Q-Mic and a smartphone, to large infrastructures and OB vans packed with SERV/LINK or X/LINK, our solutions scale up to accommodate the largest, world-class live events – or your routine sound recordings.

Success story

Broadcasting live Sports events in full confidence with IQOYA TALK
The need for utmost reliability in extreme conditions



THE NEED

Antenna Hungária, the historical public Hungarian broadcaster operate the national television, radio broadcasting and distribution, as well as satellite broadcasting and distribution. In a move to acquire their own fleet of portable IP codecs, Antenna Hungária carries out a large, live beta test of several devices to check their compliance with their requirements during the European waterpolo championships held in Budapest.

THE CHALLENGE

Carrying out a first, large investment operation to acquire their own fleet of IP codecs, Antenna Hungária needs to screen devices that would meet their requirements. accommodate at least 3 headsets, have two codec instances (PGM and TalkBack), feature at least one line-level input, encode in G711/G722, MPEG1/2 L2, AAC LC/LD, PCM and OPUS. The device should also Include 2 ETH-ports and an internal 4G modem with dual-SIM slots and remote control possibilities.

Additionally, due to live and field conditions, the perfect codec would be able to operate without external power source for at least 30 minutes. Overall, the investment should be sustainable, durable and reliable to operate on the long-haul.

All candidates are live tested during the live broadcasting of European waterpolo championships, adding another challenge to the requirement: hardware sturdiness to resist the live conditions under wet atmosphere.

THE BENEFITS

- Robust and reliable
- User-friendly with 2-clicks configuration
- Increased autonomy for field operators
- Technically acute and spot-on
- Pristine audio quality

THE SOLUTION

Digigram responded to the Hungarian requirements lining up IQOYA TALK, its flagship IP portable codec. Not only the device checks all the boxes technically-wise, but IQOYA TALK comes with additional benefits: the extreme robustness of the codec hardware scored points with Antenna Hungaria teams. Also, its simple and comprehensive user interface eases the life of technicians and reporters on the field with its intuitive configuration process. IQOYA TALK increases the autonomy of field operators, who can work with very little assistance.

A trustworthy codec that brings extra confidence, reliability and flexibility, IQOYA TALK is now Antenna Hungaria's go-to device, meeting all initial requirements and beyond, paving the way to broader live applications.

“The IQOYA TALK is perfect, during the European Waterpolo Championship, the units were bulletproof, fully operational and connected almost 24/7 - not a single issue was experienced”

Zoltán Tihanyi, Audio supervisor at Antenna Hungária





REPORTING FROM THE FIELD WITH DIGIGRAM

Dimitri Grossi, Head of multimedia external production with RMC, covered the 2021 Tokyo Games with Digigram IQOYA SERV/LINK and IQOYA TALK.

HOW WAS THE TECHNICAL WORKFLOW BETWEEN PARIS AND TOKYO?

We used 2 SERV/LINK and 1 IQOYA TALK. The SERV/LINKs were located in Paris (RMC studios) and Tokyo (IBC) respectively. In Tokyo, we received the Radio Package International Sound in MADI format. We captured ambient sounds at the competition sites, then transmitted them through the local SERV/LINK connected to its Parisian counterpart.

This Radio Package International Sound was then mixed in Paris before the broadcast. This configuration was new: usually, all the mix are done on-site before being sent to Paris. This year, our infrastructure was redesigned and we shipped a much lighter system to Tokyo, thereby lowering the costs.

WHAT ARE THE ADVANTAGES OF THIS WORKFLOW ?

We were able to test actual remote production on a large-scale event. A lighter structure, with a studio remotely operating Paris, achieved a fully functional media coverage of the event. The minimal footprint of SERV/LINK which accommodates 64 codecs in 1U space was much appreciated. Fewer resources, same results.

HOW DID YOU USE IQOYA TALK?

We took IQOYA TALK on several events: volleyball, track and field, and swimming. In athletics events, we used it during a 3-hour live broadcast during which journalists and athletes followed one another. The streams were sent directly to Paris to be broadcasted. We used mostly a wired Ethernet connection, coupled with a 4G connection as a backup.

TELL US ABOUT IQOYA GUEST?

We tested the IQOYA TALK codec with its IQOYA GUEST service, a real plus when we recorded broadcasts and interviews with athletes, coaches, and officials before the Games started. IQOYA GUEST was useful to exchange with remote athletes prior to the start of the events: by sending them a simple link, we could reach them easily. It was very easy to approach the sporting world at large. We were, therefore, able to produce our shows and interviews.



REPORTING FROM THE FIELD WITH DIGIGRAM

Dimitri Grossi, Head of multimedia external production with RMC, covered the 2021 Tokyo Games with Digigram IQOYA SERV/LINK and IQOYA TALK.

While in Tokyo, I was stunned by the performances of the SERV/LINK: I had specific tech specs and requirements to meet and the SERV/LINK ticked all the boxes with complete success.

My major stake was to manage a large number of streams from Tokyo up to Paris while using the smallest possible space as allocated. On paper, IQOYA SERV/LINK can handle up to 64 stereo codecs, all lodged in a 1U rack. If you remember Hermione Granger's magical handbag, you get the picture, because these promises were actually kept hands down.

On top of that, the performances and sturdiness of the SERV/LINK are impressive: it is so reliable that we did not experience any service interruption while in Tokyo. My guess is that SERV/LINK has a bright future given its features: it is highly reliable and designed to accommodate new tech standards such as Dante, I'll be glad to work again with IQOYA SERV/LINK.



2

BROADCAST

Radio stations play a central role in sharing the news. Live broadcasting of sports events and reporting in real-time require absolute reliability of both machines and networks, as well as high audio quality. The Master Control Rooms are the hotspots where the magic happens, ensuring spotless broadcasting thanks to redundancy and sometimes complex multiplexing of audio streams over IP.

LOW LATENCY TRANSMISSION

The use of high quality codecs ensures that the broadcast is in sync with the live event, minimizing delay between the actual event and what the audience hears.

MULTIPLEXING

Combining multiple signals into one for transmission over a shared medium allows multiple audio streams (e.g., commentary, crowd noise, field reporters) to be transmitted simultaneously. AoIP systems that can handle multiple audio streams efficiently are ideal for this complex type of broadcasting.

Additionally, the radio station includes audio codecs that support various audio formats and can be integrated with existing broadcast infrastructures for increased flexibility. Last, dual network interfaces and backup power supplies ensure continuous operation without interruptions for stress-free redundancy and reliability.

REAL-TIME MONITORING AND CONTROL

Real-time monitoring and control of the entire audio network, including managing audio levels, routing, and diagnosing any issues that arise during the broadcast is critical when broadcasting live sport events.

OPERATIONAL EFFICIENCY

A simplified infrastructure reduces the complexity of managing multiple audio streams by consolidating them into a single transmission path. Scalability to accommodate additional audio channels or new locations as needed brings flexibility and durability to an audio network.

Success story

Real-time remote commentary for International sports events

Efficient and acute A/V synchronization in remote environments



THE NEED

Eurosport, an international sports broadcasting company, needs an effective solution to enable real-time sports events coverage by remote commentators. This specific workflow requires transporting the commentary from the sports venue to remote commentators located in various geographic locations. The commentary is then routed to Eurosport servers to be integrated with the video and broadcasted. The main stake for Eurosport is to ensure real-time audio transmission with optimal audio quality, while handling the distance and diversity of commentator locations.

THE CHALLENGE

The main challenge for Eurosport is to elaborate a solution that would include a multi-site management, enabling commentators to actively participate in real-time sports event coverage while ensuring professional audio quality and precise synchronization with the video. Ensuring a stable and reliable audio transmission, even over the public Internet, is of utmost importance to provide Eurosport audiences with a high-quality viewing experience. Moreover, the solution should be extremely easy to operate for commentators and seamlessly blend into Eurosport's existing production workflow.

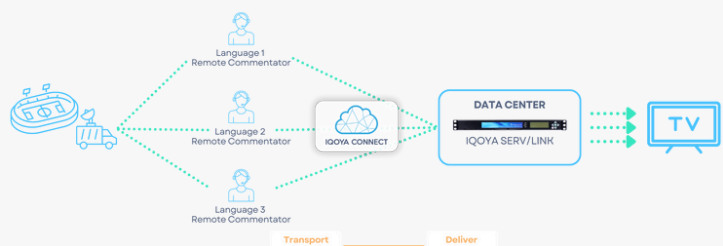
Eurosport is able to offer real-time coverage of sports events incorporating professional-quality commentary, even in remote settings.

THE SOLUTION

Digigram developed a solution based on IQOYA SERV/LINK products to meet the challenges as described by Eurosport. As this solution unfolds, Eurosport streams the live video of the event, with each sports commentator on a PC screen. Sports commentators can then provide the audio live commentary over the internet as they are witnessing the sports event. The commentaries are sent to the Eurosport production studio, where several Digigram IQOYA SERV/LINK units have been installed to collect all these commentaries from the internet. Next step, audio commentaries are output directly to the AES67 audio infrastructure of the studio. These multi-lingual commentaries are then multiplexed into the original video feed for distribution to Eurosport customers. IQOYA Connect, the Digigram cloud-based SIP infrastructure, and application for live remote broadcasting is used by Eurosport to monitor in real-time the IP transport quality of all the commentaries, meeting the critical audio challenges faced by the international broadcaster.

THE BENEFITS

- Precise A/V synchronization for enhanced user experience
- Professional quality
- Functional in every environment, crowded or remote





Success story

A major sports broadcaster upgrades its remote broadcasting system to full IP Setting up a Digigram powered Master Control Room



THE NEED

Plazamedia, the German-based leading sports TV production company with over four decades of experience work with main TV players involved in sports broadcasting, like Amazon, DAZN, Sport1 as well as ZDF or ARD. Plazamedia have engaged in a large project where they build a brand new Master Control Room (MCR), but also upgrade to a full IP remote broadcasting system to replace the existing ISDN system. Naturally, the switch between equipments should be controlled and hassle-free.

THE CHALLENGE

This mission critical project for a large broadcaster such as Plazamedia has to respect a tight schedule as the the MCR should be fully functional for the kickoff of the sports season. Plazamedia's requirements for the MCR include interoperability, and a future-proof, scalable system to accommodate a fleet of miscellaneous portable commentary codecs operating from OB vans. Plazamedia also wishes to implement a space-saving system for its new MCR. Legacy bulky analogue equipment should be completely replaced with the new integrated MCR infrastructure. However, the MCR should remain at reach via a simple phone or GSM-Hybrid to connect live transmissions taking place outside Internet covered zones. As Plazamedia distributes both live commentary and talkback channels between the venue and the MCR, dual mono and stereo channels are required. Capitalizing on the deployment of optical fiber for the new installation, MADi connectivity is the natural choice. Last requirement, Plazamedia needs 24/7 operational support to help the MCR operators evaluate and track possible connexion issues.

“Digigram’s advanced multi-channel AoIP codec IQOYA SERV/LINK associated to cloud-based SIP infrastructure and codec management software IQOYA CONNECT perfectly meet Plazamedia’s needs.”

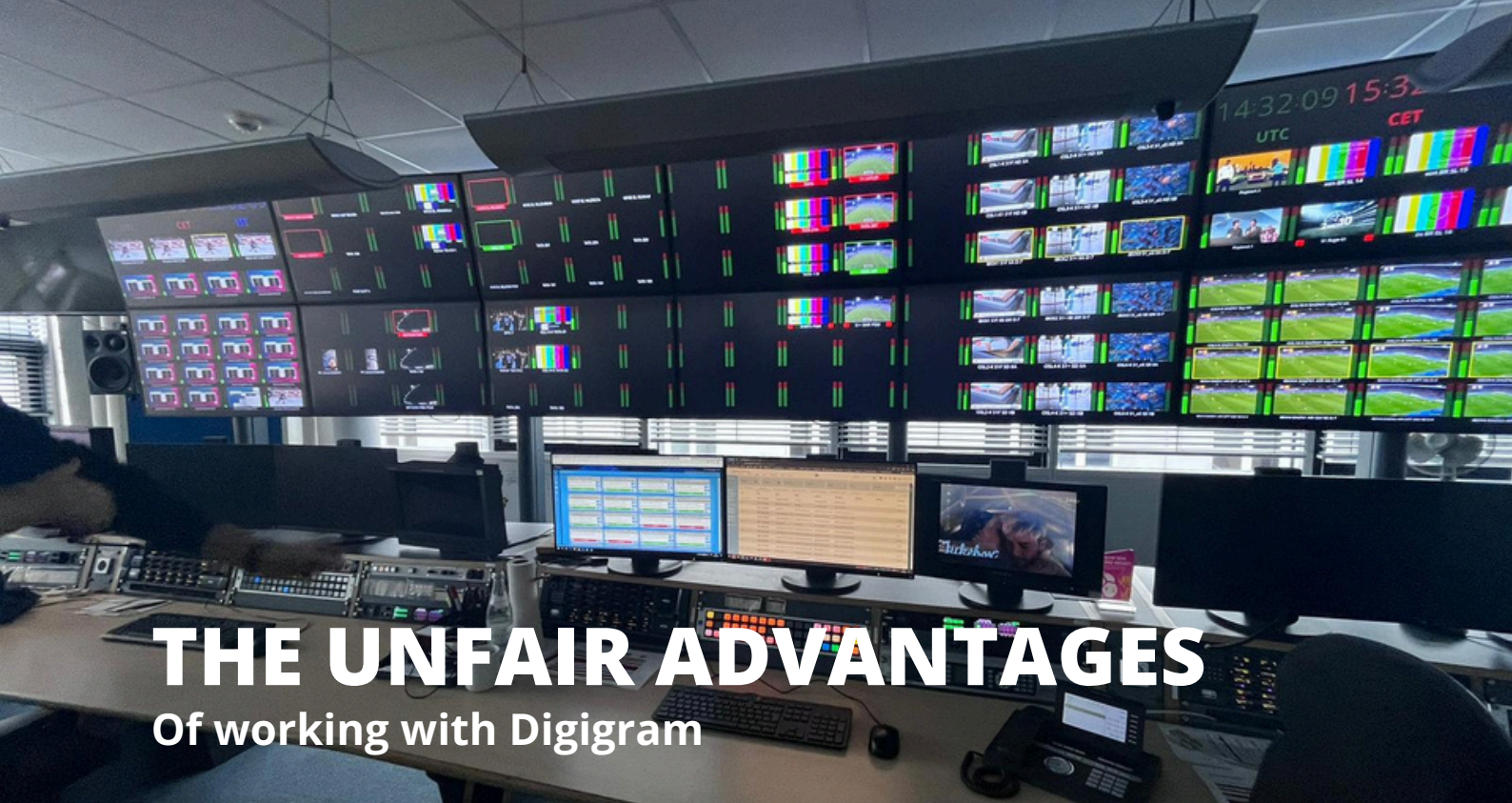
THE SOLUTION

Plazamedia's priorities and expectations mirror how the chosen solution will play a vital role in the efficient delivery of their content. IQOYA SERV/LINK, Digigram's audio-over-IP multi channel platform fit three of Plazamedia's requirements: it is scalable, MADi compatible and assembled in a compact 1U-rack. This unique IP audio codec tailored for remote broadcasting manages up to 64 mono or stereo full duplex IP streams with a small footprint. It simultaneously encodes and streams audio inputs in multiple formats and protocols. Plazamedia can upgrade this system at will to handle more channels, making it future-ready. IQOYA CONNECT, Digigram secured SIP infrastructure and codec fleet manager meets Plazamedia's remaining requirements. This cloud-based solution enables valuable, worldwide discovery and access security with a broad array of IP audio codecs from different manufacturers.

This solution gives Plazamedia access to a robust and secured broadcast SIP infrastructure while facilitating centralized codec management anywhere from any authorized device. Together, these two solutions successfully meet all Plazamedia's requirements.

THE BENEFITS

- Cost-effective = 1 IQOYA SERV/LINK to replace the whole ISDN fleet
- Ultra low latency guaranteed by full IP
- Accessible anywhere with cloud-based infrastructure
- Operational support with Digigram team



THE UNFAIR ADVANTAGES

Of working with Digigram

COST EFFECTIVE & COST REDUCTION

A single unit of IQOYA SERV/LINK was able to replace Plazamedia's existing ISDN systems; this allowed the company to save thousands of euros, spare a lot of precious rack space and invest in durable, sustainable hardware that will last. Thanks to IQOYA CONNECT's SaaS, Plazamedia gets a no fuss, no hassle, pay-as-you-go model.

ULTRA LOW LATENCY

Switching to a Full IP system not only provided a higher audio quality, but it also ensured very low latency.

"After careful consideration of all Plazamedia's requirements, we knew that our advanced multi-channel AoIP codec IQOYA SERV/LINK associated to our cloud-based SIP infrastructure and codec management software IQOYA CONNECT would perfectly meet their needs."

Stéphane Bert, Digigram Pre-sales Manager

UNLIMITED ACCESS

Plazamedia now benefits from MCR cloud-enabled functionality with web access from any location at any time, enhancing the workflow flexibility.

TAILOR-MADE OPERATIONAL SUPPORT

Plazamedia's technical questions are dealt with by Digigram's dedicated team of experts: system designers and engineers are only a mail/call away from delivering professional, tailor-made support to Plazamedia at any time.

3

INSTALLED SOUND

Whether ice rinks, stadiums, swimming pools, tennis courts - sports facilities are where the magic happens. Emotion, performance, joy or disappointment blend in unforgettable moments. Audio plays a crucial part of stirring all these together, with focus points to consider for any sports venue audio installation.

AMBIENT AUDIO

Speakers to ensure even sound coverage throughout the venue, using line array speakers for large stadiums and distributed speaker systems for smaller areas.

Zoning Capabilities to define different zones (seating areas, restrooms) with tailored audio levels and content.

Background Music System takes over during downtime, breaks, and intermissions to maintain audience engagement.

NETWORKED AUDIO SYSTEMS

Digital Signal Processing (DSP) enables sound optimization and management across all areas of the venue.

IP-based Audio Systems provide flexibility in routing audio signals over the venue's network infrastructure, enabling easy reconfiguration for different events.

Remote Control and Monitoring allows technicians to manage and troubleshoot the audio system from a central location or remotely.

PUBLIC ADDRESS (PA) SYSTEM

Clear and Intelligible Sound is essential for announcements, ensuring that spectators hear important information clearly.

Emergency Announcements are usually integrated with fire alarms and emergency systems to broadcast evacuation instructions or other critical messages.

COMMUNICATION SYSTEMS

Intercom Systems facilitate seamless communication between staff members, including security, event managers, and technical crews.

Integration with CCTV, access control, and other security systems enhances coordinated response during emergencies.

Wireless communication with portable radios or wireless intercom systems for staff mobility.

SECURITY SYSTEMS

Alarm Integration ensures the audio system can broadcast alarm signals and instructions clearly in case of an emergency.

Surveillance Audio includes incorporating microphones for monitoring purposes in critical areas for security reasons.



Next Level Audio Experience

FORGET AUDIO PROTOCOLS CONUNDRUM WITH AUVITRAN SOLUTIONS

Sports venues place a great emphasis on speakers: the masterpiece of installed sound, they deliver vibrant live commentary and crucial security messages alike. Forget about audio protocols, bridging your equipment or monitoring latency. Focus on on the game and its excitement. AuviTran solutions achieve audio quality, system reliability and zero latency.

EXPLORE THE POWER OF THE AUDIO TOOLBOX SUITE

For 20 years, AuviTran has interconnected audio technologies without compromise on audio quality, latency or reliability. AuviTran's high-end solutions power major live sound events, large scale installations, theaters and venues worldwide.

"Smart, reliable, sustainable and scalable" best describe this suite of **2 hardware platforms and 20+ audio interfaces** that enable audio protocols interoperability.

The **AVBx3 and AVBx7 platforms** are designed to bring high-end audio to every structure, regardless of audio protocols and interfaces. Available in **StageBox or Installation** modes, the ToolBox was designed for a long-term use with a robust stainless steel casing.

AVBx3 and AVBx7 feature a modular design with detachable components for easy scalability and maintenance. Adapt your network configuration at any time by adding cards, upgrading network protocols or even stacking up AuviTran ToolBox. AuviTran's AxC interfaces support most network protocols, including AVB-MILAN, interoperating different technologies together to build your system.

AuviTran Audio ToolBox is cost-effective, designed in France and proudly manufactured in Europe.



STADIUM OF MARRAKECH, MOROCCO - STADIUM OF TANGIERS, MOROCCO - STADE DE FRANCE, PARIS - METLIFE STADIUM, NEW JERSEY - MADISON SQUARE GARDEN, NEW YORK - SYDNEY OPERA, AUSTRALIA - GARDENS AT CHATEAU DE VERSAILLES, FRANCE - PUY DU FOU ENTERTAINMENT PARK, FRANCE -



A year in sports is undoubtedly a rollercoaster of emotions. Mostly, our pledge is to offer reporters, integrators and journalists ridiculously simple yet extremely reliable tech that enables them to focus on what they do best: cover a sports event with its share of excitement and emotion.



DIGIGRAM - AUVITRAN

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