Ready for Everything:

The evolution of technology in sports and major events



Atos

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Watch highlights of Atos's Ready for Everything event



Foreword

I'm delighted to introduce you, our clients, partners, analysts and advisors, to this Ready for Everything magazine, named after the event Atos UK&I held at the home of the London 2012 Games, the Queen Elizabeth Olympic Park, on 8th February 2024.

2024 is a big year for sport, with some of its most significant calendar moments playing out. Atos – and the entire world – will be gearing up for the excitement and triumph of the Paris Olympic & Paralympic Games, as well as the UEFA EURO 2024.

At Atos, we are proud and privileged to have worked with the International Olympic Committee for over 30 years. Through our dedicated Sports and Major Events division, the only one of its kind, we provide technology for many of the greatest sporting events in the world, including UEFA National Team Football competitions, Olympics, Paralympics, Special Olympics, European Olympic Games, Rugby World Cup, European Championships and PGA European Golf Tour.

But have you ever thought about what it takes to run these high-profile tournaments with the whole world watching? It's easy to get swept up in the action but believe it or not there's something which is even more critical: the infrastructure that makes it happen.

As the global technology partner for these major events, we'll be providing this critical IT infrastructure and operations under the watchful gaze of over 3 billion viewers.

There are strong parallels to be drawn between sports and business: lessons learned from the former being applied for success in the latter. Think about it. Sports and business are both competitive, dynamic and challenging. They both require innovation, resilience and excellence. They both rely on collaboration, strategy and data. And they both have risk and reward.

Helping your business be "Ready for Everything" is where we come in. With proven experience powering iconic sports events, time after time, we know what it takes to deliver when there is no room for error.

Frederic Lelong CEO. Atos UK&I

No second chances

In sport, every moment counts — down to one-hundredth of a second for an Olympic gold medal. Time is precious for competitors and spectators alike. Fans don't want to miss any of the action, whether they are sitting in the stadium or watching from the other side of the world.

This global passion for sport creates immense pressure on organisers. From scheduling, scoring and results, ticketing, live-streaming, media support, security and increasingly, data analytics, every element must be handled precisely. Mistakes are magnified. There's no hiding in front of a global audience of millions.

To make these unique, multifaceted major sports events a success takes expertise and experience. For over 30 years, organisers of the Olympic and Paralympic Games, UEFA National Team Football, European Olympic Games, Special Olympics, Rugby World Cup, European Championships and PGA European Golf Tour have partnered with Atos.

Through our dedicated Sports and Major Events division, organisers have found a winning formula for delivering integrated physical and digital experiences that thrill spectators, capturing every special moment.





The technology of sports

Technology and data are critical to efficiently operate the multi-billion-dollar venues that host global sporting events. Only in a fully integrated environment can security, sustainability and seamlessly connected audience experiences meet increasing expectations. Success in major sports events requires a comprehensive approach to technology.

Atos delivers seamless services for event systems and IT infrastructure, fan and athlete experience, media and communications, security, decarbonisation, consulting and more — all in a single, integrated solution.

Our mission is to make complex environments efficient, flexible and capable of evolving to meet the needs of future events as new technology and possibilities emerge.

Our key differentiators:

Managing IT for large sport events

The Atos Olympic Management System (OMS) is the technology backbone of the Olympic Games, centrally handling the competition schedule, workforce management, qualification and accreditation for as many as 500,000 athletes, staff, volunteers, Olympic Family, media, broadcasters. Our Olympic Diffusion System (ODS) is the single, centralised source for real-time results and statistics. It features modules designed to supply broadcasters with instant access to play-by-play information and statistics about the competition, background information on athletes, and to provide real-time results to millions of supporters worldwide through websites and mobile apps.



Atos systems deliver all **official competition** and results
information during the Olympic
and Paralympic Games



Atos manages **150+ critical**IT applications for this
single event

OMS (Olympic Management System)

Volunteer portal
Workforce management
Athletes voting applications
Sport entries & qualifications
Competition schedule
Accreditation

ODS (Olympic Diffusion System)

Olympic data feed

Web results

Results mobile apps

Commentator Information

System (CIS)

MyInfo

Print distribution

150+ critical IT applications

Figure 3. Atos's critical Olympic IT systems

Operating the largest sport event in the world

Atos has unique capabilities and experience to prepare and operate the IT for any sports event. We have proven it over and over during the Olympic Games, where we are not only operating the critical applications, but also deliver planning and design for the critical IT infrastructures at the venues. We coordinate the deployment of equipment in the venues, define the policies and procedures to follow during the event, provision tools that manage IT services for all stakeholders, and operate the IT that ensures that spectators and fans can have the best possible experience.



A team of more than **500 Atos IT experts** in Paris will operate local services and applications during the events



We are coordinating a team of more than **2,000 technicians** in **60+** Olympic and Paralympic competition and non competition venues "The world is becoming more digitalized and with Atos onboard as our technology partner, we are ensuring we will have all the necessary technological expertise to successfully deliver our competitions to the millons of fans around the globe" Guy-Laurent Epstein Marketing Director, UEFA

Bringing fans closer to their heroes

Using our live broadcast solutions, organisers can provide world-class live footage and highlights for their sports events, including instant data analysis, 2D and 3D graphics effects processing and local language graphic packages that shape the fan experience. Event commentators receive a single source of information on every event through an intuitive interface with enriched content, including information such as athlete biographies and statistics.

To bring fans closer to the action, our website and mobile apps provide multi-platform access to all information related to the event and the competitors. Our highly secure, scalable platforms can deliver personalised content to fans and athletes to maximise audiences, build awareness and increase engagement. Moreover, our event media production and streaming solution is an end-to-end service, including equipment rental and professional services. The customisable solution covers every aspect of production and distribution across multiple channels.

1,100 hours

of video produced in 33 different feeds for the **European Games 2023**

30 million

viewers see video highlights cut by the **Atos team**



Figure 4 Commentator Information System (CIS) which provides broadcasters with results and statistics from the field as well as background information on athletes

Elevating reach, driving athlete and fan engagement

Through our ticketing and e-commerce solutions, fans enjoy personalisation that includes exclusive promotions and advanced data analytics on whatever interests them most. Our platform is designed with end users in mind, featuring a user-friendly interface for seamless browsing and ticket purchases. It integrates with local partners to ensure efficient ticket distribution.

Increased engagement extends to participants through our Player Portal. The platform — first used during the PGA European Golf Tour Championships — creates a one-stop-shop to access and manage event information for players, managers and teams. It is highly customisable, with secure, passwordless, log-in and a web and mobile-first approach. The scalable solution integrates seamlessly with third-party systems, including CRM and ERP platforms.



Seamless and **personalised** browsing and purchasing of tickets online



Complete business control of ticketing and e-commerce



Enhanced **security measures**for customers to store and
transfer tickets



Easy integration with third-party systems

Re-inventing the on-site experience with integrated phygital experience

Using the latest technology, Atos is driving the evolution of smart venues, where a wide variety of sensors, cameras and other digital technologies are supported by 5G networks to enhance fan and participant engagement. Our solutions help create omnichannel phygital (blended physical and digital) journeys, bridging digital and physical experiences for spectators. From social media engagement to transit and parking, food and beverages trackside and post-event feedback, we deliver one continuous, seamless experience.

We cover the essential functionalities for major sports events, including providing cutting-edge 5G-enabled temporary infrastructures. Our horizontal solutions protect against cyberattacks across multiple digital touchpoints, while our hybrid cloud and management services maintain the infrastructure continuum in a scalable and highly sustainable manner.



47% of Gen Z have never watched a live professional sports event in person (compared to 41% of all adults)



The sports technology market is valued at \$14.7 billion



The revenues from the sports events market are anticipated to reach \$33.7 billion in 2024



What's the difference between a technology provider and an integrator?

Our purpose at Atos is to enhance the value of sports for fans and the feeling of pride among all participants. For us, IT is only an enabler. We don't just provide technology systems. We collaborate with event organisers, integrating our knowledge and experience to develop end-to-end solutions tailored to meet their specific needs. That's what being an integrator is about — bringing everything together to create seamless events and smarter venues using technology and data.

30+years

of experience in sports

400+

dedicated IT sports experts



End-to-end services working with top industry players



The platform for performance

Atos is a unique player in the arena of sports. We are revolutionising what is possible through digital transformation, delivering innovation without risk across every critical area. Our passionate experts and world-class partners design solutions that maximise the power and impact of sport — demonstrating the highest in human achievement, both individually and collectively.

Our solutions embrace the technologies that are driving digitalisation worldwide:

Real-time data and analytics

Real-time data can empower people on and off the field of play. Whether it's a coach beside the field of play figuring out what substitution to make or fans in the stadium checking out player statistics, the right information makes all the difference. Generating insights that can improve performance and enhance the viewing experience is no simple matter. It requires high-powered, flexible infrastructures to securely store and process vast amounts of data for multiple applications to access.

The results from our real-time data and analytics services include:

- Results data feeds with just 0.35 seconds of latency – less time than it takes to place a bet
- Real-time display systems for all event competitions, both inside the venue and remotely
- Video instant replay

Hybrid cloud

With hybrid cloud, sports and major events organisers have achieved performance improvements that are no less revolutionary than the latest advances in sports nutrition and racewear. Hybrid cloud creates an agile, scalable infrastructure that optimises costs and reduces carbon emissions, delivering the right level of IT performance at the right moment. Data sovereignty is protected, with sensitive data in highly secure private cloud infrastructures for compliance.

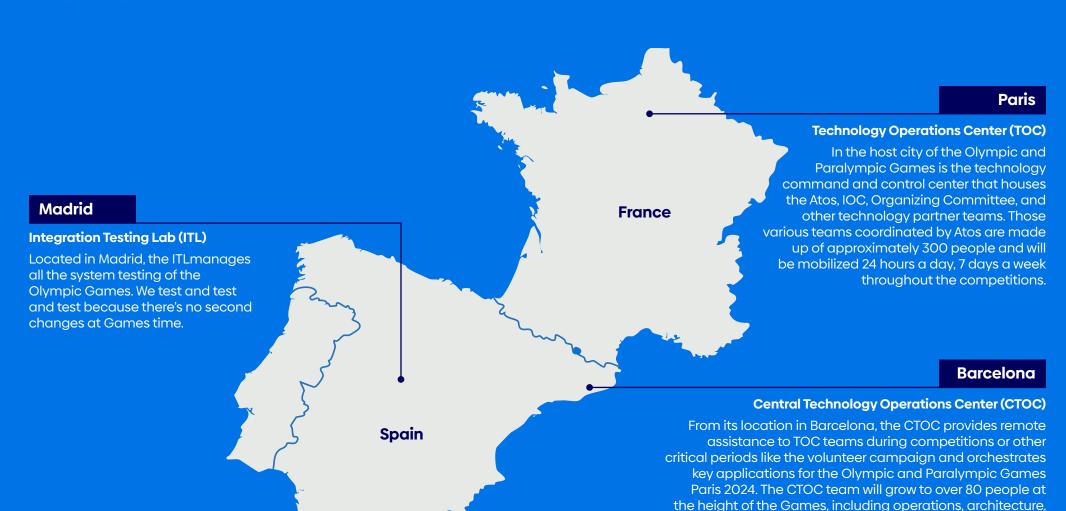
Our cloud solutions for the International Olympic Committee (IOC) revealed:

- A 25% annual cost savings was achieved for all Olympic Games applications
- Migrating applications to the cloud was easier than the IOC expected
- Compliance could be assured for multiple workloads across multiple clouds



A "build once use many times" sustainable cloud delivery model

Integrating a hybrid cloud delivery model from three locations



security, infrastructure, and data managers.

Cybersecurity and data protection/ sovereignty

Cyberthreats are increasing worldwide, with attacks targeting sports events in addition to businesses of all sizes. By applying the expertise of a global team of 6,000 security specialists, Atos, through its Eviden business line, is helping protect major events from disruption. Our big data and automation-powered security controls create efficient, agile controls that keep information safe. With analysts predicting that cybercriminals will steal over 33 billion records in 2023 alone, we make security and the integrity of information our highest priority.

Working with the IOC, Atos ensured the integrity of services and infrastructure:

- 4.4+ million security events were detected and mitigated during the 2020 Olympic and Paralympic Games in Tokyo
- 250,000 hours of testing to ensure safe and secure delivery at the Olympic and Paralympic Games Paris 2024

Sustainable and eco-friendly initiatives

Atos helps deliver environmental initiatives for major sports events that align with global sustainability goals. We have optimised and certified our applications to reduce energy consumption. By moving the critical systems to the cloud, organisers have seen further reductions in their overall carbon footprint. We have also focused on centralising IT facilities to reduce travel between Olympic sites in host cities. It's helping minimise the environmental impact of large-scale sporting events, setting a benchmark for sustainable technology management in sport.

We're helping Paris 2024 become one of the world's most sustainable sports events:

- Results applications have been optimised and certified to reduce energy consumption and data transmission.
- Cloud-native services optimise the use of infrastructure, thus reducing resource consumption

Innovations in major events

Artificial intelligence (AI) increasingly supports businesses and is fast becoming a part of our everyday lives. With support from Atos, major events such as the Olympic and Paralympic Games have begun using AI for the first time to transform critical parts of their operations.

Smart pre-assignment system for volunteer management

For Paris 2024, Atos introduced an advanced Al-driven system to streamline volunteer recruitment by matching applicant profiles to the best-suited roles for them. The system has made recruitment more efficient while ensuring volunteers end up in the right role.



"Innovation is a very important topic in sports, and the Olympic Games are not lagging behind. For Tokyo 2020, Atos introduced an Access Control solution based on facial recognition, that was using AI technologies to validate the identity of accredited people in 350 checkpoints in competition and noncompetition venues. For Paris 2024, we are providing the Committee with an Al solution to help them define and optimize scenarios for the pre-assignment of volunteers to specific positions, based on their experience and skills" **Angels Martin Muñoz,** General Manager Olympics at Atos

Inclusion at the heart of the game

Sports play a unique role in breaking down barriers and fostering mutual respect that can create a greater sense of belonging. Atos is committed to building an inclusive digital world accessible to everyone. We believe in being an inclusive, diverse, ethical employer and supporting underrepresented groups to promote greater equality.

We're proud to have been chosen by the International Paralympic Committee (IPC) to provide the IT solutions that support the Paralympic Games and other major para-sport events such as the World Para-Athletics Championships and World Para-Swimming Championships.

Atos is also proud to deliver solutions to the Special Olympics, which provides training and athletic competitions for children and adults with intellectual disabilities. Our support for Special Olympians reflects our aim to make technology inclusive and accessible through digital solutions adapted to individual needs.

Our dedicated accessibility and digital inclusion program takes all areas of our business into account. It offers accessible and assistive technology services that enable our clients to meet their legal and ethical commitments and ensure that all employees can contribute, regardless of the challenges they face. We have also implemented Digital Accessibility Specialist apprenticeships and created a range of job-specific training programs on embedding accessibility.

"We are happy to see Atos join our family and bring us its technological expertise developed over more than 30 years with major sporting events. Alongside them, we want to innovate and continue to be as inclusive as possible so that all people who have an intellectual disability can thrive through sport"

Mary Davis, CEO Special Olympics International

Support behind the scenes

After more than 30 years of working with sports and major event organisers, we have learned that although we work behind the scenes, our impact takes centre stage. From cybersecurity to e-ticketing, real-time results to trackside food and beverage – it all must run seamlessly for the focus to stay on the competition. We work closely with organisers for every event to identify the challenges, develop the solutions and capture the benefits to continue improving.

Our most notable success stories include:



Olympic Games

Atos is the global IT partner, chief IT integrator of the International Olympic Committee (IOC) and a key technology provider of the Olympic movement for over 30 years.



Paralympic Games

Atos has provided IT solutions to the Paralympic Games since 2002 and has been the Worldwide IT partner of the International Paralympic Committee since 2008.



UEFA National Team Football

Atos was selected as the Official Technology Partner for UEFA National Team Football until 2030, supporting events including UEFA EURO, UEFA Nations League Finals, European Qualifiers, Under-21 Championships and the Futsal Championships.



Rugby World Cup

Atos delivered critical event management system (EMS) modules for the Rugby World Cup in England in 2015 and Japan in 2019.



European Athletics

Atos has been the Official Timing and Data Partner of European Athletics since 2017. Since 2020 Atos is the Official EA Digital Partner including streaming services for some EA events.



Special Olympics

Atos will deliver foundational IT services to Special Olympics until 2027 around three pillars: Development and maintenance of the Special Olympics Games Management System, Infrastructure services and security, and Events support.



European Games

Atos is the official Digital Technology Partner for the 2023 and 2027 editions of the European Games, delivering ticketing, data-driven digital services and event media productions & streaming.



European Championships

Atos delivered timing, scoring and results services and the Information Diffusion Systems in Glasgow and Berlin 2018 and in Munich 2022.



PGA European Golf Tour

Atos delivers the Player Portal - Single platform for players and their teams - for the three leading men's professional golf tours in Europe.

Olympic innovation milestones

Each time we work with a sports and major event organiser is an opportunity to innovate. Our long association with the Olympic Movement has driven advances to make these festivals of sporting achievement more successful. For instance:



Beijing 2008

Became the first Games to use the Commentator Information System (CIS), distributing real-time results worldwide.



London 2012

Rolled out Wi-Fi at every venue and the first smartphone apps for media, officials and athletes to access schedule, transportation and results info.



PyeongChang 2018

Migrated all critical Olympic applications to the cloud, delivering redundancy, flexibility and 25% cost savings.



Tokyo 2020

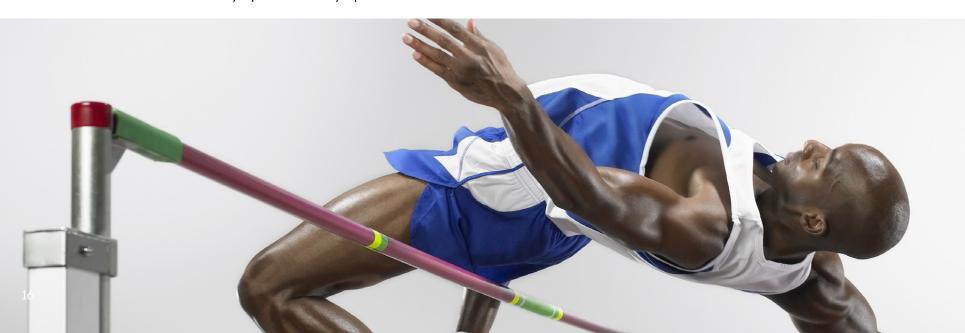
Introduced a nextgeneration access control system using facial recognition technology for improved security.



Paris 2024

Will complete 250,000 hours of testing to securely and reliably deliver more than 150 critical hybrid cloud applications.

Read more about Atos and the Olympic and Paralympic Games



A passion for delivery

Sport helps people reach new heights and realise their potential in ways that can inspire us and enhance our lives. It promotes inclusion, empowering underrepresented groups, fostering respect and providing a great sense of achievement.

At Atos, our mission is advancing what matters, and we believe that sport matters. That's why we created a specialised Sports and Major Events division — making Atos the only international IT company with this dedicated capability. We support the world's biggest global sports events, providing solutions and services expertise at scale so everyone from athletes to coaches to organisers can perform at their best.

Using the latest digital technologies, we share more than just information. We share images, insights and inspiration in real-time with fans across world. Wherever you happen to be, we want to enable you to take part in the celebration, feel the thrill of competition, and be moved by the power of sport.

Contact Atos today to learn how we can help create the foundations for the future of your business, whether in sports or in another industry.

Contact us uksales@atos.net

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About Atos

Atos is a global leader in digital transformation with c. 95,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonisation services and products, Atos is committed to a secure and decarbonised digital for its clients. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Find out more about us

atos.net atos.net/career Nos réseaux sociaux



About Tech Foundations

Tech Foundations is the Atos Group business line leading in managed services, focusing on hybrid cloud infrastructure, employee experience and technology services, through decarbonised, automated and Al-enabled solutions. Its 48,000 employees advance what matters to the world's businesses, institutions and communities. It is present in 69 countries, with an annual revenue of € 6 billion.

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