

Accessibility and the Olympics

Essential questions, straightforward answers



“Delivering safe and secure access and egress will contribute fundamentally to the success of the 2012 Games...and physical security is at the heart of delivery.”

Dr Peter Ryan, October 2006

This document has been prepared by a consortium of the UK’s leading manufacturers and providers of accessibility solutions, to highlight issues including the need to provide efficient access and egress without compromising safety or security. The consortium offers its collective experience to support the Olympic Delivery Authority and its delivery partners to fulfil its promise of providing a spectacular and inspirational Games and future legacy for the UK.

These objectives can be met by creating a safe, secure and relaxed atmosphere for all who work, compete, spectate and live around the Olympic venues. We also believe that we have a responsibility to help ensure that integrated, seamless solutions are prepared for the games. These will provide efficiency across all aspects of security for the millions of people who will enter and exit through hundreds of access points throughout the Games venues.

The purpose of this document is to help initiate a process of consultation and advice. To illustrate how accessibility affects everyone involved in the Games, we have selected three key categories for consideration on the following pages. These are: paralympians, security managers and spectators.

Creating safe, secure access and egress

Areas for concern

ATHLETE VILLAGE
 BUILDING REGULATIONS
 CARBON FOOTPRINT
 CLEAN SIDE/DIRTY SIDE
 COMMAND AND CONTROL CENTRE
 COMPATIBILITY
 CORROSION RESISTANCE
 DDA
 DELIVERY ON TIME
 EASE OF INSTALLATION
 ENVIRONMENTAL MANAGEMENT
 ESCAPE
 EXTERNAL ACCESS
 FIRE
 FUTURE LEGISLATION
 HEALTH AND SAFETY
 INTERNAL ACCESS
 LEGACY AND RE-USABILITY
 OFFSITE INSTALLATION
 PERIMETER ACCESS
 PRESS CENTRE
 QUALITY
 SECURITY RATING
 STADIA
 SUSTAINABILITY
 TAILGATING
 VEHICLE INTERLOCKS
 VIP ACCESS

Integrated solution elements

ACCOMMODATION LOCKING
 AIR CURTAINS
 BARRIERS
 BLAST AND BALLISTIC DOORS
 BOLLARDS
 CELL DOORS
 DOOR AUTOMATION
 DOOR FURNITURE
 FENCES
 FOLDING GATES
 GATE AUTOMATION
 GLASS DOORS
 HINGED GATES
 HINGES
 LOCKS
 MAINTENANCE CHIPS
 METAL DOORS
 REVOLVING DOORS
 ROAD BLOCKERS
 SHUTTERS
 SLIDING DOORS
 SLIDING GATES
 SYSTEM INTEGRATION
 TIMBER DOORS
 TURNSTILES

The big 4 issues for the ODA to consider

1.

People movement

- HOW DO YOU PROCESS HUGE VOLUMES OF PEOPLE SO QUICKLY?
- HOW DO YOU ACHIEVE EASY, RAPID ACCESS AND RELAXED CROWDS WHILE MAINTAINING DISCREET SECURITY?
- HOW DO YOU ACCOMMODATE SO MANY DIFFERENT TYPES OF VISITOR WHILE MAKING ACCESS AND EGRESS EASY FOR SPECTATOR, COMPETITOR, VIP AND STAFF ALIKE?
- HOW DO YOU INSURE THAT MAKING ESCAPE THROUGH ANY DOOR IS INTUITIVE AND NATURAL FOR ALL?
- HOW CAN YOU PREVENT ACCESS BOTTLENECKS AND WHAT ‘PRESSURE RELEASE’ MECHANISM CAN YOU EMPLOY IF THEY OCCUR?
- HOW DO YOU ASSESS THE PLAY-OFF BETWEEN SPEED OF ENTRY AGAINST THE NEED FOR IDENTIFICATION?

2.

Safety and security

- SAFETY, SECURITY AND ACCESSIBILITY: HOW DO YOU PRIORITISE AND WHAT ARE THE COMPROMISES?
- HOW WILL INCREASING SECURITY REQUIREMENTS BE MANAGED AS THE GAMES APPROACH?
- AT WHAT POINT SHOULD TECHNOLOGY RESEARCH AND DEVELOPMENT BE CUT OFF TO ENSURE THAT SYSTEMS ARE FULLY TRIALLED AND TESTED?
- WHAT ARE THE FAIL-SAFE OPERATIONS IN THE EVENT OF POWER FAILURE?

3.

Risk management

- HOW DO YOU ENSURE DELIVERY OF ALL ACCESSIBILITY SYSTEMS TO A STRICT, DEPENDABLE TIMETABLE?
- HOW DO YOU COMPLY WITH CURRENT STANDARDS AND PREDICT CHANGES IN FUTURE STANDARDS?
- HOW DO YOU KEEP OUT OF THE HEADLINES UNLESS THE MESSAGES ARE POSITIVE?
- HOW DO YOU ENSURE SOUND LEGACY AS THE VENUES ENTER THEIR NEXT PHASE OF USE POST-GAMES?

4.

Overcoming complexity

- HOW DO YOU MINIMISE YOUR SUPPLIER BASE AND SIMPLIFY INTERFACES BETWEEN RELATED SYSTEMS?
- HOW CAN YOU DEPEND ON RELATED SYSTEMS WORKING EFFECTIVELY TOGETHER?
- HOW DO YOU RESOLVE FUTURE LEGISLATIVE AND STANDARDS COMPLICATIONS
- WHAT IS THE BEST WAY TO ENSURE THAT WHAT YOU ARE PROMISED ACTUALLY HAPPENS?

What are the accessibility concerns of the paralympian?



The paralympian athlete has all the requirements of the olympian with additional considerations. The ODA is committed to giving athletes the best possible context to prepare for competition. This demands that they will be unaware of the high levels of security protecting them, while enabling ease of access to all relevant areas of the Olympic sites, without creating language or culture barriers.

Apartment door

- WHAT WILL BE THE ESCAPE REQUIREMENTS FROM THIS TYPE OF ACCOMMODATION IN THE FUTURE?
- WHAT WILL BE THE FIRE DOORSET REQUIREMENTS IN 2010?
- WHAT WILL BE THE WEEE REQUIREMENTS FOR RECYCLABILITY IN 2012?

Communal entrance to building

- WHAT WILL BE THE DOOR AUTOMATION SAFETY REQUIREMENTS IN THE FUTURE? WILL DIN 18650 BE ADOPTED IN THE UK?
- UNDER EN 13637, WHAT WILL BE THE MAXIMUM CAPACITY FOR APARTMENT ACCOMMODATION?

Exit from the Olympic village

- HOW WILL WE PREVENT MISUSE OF SPECIAL NEEDS PASSAGES ADJACENT TO TURNSTILES?
- WILL DIN STANDARDS FOR TURNSTILES BE ADOPTED FOR THE OLYMPICS?

Entrance to stadium

- HOW ARE PART L REQUIREMENTS FOR STEEL DOORS LIKELY TO CHANGE IN THE FUTURE?
- WILL ELECTRONICALLY CONTROLLED PANIC ESCAPE DRAFT STANDARD prEN 13633 EVER BE ADOPTED IN THE UK?
- WHAT ARE THE PROPOSED CHANGES TO THE PANIC EXIT DEVICES EUROPEAN STANDARD BS EN 1125?

Changing room door

- WHAT WILL BE THE MOST COMMON LOCK CASE DIMENSIONS IN 2012, TO ALLOW COMMONALITY OF SIZE BETWEEN MECHANICAL AND ELECTRO-MECHANICAL LOCK CASES?

How can the security manager's job be more effective?

Security personnel require access privileges beyond all others in and around each Olympic venue. As their focus is on professional activity, transit through all areas of each site must be totally free of restriction and delay. Overall security of the huge transient population demands that operatives' own security is flawless, including fraud and identity theft.



Pass from dirty side to clean side with vehicle

- WILL WE ADOPT USA STANDARDS FOR IMPACT TESTING OF GATES?

Entrance to command and control centre

- WILL REGULATIONS ALLOW THE IDEAL ELECTRIC LOCKING SITUATION OF 'FAIL LOCKED' ON THE OUTSIDE AND 'FAIL UNLOCKED' ON THE INSIDE TO ALLOW ESCAPE?
- HOW WILL NEW TECHNOLOGY ALLOW VISION PANELS TO BE USED WITHIN INNER INTERLOCKING DOORS?

Enter venue from back of house

- HOW WILL INTERCONNECTIVITY BETWEEN VARIOUS DOOR AUTOMATION COMPONENTS AND ELECTRICAL LOCKING BE IMPLEMENTED?
- WHEN WILL THE PRESENT AUTOMATED PEDESTRIAN DOOR STANDARD BS7036 BE REPLACED WITH THE NEW EUROPEAN STANDARD prEN 12650?

Secure room in venue

- WHAT WILL BE THE BALANCE BETWEEN SECURITY AND AESTHETICS IN 2012 FOR HIGH SECURITY MULTIPOINT LOCKING?
- WHAT CHANGES WILL THERE BE IN THE FIRE DOOR ASSEMBLIES REGULATIONS AND STANDARDS BY 2012?

Enters broadcast and press centre

- HOW WILL THE PRESENT POLITICAL SITUATION IMPACT UPON THE FUTURE REQUIREMENTS FOR BLAST- AND BALLISTIC-RESISTANT HIGH SECURITY DOORS?
- WHAT ACOUSTIC AND VIBRATION REQUIREMENTS MIGHT BE REQUIRED FOR BROADCASTING ROOMS?
- WHAT WILL BE THE APPEAL PROCEDURE FOR WRITTEN RELAXATION FOR ESCAPE REQUIREMENTS TO ALLOW SILENT ELECTRICAL LOCKING TO BE USED?

Security store room

- HOW WILL UNAUTHORISED KEY DUPLICATION BE AVOIDED IN THE FUTURE?
- WHAT IS THE FUTURE OF AUDIT TRAILABILITY FOR OFFLINE DOORS?



Spectators from Ethiopia, athletes from China, coaches from the USA – all deserve a gold standard for safe, secure access and egress around the 2012 Games. With many cultural and language challenges to meet, systems must be intuitive, second nature and faultless in their performance.

By far the largest of the user groups, the spectators, is the least experienced in using accessibility systems. Spectators are not available for training as are the other groups. They will need to access and egress with minimum disruption and intrusion, enjoying maximum safety and security. This is the greatest design challenge for the access systems supply team.

Entrance to the Olympic park

- WHAT WILL PREVENT MISUSE OF SPECIAL NEEDS PASS GATES INTEGRATED WITH TURNSTILES

Entrance to stadium

- CARD VALIDATION SYSTEMS – HOW WILL I.T. INTEGRATE WITH LOCK SYSTEMS AND WHAT PROTOCOLS SHOULD BE ADOPTED?

Exit stadium

- HOW WILL DOCUMENT M AFFECT VOMOTORY DOORS FOR DDA EGRESS

17,000 athletes and officials
70,000 staff and volunteers
millions of spectators

European standards

It is now possible to use European standards to assemble an integrated accessibility schedule that includes door sets with frames and seals, ironmongery and all physical security components from fencing to turnstiles.

Best advice

The UK is well served with best-in-class industry members at hand to advise on security for major events. Accessibility is a key component in the protection of visitors to the Games, with technology now allowing complete integration between systems that are correctly specified and implemented.

Whole life costs

‘Whole-life cycle’ costings from recognised test facilities can now be created for all ironmongery products, ensuring they will meet the ODA’s legacy requirements. Selecting proven, high performance, top brand products that have a long term future will provide the best insurance against premature component failure and expense.

Universal commonality

Simple-to-apply standards can be built into the specification from the outset including, for example, agreeing a universal commonality of lock case size, whether mechanical or electro-mechanical, to simplify security amendments at fit-out and to facilitate maintenance into the legacy period.

Interconnectivity

Reducing the likelihood of communication problems between different physical security component suppliers can be achieved by appointing one integrated supplier that will take responsibility for the design, supply and installation of all gates, doors and ironmongery.

Legacy

Long term operational success and dependable maintenance of the accessibility systems is essential to meet the ODA’s legacy objectives. This can best be achieved if the supplier has the financial stability of a global corporation and controls the manufacturing sources of the physical security products,

Local needs, local people

Local warehousing of the physical security products prior to fit out gives greater assurance of an on-target fit-out. The engineers who carry out the installation should be the same as those who deal with snagging post-installation. This promotes a blame-free process across all integrated systems.

The accessibility project check-list

Ensuring legacy is achieved

- QUALITY PRODUCTS
- BALANCE OF STYLE AND PERFORMANCE
- WORLD CLASS SUPPLIERS
- VALIDATED WHOLE-LIFE COSTING

Adding value

- THE CRITERIA ABOVE ADD VALUE FOR END USER
- EXCEED PERFORMANCE STANDARDS
- R&D FOCUSED ON USER SATISFACTION

Ensuring Simplicity

- MARKET LEADING SUPPLIERS OPERATING TO HIGHEST STANDARDS GIVES PEACE OF MIND
- SINGLE CONTACT FOR INTEGRATED ACCESSIBILITY SYSTEMS AND COMPATIBILITY OF PRODUCTS
- INTEGRATED SUPPLY CHAIN MANAGED BY SINGLE SOURCE FROM DESIGN THROUGH SUPPLY, INSTALLATION, COMMISSIONING, MAINTENANCE
- ENSURE THE BIDDING TEAM IS THE DELIVERY TEAM

Reducing risk of non-delivery

- IDENTIFY RISKS AND COLLABORATE WITH SPECIALISTS
- CONTROL MANUFACTURING SOURCE
- CONFIRM CREDENTIALS OF SUPPLY CHAIN
- LOCAL OR ONSITE STOCKHOLDING
- FINANCIAL SECURITY

Ensuring compliance

- WORK ONLY WITH EXPERT KNOWLEDGE OF PERFORMANCE STANDARDS AND REGULATIONS
- ENSURE COMPATIBILITY AT ALL POINTS OF INTERFACE BETWEEN ACCESSIBILITY SYSTEMS AND OTHER PHYSICAL SECURITY COMPONENTS INCLUDING CCTV, FIRE ALARMS, ACCESS CONTROL, COMMAND CENTRE

Delivering programme timeline

- DELIVER ON TIME THROUGH EFFECTIVE PROJECT MANAGEMENT
- EARLY DIALOGUE WITH SPECIALISTS
- IDENTIFY ALL POTENTIAL PROBLEMS AND RESOLUTIONS
- CHOOSE TO WORK ONLY WITH WORLD CLASS SUPPLIERS

Through this document, A³G has identified a range of accessibility and physical security challenges for assessment and resolution. Some are project specific, others generic to all Games venues. While the Olympic Delivery Authority and their advisers will be aware of much of the content, A³G believes there is a need for early dialogue with manufacturers and that a collaborative approach is the way forward, resulting in an integrated, fail-safe accessibility solution.

As the challenges are recognised and resolved, compromises between safety, security, access and egress will be minimised or removed.

A³G is committed to contribute its collective experience to the 2012 Olympics. This document is an invitation to the ODA and those involved in the delivery, to enter into dialogue with the purpose of providing the best possible security at the Games.

To be included in this process and receive relevant papers published by A³G, please register your interest with nick.carroll@a3gp.co.uk



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