



Atos Origin Media Kit For the Olympic Games

Atos Origin, the Worldwide IT Partner of the Olympic Games, is an international information technology (IT) services company with annual revenues of EUR 5.8 billion and with 50,000 people in 40 countries.

The date, time and place for the Opening Ceremony of the Olympic Games will not move. With 17 days of competition and the world watching, there is only one chance to get it right.

Atos Origin provides a complex mix of people, process and information technology systems that support the Olympic Games. The Group develops implements and manages a critical, but invisible, IT system allowing Atos Origin to be in the competition since Salt Lake 2002, Athens 2004, Torino 2006 all the way to Beijing 2008, Vancouver 2010 and London 2012.

If we can turn the IT challenge of the Olympic Games into results for the billions of spectators, imagine what we can do for our clients.



“Today, technology has become crucial for the success of the Olympic Games. Atos Origin’s long-term commitment to implementing and integrating the technology consortiums behind each organizing committee is essential to bringing the Olympic Games to the world. Our Worldwide IT Partner has facilitated a flawless delivery of IT systems and we are confident that Atos Origin will do an outstanding job for the Beijing 2008, Vancouver 2010 and London 2012 Olympic Games. ”

Jacques Rogge, President of the International Olympic Committee.

“Atos Origin continues to demonstrate its ability to seamlessly coordinate the efforts of a complex array of best-of-breed technology partners and suppliers. This unique systems integration capability enables consistent performance across multiple Olympic Games, while simultaneously facilitating the management of costs and complexity. As the athletes tirelessly prepared for performance, Atos Origin’s global team of IT experts mirrored their efforts by employing world class expertise, technology and solutions to protect and safeguard the vast IT systems performing on the global stage.”

Jean-Benoît Gauthier, Technology Director of the International Olympic Committee

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I. OVERVIEW

- As the Worldwide IT Partner for the Olympic Games and Top sponsor, Atos Origin integrates, manages and secures the vast IT system that relays results, events and athlete information to spectators and media around the world.
- The company brings considerable international IT experience to the Olympic Games, including global expertise and leadership in consulting, systems integration, operations management, information security and software applications development.
- The Atos Origin contract with the International Olympic Committee (IOC) is the world's largest sports related IT contract covering the Games at Athens, Greece in 2004, Torino, Italy in 2006, and Beijing, China in 2008.
- In July 2005, Atos Origin announced the extension of its Technology Partnership Contract with the International Olympic Committee for the 2010 Olympic Winter Games in Vancouver, Canada, and the 2012 Olympic Games in London, UK.
- For the Athens 2004 Olympic Games alone, Atos Origin provided the IT solution for the accreditation system which issued 200,000 accreditations, and provided sports results from 301 events, at 36 competition venues, for 21,500 journalists and 4 billion TV viewers. This information was carried on a secure network including 2,500 INFO2004 terminals.
- For the Torino 2006 Olympic Winter Games, Atos Origin relayed real-time results to broadcasters in under 0.3 seconds for 15 disciplines plus both ceremonies via 929 Commentator Information System (CIS) terminals deployed in 18 venues, sustained about 6 million queries for information on 806 INFO2006 terminals deployed in 39 venues, supplied 16.2 Gigabytes in over 2,700,000 messages of direct data feeds, and produced 4,500 printed reports (representing around 3.5 million pages) to journalists and sports representatives' desks.
- The Beijing 2008 Olympic Games have been the most information intensive Olympic Games ever, with 80% more competition data processed for media and news agencies worldwide. In comparison to the Athens Games, Atos Origin has provided the IT systems and software that processed and activated over 70% accreditations, totalling 340,000; securely processed over 80 % more competition data for media and news agencies worldwide – totalling 1.5 million messages; added 40% more sports disciplines, 8 in total, to the CIS; and supported approximately around 30% more hits on the intranet for the Beijing 2008 Olympic Games – INFO2008 – averaging around 1.2 million hits each day.

II. OLYMPIC GAMES TECHNOLOGY CONSORTIUM SCOPE

For an event of this magnitude, flawless delivery and deadlines are not negotiable.

2002 Olympic Winter Games in Salt Lake City	2004 Olympic Games in Athens	2006 Olympic Winter Games in Torino	2008 Olympic Games in Beijing
7 sports (15 disciplines, 78 events)	28 sports (37 disciplines, 301 events)	7 sports (15 disciplines, 84 events)	28 sports (38 disciplines, 302 events)
40 venues (10 for competition)	62 venues (36 for competition)	28 venues (14 for competition)	70+ venues (39 for competition)
2,400 athletes	10,500 athletes	2,500 athletes	10,500 athletes
2,650 media representatives	21,500 media representatives	10,000 media representatives	21,600 media representatives
1,350 IT team (incl volunteers)	3,400 IT team (incl volunteers)	2,500 IT team (incl volunteers)	4,000 IT team (incl volunteers)
5,000 computers	10,500 computers	5,000 computers	10,000 computers
445 servers	900 servers	385 servers	1,000 servers
89,000 accreditations	200,000 accreditations	90,000 accreditations	200,000 accreditations
1,000 result systems terminals	4,000 result system terminals	1,800 result system terminals	5,000 result system terminals
1,250 printers	4,000 printers	700 printers	4,000 printers

III-1. IT INTEGRATION

As the Olympic Games' IT integrator Atos Origin is responsible for the **design, build** and **operation** of the IT infrastructure.

- **Design**

- Atos Origin is responsible for designing a complex and secure high quality IT infrastructure on time, to specification and within budget. While designing architecture for current Games, Atos Origin considers the next Games and how to transfer the knowledge gained.
- This knowledge and experience transfer decreases future costs and lowers risks through knowledge mapping, critical knowledge recovery and retention, resulting in 25 percent increase in productivity in Athens over Salt Lake, with only 50 percent increase in staff to manage an event 300 percent bigger.

- **Build**

- Atos Origin implements IT security preventative measures to protect against physical and digital attacks on the IT network architecture. The company is also responsible for building and refining a customized suite of software applications that power the Olympic Games.
- Atos Origin coordinates with the Organizing Committee (OCOG) a massive *IT testing program*, a critical step in the run up to the Games, to ensure the successful implementation of the IT solution. *For the Beijing Games, under BOCOG Technology Department supervision, this program was launched three years before the start of the Games and represents more than 50 applications sourced from around the world, more than 200,000 hours of testing and more than 100,000 "test cases".*

- **Operate**

- Atos Origin applies its 'one team' approach to ensure that a complex network of IT partners and suppliers, employees and volunteers work together to deliver the best possible service and support to each Olympic Games.
- At Games time, from the Technology Operation Centre, Atos Origin manages a team of more than 4,000 IT team members, including volunteers, stationed several competition and non-competition venues. The results will be used by more than 20,000 media representatives.

III-2. IT SYSTEMS

Atos Origin designs and builds two main IT systems to run the Games: **Games Management Systems & Information Diffusion Systems.**

GAMES MANAGEMENT SYSTEMS (GMS) support the planning and operations of accreditation; sport entries and qualification; transportation schedule; medical encounters reports; protocol for VIP activities; arrivals and departures; staff, and volunteer management.

All the suite of applications below require a high level of quality and availability and security, as most of them are interconnected to highly secure systems (police and security forces, immigration...).

ACCREDITATION SYSTEM

Atos Origin contribution to the accreditation system is to provide the system integration. The accreditation system identifies the accredited participants for various events, manages registration, assigns access privileges and other rights to individuals, and provisions access control information.

In Beijing, over 300,000 Olympic athletes, coaches, officials, staff, volunteers, and media required privileged access to the Olympic Games and were registered and granted security clearance.

TRANSPORTATION SYSTEM

The transportation system provides the planning and scheduling of transport services and fleet management for the Olympic Family and allocates the available transportation resources according to the service levels established for each customer.

SPORTS ENTRIES & QUALIFICATION SYSTEM

Qualifying for and competing at the Olympic Games marks the culmination of a lifetime of work for most athletes. Accurately representing the official qualifying times is critical to fair competition. The sports entries & qualification system, along with the athlete qualification system, collects data on each athlete and processes who is eligible to compete based on the qualification marks in the results system. This system maintains the criteria for qualifying individual competitors, pairs, relays or teams based on the minimum and maximum qualification standards for any event, types of qualification and quotas, combining around 1,000 different criteria across all the events.

MEDICAL ENCOUNTERS SYSTEM

The medical encounters system gathers information relative to the different levels of healthcare, generated reports for the medical management organizations (IOC Medical Commission, Department of Health and others) and provides an online summary of each case history.

ARRIVAL, DEPARTURE & PROTOCOL SYSTEM

The arrival & departure system gathers the expected arrivals and departures data for the Olympic City and provides the information to the groups responsible for managing the travel arrangements for the Olympic Family as well as the welcome greetings for the delegations. The protocol system assists with coordinating, scheduling and providing appropriate services for VIPs, including registration of VIPs, VIP events and other VIP arrangements.

STAFFING INFORMATION SYSTEM

The Staffing System provides support to the Human Resources department, functional areas and other Workforce Management related divisions. It includes all the functions needed for staff management, such as registering staff; planning workforce needs; staff selection for various positions; organizing interviews and trainings; planning and distribution of uniforms; helping in creation of shift plans and assignments; and finally, providing the Accreditation System with staff personal data and positions.

INFORMATION DIFFUSION SYSTEMS (IDS) that include the Commentator Information System (CIS) delivering real-time competition results and INFO, an Intranet system providing information to media, athletes, judges, coaches and sponsors.

INFO

At the heart of Information Diffusion System is INFO, an Intranet that is available to accredited media and the Olympic Family of athletes and IOC officials. For the Beijing Games, all 200,000 members of the Olympic Family had access to the information on the INFO2008 system.

In Beijing, INFO2008 featured information in English, French and Chinese, including over 10,000 biographies as well as historical results dating back to 1896 – the first Olympic Games of the modern era held in Athens. During Games time, Atos Origin supported approximately around 30% more hits on the intranet for the Beijing 2008 Olympic Games compared to the Athens Games – averaging around 1.2 million hits each day.

For the Beijing 2008 Games, a Wireless INFO service was available for the first time in the Olympic Games. This service allowed all the journalists to navigate through the INFO2008 from their own laptop via a wireless network.

COMMENTATOR INFORMATION SYSTEM (CIS)

With around four billion people watching the Olympic Games on television, getting results to broadcasters across the world is vital. Commentator Information System (CIS) is a Java-based application that displays results on touch-screen PCs at the venue broadcast sites in a fraction of a second, so they can be instantaneously dispatched across the globe.

It provides event results to broadcasters before they hear the roar of the crowd. 'Color' for the commentary is provided by sport-specific screens.

For the first time at the Olympic Games, 15 broadcasters worldwide could also access CIS from the studios in their home countries via the Remote CIS service. This means more of the broadcast teams can access the real-time competition results and data without having to travel to the Games themselves. For the broadcasters, the new service can help to reduce costs and also their carbon footprint. Take up was high and the service will be extended at future Olympic Games.

For the Beijing 2008 Games, 8 new sports benefited from CIS system: shooting, fencing, weightlifting, cycling BMX, modern pentathlon, taekwondo, beach volleyball and archery.

INTERNET DATA FEED (IDF)

Results data distributed to the official website, broadcasters and other internet customers. IDF contains all the results and real-time data from both INFO and the Commentator Information System.

RESULTS DATA FEED

The Results Data Feed provides competition data in a specific format for the World News Press Agencies including Reuters, AFP, Kyodo, AP, PA and SID

PRINT DISTRIBUTION

A centralized database feeds event data and results to Games web sites, world press agencies, Internet data feeds and the Olympic Games officials.

III-3. IT SECURITY

- Atos Origin prevents viruses and hackers during the Olympic Games ensuring that there is no disruption and that the results are relayed to the world and to the media accurately and on time.
- In Beijing, the IT team was able to respond fast to all the critical alerts and prevent unauthorized access.
- Games security system built on risk management bases enabled IT security team to recognize real threats and respond fast to them. Through efforts of the IT security team, there was **NO** impact on the Games.
- *For the Beijing Games, Atos Origin collected and filtered more than 12 million IT security events each day to detect any potential security risk for the Olympic Games IT systems. From these, less than 100 were identified as real issues. All were resolved, so there was no impact at all on the Olympic Games.*

Atos Origin is focusing on three key IT areas: security architecture, risk management and security operations, to ensure that everything is in place to respond to any potential threat from either inside or outside of the network.

IT SECURITY ARCHITECTURE

- Security is built into the infrastructure from the outset. Security measures include:
 - Separation between the Games network and the Internet
 - Olympic network segmented into security domains
 - Strict configuration management processes, (security mechanisms such as anti-virus software and port security)
 - Strategic placement of Intrusion Detection Systems

IT RISK MANAGEMENT

- Through extensive testing before the Games the IT security team is able to understand what is normal activity on applications, servers, PCs and the network, so that an incident can be logged when the traffic becomes abnormal.
- This strategy enables the IT security team to effectively respond to incidents on a prioritized basis and keep the Games IT infrastructure protected from a wide range of threats that may otherwise compromise critical IT services – including the recording and distribution of competition results.

IT SECURITY OPERATIONS

- Atos Origin is training the entire IT team in security policies and procedures. At Games time, the IT security team is operational 24x7 in order to respond to any incidents that occur, day or night.

VI-1. TECHNOLOGY IN THE OLYMPIC GAMES HISTORY

Key technology milestones in the Olympic history:

- **776BC to 349AD** – Architectural findings suggest that Ancient Olympic Games used mechanical starting gates.
- **1896** – After a 1,500 year hiatus imposed by Roman conquerors, the first Modern Olympic Games were held in Athens, Greece, but little had changed in the techniques used to determine competition results.
- **1924** – Technology begins to win a place at the Olympic Games with the event's first live radio broadcast.
- **1932** – The stop-watch and photo finish were first used at the Olympic Games in Los Angeles, California. When officials found it impossible to determine the winner of the 100 meters race by naked eye and stop watch alone, newsreel film was analysed to determine that Eddie Tolan (U.S.) was the gold medal winner. The timekeeping equipment was provided by Omega.
- **1936** – The Berlin Games were the first to be televised, with events broadcast throughout the Olympic Village, as well as German public halls and theatres. Results were transmitted internationally by telex and newsreel film was rushed abroad via zeppelins.
- **1956** – Although live television coverage of the Olympic Games was available internationally for the first time, Europe and the US boycotted the sale of television rights to the Games. As a result, only six pre-recorded, half-hour programs were accessible on a few independent channels in the U.S.
- **1960** – Computer punch cards were used for tallying results at the Olympic Winter Games in Squaw Valley, California. Free of television rights boycotts, the Olympic Games held later that year in Rome were the first to be fully televised.
- **1964** – Results were stored on computers for the first time, marking the permanent pervasion of computer technology into the Olympic Games.
- **1996** – In conjunction with the Games in Atlanta, Georgia, the first-ever Olympic Games web site received 189 million hits.
- **1998** – Growing consumer interest in the Internet drives the number of web hits to 634 million virtual visitors to the Olympic Winter Games in Nagano, Japan.
- **2000** – With 10,651 athletes participating in 300 events, information technology was key to the running of the Games, and web hits during the Games in Sydney escalated to 11.3 billion.
- **2002** – While athletes from 77 nations competed in front of audiences of around 2.1 billion, a team from SchlumbergerSema, now Atos Origin, was hailed by Dr Jacques Rogge, President of the International Olympic Committee (IOC) as the 'unsung heroes behind the scenes'. The Salt Lake City 2002 Olympic Winter Games have been acknowledged as among the most successful Games ever.
- **2004** – Information technology is an intrinsic part of every Olympic Games and was crucial for the success of the Games in Athens, Greece - from secure accreditation to accurate split-second scoring to relaying the results in real time across the globe.
- **2006** – The Torino 2006 Olympic Winter Games are marked with the introduction of web based applications to manage the 90,000 accreditations and train 20,000 volunteers.
- **2008** – For the first time in Beijing the Commentator Information System has been provided to media back in their home countries, enabling them to have remote access to the real-time competition data and statistics. INFO2008 was provided over a wireless network to the media in the venues and will also incorporate leading search technologies

About ATOS ORIGIN

Atos Origin is an international information technology (IT) services company. Its business is turning Client Vision into Results through the application of consulting, systems integration and managed operations. The company's annual revenues are EUR 5.8 billion and it employs over 50,000 people in 40 countries. Atos Origin is the Worldwide Information Technology Partner for the Olympic Games and has a client base of international blue-chip companies across all sectors.

Atos Origin Major Events' Mission

Since 1989, the Major Events unit of Atos Origin is exclusively dedicated to the provision of IT solutions and services to large-scale events and international bodies. Its mission is carrying its experiences and know-how from one event to another, and, in whatever configuration it is involved, helping to ensure that each event is a success.

The business unit aims to share its experience with sporting and non-sporting event organizers, and links this to specialist consulting, project management, systems integration, systems management, and the provision of software solutions. Atos Origin's involvement in large sporting events is at all levels - business, organizational and technical.

As well as serving the Olympic Games, Atos Origin, through its Major Events Unit, also provided systems integration, project management and applications software for other major events, such as the World Summit on the Information Society, Tunisia, 2005; the University Games, Turkey, 2005; the All Africa Games, Nigeria in 2003; FIFA World Cup in 2002 and 2006; the United Nations World Summit, South Africa in 2002, the Pan-American Games in Rio de Janeiro in 2007.

ATOS ORIGIN OLYMPIC GAMES SPOKESPERSON



Patrick Adiba
Executive Vice President
Olympic Games and Major Events – Global Sales and Markets
Atos Origin

Patrick Adiba provides strategic direction and executive management to Atos Origin as a member of the Executive Committee of the group in charge of Global Sales and Major Events. Major Events is a business unit specialized in Major Events including the Olympic Games from Salt Lake City 2002 and till the 2012 Olympic Games in London.

Most recently, he served as Vice President Human Resources of SchlumbergerSema, a division of the Schlumberger group with more than 25,000 employees in 60 countries. Previously, Adiba had been Vice President and General Manager for SchlumbergerSema Latin America, for 5 years working predominantly in the Finance, Energy and Telecommunications markets.

Before moving to South America, Adiba worked as Vice President and General Manager e-City Division, providing leadership for the wide deployment of smart card based solutions for mobility solutions including parking and transport. Previously, Adiba held several other Marketing and Business development posts for Telecom systems. He also worked in research and development in the Energy domain.

Adiba holds a degree in Electronic and Telecommunications Engineering from INSA, Lyon and did an Executive MBA at Stanford University in 2001.



Magnus Alvarsson
Chief Integrator for the Vancouver 2010 Olympic Winter Games,
Atos Origin

Magnus Alvarsson is the Chief Integrator at Atos Origin for the Vancouver 2010 Winter Olympic Games. He is responsible for leading the technology team that will design, build and operate the IT infrastructure and systems that make the Games happen and deliver the results worldwide in 0.3 seconds.

Magnus has almost a decade's experience of working on the Olympic Games. He was Integration Manager for the Beijing 2008 Olympic Games, where he worked with all the technology partners to deliver a seamless and complete solution on schedule and within budget to ensure the Games ran smoothly. For the Athens 2004 Olympic Game, Magnus was Info Diffusion Manager and at the Salt Lake City 2002 Winter Olympic Games, he was Central Repository System Manager

Prior to working on the Olympics Games, Magnus was a business and IT consultant for Atos Origin in Sweden, where he delivered IT projects for clients in both the private and public sectors.



Michele Hyron
Chief Integration Manager, London 2012 Olympic Games

Michele Hyron is Atos Origin Chief Integrator for the Olympic Games in London. She will be responsible for leading the consortium of IT partners to design, build and operate the massive, mission critical IT infrastructure and solutions that will support the London 2012 Games.

Michele will lead a team that will ramp up from eight today to several thousand during the London Games themselves. The team will include employees from Atos Origin, the technology partners, LOCOG, as well as volunteers. It will implement and protect the technical infrastructure for all competition and non-competition venues.

Michèle comes to London with almost a decade's Olympic Games experience, having been Operations Manager at the Beijing 2008 Olympic Games, Integration Manager at the Athens 2004 Olympic Games and Quality Manager in Salt Lake City.

Prior to joining the Olympic Games team, Michele worked with clients in the nuclear industry for 13 years, where she held a number of roles including Project Manager responsible for software and systems integration support for nuclear power stations.

Michele graduated from Ecole Polytechnique Feminine in France with a degree in Computer Science.

Q&A

How will the IT infrastructure be used during the Olympic Games?

IT is vital for managing the complexity of the Games and relaying results in a timely, accurate, and secure way to the millions of viewers around the globe and the thousands of media attending locally.

Atos Origin is responsible for the design, build and operation of the IT infrastructure – the company literally powers the Olympic Games. This includes integrating, managing and securing the vast IT systems that relay results and event and athlete information to spectators and media around the world.

What is the biggest challenge faced when designing and deploying the IT infrastructure?

Atos Origin is constantly working against an unmovable deadline – the company has just one chance to get the project right. Olympic systems must be ready from the very first day of the Games, so Atos Origin begins working on the systems three years in advance, testing them again and again to ensure they are ready for the start of the Games.

When designing the IT architecture, Atos Origin must integrate the technologies of multiple technology vendors to form one seamless system. This requires significant interaction and testing of the partners' products to ensure that they are capable of meeting the requirements of the Games.

How long did the infrastructure take to develop?

Atos Origin starts working on the IT systems around four years out from the Games. For example, we started working on the technology for the Beijing Games in November 2004. The company started designing the Games System Architecture in early 2005 and finalized it in June 2007. The company worked with BOCOG and the technology partners to define the detailed architecture, equipment and software specifications and support services needed.

How many people will use the infrastructure?

Around 4,000 IT staff. During the Beijing Olympic Games, the technology team of BOCOG, Atos Origin and technology partners were approximately 4,000 including volunteers.

How has the infrastructure been tested?

Testing is one of the most critical steps in preparing the technology for the Olympic Games. For Beijing, the Integration Testing started in 2006 in the Integration Testing Lab, located in Beijing. In this lab, there are more than 100 people testing the key systems; the testing process lasts for almost two years. During August 2007, Atos Origin began testing the systems at competition venues, and then loaded the systems to ensure the architecture can support the Games' requirements.

Are you ever concerned that you might run over the deadline, or that you may have to sacrifice any of the infrastructure's functionality to meet this deadline?

With a scale as such of the Games, running over the deadline is not an option. When the Games start, the IT has to be ready. In order to achieve this, Atos Origin must be very much disciplined; each member of staff understands the importance of the project and is committed to making it happen. The company ensures the 'must have' elements are in place and then adds as many 'nice to have' elements as possible.

Ultimately, the role of IT – and that of Atos Origin – is to facilitate the smooth and successful operation of the Games.
