

Card call exercise:

In 10 years time, what will be the principal features of design activity that enable construction health and safety risks to be minimised ?

Group 0 - not used		Group 1		Group 2		Group 3		Group 4		Group 5	
Improved Construction Processes	Rating	Communication System	Rating	Culture Change	Rating	New Professionalism	Rating	Team Working	Rating	Designers as Persuaders Add value	Rating
Prefab, offsite, on ground	0	More feedback (HSE, Consultants, Builders, Facilities)	3	Culture change	5	Consistent competence	1	Total team working	7	Designers thinking business	0
Embrace standardisation	1	Feedback throughout	0	Ownership responsibility	1	Questioning PSs	0	Very early involvement from concept stage	1	Resources for iteration	0
		Engage those who construct and maintain	0	Joined up life-cycle thinking	1	Designers better educated in H&S in design	1	Collective approach to H&S - Designers and operations	0	More resources for design investigation	1
		Desire to learn Proactively seek feedback	1	Feedback, no blame contracts	0	Awareness	0	Improved teamworking - communications	0	Client recognises CDM adds value	7
		Best practice broadcast	1	Hunger to share success!!	0	Design safety training (colleges + CPD)	2	No PS; Lead Designer Integrated Team	1	Capability to understand and present whole life value	1
		Strengthening knowledge base and co-operation	0	Industry wide recognition	0	Culture of 'Right 1st time'	0	Design as a continuous loop	2	More client involvement	0
		FM Feedback	0	Designers understand construction process	0	Analyse and understand the process risk	5	Integration	2	Accepting the business case	0
		Multiway communication	0					Co-location	0		
								Designing involves all parts of construction team	0		
								Partnership/Clusters	1		
								Designers are (truly) part of the team	0		
								Encourage integrated design and procurement	0		
								True integrated design team - All key designers	0		

What needs to happen to make the COMMUNICATION SYSTEM for H&S in design a reality?	
Idea	Comment
Corporate "knowledge" allows CDM to become 2nd nature.	How do you get this across?
End of project feedback?	Need feedback when things are happening, so that active change can be made - useful feedback
Need for team CDM risk meetings at certain (critical) times in project life.	Comes back to resources - team members cost money to send to meetings, must be very relevant & productive.
Companies could benefit from logging changes and carrying learning for next time - then it'll be done right 1st time - commercial benefits for designers too!	That won't work for the one off clients - as they don't have an incentive for learning.
This needs to be done by contractors & designers themselves.	So what's the PS doing?
Scrap the PS role and replace with a legally responsible lead designer.	May affect PI - more feel, not help communicate across industry.
HSE set communication system that ties in accident/incident stats & ways of designer successful reduction of H&S risks.	Again does not work on smaller projects - data set not big enough.
Promote awareness of system thinking & feedback awareness.	Can have industry wide by type.
Use intelligent data management professionals to advise on how to use info effectively. (Strathclyde)	Will this work across the board? Not all designers effective communicators.
Communication systems must be simple and effective so that all designers can input.	
What needs to happen to make the COMMUNICATION SYSTEM for H&S in design a reality?	
Idea	Comment
HSE provide better statistics on accidents	Supported
Use accident reports more fully.	How do you collect data on real cause(s) of accidents (ie. design etc.)
	Anything is better than 'Falls from height' etc. Fall from ladder, fall through roof, fall from gutter all a lot more helpful.
Intelligent investigation needed - immediate and underlying causes - lesson is what could be done in future to 'prevent'.	Need to address 'fear' of legal consequences.
Single project insurance?	
Each project to collect own stats for use of all team members.	But they need to be shared widely to build up meaningful stats.
Web page where accident/ill health/near miss info can be entered anonymously.	Unrealistic - where's the incentive to participate.
HSE construction accident report annually.	Stats are not the answer.
Project specific brainstorming.	
Make better use of drawings; provide relevant info.	
Encourage designers to put themselves in the shoes of contractors.	This needs to be instilled at the start of their education/course.
	.. or in the middle or at the end - any time! Designers should move around the industry by job change or secondment.
	No longer mandatory at ICE.
We know how to do "it" well and we know what "it" is. Mentoring to be encouraged.	
What needs to happen to make the COMMUNICATION SYSTEM for H&S in design a reality?	
Idea	Comment
	Communication requires someone to ask a Q'n - how do they know what to ask for - who will ask?
Design team meetings could serve this purpose - CDM is then a live topic.	Need to take wider? Say primary contractors, supply chain, specialists, client, FM (as appropriate).
	But CDM is an up front exercise before others are invited in.
Employ on a consultancy basis.	
Establish industry wide forum to collect & disseminate knowledge gained.	Why isn't this the HSE?
Have HSE as part of design team - then they can contribute to a project not just judge it.	What makes you think HSE could resource such?
Make industry self-driven.	Institutions/Trade bodies have a part to play & responsibility.
HSE to lobby/challenge above [Institutions/Trade bodies] to do something creative.	
Institutes of professions gather info and head communication linkage.	Adopt a confidential reporting scheme aka Railway/Airlines.
	But, secrecy does not help create a good communication system.
So no-blame culture (eg. single project insurance)	But even then project could get sued.
Portray CDM as an ongoing project management tool.	But it's not worked so far despite the legislation.
Need case studies where it has benefitted the bottom line.	Agreed - Use to educate designers.
What needs to happen to make the COMMUNICATION SYSTEM for H&S in design a reality?	
Idea	Comment
Designers to discuss at start of project experiences of similar problems and how solved: H&S think tank.	Don't just involve professional designers - they may be too removed from practical issues.
Use technology & media to place info into public domain.	How do people 'at the coal face' tap into this?
H&S magazine (like Metro) free to all (distributed on site).	Agree. Let the insurance companies pay for it.
To improve work face communication, have designer experience at least 1-2 years site experience.	
What needs to happen to make the COMMUNICATION SYSTEM for H&S in design a reality?	
Idea	Comment
All proactively collect data within own companies (to commence database)	And disseminate across company.
Forums to pool data between firms?	Ditto - HSE to share 'generic' findings from investigations.
Develop 'generic structure' so collected data can be searched & indexed.	Why are the professional institutions not doing this - they claim to be learned bodies.
	They also have resource problems.
	But if they set it up properly it does not have to be.
	Funding - is this what prof. subs should be used for?
Have a developer tax for improved communications.	Not sure taxing will help, there are issues that need to help ourselves - part of professionalism.
Set up institute database that all can input into - should not be difficult to manage although price for setting up.	It's wider than prof. institutes?
We need a pan-industry umbrella body (incl clients) again!	But would you ever get any info from micro business?
Accidents & ill health & near misses reported to designer as well as HSE.	A lot of effort for little benefit.
Designers to be given clear data on the priority areas to consider.	Need to be related to particular designer functions
HSE guidance on how design decisions have affected risk.	Why can't industry do this? Why rely on the regulator?
10 years on, its all on the web - with people sharing knowledge of ideas - just like today!	On the web is all well and good if you know where to look for it.
Use specialist contractors, professional bodies for collection and dissemination of information.	

Informative statistics	Proactive constructive intervention	Specialist knowledge	Web site	Anonymous					
How w/o funding	HSE	Communicates enforcement why?	Management	"Near Miss" No Blame					
Communicate expectations	Communication good practice	Informal communication	How will it be used						
Accessible	Structured	Funding					Aid communication	Availability	
Concise	Collect Info	Feedback	Communication System					Team Insurance Encourage no blame	
Correct	CDM info on drawings	Forums							
Reach how?	Short life	Communicate H&S to partner	Communicative team work	Early involvement supply chain	Do reviews		Learning culture	Commitment from top	In-house dissemination
No time	Micro Business		Procurement methods	Designers cannot do on own	Silo mentality		IT + other tools	Corporate Knowledge	Record!
			Who are designers	Grass root understanding to be improved			Informal communication	Contract staff	Proaction amongst designers

ACTION PLAN:

Commit to record corporate knowledge

CDM reviews in team environment

HSE communicate good practices (get off the fence)

HSE formal statistics more informative

Web site for *anonymous* "near misses"

What needs to happen for the CULTURE CHANGE for H&S through design to become a reality?	
Idea	Comment
Reduction in influence of British class system (thinkers/doers; middle/working; professional/commercial; officers/soldiers)	Need to involve all disciplines in discussing constructability/buildability/operational problems.
Working groups to be set up to discuss various aspects of design/construction including designers/builders/labourers.	Agree = more TU involvement.
Better enforcement of the H&S Reps legislation.	You cannot change culture quickly enough by this way especially as HSE has not the resources to do it.
Perhaps personal prospects of practice principals is a better way.	
Have system similar to French with safety specialists passing design & safety. Get rid of PS	
Could CDM become part of building regs check? Once client has consent withheld he will want to know why?	Yes, but requires more competence in BR.
BR includes some basic design 'no no's like fragile roofing.	BR focus on finished product not how to build it.
Have web based forums for exchanges of ideas and standardisation of details.	The const/buildability aspects are front end issues and cannot wait for BR approval
Introduce more self-regulation	Needs to be managed/edited - cost depends on hits - who pays?
Government taking a stronger lead (see OGC examples)	Unlikely to happen - political hot potato
Yes, but with 40% of market, they need to act.	This will only lead to legislation.
What needs to happen for the CULTURE CHANGE for H&S through design to become a reality?	
Idea	Comment
Contractors to be involved in the design process from day 1 to allow better cross fertilization of ideas.	But much design work never gets to the construction stage & usually happens way before contract goes out to tender.
Strengthen position of 'Partner Companies' who get to know how 'the team' works.	Therefore - redesign (or ditch altogether the tendering process)
To ditch tendering, client needs to understand whole life costs, benefits of building etc. (1 : 5 : 200 ratio of capital costs : operating costs : staff costs over life of building)	Tender process still possible but shortlist say 3 contractors and client pays for their early contribution which can be considered by design team.
Educate the accountant.	Better management training in construction - often none at all at the moment.
Engineers need to redefine/rebrand the service they offer - quality, value, safe, sustainable...	Need to sell the idea that good CDM = good design.
There are time as well as cost benefits to the client which could help sell the culture change.	Agreed, which in turn needs designer to persuade/educate clients....
Institutes & contractor groups capture & publish examples of benefits of new ways of working - perhaps through CBPP.	But we need to capture these examples & share them.
Incentive of institutes to collect good practice information & publish in mag.	Good idea, education is part of the vehicle for culture change.
Needs 'H&S champions' within design organisations to ensure info reaches the 'uninformed'.	Unfortunately not many read the mags.
	Good idea.
What needs to happen for the CULTURE CHANGE for H&S through design to become a reality?	
Idea	Comment
Buy in by senior/middle management - the process needs leadership.	Who pays for this - what is the value - how do you demonstrate this?
Design industry is too aloof - reposition.	Senior Managers may want to change culture, but do not know how to do it.
Develop & promote tools for delivery of change.	What 'change' is essential?
Ensure that all stakeholders fully appreciate the 'bottom lines' 1) Injury, death, ill-health 2) The business case for them in securing cultural change as owners/users of the built environment.	
Culture change to begin at university.	Agreed but may take time to materialise.
We need 'short term' fix!	Yes. It's lunch time.
Introduce safety culture into all aspects of design and noting responsible action necessary.	
What needs to happen for the CULTURE CHANGE for H&S through design to become a reality?	
Idea	Comment
More clearly defined responsibilities on designers under CDM - ensure that the sector realises they actually have a responsibility (legal) for what can happen on site.	Needs better understanding of what goes on, on site more time at the coal face.
Bring down culture barriers.	Yes, interaction (ie. more time on site) will bring down barriers.
Construction workers work in designer's offices.	Or on large Projects locate design team on/near site - feedback will happen.
Or locate a contractor with good 'buildability' experience into the design team (or this idea plus previous comment).	Crossover good idea, but comes back to resources, is it practical?
	This was the idea behind route to C.Eng!
Designers to go on site to understand constraints.	Totally agree - also inspectors from HSE working within design practice.
HSE/Designer secondments as part of understanding & culture change.	How many HSE inspectors have sufficient design experience to contribute except in specialist role (in large practice).
Call review meetings on all large projects.	Yes, but what about small projects.
Introduce a non competitive prelim therefore budgeted into the tender for H.S.E and it to be reviewed at FA by client for acceptability.	Too legalistic and subjective - would spend months arguing the case.
Appoint a principal designer!	So why do designers lead in this 'Brave new World'??
Corporate/single bodies meet the client need. Step forward Sir Chris Wren!!	Client needs differ innumerably. How do you capture all this?
Establish trust throughout Project Team - Divorce commerciality from design.	
What needs to happen for the CULTURE CHANGE for H&S through design to become a reality?	
Idea	Comment
H&S training at school bringing down cultural barriers.	Good idea - esp. primary/secondary schools. Enough space in curriculum?
Broaden out to risk awareness in education (links in with e.g. pensions, mortgages, longevity)	Must be of overall societal benefit so a good thing - most people can spot a hazard, few can quantify a risk.
Needs to be targeted to the real site risks - requires information on highest risk areas - requires less defensive stances to be taken - no blame culture to prevail.	All risks to be considered early days by all parties analysing each other's risks.
	Risk awareness changes as a project develops.
Cyclical risk workshops required to fully bottom out all the risks.	Integrated staged design reviews to be established under unified Project Brief with H&S as 'Shared Territory'.
We need stronger project leadership which ensures integrated approach.	Yes, but need a mechanism.
Live risk register ongoing through project - owned & contributed to by all.	Who manages or accepts risk?
Risk will end up with whoever is most affected by it - can't assign risk to anyone else, can only move if someone offers to accept it!	
Role of Engineer (as one designer) needs to be redefined/strengthened professionally.	But have we as a profession become too specialist (designer, contractor, etc...). Should we value 'generalists' more?
Construction too complex for generalists, communication the answer.	Agree - can't be too simplistic.
Use the ideas on integration of other complex industry sectors with similar issues of design complexity & supply chain - eg. Nuclear, petrochemical as a basis.	But what about simple domestic and commercial work.
Don't base approach on multi million £ projects. They can sort themselves out... sometimes!	

H&S awards for excellence				Bonding - group hugs	Understanding other party's position	From primary level	H&S champions	Admit mistakes & learn from them
	Stick or Carrot			Establish Trust	Common education at tertiary level	Perception that H&S important	Risk Education	H&S risk alongside commercial
The company 'family'	The project 'family'	Manslaughter		Role swapping	Long term partnering	Sharing ideas & innovation within a practice	Educate the financiers	Contractor feedback
Publicity hostage to fortune	Change tax system	Use of integrated teams				Legal	Morality	Cost benefit
Ministerial accountability	Government Lead	Education of public sector managers	Culture Change			Publicity risk if get it wrong	Acceptance of Need to Change	Rebranding the profession
Excellence	Change planning permission system	Project review & publication				Reputation for excellence	Don't want Christmas inside	From the practice head
Respect for the artisan		Improve status of 'do-ers'	Designer' covers too many people		Fee structure	Remove general contractors	Abolish tendering	More client allowance for design time
	Reduce Influence of Class System		Little regulatory pressure now	Massive Inertia	Scrap the PS	Spec work (no planning perm'n no fee)	Different Procurement Methods	Partnering and integrated teamwork
					Appoint lead designer to coordinate design	Rewards for better solutions		

ACTION PLAN:

Educate designers now as to how their designs influence on-site risk

Lobby for PP system to be more flexible and educate planners re risk

Remove role of PS - Appoint lead designer to coordinate design in integrated team (incl contractor)

Educate re the benefits of longer term partnering to improve trust between parties

Government lead by example - excellence as client to be norm rather than exception

What needs to happen for the NEW PROFESSIONALISM for H&S through design to become a reality?	
Idea	Comment
Education of designers in H&S issues.	Yes, but not by H&S professionals who do not understand design process.
Design master classes for students & professionals to excite, inspire, inform, share.	Where are these leaders/experts?
HSE web page/newsletter on what are good innovations/ideas.	Agreed, but could also have individual company 'H&S promoter' - company reps meet and discuss at equivalent of CPN events?
Open publication of stock solutions - agreed by HSE as adequate under CDM.	
Designers to obtain H&S qualifications.	Don't necessarily agree. Better education/training for designers in how their designs affect H&S.
HSE to provide seminars on how designers can have influenced Health & Safety issues - good and bad.	It is better if the seminars are industry led. They have a better grasp of the practicalities. HSE can contribute.
Let's integrate H&S with other issues for a quality job so it isn't an add on.	
New professionalism will depend upon better explanation of what R13 actually requires.	Shouldn't we already understand these basic concepts?
Introduce design into H&S qualifications.	We should not be viewing H&S and design as separate components of qualifications.
More holistic approach so that H&S is viewed as equal with financial, legal, sustainability drivers to give a 'solution' to client requirements.	Start at school, colleges, universities, so that H&S is integral to qualifications.
What needs to happen for the NEW PROFESSIONALISM for H&S through design to become a reality?	
Idea	Comment
Shared educational goals on process risk,	Are the goals set by regulation?
Assess competence of designers to evaluate risk	Yes but need industry led flexibility to celebrate diversity.
Communities of passionate exponents of added value to lead young starters & set industry goals.	So how does this happen in the hard nosed commercial environment?
Move beyond the barriers altruistically	There is no hard evidence that CDM 'Adds Value'
Prove it!	You can't prove anything absolutely. It's a matter of consensus and use of discursive reasoning.
Passionate about added value = being commercial in the widest sense so commercialism needs to be redefined so that it looks very broadly & over the long term.	But you won't sell it to the client on such an altruistic basis.
Need evidence that altruism works.	Have to convince client that more resource/money expended at the outset of a project will benefit in long term with more cost effective solutions - more investigation, less risk.
Demonstrate to a client how certain investigation on a particular project saved him money and led to safer design - educating client.	Agree. But what about the ones that cost them money at the same time.
Involve the client in early talks listening to what he thinks has cost money on other projects, which his designers did not recognise.	Agree, but would need to extend to problems with logistics, maintenance, supply/ consumables.
Common forum for designers chaired by the HSE - promote learning.	Yes, but need to be promoted in a way that enthuses designers.
What needs to happen for the NEW PROFESSIONALISM for H&S through design to become a reality?	
Idea	Comment
Wider empathy with constructors.	But what's the driver?
	Ultimately want to use knowledge to ensure construction is safe (straightforward as planned, without rework) giving client a smooth job on time & budget!
	OK but designs push boundaries of learning - accept risks?
More knowledgeable designers.	Knowledge in materials, plant, installation techniques?
Insist all professional designers have a trade qualification - practical experience.	May need legislation to develop this. Can be prescriptive not creative.
Benchmark customer/user/maintainer satisfaction.	Requires no-blame culture for continuing dialogue.
Legal requirement under CDM for Project Review after 1st year post project completion.	It might take 10 years for legislation to be passed!!
If designers need to know more about construction & contractors to understand design more fully, they should get together for common good!	Yes, that's true, but to go back to idea 3:
All constructors to have a design qualification (so they can think futurially.)	
How about licensing designers in order to achieve competency.	In CDM only?
Include in professional exams	Good idea
Needs to be part of professional training formalised under institutions.	Definitely needs to be integrated otherwise designers end up sitting numerous exams and not sure which one is meaningful.
Registration scheme that is recognised by all & ties in with EPD/Training/CPD.	Could use IStructE CPD annual return as starter.
What needs to happen for the NEW PROFESSIONALISM for H&S through design to become a reality?	
Idea	Comment
We need people who can multi task & understand the wider picture.	And sympathise.
Information/feedback on impact of decision (sensitivity analyses)	So what makes people feedback on their decision.
Shared risk registers so everyone is engaged and adds value to solutions.	How does this information get into the wider domain?
Use technology to capture & publish shared learning.	Yes, but the new professional must be non-egotistical to make that work.
Ensure feedback is resourced within and across projects (client provides cash).	Important that feedback is published within each establishment so that other teams within a company share the experience.
Web site for all projects whereby all parties can contribute to H&S issues.	Organisations not always willing to share things.
Professional bodies need to emphasise importance of information share (non commercial?)	
Need to ensure 'new' professionals take a holistic view of the construction system.	I became an engineer to be involved in wonderful structures - calculations were a means to be part of that process - we tend to forget this.
New professionalism needs support from senior management: this will require both carrot & stick.	Better management training?
We need to review the way the professional institutions are putting conditions of engagement together to reflect improved design safety techniques.	Accepted as unable to comment.
Introduce an additional aspect into the learning culture (i.e. the practicality of building - work face experience).	

Revised scope for 'chartered'

Check macho values	Strength to go against flow with commitment	Professional institutions to make mandatory for entry		Facilitation & empowerment	Top level industry commitment +vely expressed		Process	Cross sector learning
Empathy - check others needs & wants	New Behaviours	Break down boundaries e.g. facilitation	Networking	Leadership	Means of persuading the leaders	Knowledge: U/G - CPD	Competence	Experience
International listening & learning	Standard form of contract changes	Listening actively	Courage and conviction	Leaders with 'people' skills	Expert leadership group established - the professions to lead	Breadth of skills	Assessment of competence	Standard to set competence
Legal system knowledge	Working outside standards and CoPs	Globalisation					Peer appraisal +ve	Sell +ve emotions
Economic driver awareness	Holistic	Social influence	New Professionalism				Inspiration	Promote by appealing to personal drivers
Human factor	Environmental constraints	PR & communication						
Human factors	Learn from mistakes as well as successes	Cost benefit balance	Working without boundaries	Vision as ambition for the future	Industry signed up to a vision		Performance measures - individual	Performance measures - team
Economic constraints understood	Pragmatism		Capture of ideas - industry led	Vision	Individual corporate vision		Pride	Performance measures - as an industry
Historic riches of knowledge retained	Evolution not revolution		Communication to key audience					

ACTION PLAN:

Movers and shakers (incl HSE) persuade CIC

CIC inspired to high level action

CIC provides focus for industry action

Vision set (with flexibility)

Leadership (by...)

What needs to happen to make the TEAM WORKING for H&S through design a reality?	
Idea	Comment
Strong leader - the leader needs to co-ordinate ideas not drive through own agenda.	Imperative for this to work.
Leader to change so that different discipline's ideas come through in the agenda.	That has the disadvantage of lack of continuity.
Perhaps we need a Project Manager to pull it all together - may change during project.	PM should coordinate - not take responsibility away from designers (as PS does).
Roles need to be agreed up front.	Clarity is important.
All Consultants/Designers to have established appointment model integrated as 'Design Team'	Review terms of engagement of PS and review 'standard agreements'.
Clients to develop "standard framework" docs which integrate supply chain.	Frameworks need to be ISO or BS EN.
Retain leadership through life of Project.	Yes this encourages continuity.
Continuity of team from Project to Project.....	Team working
Leaders need personal benefits as well as personal liability. Light not heat.	
Team needs to revisit project after 6 months.	What would make them do this?
Promulgate the gains from doing so - so everyone wants to 'win'	How do you know when you've 'won'.
Link with a 'successful' project should lead to 'reward' for the individual.	Need commercial advantage as well.
Have initial project brainstorm where leader is chosen.	Is this suggesting this is a 'special' leadership role?
What needs to happen to make the TEAM WORKING for H&S through design a reality?	
Idea	Comment
Trust other members.	Comes from multi project working.
Adopt project PI to improve 'no blame' culture.	Trust needs to be earned so multi project working gives it a chance. So would not have to conceal commercial risks.
Government contracts should encourage clustering.	Gov = 40% of all work - must lead by example!!
Government as a client would have significant bargaining power in the insurance market & would make project based insurance easier to obtain.	Encouraging mutual success/risk is good for teamwork. Reward success with long term commitment.
Team working still needs individual responsibilities. Project PI may assist stronger delivery.	Who picks up the PI cost? Ultimately it's the client? Why should we?
The client sets up & leads the team.	Client leadership is a myth except in exceptional instances.
Develop supply team that offers solution to client needs - ie the Project from a 'one-stop-shop'	
On trust - keep register of responsible individuals at the extremes of good & bad. Trust can only be earned not automatic.	What about no-blame!?!?
Teach members game-theory so its clear that beginning with a presumption of trust is the best way to proceed commercially (is opposite of traditional tendering)	Such trust will only come from experience with that party.
Let government as client prove that partnering actually works - case study projects.	Like case studies/champions.
For once let's begin by looking at small projects where design causes and consequences are clearer & share these.	
What needs to happen to make the TEAM WORKING for H&S through design a reality?	
Idea	Comment
People need to get together to talk.	Meeting management crucial; include client.
Formal structure with time tables to be put in place.	Focus the minds - needed.
Establish a protocol for all projects to follow.	Flexibility is a key.
Develop a number of model protocols that could be used.	This would immediately remove any flexibility - keep it flexible.
Remove the blame culture by allowing the client full access to all decisions.	Depends on the client - how much involvement do some clients want?
Leave meeting invites open to all & ask why they do not want to attend - This will focus what they think they have to say (or not) from communications.	Mutual benefit/loss should resolve this issue.
We need to differentiate between 'one off' clients (ie those who only build once and those who are serial procurers).	Why doesn't the industry already cater for these.
What will bind together the parts to produce a team? Not money - reputation/peer review.	But, the 'peers' need to be the whole industry, not one's fellow professionals/immediate colleagues.
Thus, have initial 'away days', bonding sessions etc on each project,	Mustn't forget breadth of project size.
Study small as well as large projects that work well.	
What needs to happen to make the TEAM WORKING for H&S through design a reality?	
Idea	Comment
Encourage framework agreements with KPI measurements by peer review.	How does that encourage team working?
Make the KPI project based & give everyone an incentive if the project beats it.	How do you prevent the significant proportion of incentives going to those who have least influence.
Place problem rectification costs at the door of the designer.	Disagree - Having removed blame culture keep the client involved.
Regular open discussion on all issues introducing at least one member into a collect forum.	Team members need to appreciate how their input into a project affects that project positively or negatively.
KPIs with team discussion/action plans on how the team could improve the KPIs.	Remember this is a safety based discussion.
Have a process that requires people to work as a team. A shared risk register.	Where does ownership of establishing the process lie.
Breakdown existing barriers & constraints. ie. traditional contractual relationships.	Yes!
Outlaw traditional procurement & esp tendering (but don't the CDM regs already do this?)	No they don't (otherwise how can they require a pre-tender H&S Plan?)
Promote the benefits of long-term partnerships.	What about one-off clients?
What needs to happen to make the TEAM WORKING for H&S through design a reality?	
Idea	Comment
Total project team selected at feasibility stage/start of design concept.	Yes you cant work together if appointed sequentially.
Clients need to see the importance/value because they control timing of appointments.	Appoint contractors as 'consultants' in order to obtain early input on day to day projects.
Use contractors as 'consultants'	Clients will need educating as to 'value' of early appointment.
Earlier identification of members of the team.	Agree
Perhaps teams can be champions of building/structure type as a core activity of the design team to assist knowledge management.	Be prepared to constantly freshen team with additional 'expertise' to reflect design development.
Do we need a central independent bank of expertise paid as consultants who are a knowledge bank.	How does one manage demand?
More rigorous enforcement of designer duties under CDM - focuses effort on team work!	Who would be capable to monitor such responsibility and it would need to be client funded therefore not practical.
Provide profit incentive to support long term client satisfaction via team.	This needs huge buy in by clients, who are a disparate group.
Study SMEs especially small local builders who have worked as teams for generations.	These 'teams' are very small, handful of people.
'Team' needs to be in place before 'Project'!	Does the team incorporate all key personnel from a Project, if so how are they decided.
Let the contractor establish & manage the team.	It should not matter who does it. The issue is team working, not contract method.
Move away from idea that contractual solutions work. They don't its cultural.	

Client attitude	Openness	Clarity of briefing	Period of framework	Business case	Quality / accountability	Early appointment (ALL)	Early briefing and solving	Appropriate IT resource
Risk management	No Blame Culture	Clarity of role	KPI	Framework Agreement	Speed of response deliverability	Repeat membership	Communication Team Build	Feedback
Ground rules - values & behaviours	Adequate resource/time	Protect team insurance						
Recognise range of clients	Examples of best practice 'improvement cycles'	Encourage trade orgs to educate one-off clients (plan'g officers)				Remove unnecessary boundaries	Think outside box	Utilise all levels of const'n knowledge at design stage
Make use of CIC & other client orgs	Educated Client	Life cycle	Team Working			Repeat membership	Integrated Team	Share problems and solutions
Appoint appropriate team leader	Client advisor for 1st time clients					Life cycle knowledge/costs		
			Trained	Continuity / flexibility	Responsibility to deliver	Exemplar	Education of representatives	Consistency in sectors
			Lead designer, Planning sup, Financ'l control, timescale	Leadership	Incentive	Standard setting - H&S, life cycle	Role of Government	KPIs
					Communication			

ACTION PLAN:

Buy in from - prof bodies, trade orgs, CAGE, Planning deps, Buildings Control

Establish business case with case studies

Develop guidance, procedures

Target funders, insurers, Government, major spending on benefits

Selling of ideas by professional bodies, trade orgs (feedback loop)

What needs to happen for DESIGNERS AS PERSUADERS ADD VALUE to become a reality, enabling designers to play their full part in securing healthy and safe construction?	
Idea	Comment
To create an atmosphere for the client to engage the best professionals in the total process of safety.	The best professionals cost money. How do you reconcile this?
All professionals in the design process to achieve credible levels of H&S competence.	Agree. As long as client picks up an interest and agrees to partake in costs.
The client has to consider his/her role in the design & the whole life of the building whilst they are in possession of it.	Beneficiary of good ideas is usually contractor on all fronts.
Designers need to engage in new/tested procurement that delivers benefits to all team.	New procurement can bring/identify new risks.
CDM be part of risk management.	Do short term contracts attract the right people!?
Everyone knows problems in their own sector - more pooling between disciplines.	Clients get what they pay for usually at the cheapest cost possible.
Industry to stand up for itself and charge realistic fees to enable the job to be done.	Yes. A fair fee for good work!
Designers to put over to clients the 1 : 5: 200 ratios capital costs: life time costs: staff costs (added value of good design).	More time, more resource, better investigation, safer design.
What needs to happen for DESIGNERS AS PERSUADERS ADD VALUE to become a reality, enabling designers to play their full part in securing healthy and safe construction?	
Idea	Comment
Designers need to communicate with clients (and other stakeholders) in the language that reflects clients' interests & drivers in order to get most impact.	To do this designers need to be able to demonstrate 'measurable' in clients language and to assist the understanding.
Client needs to appoint with the H&S (CDM) feature prominently in mind.	I thought he did this anyway eg CDM.
Lay down standards for appointing?	Standards create classism.
The common language of client business and health & safety needs to be agreed.	Clients, even in same sector eg. high street retail, have different imperatives.
Designers need to learn new skills eg facilitation, economics, etc..	Who is going to set this syllabus?
Keep it loose: engage key industry leaders: agree the need: promulgate in lead bodies.	Is there a role here for industry trade bodies to take a lead here (fewer people to influence initially & then to give 'standard' advice across represented industry).
Design trade associations to provide sector guidance to include worked + priced case studies.	Agreed, but you could have the problem of commercial income, device and window dressing "look how good we are"
Trade bodies produce less & less info as they lack resources.	Was that an idea?
Trade bodies for designers to require MBA-type qualifications for directors of design firms.	All the team need to understand the case studies. Education must be drilled down not only at top end.
Designers need to be clearer about what info they need & why - this may prompt more useful dialogue/info exchange/influence.	
What needs to happen for DESIGNERS AS PERSUADERS ADD VALUE to become a reality, enabling designers to play their full part in securing healthy and safe construction?	
Idea	Comment
Client to be notified of cost related issues which can over time save money and FM structure.	The information to do this needs to be more readily available.
More feedback to collect whole life cost info.	Remember Safety and Designing for safety needs to be part of designers 'measurables
Designers to be able to demonstrate Safety in Design.	How would they achieve this? It is only until problems occur that deficiencies are identified.
Lower supply chain designers to persuade the lead designer.	Through integration at an early stage in the design process.
Facilitate a risk identification forum & include all key stakeholders in the design//construction process.	PS should be this facilitator.
Need to evaluate design ie. 'score' & 'rate' them.	Can work well to allow client to take decisions about cost/risk over structure life.
Designers need skills/tools from other industries such as process, IT, defence etc. where LCC etc are well developed.	All takes time, where's the incentive.
Centrally compiled worked examples for 'typical' projects.	Good idea - what went wrong - but people tend to hide this.
Single project insurance would lead to more pooling of info.	Trouble is that H&S is not insurable[?]
Publicise hidden cost of accidents.	Yes, but it's already available to some extent.
Designers have knowledge & skill to inform clients about LCC & risk (ie hidden cost of accidents & bad designs)	Not all designers. Within any organisation, all persons with a designer role need to be educated into how decisions they make affect safety.
What needs to happen for DESIGNERS AS PERSUADERS ADD VALUE to become a reality, enabling designers to play their full part in securing healthy and safe construction?	
Idea	Comment
Designers must have the tools to be able to present coherent business cases.	Agree - However these tools would have to demonstrate actual cases over realistic periods.
Visit other clients who have received these benefits previously.	Some information will be commercially sensitive as it relates to costs.
Central repository of cost info is needed along with the tool.	Can cost and safety be linked together?
	Yes cost and safety are linked for good & ill.
HR community has self help group seen by senior managers as useful. Deals with reality not PC matters. Could have same for designer communities.	But is this designers persuading designers - or should the self-help group be mixed? AND what will cause senior managers to be involved?
Promote top level work group of this type. Require 'chain-letter' pyramid selling with each member required to start own group hold such events.	Difficult to do consistently throughout industry.
A national 'forum for ideas & arguments.	Ok, but too large for specific projects. Need to involve the team's experiences from similar projects as the 1st basis for persuasion.
HSE should collect case studies which demonstrate that good CDM = good design.	Should be done by professional bodies not HSE.
10 Projects (of different type) selected for detailed investigation of potential costs/savings/accidents/ill-health	CWCT has tried this - no one will cooperate - afraid of bad publicity.
	Just because one failed should not stop
Approach all the specialist trade & professional bodies to set this up	Yes. Integration of trade bodies will aid project integration.
Set up web-based peer to peer discussion forum where ideas can be shared.	

Offsite construction testing	Case studies	Quality assurance	Supply chain initiatives	Benchmark	Feedback continual learning	Previous experience	Tools	Partnering
ISO	Standardisation	Design guides	Driven by quality	Procurement	Method of procurement	Demonstration	Cost Effectiveness / Key Value Drivers	Case studies
Supply chain	Industry best practice	Continual improvement	Value recognition	Investment in relationship	Meaningful indicators and assurance	Measurable	Synergies	Database
Better information useful	Recognition	Enforcement - support balance				Openness & trust	Change of culture	Frequent & effective
Greater resources	Greater HSE Proactivity	Consultancy input	Designers as Persuaders Add Value			Multi disciplined	Communication	Focus & control
Assist in training	Specialisms	Updating mechanism				Accepting responsibility	Feedback	Timeliness
Proactive communication	Monitoring	Feedback	Stronger drivers	Long term/short term contracts	Framework agreements	Recognised resources	Clearly defined competencies	Target audience
Single industry voice	Industry Leadership	Trade association	Clear roles and responsibilities	Ownership	Blame culture	Standard training packages	Knowledge Skills & Training	Continual improvement & learning
Lobbying	Self regulation	Self promotion	Integrated feedback	Industry willingness	Communication	Recognition	Skills database	Vocational agenda

ACTION PLAN:

Change of culture

Self regulation

Knowledge skills and training

Continual improvement & learning

Value recognition

HSE Designer Think Tank Output (19.5.03)

Improved construction processes were not considered in detail in the workshop

CONSOLIDATED ACTION PLANS

Designers as persuaders	Change of culture	Self regulation	Knowledge skills and training	Continual improvement & learning	Value recognition
Team working	Buy in from - prof bodies, trade orgs, CABE, Planning deps, Buildings Control	Establish business case with case studies	Develop guidance, procedures	Target funders, insurers, Government, major spending on benefits	Selling of ideas by professional bodies, trade orgs (feedback loop)
New professionalism	Movers and shakers (incl HSE) persuade CIC	CIC inspired to high level action	CIC provides focus for industry action	Vision set (with flexibility)	Leadership (by...)
Culture change	Educate designers now as to how their designs influence on-site risk	Lobby for PP system to be more flexible and educate planners re risk	Remove role of PS - Appoint lead designer to coordinate design in integrated team (incl contractor)	Educate re the benefits of longer term partnering to improve trust between parties	Government lead by example - excellence as client to be norm rather than exception
Communication system	Commit to record corporate knowledge	CDM reviews in team environment	HSE communicate good practices (get off the fence)	HSE formal statistics more informative	Web site for <i>anonymous</i> "near misses"