

**Going for Gold: Construction success in  
health and safety**

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**Bundeskoordinatorentag 2012**

**8 November 2012**

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Director for London 2012 Games  
Health and Safety Executive**

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- **Introduction**
- Enforcement Framework
- UK Construction Industry
- London 2012 Construction Project
- Regulation in Practice
- Legacy

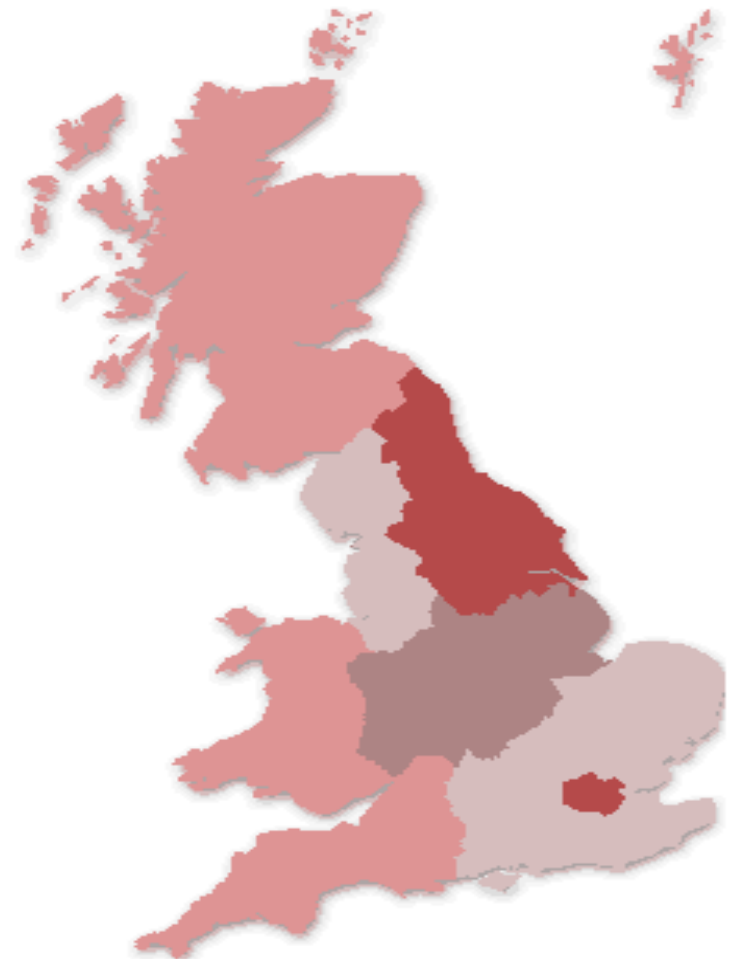
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## Introduction

- National Regulator (with local authorities)
- Policy
- Science/Intelligence
- Enforcement
- England; Wales; Scotland



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- Introduction
- **Enforcement Framework**
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## Enforcement Framework

- Health and Safety at Work etc. Act 1974  $\equiv$  Framework directive
- Specific Regulations ( e.g. Construction Design & Management Regulations  $\equiv$  Temporary Mobile Worksites Directive)
- General regulations



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## Enforcement Framework

- Principles - targetted; proportionate; accountable; transparent; consistent

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## UK Construction Industry

- 1.82 million people
- 10% GDP
- Poor accident record
- Poor health record
- Many small firms



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## UK Construction Industry

### Poor safety record over 10 years:

- 750 fatal accidents (workers and public)
- 48,000 major injuries

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## UK Construction Industry

### Poor health record:

- 1,000 deaths per year – asbestos exposure
- 500 deaths per year – silica exposure
- 59,000 cases of musculoskeletal disorders
- 3.5 times the all industry average for deafness

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## UK Construction Industry

- Fragmented (> 202,0000 firms)
  - 93% of companies < 14 workers
  - 70% < 3 workers

Difficult to regulate!

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## London 2012 Construction Project

**“Our vision is to  
use the power  
of the GAMES  
to inspire  
lasting  
change”**

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## London 2012 Construction Project

- 30+ venues
- 600+ training camps
- 203 Countries
- 21,800 athletes and team officials
- 22,000 media people – 4 billion global audience
- 9.2million tickets
- 250,00 workforce including 70,000 volunteers

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## The 'big build'

- From 2008-2011, five new permanent venues, 11 residential blocks, 30 bridges, roads, underpasses, rail lines, school, electricity substation built

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## London 2012 Construction Project - Challenges

- Showpiece event- timebound
- Multiple principal contractors
- Major procurement exercise
- Diverse workforce- Strategy for Equality and Inclusivity
- Skills gap-training centre
- Innovative designs
- Gold fish bowl



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## London 2012 Construction Project – Challenges

- Enabling (demolition and remediation, tunnelling, powerlines undergrounding)
- Design and build
- Fit-out (Overlay)
- Test events
- Post-test/pre-games
- GAMES!

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## London 2012 Construction Project – Challenges

- Post-Games/Pre-Paralympic overlay
- PARALYMPICS GAMES!
- Removal of overlay
- Deconstruction
- Legacy transformation
- Legacy operation

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## London 2012 Construction Project – Challenges

The challenge of regulating one of the biggest infrastructure projects in Europe became an opportunity to drive up standards of health and safety in several sectors:

- construction
- event management
- broadcasting

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## Regulation in Practice

### Coalition Government Statement 20 May 2012

“ to ensure a safe and successful Games and to deliver a genuine and lasting legacy”

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## Regulation in Practice

### HSE aims for London 2012

- To enhance our reputation as a best practice regulator
- To work with others to drive up standards of health and safety and welfare
- To capture lessons learned for future application – e.g. Glasgow Commonwealth Games 2014

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## Regulation in Practice

### Olympic Delivery Authority (ODA)

- Public body tasked with constructing the main venues and infrastructure
- Construction client
- Appointed Delivery Partner for assurance (CLM)

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## Regulation in Practice

### London Organising Committee of the Olympic and Paralympic Games (LOCOG)

- Responsible for preparing the venues and staging the Olympic and Paralympic Games



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## Regulation in Practice

### HSE Intervention Strategy:

- High level statement: key risks
- Early engagement
- Assurance

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## Regulation in Practice

### HSE Intervention strategy

Key themes:

- Transport
- Broadcasting
- Volunteers
- Construction
- Event  
management

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## Regulation in Practice

- Focus on HSE's core agenda
  - Leadership
  - Competence
  - Roles and responsibilities
  - Management of contractors
  - Worker engagement

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## Regulation in Practice

### ‘Enabling regulator’

- Clear objectives set from the start
- Transparency – published Intervention Plan
- Early intervention to seek assurance
- Risk based
- Proportionate

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## Regulation in Practice

### Driving up standards

- Early discussion
- Sample inspections from outset
- Targetting key risks
- Enforcement as necessary
- Frank feedback to dutyholders

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## Regulation in Practice

### Temporary Demountable Structures

- Broadcasting towers
- Scoreboards
- Speaker gantries
- Video screens
- Seating stands
- Sponsors stand/hospitality  
buildings

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## Regulation in Practice

### Effective management of Temporary Structures

- Design
- Erection/dismantling
- Built as designed
- Safe use
- Modification

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## Regulation in Practice

### Driving up standards

- Initial planning and consideration of key issues- designing out risks from the start
- Challenged subcontractor to provide safer method of working at height that minimised need for abseiling



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## Regulation in Practice

Driving up standards

External skin mock up

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## Regulation in Practice

### Driving up standards

#### skin to structure

#### External skin to structure

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## Regulation in Practice

### Construction Co-ordinators

- Met monthly to review work and share lessons
- Established a programme of design reviews
- Challenge function during design phase
- Continuity of co-ordination in design and construction phase

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## Legacy

- HSE/ODA's London 2012 Learning Legacy programme to capture good practice
- HSE funded research reports
  - Leadership and worker involvement
  - Occupational health
  - Dutyholder roles and impact
  - Safety culture
  - Preconditioning for success



London 2012 Games

HSE's role

+ 'Big build'

+ Getting ready

Games time

+ Lessons for industry

Frequently asked questions

Related content

- Health and safety in the construction industry
- Health and safety in the entertainment and leisure industry

# London 2012: helping to secure a safe and successful Olympic and Paralympic Games

HSE stated at the outset our commitment to act as an enabling and proportionate regulator for the London 2012 Olympic and Paralympic Games. We have worked with the key dutyholders to ensure that consideration of health and safety is integral to the project at every stage. Our strategy has been based on early intervention to advise and seek assurance, coupled with targeted inspection of high risk activities.



[More about HSE's role in London 2012](#)

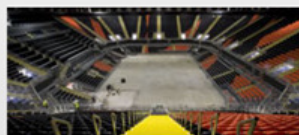
## 'Big build'



The main venues, Athletes' Village and infrastructure, built with an exemplary health and safety record.

[More about 'big build'](#)

## Getting ready



Preparations for staging the Games - the biggest ever peacetime operation in the UK.

[More about getting ready](#)

## Games FAQs



Questions and answers on HSE's role in the London 2012 Games.

[Read the FAQs](#)

## Latest news

## Subscribe

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## **Legacy - Achieved:**

### **Driving up standards**

### **An exemplary safety record**

- No work-related fatalities in 6 years of construction
- 80 million hours worked
- 30 periods of one million hours worked without significant injury
- Accident frequency rate of 0.16, against UK all-industry average of 0.21

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## Conclusions

- Excellent standards can be achieved
- Sensible health and safety enables delivery
- Good management of health and safety is simply one aspect of good management



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## Conclusions

### A focus on:

- Leadership (Client; principal contractors)
- Clarity of purpose (Shared view of risks)
- Sharing of expertise (Competence)
- Worker involvement (Respect)
- Common culture (the way we work)

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**Legacy**

**= Success**