



Welcome

The risks and pitfalls associated
with the appointment of a
Principal Designer

Speakers:

Ian Whittles, HSE,
Tim Clark, Kendall Kingscott
Richard Parry, Ian Williams

Introduction



Kendall Kingscott



Mike Turner
Executive Director
Ian Williams

The Evolving Principal Designer Role

Ian Whittles

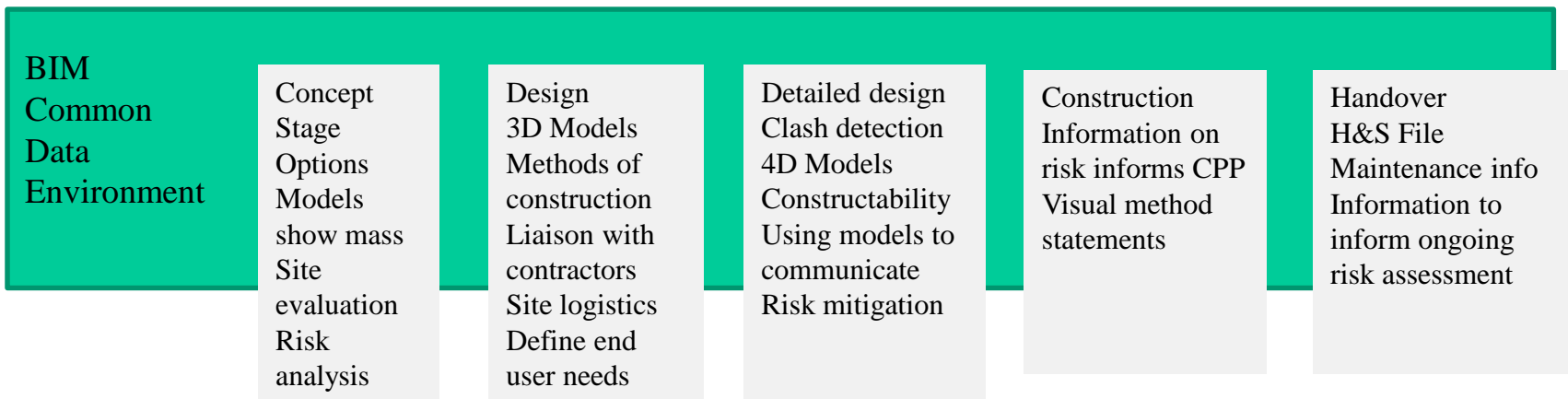
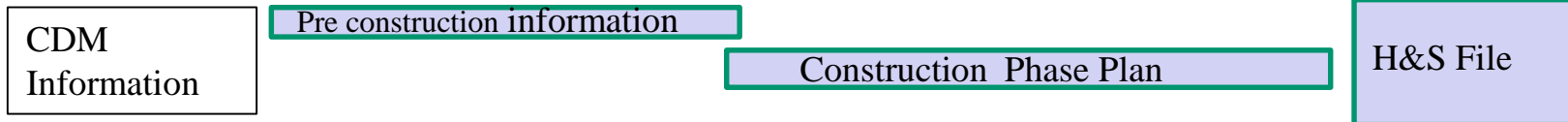
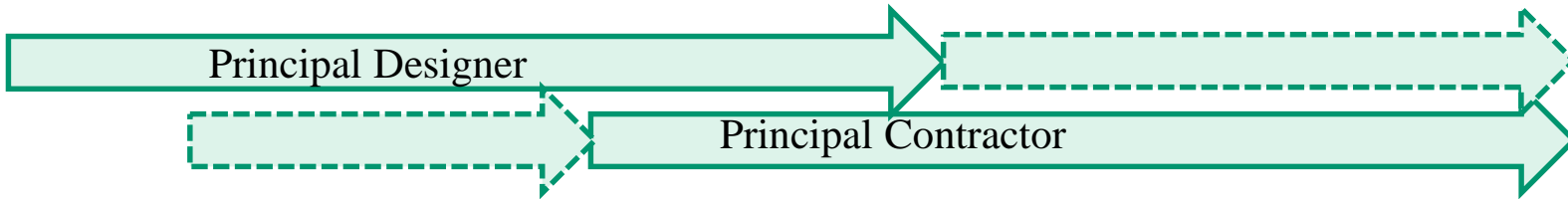
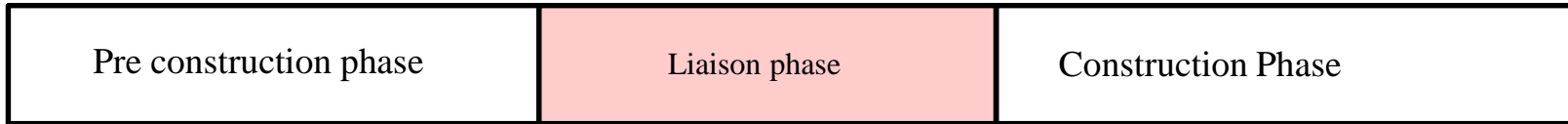
HM Inspector

Bristol Construction

The PD – Child of CDM 2015

- Born out of necessity
- CDM-C role was not working
- The PD Should
 - Strengthen design risk management and co-operation
 - Mirror the PC role in achieving co-ordination
 - Simplify Health and Safety in the pre construction phase

CDM 2015



PD Appointment – 5(1)(a)

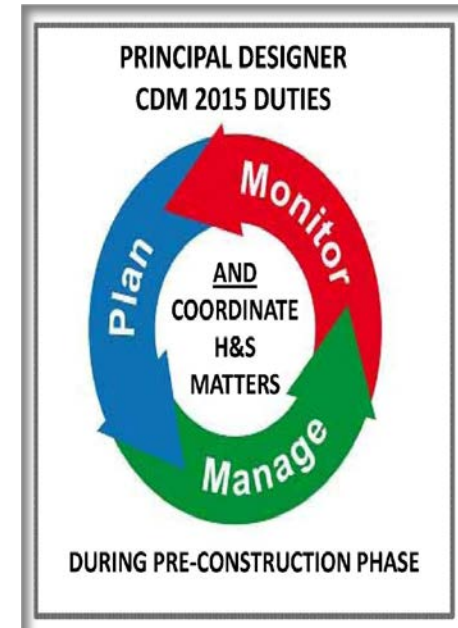
- Required where there is more than one, or reasonably foreseeable to be more than one, contractor
- Must be appointed in writing
- Must be in control of pre-construction phase
- Must be a designer
 - “designer” means any person (including a client, contractor or other person referred to in these Regulations) who in the course or furtherance of a business—
 - (a) prepares or modifies a design; or
 - (b) arranges for, or instructs, any person under their control to do so,
relating to a structure, or to a product or mechanical or electrical system intended for a particular structure, and a person is deemed to prepare a design where a design is prepared by a person under their control

PD requirements

- 8(1) - A designer (including a principal designer) appointed to work on a project must have the skills, knowledge and experience, and, if they are an organisation, the organisational capability, necessary to fulfil the role that they are appointed to undertake, in a manner that secures the health and safety of any person affected by the project.
- 8(2) - A designer ...must not accept an appointment to a project unless they fulfil the conditions in paragraph (1).

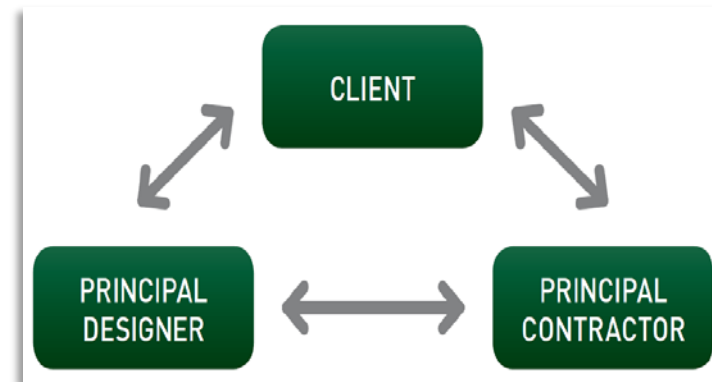
PD – main duties – regs 11 (1 to 7)

- Role is to plan, manage and monitor the pre-construction phase
 - To co-ordinate the health and safety
 - Pre-construction is defined as any period which design or preparatory work is carried out
- PD must:
 - **assist** the Client in identifying, obtaining and collating the pre-construction information
 - **provide** pre-construction information to Designers, the Principal Contractor and Contractors
 - **ensure** that Designers comply with their duties and co-operate with each other
 - **liaise** with the Principal Contractor for the duration of the appointment
 - **prepare** the Health and Safety file (possible handover)



PD role – what is industry trying to achieve?

- Designers taking responsibility during pre-construction
 - Mirror role to the Principal Contractor (PC)
 - Ability to influence the Client and PC
 - More strategic approach on a project
- Designers taking responsibility for health and safety
 - Health & Safety part of their design (not at the end)
 - Needs to be an integral part of design – not separate / part of the thought process
- Added value
 - Reduce no of duty holders
- Change accountability and behaviours
 - Perception of delegating H&S to consultant
 - Remove the Notifiable / Non-Notifiable behaviours

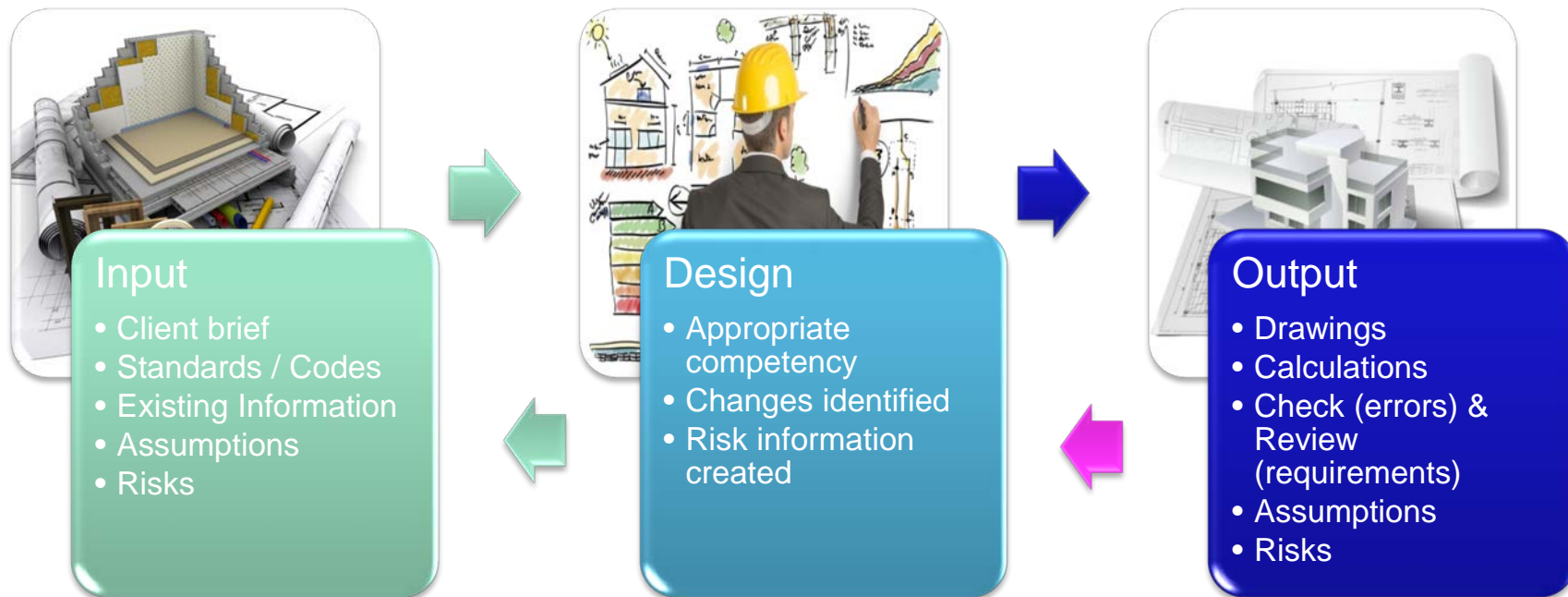


What we expect of the PD and the professional design institutions in support for developing the role.



Know CDM2015
Know the Principles of Prevention
Know how to influence the Client
Know how to manage the design risk process
Experience in benefitting from BIM tools
Confidence to influence the supply chain

PD is in control of process of risk management - but Client is key



Client resources PD

Client instructs PD

.....but Client is entitled to look to PD for leadership in Health and Safety

Principal Designer Risks & Pitfalls

A Practitioner's View & Experience

Tim Clark
Kendall Kingscott Limited

January 2017



Principal Designer Risks & Pitfalls

A Practitioner's View & Experience

Will be looking at:

- Complying with Duties and 'Tools' available
- Late Appointment, and Types of Appointment
- Typical Technical Issues
- Design Changes
- Not being 'Kept in the Loop'
- Security/ASB Issues
- Conclusions



Complying with Duties

Principal Designer duties – as Regulation 11, include...

- **Must** plan, manage, monitor pre-construction phase
- **Must** identify, eliminate or control, SFARP, foreseeable risks
- **Must** take into account General Principles of Prevention

More ***emphasis*** than the old CDMc role – previously had to ‘*ensure*’ arrangements were in place



Complying with Duties

Designer Duties under Regulation 9 of CDM 2015, include...

- Eliminate, reduce and control risk
- Take into account General Principles of Prevention

Designer duties have not significantly changed from CDM 2007 – but Principal Designer **MUST** ensure that they carry them out

Therefore – risk to the PD from poor Designer performance



Tools for Compliance – General Principles of Prevention

- These come from the Management of Health & Safety at Work Regulations 1999, Schedule 1
- Annex D of CDM 2015 “Industry Guidance for Designers” lists them and gives examples of applying them



Industry guidance for
Designers



Tools for Compliance – Red, Amber & Green Lists

- Annex E of CDM 2015 “Industry Guidance for Designers” includes the HSE Red, Amber, Green lists



Industry guidance for
Designers



Tools for Compliance - ERIC

Get to know ERIC

- Eliminate risks where possible
- Reduce to an acceptable level risks that cannot be eliminated
- Inforn those who need to know of the residual risk i.e. PD, PC, C etc.
- Control of residual risks, could be by the PC, C and end users, future maintenance contractors



Other Tools for Compliance

- Designer Risk Assessments
- Hazard Reduction and Risk Reduction Checklists
- CDM Risk Registers
- Attendance/Minutes of Design Team Meetings
- Other notes/discussions
- Reference to HSE Guidance, e.g. HSG 264 Asbestos Survey Guide
- All help demonstrate that the PD role has been properly executed



Late Appointment of PD

- PD should be appointed as early as possible in the design process (as per Regulations guidance)
- If not, it could be too late to be effective in reducing design risk
- APS have letter which refers to 'modified' PD role
- What if you don't like what you see?
- Who has been PD up to that point (whether they knew it or not), and what have they done?
- Being named as PD on the F10 form when most of the design was completed without your involvement – not very appealing?



Types of Appointment – Principal Designer

i) Principal Designer

- For projects where also appointed as designer

ii) Principal Designer

- For projects where not appointed as designer – has been clarified as acceptable by APS that **a** Designer rather than **the** Designer can fulfil the role (initially we thought this was not the case)



Types of Appointment – Adviser

iii) CDM Consultant/Adviser

- For projects where not acting as designers, and those involved do not have sufficient knowledge, experience or ability to undertake the role without assistance
- **Not a duty holder under CDM 2015**
- May be of use in larger /complex schemes, M&E design lead schemes, and design and build
- Prior to APS clarification, we thought this was the only alternative where we were not already the designer for the project



Typical Issues - Asbestos

- Correct type of survey - to HSG 264 by competent person
- Refurbishment Demolition Survey required for works, **not** a Management survey
- Rather than telling the qualified asbestos surveyor what to do, give them the details of the scheme and let them advise what is necessary for providing a targeted/localised R&D Survey suitable for the proposed works
- Place responsibility with the competent person, otherwise who is responsible for the scope of the survey?
- Watch out for caveats - read surveys carefully!
- Occupied premises/contractor design works – two stage process?
- Archetypes/cloning – again, take advice (refer to HSG 264)



Typical Issues – Work At Height

Edge Protection

- Sufficient height for duration of works? Think about when insulation is laid
- Can edge details be formed with kickboards in place? Are alternative provisions required, e.g. exclusion zones at ground level?

Fragile Surfaces

- How to temporarily protect – barriers, deck below?
- Can activities continue beneath?
- Avoid specifying – see R/A/G lists



Typical Issues – Work At Height

Fall Restraint versus Fall Arrest

- Fall arrest stops a fall that has already happened, whereas..
- Fall restraint stops a fall from occurring by restricting movement
- Therefore, where possible always go for **fall restraint**
- Prevention, rather than (a potentially very dangerous) cure

Maintenance Works

- When are ladders appropriate? – short term, e.g. less than 30 minutes



Typical Issues – Work At Height

- HSE WAIT Toolkit suggests methods other than ladders for a light task, despite equipment moves less than 30 minutes apart
- Food for thought.....

12/3/2016 WAIT Tool

[Home](#)
[What you must do](#)
[How to manage the risks](#)
[Selecting the right equipment](#)
[WAIT toolkit](#)
[Why is it important](#)
[Subcontract safely](#)
[Find out more](#)

WAIT Toolkit

If you don't work at height very often or are unsure about which type of access equipment to use, it is important that you assess the risks and select the right equipment for the job. The following table will provide you with some possible solutions.

It provides you with details of some of the most common types of access equipment. There are of course, also many other types of access equipment available.

Height of working platform	1.5 to 5
Work duration	Over 30 minutes
Time between equipment movements	Less than 30 minutes
Is access to the job restricted?	No
Work activity	Light
Does the access equipment need to be freestanding?	No

[CLEAR FILTERS](#)

12/3/2016 WAIT Tool

Results

Mobile scaffold: find out more	MEWP scissor multi user: find out more
MEWP scissor single user: find out more	MEWP boom multi user: find out more
MEWP boom single user: find out more	

The table does not specifically deal with horizontal reach. However equipment such as certain types of mobile elevating work platforms (MEWPs) will provide horizontal reach. You should always refer to the manufacturer's information for more details.

	Details	Approximately...
Is access to the job restricted?	Yes No	equipment requires larger width than a standard doorway equipment will fit through a standard doorway
Work activity	Light Medium Heavy	cleaning windows, replacing light bulbs, painting/decorating, inspection restoring roof tiles, or a similar patch of glass or light building works building, replacement of heavy machine parts

Why is it important?

HSE WAIT Copyright Important information Updates Contact

<http://www.hse.gov.uk/work-at-height/wait-tool.htm>

Typical Issues - Security/Anti-Social Behaviour Matters

- Vacant premises
- Squatters
- Syringes
- VIP properties, 'Visit In Pairs'
- Need to consider how to protect the workforce, whilst paying due regard to data protection issues



Design Changes

- Construction phase design changes need to be considered to the same extent as pre commencement design
- This is to eliminate the introduction of unintended risks into the project
- Process for dealing with these if PD appointment ended at commencement? Still need to have availability of competent person to advise in this regard



PD not being 'Kept in the Loop'

- Need to be wary of PD 'box having been ticked', and then being isolated from the design process – remember your duties
- Be wary if communications dry up



Conclusions

- The Principal Designer role is a significant responsibility with legal duties
- Need to have the relevant skills, knowledge, training and experience to fulfill the role
- In order to adequately discharge the duties, close liaison is required with the Designer(s), Client, and Principal Contractor
- Demonstrative involvement required in the role of PD – more than the CDM Co-ordinator
- It remains to be seen whether Designers will embrace the Principal Designer role or whether ‘specialists’ will be required to provide support indefinitely



Impact on Service Providers

Richard Parry
Ian Williams



The Contractors Conundrum

- The responsible contractor carries an obligation
- Can a contractor be a designer?
- Principal Contractor also the Principal Designer? Good or bad idea?
- Simply acquiesce? – The responsible contractor will not want to simply agree where they know it is wrong to do so
- A contractor may only accept the PC or the PD role where they can demonstrate a sufficient mix of skill, knowledge and experience that is *relevant* to the project for each role
- Inevitably many contractors will aim to avoid PD duties in all but the most simplistic of construction projects
- Mission creep?



Doing the right thing?

- Housing Association client awards work packages to three separate contractors
- Multiple but similar projects over 7 areas
- Three separate contractors all given written letters of appointment as PD
- No indication in bid documentation of PD requirement
- 3 x PD inputs = inconsistency
- Contractor options?



Supplementary conditions to an invitation to bid

(extract)

Article 4	Principal Designer (Delete 'CDM Co-ordinator') The Principal Designer for the purposes of the CDM Regulations is the Contractor or such replacement as the Employer at any time appoints to fulfil that role.
Article 5	Principal Contractor. The Principal Contractor for the purposes of the CDM Regulations is the Contractor or such replacement as the Employer at any time appoints to fulfil that role.



Doing the right thing

Extract – Design and build

6 Principal Designer

The Principal Designer employed by [REDACTED] City Council has prepared this Pre Construction Information document and developed the Project Design Risk Register in Appendix B. Under the Design and Build contract the appointed Contractor is to appoint his own Principal Designer as part of his Design Team and that Principal Designer is to take over the Principal Designer duties from the [REDACTED] City Council appointed Principal Designer.

As part of the Contractor's tender submission the Contractor is to provide evidence of their preferred Principal Designer's skills, knowledge and experience that are appropriate for work of this type in compliance with CDM 2015.



A dual role – desirable?

- It is a client duty to appoint a PD not the Principal Contractors
- The client must appoint a PD in writing. (reg.5 CDM 2015)
- The majority of the PD role occurs pre-construction phase. Appointment therefore must be as early as possible, ideally at the concept stage
- Adoption of role during life of the project
- Failure in timely appointment could result in additional cost and cause delay
- Failure to appoint results in client adoption of these roles



Doing the right thing?

- Conception of the project / Outline specification
- If foreseeable that more than one contractor will be involved a Principal Designer (PD) to be appointed
- PD advises the client on the content and adequacy of the PCI
- PCI and project put out to tender
- PD assists in selection of a Principal Contractor (PC)
- Appointment of a Principal Contractor
- Project start
- PC and PD liaison during the construction phase
- PD liaison and influence on any ongoing design changes
- PD completes the H&S file



The way it (sometimes) appears

Conception of the project / Outline specification

- Client fails to recognise the implications of more than one contractors involvement
- Client draws up a tender document / model contract without the assistance of a PD
- Tender document issued for contractor bid ignoring the need for PD & PC appointment.
- Client recognises the implications of more than one contractors involvement
- Client draws up a tender document / model contract without the assistance of a PD
- Tender document issued for contractor bid by seeking to discharge PD duty by contract through the PC

Consequences

Client by default adopts the roles of both the PD & PC

Client may well retain the roles of both the PD & PC

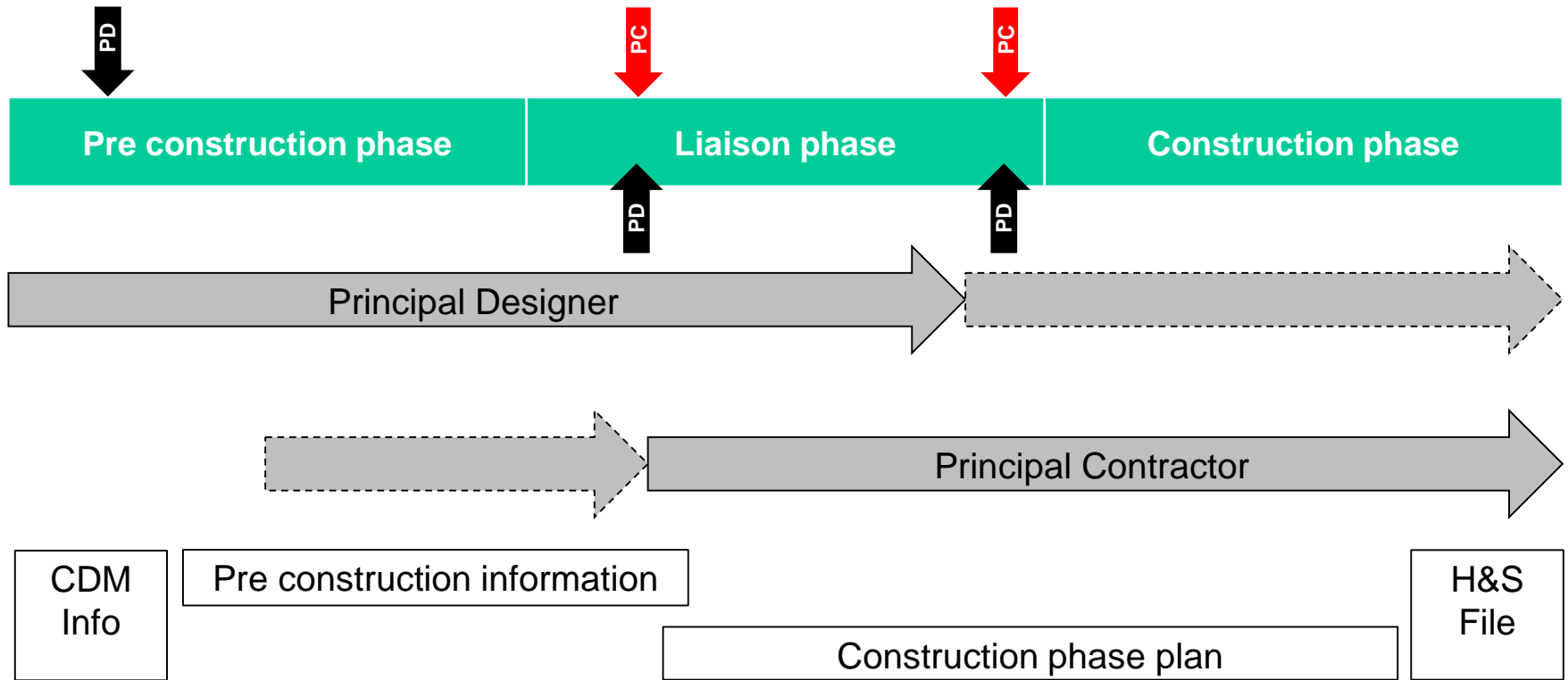
Civil (contract) law v Statute Law

Failure to comply with CDM?

Delay where PCI info falls short of that required



Timely PD involvement



Areas of concern

- A contractual clause in tender docs requiring the contractor to fulfil PD role as a contractual condition for award may not be wise
- Any appointment of a PD in the liaison or construction phase, then the client must 'brief' the incoming PD on any design risks or considerations that arise from design activity in the pre-construction phase
- A potential for conflict?
- Where a contractor has to discharge by the involvement of a competent third party. Appointment ought to be subject to client agreement bearing in mind their legal obligation



The contractors take on it

- The PD manages health and safety, mainly in the pre-construction phase of a project
- The PD role extends to the construction phase through the PD duty to liaise with the PC and designers for *ongoing* design work
- The PC manages the construction phase of a project
- The PC has to liaise with the client and the PD throughout the project to include the pre-construction phase once appointed



Skill, knowledge and experience

- Client should check all duty holders have ...
- Principal Designers shouldn't accept unless they have ...
- Principal Contractors shouldn't accept unless they have ...
- And the PC should not appoint (sub) contractors unless they have checked that they have ...

Regulation 8 CDM 2015



Questions?



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