





delivering consulting, system integration, managed and cloud services, mission critical and high performance infrastructure

# AtoS

A Group of Companies

Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, and Worldline



Annual revenue

+ 11 B€

Workforce

+ 100.000 Business Technologists



Worldwide Information Technology
Partner for the Olympic and Paralympic
Games

and is quoted on the NYSE Euronext Paris market.

### Atos and the Games embracing Digital Transformation Turning the event into a global and fully connected experience

Long-term
relationship
based on trust and
proven performance since

Barcelona 1992

#### **End User Experience**

1992: Statistic information for the the press only on dedicated kiosks 2016: Video integrated with real time data available to end user

#### Olympic Information:

1992: One application per type of users 2016: Common data-model supporting all the applications

#### **Infrastructure:**

1992: First client/server architecture 2016: Cloud enabled IT – Big Data use cases

Contract for the provision of IT Services for the IOC extended **until 2024** 



#### **But what is behind?**

Equivalent to a business of **200,000 employees**, addressing 4 billion customers, operating 24/7, in a new territory, every 2 years

#### **Customer Experience**

**Trust & Compliance** 

**4,8 BN**Worldwide viewers

Competition venues with complete IT infrastructure

300,000 + accreditations

**30,000** media

**14,700** + athletes

**O**IT security impact

**RIO 2016** 



#### **But what is behind?**

Equivalent to a business of **200,000 employees**, addressing 4 billion customers, operating 24/7, in a new territory, every 2 years

#### **Operational Excellence**

**Business Reinvention** 

70,000

volunteers - with online portal

200,000 Competition venues with testing hours complete II infrastructure

30<del>0,00</del> +

digital, social games

different systems and applications

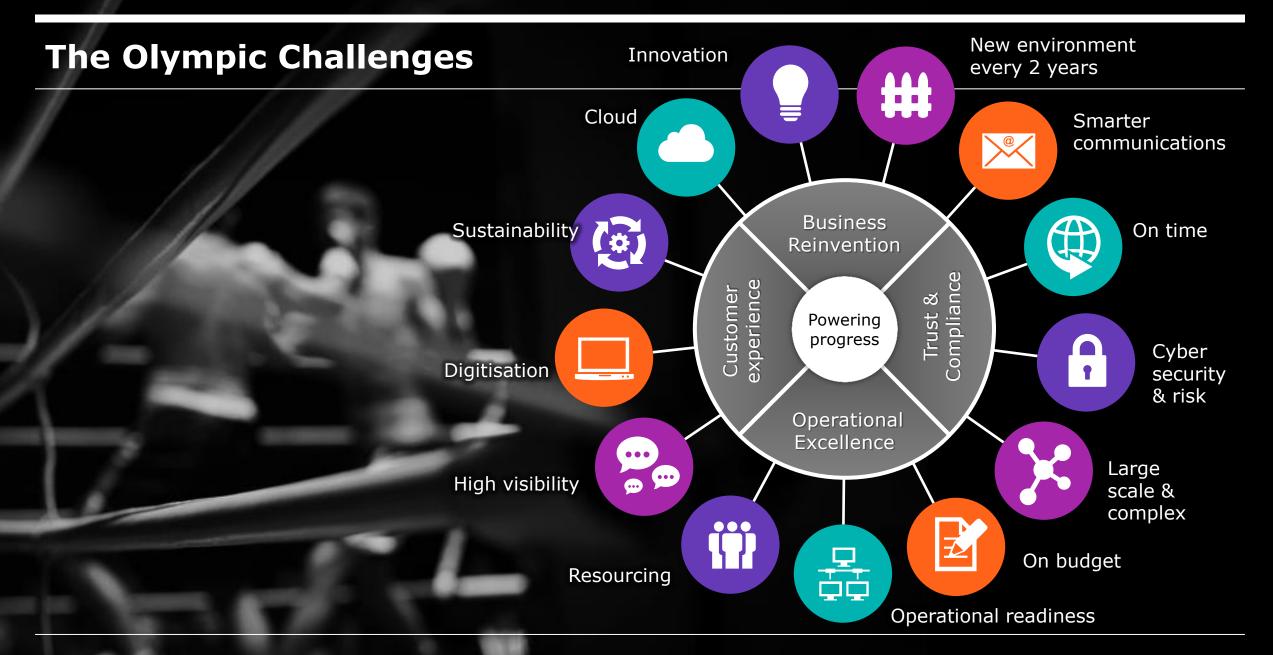
14,250 + servers

Cloud

IT seservices pact

**RIO 2016** 







.....Well...this will say it all....!



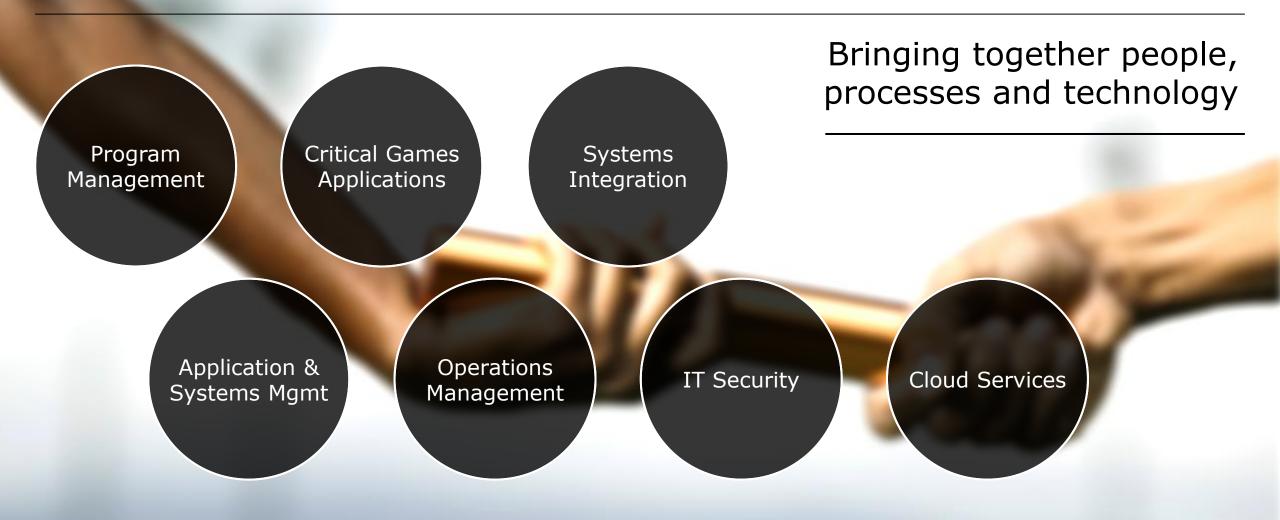


# Sorry!

Can you do it again?
We were hacked!

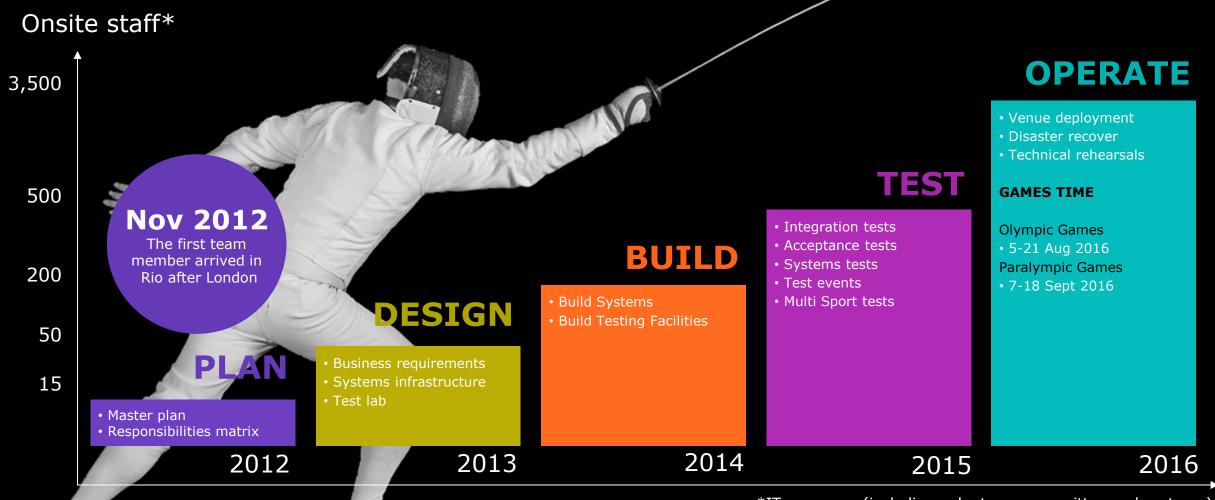


## Our recipe?



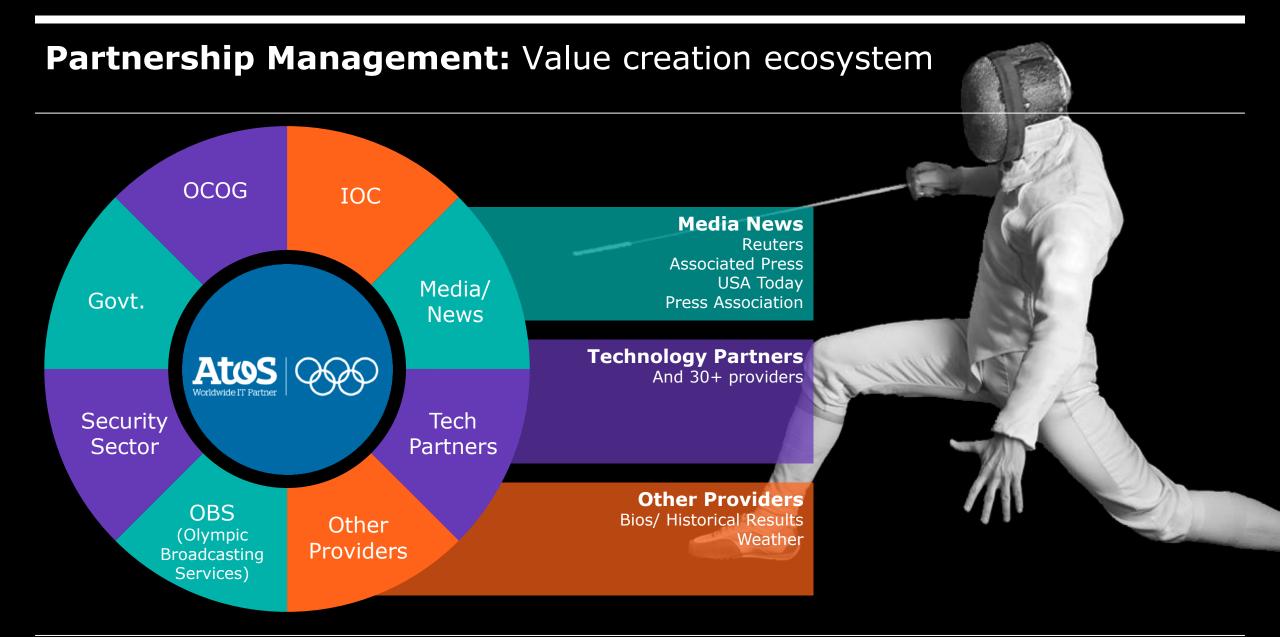


### Over 4 years of preparation: For 3 weeks peak time



\*IT resources (including volunteers, committee and partners)







## Ensuring key systems are in place: Before...



#### **Games Management System**



Volunteer portal

Supporting Rio2016 recruit up to **70,000** volunteers



Sport entries & qualifications

Collects and processes data for each of the **14,700** athletes eligible to compete in the Games



Accreditation

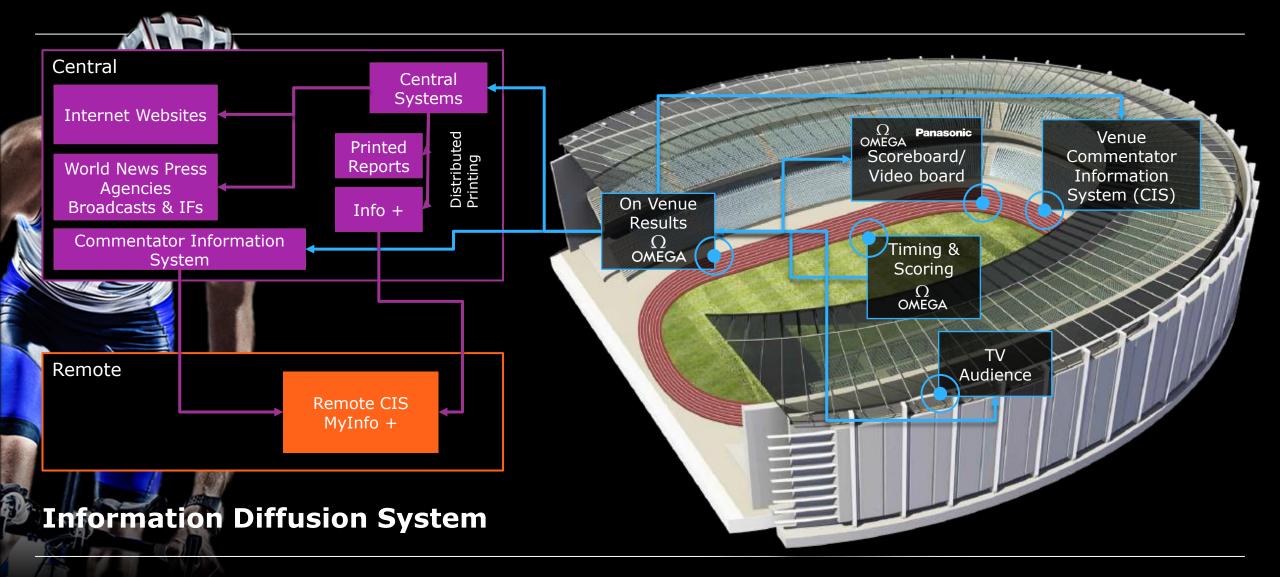
Identifies accredited participants, manages registration, assigns access privileges and provides access control information for **300,000** people



Workforce management

At work long before the Games start, support the HR departments with all functions needed for managing interviewing and training staff and volunteers

## Ensuring key systems are in place: During







## **RIO 2016**



PLATFORM

PROME COMMENCATION

NETWORK WISSES DOSSESSES

COMPANY APPUCATION

SAME
COMPANY COMMET FORMAL

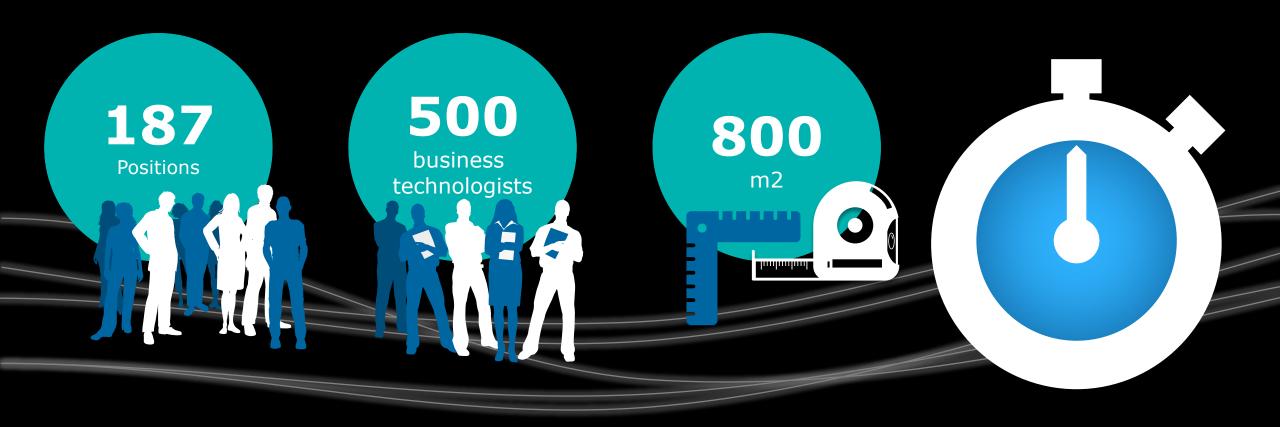
SAME
COMPANY COMMET FORMAL

INFRASTRUCTURE

Control and Command Center for Technology that supervises all 144 Olympic competition and non-competition venues

## A typical day in the TOC

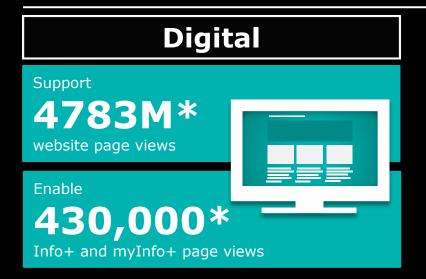
From 25th July 2016 the TOC will operate at full capacity 24/7

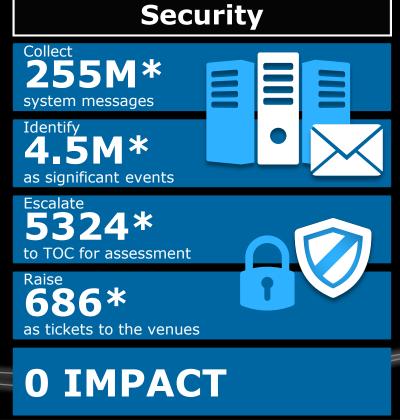




### A typical day in the TOC

The TOC manages and monitors the technology infrastructure and systems for:







\* Figures from London 2012 Olympic Games

incidents







## Real-time Data analytics for safe-keeping the Games

London 2012 figures, 17 days:
Over 255 Million events
4.5 Million filtered
5324 raised to TOC
686 tickets

**O Security incidents** 



Sochi 2014 figures, 30 days:
Over 322 Million events
1.1 Million filtered
8936 raised to TOC
182 tickets

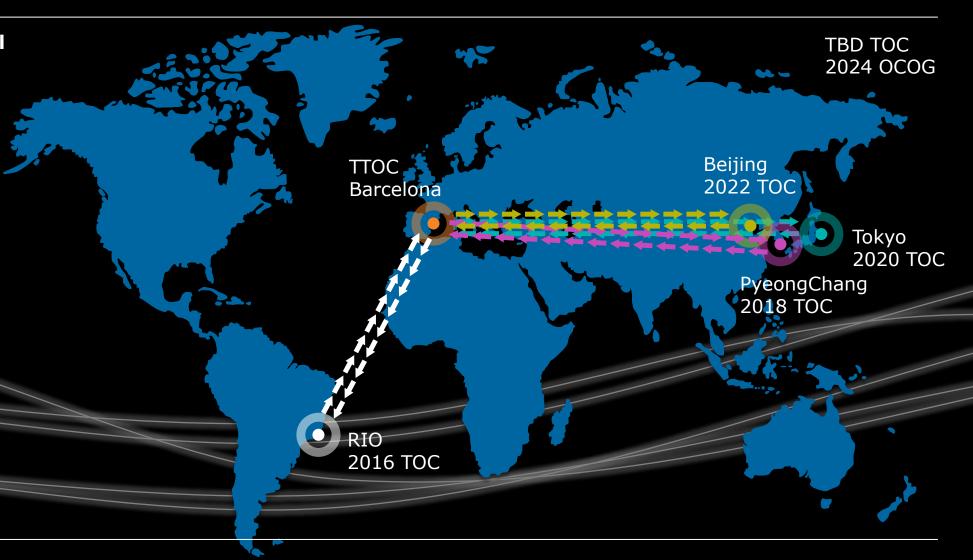
**0 Security incidents** 



## The Technical Technology Operations Center

A major step in the digital transformation of the Games is the creation of the Technical Technology Operations Center in Spain

Operating 24/7, a team of 150 business technologists will help to improve efficiency and reduce costs of the IT by providing remote support to the TOC





Driving business excellence with a new central delivery model

#### From build each time to build once.

The new delivery model is a paradigm shift from a 'build each time' to a 'build once' model delivering services over the cloud that creates significant efficiencies and operating flexibilities.





# Digital Transformation for the Olympic Games For a fully connected global experience

## **Business Reinvention**

Moving from traditional to new business models.

All systems will be in the cloud by 2018. **Through Canopy Cloud services** 

# Trust & Compliance

Safekeeping the Games.

Over 200 IT security events per second are handled, with zero impact.

Through real-time data analytics.

# **Customer Experience**

Bringing the rich experience of every moment of the Olympic Games at the fingertips of the fans.

Real-time results to 8 billion devices, worldwide.

Through Digital & New Media technologies

## Operational Excellence

Ensuring agile and flexible operations.

Building the core Games IT environment once and operate it for several Games. Through highly virtualized environment in Atos Data centre, carbon-neutral.



