

Health and Safety
Executive



Building a Safer Future: Independent Review of Building Regulations and Fire Safety

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The Royal Society - 24th January 2018

Outline



- Overview of other regulatory regimes
 - Major hazards
 - Construction (Design & Management) Regulations 2015
- Highlighting objectives and particular challenges



Regulating high hazard industries



- Lord Robens (1972)

“The primary responsibility for doing something about the present levels of occupational accidents and disease lies with those who create the risks and those who work with them.”



- Flixborough (1974)

- Advisory Committee on Major Hazards

“The rarity of major disasters tends to breed complacency...”

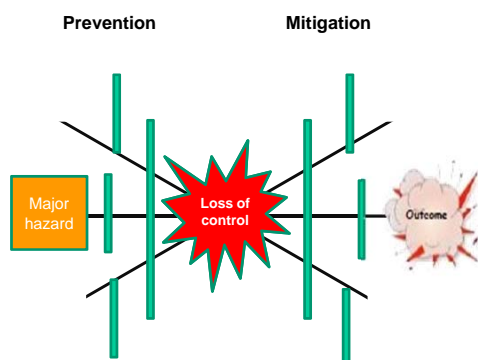
- Seveso Directives I to III

- Control of Major Accident Hazards Regulations 2015 - COMAH

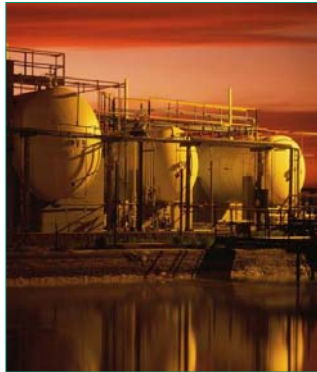
Major hazards approach



- **Operator** identifies, manages & controls risks throughout life-cycle of plant
- **Regulator** assesses operator's systems, identifies deficiencies, intervenes (even before plant is built), 'permits' operations
- **Workers and the public** gain independent assurance



Experience of major hazard regimes



- Requires investment by operator and regulator – regulators cost recover
- Takes time for processes, culture and behaviours to bed in
- Safety case/report seen as distraction or a hurdle to get over
- Strong leadership across and within businesses is crucial
- Good understanding of key vulnerabilities and barriers
- Operator competence
- Learning and sharing
- Focus on outcomes is key

CDM 2015



- Applies to **all** construction work
- Focus on managing risk on construction **PROJECTS** by those who create the risk
- Flexible, goal setting framework: sets standards to be achieved
- Compliance strategies will vary dependant on project risk profile
- A project is more than a construction site....




CDM objectives



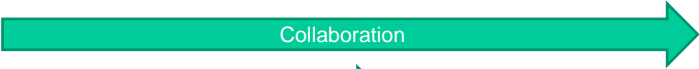


- **Integrates health and safety into project management**
 - Risk management not an after-thought or bolt-on
 - Improve communication and co-ordination
- **Clear roles and responsibilities**
Client – Designer - Contractor
- **Encourage collaboration**
 - Plan and manage from the outset, identify hazards early on
 - Target effort where it can do most good
 - Discourage unnecessary bureaucracy
 - Improved quality of the finished product

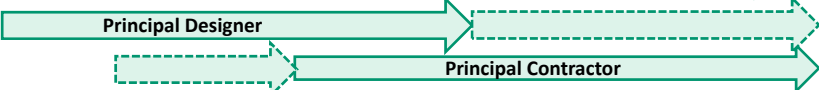
CDM 2015




Pre-construction Phase	Construction Phase
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Collaboration



Principal Designer



Principal Contractor

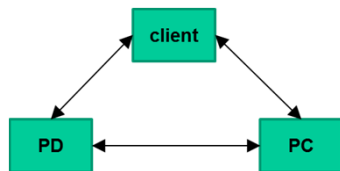
CDM Information	Pre construction information	Construction Phase Plan	H&S File
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BIM Common Data Environment	Concept Stage Options Models show mass Site evaluation Risk analysis	Design 3D Models Methods of construction Liaison with contractors Site logistics Define end user needs	Detailed design Clash detection 4D Models Constructability Using models to communicate Risk mitigation	Construction Information on risk informs CPP Visual method statements	Handover H&S File Maintenance info Information to inform ongoing risk assessment
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The client – enabler for success



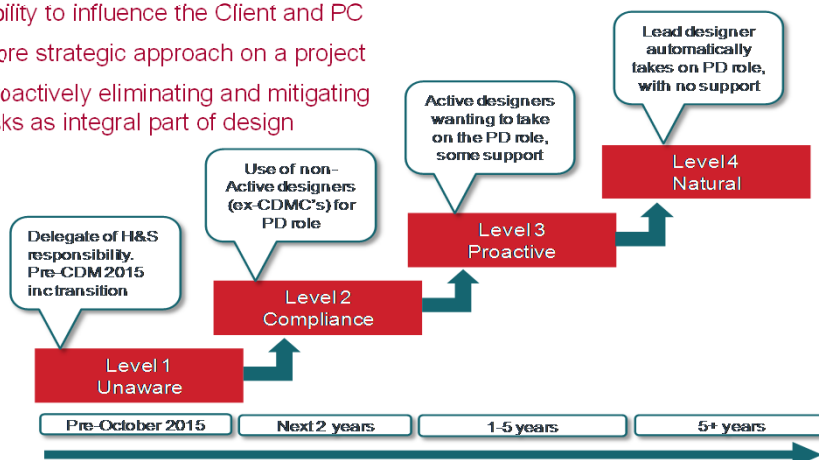
- Client viewed h&s as enabler for success and encouraged integrated approach
- Measurement of performance used to create strategies for improvement
- Worker involvement - reward and recognition for positive safety behaviour
- Contractors encouraged to adopt a 'health like safety approach'



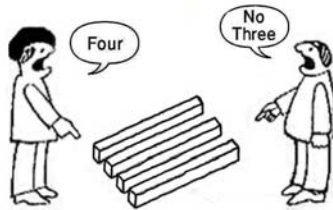
The principal designer



- Designers responsible for coordination and information flows
- Ability to influence the Client and PC
- More strategic approach on a project
- Proactively eliminating and mitigating risks as integral part of design

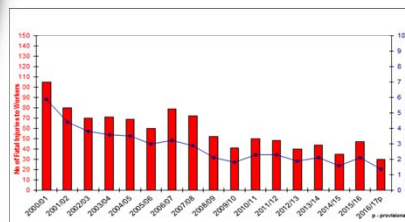


CDM 2015 – Competence



- Getting the right people for the job
- Individuals: Skills, knowledge, training and experience
- Businesses:
 - Organisational capability
 - Policies, structures, safe systems
 - Selection of supply chain & due diligence
- Ongoing industry reform of pre-qualification PAS 91 - risk-based assurance system
- 'Blue tape' challenge

Acting together



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Thank you

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