STAFFS & SALOP WWT TEMPORARY WORKS SEMINAR

PREVENTING CATASTROPHIC EVENTS IN CONSTRUCTION

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Catastrophic Events in Construction

Catastrophic Events are…

“events that are beyond the ordinary or routine and are characterised by being low probability but high consequence”
Catastrophic Events in Construction

Examples:

• Structural collapse of permanent structure
• Failure of temporary works
• Collapse of plant or equipment
• Fire involving major building/structures
• Disruption of underground services
Catastrophic Events in Construction

Potential consequences:

• Multiple deaths and/or serious injuries
• Off and on-site consequences
• Major disruption to infrastructure
Catastrophic Events in Construction

Additional features:

• Ability to adversely affect organisations commercially (financially and/or reputationally)

• Creation of public demand for action
HSE interest in catastrophic events

- RIDDOR and industry data gives a detailed picture of the construction industry’s conventional risk profile
- Less clear is the potential for low probability high consequence events
- Research needed therefore to ensure industry and HSE have the right solutions in place
HSE Response

• In 2010 HSE commissioned CIRIA to undertake research

• CIRIA partnered with Loughborough University who carried out literature review, analysed on-line survey results and undertook case studies

• Project overseen by a steering group – members from major contractors, professional institutions, the insurance industry, designers and others
Research report

- Published in February 2011 – HSE Contract Research Report RR834
  “Preventing Catastrophic Events in Construction”
CIRIA Guidance

• Complementary CIRIA document C699 “Guidance on Catastrophic Events in Construction” launched on 13 April 2011
Main Findings 1

**Issue:** The construction industry recognises that catastrophic events need further attention

- Preventive action over and above normal construction activity should be taken
Main Findings 2

**Issue: Corporate risk management systems should be improved**

- Construction companies should ensure their risk management systems include consideration of how well catastrophic events are managed.
Main findings 3

**Issue: Knowledge, skills and experience**

- more emphasis needs to be given to:
  - education of those who will be entering the industry
  - CPD and on-the-job training
  - development of more effective safety risk management systems
Main Findings 4

Issue: Communication and interface management

• More effective management of risk at interfaces between and within organizations is required
Main findings 5

**Issue: Competence**

- The industry should develop proposals for ensuring that inappropriate PCs (or more accurately inappropriate persons) do not become responsible for sites where there are risks which could lead to catastrophic events.
Main Findings 6

Issue: Management of temporary works

• The potential impact of failures of temporary works needs to be carefully considered to reduce the likelihood of a catastrophic event occurring and the industry needs to seek to improve performance in this vital area
Main findings 7

**Issue: Independent review**

- Project risk management should be improved including greater use of independent reviews to identify risks and learn lessons
Main findings 8

**Issue: Learning from experience**

- Industry needs to improve how it shares information to ensure:
  - Learning points are rapidly shared
  - Lessons can be incorporated into education/ training process
  - Information can be more easily accessed
Key priorities for industry action

• Changing perceptions about hazards:
  – probability
  – Impact

• Developing leading indicators to improve corporate risk management

• Improving competence so that, ultimately, project risks are managed more effectively

• Sharing experience more quickly and more widely
Action taken

- CONIAC Working Group has been established to review report findings, identify who is best placed to respond to the issues raised and monitor progress
Remit of CONIAC Working Group

- Receive and review the Contract Research Report, particularly the findings and conclusions
- Develop an industry-wide response to the report including identifying the “what, how, when and who” for taking forward workstreams to address the findings and conclusions
- Report to CONIAC on progress and advising on remedial actions, if necessary
Questions???????????