

**London Olympic
and Paralympic Games 2012**

HSE Construction Division

**Intervention Strategy and delivery
arrangements for regulating the
Construction Phase of the London 2012
Venues and Infrastructure**

INTRODUCTION

Scope

1 This Strategy covers construction projects on the Olympic Park, the Athletes Village and other sites related to London 2012 where the Olympic Development Authority (ODA)/CLM or the London Organising Committee of the Olympic Games (LOCOG) is the construction client or is closely involved. The construction work will include fit out of London 2012 venues by others, for example, the Olympic Broadcasting Service, and LOCOG construction overlay of new and existing venues. Annex 1 describes the key organisations involved. The strategy takes account of the ODA's Health, Safety and Environment Standard which is published on the ODA website.

2 The main venues for the London Olympic and Paralympic Games will be in the Olympic Park in Stratford, East London. The site extends over 500 acres of formerly mixed-use land- both industrial, residential and 'brown field' sites; much of the land was contaminated from its former industrial uses. The land is in the lower Lea Valley and the Park (roughly the size of Hyde Park) and contains a number of natural and artificial waterways which have now been opened up to become a prominent feature of the Park itself. There are other venues outside the Olympic Park that will need significant construction work to get them ready for the Games.

3 By July 2010, almost all the enabling works has been completed and the 'big build' of the main venues on the Olympic Park is more than 60% complete. Fit out of the venues is starting on some of the sites. ODA/CLM is more closely involved with the building of the Athletes Village, and this project now has seven separate principal contractors. The 'big build' will be completed in the first half of 2011 and venues will be progressively handed over. Later in 2011, LOCOG is due to commence 'Games overlay' construction work in Olympic Park venues and the erection of temporary venues such as the equestrian centre at Greenwich Park. Most of the venues and the Athletes village have legacy uses which will involve further construction work after the Games have been staged. Some of the venues will be dismantled and erected elsewhere in the country. Venues such as the Olympic Stadium and the Aquatic Centre are designed so that they can be converted to smaller facilities for legacy use.

4 Stratford City is a major shopping/business development which lies between Stratford International station and Stratford Regional Station, immediately adjacent to the Olympic Park. That project is not covered by this strategy.

5 The ODA has a responsibility under section 10(2) of the London Olympic Games and Paralympic Games Act 2006 for an 'Olympic Transport Plan' in order to ensure that transport to and from the Games is sufficient. ODA is therefore providing grant-aid to help ensure that vital transport infrastructure projects being undertaken by TfL, LUL, DLR and Network Rail are completed in time and to the necessary scale and quality for the 2012 Games (e.g. the Stratford Regional Station upgrade and new sections of track, stations and platform extensions for DLR); The ODA is not the construction client for these projects, and they are not covered by this intervention strategy.

6 This is the third version of the HSE Construction Division's intervention strategy covering construction work.

CONSTRUCTION DIVISION INTERVENTION STRATEGY AND DELIVERY ARRANGEMENTS

Strategy

7 The goal for HSE's regulatory work is to satisfy ourselves that duty holders are achieving high standards of health and safety compliance throughout the design and construction phases of the venues and infrastructure for the Games. We will make sure that proper consideration is given to the risks arising from the use and maintenance of structures, and from the need to modify or dismantle them in legacy mode. In particular, we will be seeking:

- Strong leadership from the ODA, LOCOG and others in the supply chain in championing the importance of, and a common sense approach to, health and safety;
- A clear commitment to ensuring and developing the competence of all workers involved in the construction of the games venues;
- An active promotion of the value and benefits arising from worker involvement in the management of health and safety on site.

8 Our strategy is based on the principles of effective inspection and enforcement set out in the Hampton Report of 2005. In implementing the strategy we will ensure that we:

- make best use of Construction Division's limited resource;
- carry out timely and **proportionate** interventions to promote compliance, **targeting** higher risk activities and challenging inadequate arrangements;
- promote a **consistency** of approach with colleagues and other Regulators to avoid duplication.

9 We are committed to ensuring that lessons learned and good health and safety practice developed during the construction of the games venues will be shared across the whole industry. The goal is to contribute to the lasting legacy from the Olympic project in line with the stated objective of the Coalition Government's Programme (Ch. 7). See also para 18.

Progress to date

10 Our approach to date has been to engage early with construction clients in order to satisfy ourselves that they have adequate arrangements for ensuring that projects are properly managed. We have intervened with selected projects to:

- check that there are suitable processes for identifying and eliminating risks during the design stage (including use, maintenance and legacy), or reduce such risks to an acceptable level before the main construction work starts;
- visit projects early in the construction phase to check that the principal contractor's basic site arrangements (including transport plan, site security, induction and worker engagement) are to a high standard;
- discuss the intended controls for higher risk work activities with the relevant specialist contractors - normally we will seek a presentation;
- carry out sample follow up inspections to check that systems of work match those described, that HSE priority topics (such as workplace transport) are being managed and arrangements for controlling interfaces with neighbouring sites are working properly.

11 While the main phase of 'big build' is now well advanced, some construction projects have yet to start, for example some temporary venues and 'Olympic Overlay' construction. We have not intervened with all principal contractors responsible for Olympic venues and infrastructure projects- we have assessed the need to intervene depending on the scale and nature of the work planned, the consequent risks and Construction Division priorities. Occasional site visits have been made to

work areas not selected for planned interventions to assess the nature of the risks and ensure they are being properly controlled.

Proactive Interventions

12 The construction team of inspectors covering NE London (FMU 86) will continue to undertake interventions with ODA/CLM in order to maintain high standards of client management for all projects and for cross-Park issues (for example the allocation of areas in the Olympic Park between Tier 1 contractors and the management of interfaces). We will also continue to work with the LOCOG Venues and Infrastructure team to clarify their role and proposed arrangements for the design and construction of temporary venues and installation of 'Olympic Overlay'. We have met with the Olympic Broadcasting Service and will work with them to make sure the arrangements they make for the fit out of the Olympic Broadcasting Centre achieve equivalent standards.

13 For the projects such the Main Stadium and the VeloPark, responsibility for interventions has been allocated to small teams of inspectors drawn from units in Construction Division's London and East and South East Operational Unit (and supported by Specialist construction engineering inspectors). Each team is led by a principal inspector and includes at least two experienced inspectors.

14 These teams have prepared intervention plans for the projects based on the guidance in **Annex 2**. To aid consistency, all teams should consider the core agenda identified in **Annex 3** when drawing up their intervention plan. The Principal Inspector allocated to the project is responsible for ensuring that the plan is clear, deliverable and maintained.

15 Any new intervention started after 1st July 2010 will follow a similar pattern. If our early inspections provide confidence about the adequacy of management arrangements then the intervention plan may be adjusted to give a lighter inspection loading. If not, HSE will challenge inadequate control measures and take appropriate action in line with HSE's enforcement policy statement.

16 The Principal Inspector managing that project team will be responsible for ensuring that the plan is kept up-to-date; that it remains proportionate and is delivered (i.e. that targeted inspections are carried out when planned).

17 At each visit inspectors should take the opportunity to listen to any concerns of construction workers and ensure that safety representatives are seen or where these have not been appointed, that use is made of the site worker engagement arrangements to explain the purpose and outcome of visits.

18 Visits are also an opportunity to capture of good practice that can be collated and promoted as part of HSE's commitment to learning and legacy. Inspectors should in particular look for and note (a) measures taken to deliver the strategic objectives set out in para 7 above: leadership, competence and worker involvement and (b) measure that represent good practice that is above the minimum standard required by the law.

Cross-cutting issues, interfaces and unallocated projects

19 FMU 86 is responsible for any necessary interventions with unallocated project teams (e.g. some roads, bridges and utilities projects) and for pursuing any cross-cutting issues in the Olympic Park with the client, CLM Delivery Partner or LOCOG. Cross-cutting issues might include:

- interface problems between adjacent construction sites (e.g. site security, poor coordination of work at boundaries)
- the movement of people and materials into and away from the Olympic Park (logistics), matters concerning any work on the common haul roads and emergency arrangements within the Park

- CLM's Assurance role including monitoring/audit and the consistent use of Balanced Scorecards by Tier 1 contractors
- other matters concerned with the client's CDM duties (and the role of CLM Delivery Partner on behalf of the client)
- CLM Delivery Partner's role as a principal contractor for some projects

That team will also pursue its separate intervention plan for the neighbouring Stratford City development, taking account of any interface issues with the Olympic Park. Responsibility for inspecting facilities such as two batching plants and docks work rests with FOD London.

20 If inspectors identify any cross-cutting issues, or have concerns about issues seen on adjacent sites, then these should be raised with FMU 86 and the relevant principal inspector (if the project has been allocated to an HSE team). If neither can be contacted and the matter is urgent the inspector should contact the relevant Single Point of Contact from CLM health, safety and environment team.

21 HSE expects appointed principal contractors to discharge their responsibilities under CDM 2007 and the Management of Health and safety at Work Regulations 1999 with regard to defending their own site boundaries and coordinating work with neighbouring contractors.

22 When appropriate, FMU 86 will make arrangements for inspectors to receive a Park 'introduction' by CLM so they may use Park transport unaccompanied to carry out an unannounced inspection of particular projects (an additional site induction may be needed at that venue). Inspectors should be mindful that protective gloves and eye protection are mandatory on ODA sites in addition to Hi-Vis, hard hat and safety boots (not rigger). There may also be special training requirements for inspectors visiting some projects (e.g. work over water and possibly media training). Although inspectors will provide Park Health (the ODA-funded OH provider) with limited health information during the Park introduction, HSE staff are not expected to take part in the Park drug and alcohol testing programme.

Other projects outside the Olympic Park

23 For other Olympic-related construction work such as Games overlay at off-Park venues, transport-related projects and training centre upgrading the local Construction Division team will assess the need to intervene taking account of the scale and nature of the work planned, the consequent risks, the client commitment to high standards and Construction Division current programme of work. The client for such work might be ODA, LOCOG or an organisation unfamiliar with the ODA health, safety and environment standard. A sample of such work will be monitored to assess the likely risks.

Reactive Work:

Complaints

24 Complaints will be normally be taken by London complaints team in Rose Court and will be handled in accordance with currently agreed FOD procedures. If the matter is serious or the notifier is not satisfied with the ODA hotline they will be referred to the HSE team responsible for work in the project. That team will refer the complaint to the relevant contact in the project team for resolution. If necessary, contact the ODA Head of Health and Safety and record it with the complaint case linked to primary inspection case for that project. Our aim is to resolve complaints without a site visit where possible, using Construction Division's established complaints handling procedures. The relevant HSE team will subsequently advise the notifier of the outcome.

Accidents

25 Arrangements have been made with CLM for FMU 86 to be alerted automatically to any RIDDOR-reportable incident. The 'responsible person' for the project concerned will send details for the subsequent F2508 to ICC in due course. FMU 86 will then advise the allocated HSE team. The principal inspector responsible for the project will decide how any mandatory investigation of a

notifiable incident will be pursued. If adequate resources are not available for an investigation the incident will be referred to Head of Unit as a DRF in the usual way (with an explanation of the action already taken). Non-mandatory investigations are unlikely to be justified on resource grounds. However, the responsible principal inspector will want to be satisfied that a thorough internal investigation has been undertaken and relevant lessons learnt and applied (see ODA H&S standard).

26 If a serious incident occurs requiring an urgent HSE site presence in the Olympic Park FMU 86 and the team allocated to the project are both likely to be contacted. The agreed handling plan for incidents should be followed in all circumstances. For out-of-hours incidents, normal arrangements will apply for 'major incidents' (the HSE Duty Officer system).

27 In practice, it is recognised that one of London-based teams may need to provide a timely 'first response' (e.g. to capture key evidence, ensure effective action to control risk and where appropriate to work with the Police under the 'work-related death' protocol). Thereafter, responsibility for taking investigation forward will normally rest with the allocated team. CLM/ODA has been advised of the principal inspector (office contact details) for the allocated projects.

28 An HSE decision log should be maintained for each such investigation started by Construction Division London and ESE Unit.

Enforcement Action

29 Any enforcement action taken will be in line with HSE's published enforcement policies and procedures. For each project, enforcement decisions within that project's boundaries will be the responsibility of the allocated Principal Inspector and inspection team. If enforcement action is warranted in relation to issues which extend beyond the project boundaries this should be discussed with FMU 86. Enforcement action is likely to attract media attention and it is important that information about such action should be passed on promptly. Whoever is available at the time who will in turn alert the Director for FOD London and the 2012 Games, the Director for Construction, and the HSE Press Office and the HSE Secretariat.

Communications - internal

30 Good communication between the HSE teams responsible for interventions with Olympic projects is essential. Workshops will be arranged at least six monthly to enable allocated inspectors to share experience of good practice, discuss progress and resolve any difficulties; the initial workshop took place at Rose Court on 7th December 2007 which led to the first construction intervention strategy.

31 It is particularly important that if inspectors have concerns about health and safety arising at or adjacent to a particular project are reported promptly to FMU 86:

- they affect work on the haul roads and entrance plazas or other common parts controlled by CLM Delivery Partner and areas where CLM is principal contractor
- involve the relationship between the principal contractor and the ODA or CLM
- concern or affect a project allocated to another team
- could have health and safety implications for other 2012 projects e.g. an inspector finds defective plant or a dangerous system of work that may be in use at other projects

FMU 86 will be responsible for resolving these issues with ODA and CLM but arrangements can be made for joint interventions as the need arises.

32 FMU 86 and HSE's London 2012 co-ordinator need to be aware of HSE progress with intervention plans. Any concerns and assessments of good performance should be prepared in order to brief relevant officials and others as required.

Communications - external

33 The London Olympics team hold regular meetings with local authority health and safety regulators – primarily with the head of public health at LB Newham, the acting head of JLARS and his team. JLARS officers are likely to have increasingly frequent contacts with ODA, LOCOG and others as they take forward their regulatory responsibilities for food safety, safety in sports grounds issues etc; we are already cooperating on design matters related to CDM designer duties. As their site presence builds up it is likely that local authority colleagues will wish to draw our attention to any health and safety concerns they have. At first instance, FMU 86 will receive notification of such matters (even if CLM staff are notified in parallel). They will then quickly alert the allocated team - who will be best-placed to decide whether urgent action is required and who they need to contact in the project team.

Legacy

34 We will contribute to the FOD London 2012 team's outputs to capture and share good practice and lessons learned from the construction phase. This will entail identifying and collating suitable material for promotion on HSE's London 2012 webpages and elsewhere – see the health and safety learning legacy. The HSE London 2012 team will be responsible for managing the webpages.

35 We will use Unit meetings, team meetings and inspector workshops to identify opportunities for identifying and promoting good practice and work with Construction Sector and the London 2012 team to assist with the development of material for the website.

Annex 1

THE MAIN PLAYERS:

DCMS:

A1.1 The Department for Culture, Media & Sport (DCMS) leads for Government on the delivery of the Games. They are responsible for setting and controlling the budget, which currently stands at around £9 Billion, raising the money and releasing the funds to those constructing and staging the Games. DCMS is also responsible for bringing together the legacy benefits brought by all the wider sporting, cultural, environmental, educational and business enterprise initiatives that will take place all over the country as a result of the Games before, during and after 2012. Jeremy Hunt is the Secretary of State for the Olympics supported by Minister Hugh Robertson. Both are based in DCMS. The Government Olympic Executive is part of DCMS and reports to the Minister for the Olympics.

A1.2 DCMS works closely with other key stakeholders - the LOCOG, Mayor of London, the British Olympic Association, the British Paralympics Association and other Government departments and relevant bodies - on preparations for the Games.

The ODA:

A1.3 The Olympic Delivery Authority (ODA) is a single purpose vehicle created by The London Olympic Games and Paralympic Games Act 2006. It is the public body responsible for procuring the designs and appointing the contractors building the new venues and infrastructure for the Games and their use post-2012. ODA is a 'thin' construction client and has appointed CLM Delivery Partner to undertake much of the work on its behalf.

CLM:

A1.4 CLM Delivery Partner Ltd (an organisation drawing staff from CH2M Hill/Laing O'Rourke/Mace) is the delivery partner appointed by the ODA to manage the construction programme for venues and infrastructure in the Olympic Park. At present, they have no remit for projects outside the Park but that may change as ODA's role develops. CLM is responsible to ODA for ensuring that the construction work is delivered on time, to budget and to the specified quality. CLM has specific responsibilities for Logistics (security plazas and haul roads) and has been appointed as principal contractor for certain areas of the Olympic Park.

LOCOG:

A1.5 The London Organising Committee of the Olympic Games and Paralympic Games Ltd (LOCOG) is the private organisation is responsible for preparing and staging and hosting the 2012 Games. LOCOG will also be responsible for:

- adding the 'Olympic overlay' to the purpose-built venues and existing venues, including building the stands and fields of play for temporary sites like Hyde Park - everything which changes an average sporting venue into a 'top of the range' showcase
- staging a series of test events in the year before the Games;
- recruiting and training volunteers; and
- overseeing the four year Cultural Olympiad leading up to the Games.

A1.6 LOCOG is led by Sebastian Coe (Chair) and Paul Deighton (Chief Executive). LOCOG will let most of the contracts for services to deliver and run the Games.

Olympic Board:

A1.7 The Olympic Board provides oversight, strategic coordination and monitoring of the entire 2012 Games project, ensuring the delivery of the commitments made to the International Olympic Committee when the Games were awarded to London, and a sustainable legacy from the staging of the Games.

JLARS:

A1.8 The Joint Local Authority Regulatory Services is a partnership of the four London Boroughs that are most immediately affected by the staging of the Games - Newham, Hackney, Tower Hamlets and Waltham Forest. They have formed a partnership to better enable them to deliver Environmental Health (embracing licensing of sports grounds); planning (NB ODA has its own planning authority); transport arrangements; trading standards and other LA-provided services for the staging of the Olympics; ODA financial support is planned. They are drawing on expertise from other Local Authorities including Manchester who hosted the last Commonwealth Games.

JLAB

A1.9 The similar Joint Local Authority Building Control (JLAB) is likely to be responsible for Building Regulations approval for any new buildings associated with the Games – LB Greenwich is part of JLAB but not JLARS.

London Mayor

A1.10 The Mayor of London is Co-Chair of the Olympic Board, which oversees the 2012 project. He also has particular responsibility for ensuring that Londoners benefit as much and as widely as possible from hosting the Games in 2012.

London Development Agency

A1.11 The Mayor's London Development Agency (LDA) is responsible for the physical, social and economic legacy of the Olympic Park area and is developing Olympic Legacy Masterplan.

Olympic Broadcasting Service

A1.12 The OBS is responsible for co-ordinating the activities of the main broadcasting and media organisations during the games. They will be the CDM Client for the fit out phase of the Olympic Broadcasting Centre.

Annex 2

Outline for intervention plan on London 2012 Games' sites

A2.1 Project intervention plans should:

- make best use of Construction Division's limited resource;
- ensure that timely and **proportionate** interventions are made to promote compliance, **targeting** higher risk activities and challenging inadequate arrangements;
- be **consistent** across the range of projects where we intervene taking account of the role of other Regulators to avoid duplication.

Project overview

A2.2 Provide a brief overview of what the project involves, including scale, cost, timescale, duration of construction phase, or major milestones and COIN inspection case details for site.

Key duty holders

A2.3 Provide details of main duty holders with:

- Names, contact addresses and phone numbers and other relevant information about them including COIN case details.
- Main contact for site about initial complains to be investigated by site team (not HSE) or early details about incidents to help with briefing and deciding on need for response.
- (as time goes on) other key interested parties e.g. LAs, pressure groups.
- Identify any complex contractual arrangements such as joint ventures and broad management arrangements for project including fielding complaints/dealing with self-investigation of incidents/statistical data relating to the site.

Our aims and objectives for intervening in the project

A2.4 Here you should record clearly what are your main aims and objectives for intervening with the project. To do so you will need to meet early (well before the construction phase begins) with the project management team (Client, designers, CDM Coordinators and Tier 1 Contractors if already appointed). You will need to establish the nature of the work; what are the key risks as you and they see them and how the team intend to measure safety performance (KPI's, surveys and monitoring arrangements etc). When discussing the project you should bear in mind the main aims of this strategy which are to encourage:

- Strong leadership from the ODA, LOCOG and others in the supply chain in championing the importance of, and a common sense approach to, health and safety;
- A clear commitment to ensuring and developing the competence of all workers involved in the construction of the games venues;
- An active promotion of the value and benefits arising from worker involvement in the management of health and safety on site.

You should explain this to the project team and that you will be developing an intervention Plan on you will consult them.

A2.5 When setting objectives for the project you will need to take account of the key risks which have been identified by you and the project team. You will also need to consider the relative importance of the risks. The objectives which you set should be tailored to the particular project and the key risks which it presents. They should be simple and straight forward, and should give the project a clear understanding of what you want to achieve from the interventions. You should

set objectives for each phase of the project- planning and design; main structural build, fit out and handover. You may wish to make sure that duty holders have identified key **'gateways'** e.g. pre-tender surveys & site restrictions identified; Key design stage meetings with the CDM co-ordinator; production of risk assessments and method statements for high risk operations; Competence checks and arrangements for worker engagement.

Key hazards/risks, proposed controls and when they are likely to arise

A2.6 Outline of the **major risks** as we see them at the outset, updated as time goes on. For each of these, in advance of the risk arising, you should ask for the client, design team/PS and Principal Contractor as appropriate to give a **presentation** explaining:

- their arrangements for addressing this risk as it is introduced to the project;
- Who will be responsible for ensuring the risk is properly controlled;
- How they will monitor performance and ensure that the preventative measures are implemented and effective.

Hazard/Risk	Proposed controls

Inspection Plan

A2.7. Having identified the **key issues**/phases/risks arising from the project and set clear aims and objectives for your interventions, you should now propose an inspection plan that will deliver these, taking account of the inspection resources you have available and other key Divisional priorities. Aim to make visits to the Designers, CDM Co-ordinator (and Tier 1 contractor when appointed) early in the project (by RIBA design stage C/D) to make it clear what our priorities are and what we expect of the major players. At least make sure these duty holders:

- have management and other arrangements to address their responsibilities under CDM 2007
- have appropriate arrangements for controlling the high risk activities that they have identified during the planning phase
- Have appropriate arrangements for managing the risks
- have H&S management systems for achieving compliance and set appropriate Key Performance Indicators/expected standards including for example developed Red/Amber/Green lists for the design team.

You should schedule in presentations from Tier1/Tier 2 contractors in advance of the main risks which you have identified being introduced to the project. You will also need to allow for one or two unannounced inspections to check that the commitments made during these presentations are delivered on site, and that the risks are being properly managed. The timing and number of visits will depend on the complexity of the project, the time you and others (such as SG inspectors) have available, the nature of the risks and when they are introduced and who you need to target. A Gantt chart, project drawings and programmes for the project may be useful.

A2.8. Share plan with project team and be prepared to amend plan (strike out/insert) if circumstances change. Consider a 'lessons learnt' meeting towards the end of the project, time permitting.

Proposed date of visit/meeting	Plan [Who will be visited, key risks targeted and for what purpose (e.g. designer to assess site layout mitigation/use of red/green/amber lists, client to check survey info & welfare or PC to make sure demo risks controlled)]

Recording Progress

A2.9 Guidance on recording visits is given elsewhere; however, you may wish to keep a separate record of progress with delivering the plan. You can do this by simply recording the dates of visits made, along with brief details of the outcome of the visit.

Date of meeting	Outcome [When was intervention done, by whom and brief summary of what was achieved (e.g. by agreed changes to design/additional control regimes)? COIN ref for SO details. Mention follow up action too.]

Annex 3 Core agenda for interventions

Key issues during Pre-Construction Phase

Leadership/Competence/Worker engagement

- clear evidence of strong leadership from directors/senior managers of key dutyholders
- effective arrangements for assessing competence of contractors including assessment of supervisors and other key individuals responsible for high risk activities;
- effective arrangements for induction, task briefing (on method statements) and consultation/sharing information with workers including migrant/poor English-speaking workers (PC arrangements to satisfy regulation 24 CDM duties)

Client and PC system of monitoring and feedback

- effective arrangements for performance monitoring at an appropriate level with mechanisms for ensuring that action is taken on appropriate timescales e.g. via formal direction, review meetings etc

Coordination and integrated team working

- evidence of close working between designers, CDM co-ordinators and Tier 1 contractors to ensure that key risks are eliminated and /or controlled;
- buildability and ongoing maintenance risks addressed and arrangements for legacy use are properly addressed.

Design in relation to new projects

- active use and development of Red/Amber/Green lists
- procedures in place to deal with design changes
- management system for active consideration of H&S and risk communication (risk registers and notes on drawings) during design including temporary works and design changes during construction phase.

Key Risks during Structural Build Phase

Management issues

Worker engagement

- effective arrangements for induction, task briefing (on method statements) and consultation/sharing information with workers including migrant/poor English-speaking workers (PC arrangements to satisfy regulation 24 CDM duties)

Supervision

- clear requirements for subcontractors to provide sufficient competent supervisors with evidence of competence provided to the principal contractor, especially for temporary works

PC system of monitoring and feedback

- active monitoring at an appropriate level with mechanisms for ensuring that action is taken on appropriate timescales e.g. via formal direction, review meetings etc

Safety

Control of Vehicles and Mobile Plant

- traffic management arrangements including pedestrian segregation (traffic plan with one-way system or designated reversing areas/competent operator/records confirming weekly site vehicle/plant checks)
- arrangements for deliveries (safe access to/means to prevent falls from vehicles)

- planned approach to selection and deployment of quick hitch systems on excavators with robust training, systems, and monitoring expected in any case where semi-automatic systems used

Good order and ground conditions

- arrangements for designated lay down areas for storage and waste plus dedicated housekeeping contractor or equivalent to keep work areas clear
- plans for firm, clear and level access routes and adequately compacted areas for plant such as MEWPs and engineered piling mats for piling rigs

Work at height

- planned application of protection hierarchy and selection of appropriate equipment by competent persons - elimination (e.g. prefabrication) and collective protection (e.g. sound edge protection including systems such as advance guardrails during erection and working platforms including MEWPs) over a reliance on personal fall protection (that would require a robust system of training/instruction/checking and rescue procedure)
- adequate provision for work over water

Lifting Operations

- lifting Plans prepared under the authority of an Appointed Person taking account of engineered ground conditions, preventing collisions between cranes and clear roles including competent supervisors
- project requirements for independent thorough examinations and periodic checking and planned maintenance with action records where remedial action identified

Health

Hand/arm vibration/Noise

- positive arrangements for eliminating (e.g. scabbling, pile head trimming) or restricting hand arm vibration (e.g. other use of hand breakers) and associated noise based on subcontractor evidence of proper assessments

Manual handling

- arrangements for product selection (weight/size) to reduce handling risks, planned use of mechanical handling equipment to move products to work areas and use of MAC tool or equivalent to help control risks during placing of product

Exposure to hazardous substances including contaminated soils and silica dust

- meaningful assessments that look at material data, route of exposure, sensible control measures and monitoring including role of occupational health adviser

Key risks during Fit Out and Handover

Control of deliveries

- arrangements for deliveries (safe access to/means to prevent falls from vehicles) with effective co-ordination/scheduling of sub-contractors, unloading arrangements, and planned storage/housekeeping
- traffic management arrangements maintained including pedestrian segregation (traffic plan with one-way system or designated reversing areas/competent operator/records confirming weekly site vehicle/plant checks)

Control of fire risks and emergency arrangements

- sensible fire plans based on a sufficient fire risk assessment
- active management of flammable waste and hot work
- fire detection and alarm systems installed and operational
- fire exit routes signed, protected routes kept clear and periodic fire drills

Good order

- arrangements for designated lay down areas for storage and waste plus dedicated housekeeping contractor or equivalent to keep work areas clear

Work at height

- planned application of protection hierarchy and selection of appropriate equipment by competent persons
- adequate provision for work over water

Control of lifting and manual handling risks

- lifting plans prepared under the authority of an Appointed Person and including competent supervisors and slinger/signallers
- arrangements for product selection (weight/size) to reduce handling risks, planned use of mechanical handling equipment to move products to work areas and use of MAC tool or equivalent to help control risks during placing of product

Commissioning of services

- arrangements for coordination of commissioning work, isolation procedures and permits to work where appropriate

Exposure to silica dust

- minimising the need to cut concrete and other products including chasing of walls, water suppression on the right equipment and/or other effective control measures being used

Ends

HSE Construction Division L&SE
February 2011