

Project Case Study

HUDAYRIYAT ISLAND (WEST) - VELODROME

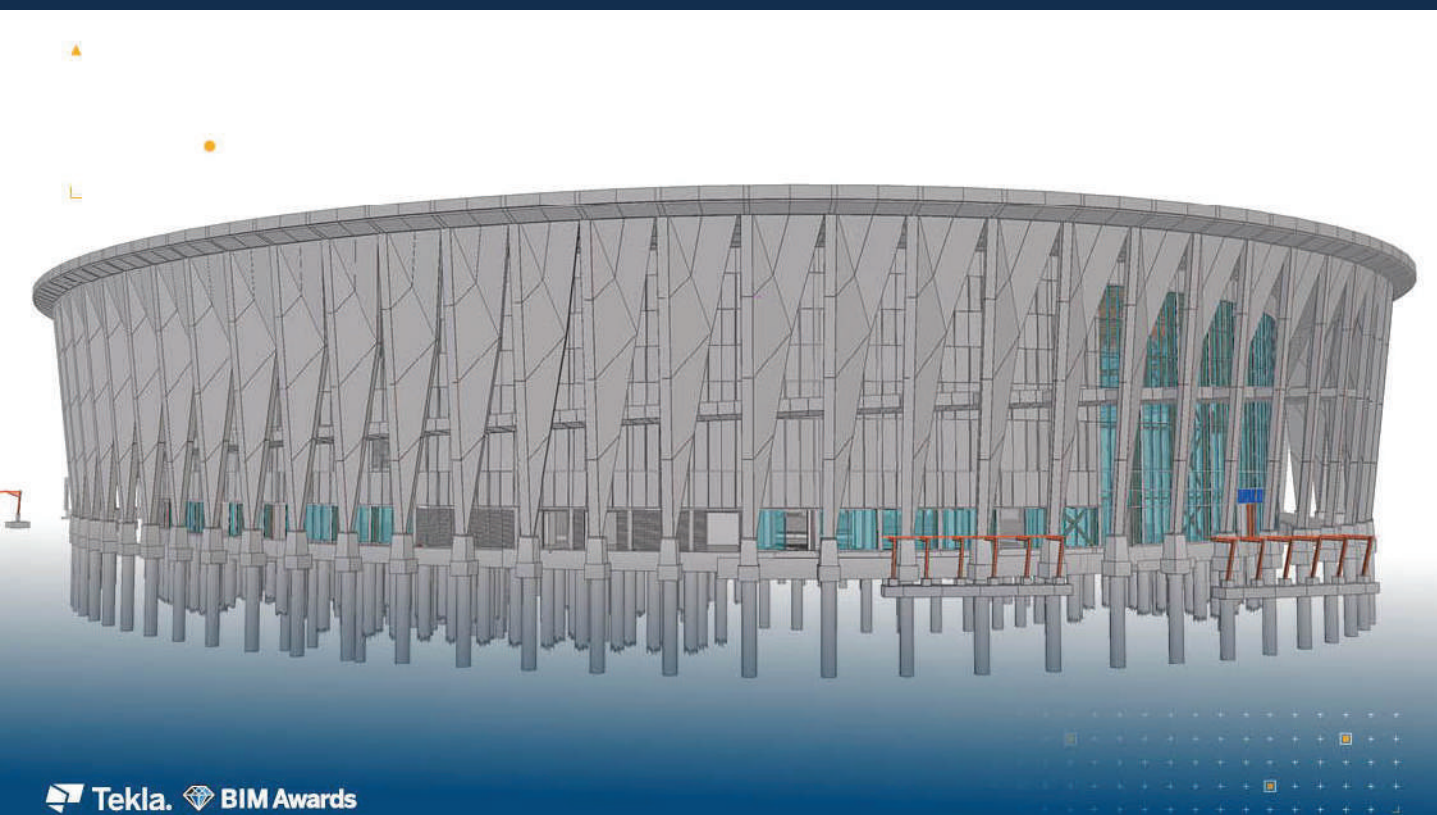
Table of Contents

The Project	01
Scope of Work	02
Client Requirements	03
Project Challenges	04
Project Outcomes	05

The Project

Velodrome Abu Dhabi is a landmark sports infrastructure project located on Hudayriyat Island, designed to position Abu Dhabi as a global destination for elite cycling and international sporting events. This world-class indoor cycling stadium is engineered to host professional competitions, training sessions, and community engagement activities within a controlled, high-performance environment.

The facility integrates advanced architectural design with cutting-edge technology to deliver an immersive experience for athletes, spectators, and broadcasters alike. With its state-of-the-art cycling track, spectator seating, and supporting amenities, the Velodrome aims to foster sporting excellence while contributing to the UAE's vision of promoting health, wellness, and sports tourism.



Scope of Work

Oasis Enterprises was appointed to design, supply, and integrate a comprehensive suite of Audio-Visual and communication systems across the facility. The scope includes:

a. Audio-Visual Systems for Back-of-House (BOH) Areas:

Implementation of AV solutions across control rooms, operations spaces, and support areas to ensure efficient communication, monitoring, and coordination during events and daily operations.

b. Public Address and Voice Alarm (PAVA) System:

Deployment of a fully compliant PAVA system to enable clear, intelligible announcements and emergency voice evacuation capabilities, ensuring the safety of all occupants within the venue.

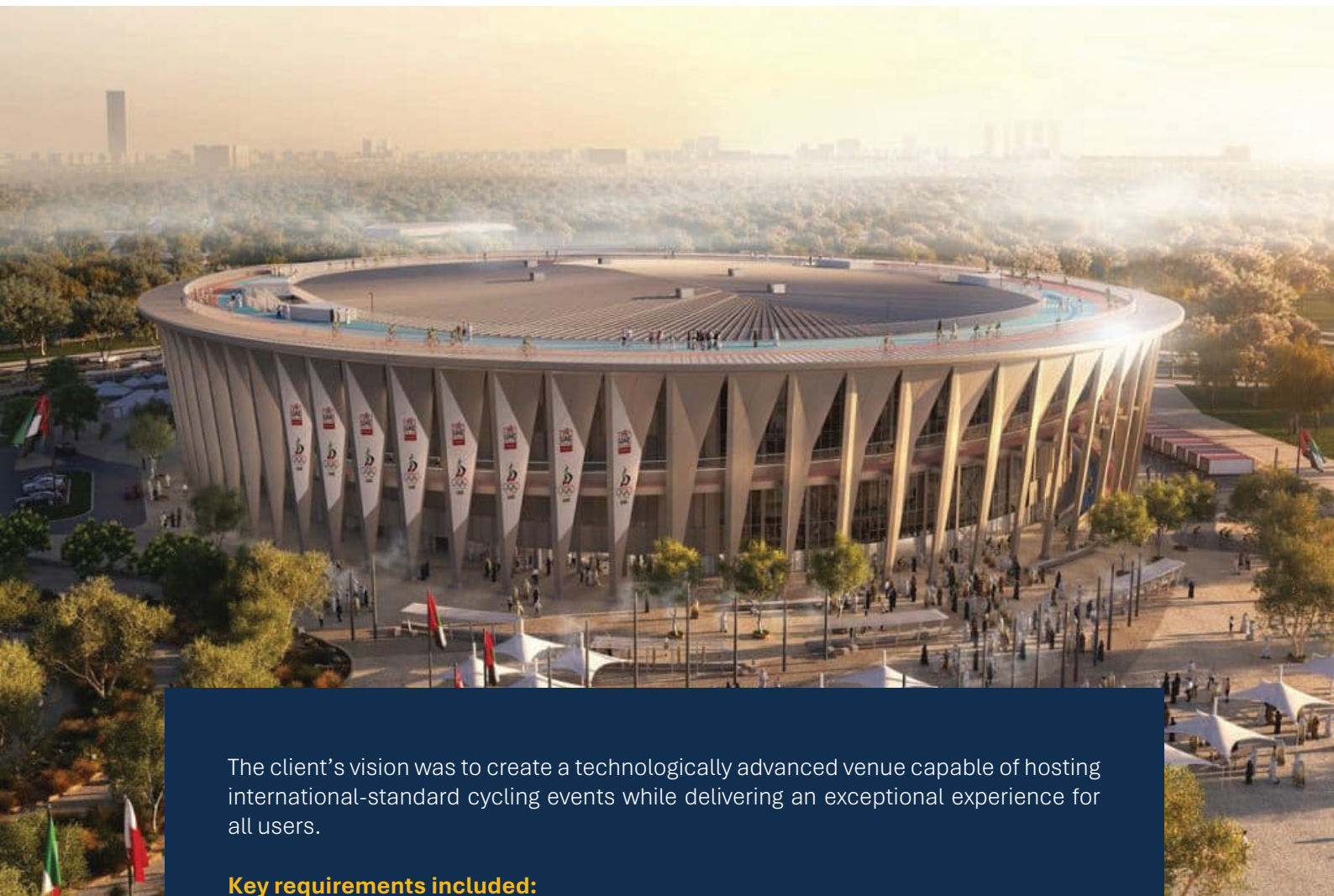
c. Broadcasting System:

Integration of advanced broadcasting infrastructure to support live event coverage, media production, and global transmission. This includes signal distribution, camera connectivity, and control interfaces for seamless live broadcasting.

d. Professional Audio System (Pro-Audio):

Design and installation of a high-performance sound system tailored to the acoustic challenges of the velodrome, ensuring consistent, high-quality audio delivery for announcements, commentary, and event entertainment.

Client Requirements



The client's vision was to create a technologically advanced venue capable of hosting international-standard cycling events while delivering an exceptional experience for all users.

Key requirements included:

- High-performance AV integration to support operational efficiency and event management.
- Crystal-clear audio coverage across all seating areas, regardless of crowd size or ambient noise.
- Robust PAVA system compliant with safety regulations, ensuring rapid and effective emergency communication.
- Broadcast-ready infrastructure to facilitate international media coverage and live streaming capabilities.
- Scalability and future-readiness, allowing the venue to adapt to evolving technologies and event requirements.
- All systems needed to be seamlessly integrated into the architectural design without compromising aesthetics or structural integrity.

Project Challenges

One of the primary challenges of the Velodrome project lies in its large-scale indoor environment and high ceiling structure, which significantly impact acoustic performance and system installation.

Key challenges included:

- **Acoustic Complexity:**

The expansive volume and reflective surfaces required precise acoustic modeling to avoid echo, delay, and sound distortion.

- **Speaker Mounting and Suspension:**

The installation of suspended line array speakers demanded a custom-engineered mounting solution to ensure:

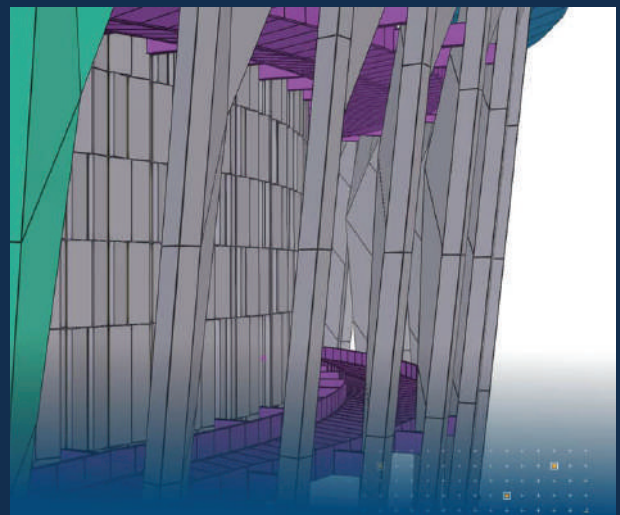
- Optimal sound dispersion across the track and spectator seating
- Structural safety and compliance with engineering standards
- Long-term durability under operational conditions

- **Integration with Architectural Design:**

Ensuring that all AV and audio components were discreetly integrated without affecting the visual appeal of the venue.

- **Broadcast Coordination:**

Aligning AV and broadcasting systems to function cohesively during live events, with minimal latency and maximum reliability.





Project Outcomes

The proposed solution was successfully reviewed and approved by the client, marking a key milestone in the project's progression.

Currently in the construction phase, the integrated systems are being implemented in line with the approved design.

Expected outcomes include:

- **Enhanced Spectator Experience:**

Sound quality evenly distributed audio ensures that every spectator enjoys clear announcements and immersive event sound, regardless of their seating positions.

- **Improved Safety and Compliance:**

The PAVA system provides reliable emergency communication, contributing to a safe and secure environment for all occupants.

- **Seamless Event Broadcasting:**

The broadcasting infrastructure enables high-quality live coverage, positioning the Velodrome as a venue capable of hosting international competitions.

- **Operational Efficiency:**

Integrated AV systems in BOH areas support smooth coordination between teams, ensuring efficient event execution.

- **Future-Ready Infrastructure:**

The design allows for scalability and adaptability, ensuring the venue remains technologically relevant for years to come.

Contact Us

OASIS ENTERPRISES L.L.C.

DUBAI - UAE
+971 4 282 1337
info@oasismena.com

ABU DHABI - UAE
+971 26 217 043
info@oasismena.com

RIYADH - KSA
+966 11 222 4488
info.ksa@oasismena.com

مشاريع الواحة
OASISenterprises
الشيراوي AL SHIRAWI