

National Highways
Principal Designer Working Group
Meeting No.27

Thursday, 19th May 2022 9.15 am – 12.30 pm.
(Teams Call)

Attendees

Name	Initials	Position	Organisation
<i>Richard Wilson (Chair)</i>	<i>RW</i>	<i>H&S Director C&P</i>	<i>National Highways</i>
<i>Doug Potter (Secretary)</i>	<i>DP</i>	<i>TA HSW Lead - Principal Designer Manager</i>	<i>Arcadis</i>
<i>Nina Warminger</i>	<i>NW</i>	<i>H&S Manager SWAD</i>	<i>National Highways</i>
<i>Mark Lamport</i>	<i>MLa</i>	<i>Technical Director / Principal Designer Manager</i>	<i>Arcadis</i>
<i>Pav Singh</i>	<i>PSi</i>	<i>Technical Director / Principal Designer Manager</i>	<i>Arcadis</i>
<i>Tim Bowes</i>	<i>TB</i>	<i>Principal Designer Manager</i>	<i>Atkins</i>
<i>Ian Nixon</i>	<i>IN</i>	<i>Hub Lead</i>	<i>Costain</i>
<i>Paul Brown</i>	<i>PB</i>	<i>Technical Manager</i>	<i>WSP Group</i>
<i>Roger Swainston</i>	<i>RS</i>	<i>PD / CDM Advisor</i>	<i>Jacobs</i>
<i>Tim Goddard</i>	<i>TG</i>	<i>Principal Designer Manager</i>	<i>Arcadis</i>
<i>Toria Thomas</i>	<i>TT</i>	<i>Principal Designer</i>	<i>Arup</i>
<i>Abbey Featherstone</i>	<i>AF</i>	<i>Technical Lead</i>	<i>Connect+</i>
<i>Ali Chaudry</i>	<i>AC</i>	<i>Principal Designer</i>	<i>Galliford Try</i>
<i>Sam Allin</i>	<i>SA</i>	<i>CDM Manager</i>	<i>LTC</i>
<i>Jonathon Giles</i>	<i>JG</i>	<i>Principal Designer Manager</i>	<i>Rambolt</i>
<i>Tony Lewis</i>	<i>TL</i>	<i>P Designer Man. YNE</i>	<i>Costain</i>
<i>Dave Olorenshaw</i>	<i>DO</i>	<i>Area Manager</i>	<i>Kier</i>
<i>Natalie Mansell</i>	<i>NM</i>	<i>Head of Safety – SR, H&LT</i>	<i>Atkins</i>
<i>Jon Webster</i>	<i>JWe</i>	<i>Safety Lead</i>	<i>Kier</i>
<i>Jim Gallagher</i>	<i>JG</i>	<i>Prin Struct. Advisor (SES)</i>	<i>National Highways</i>
<i>Josh Hicks</i>	<i>JH</i>		<i>Mott Macdonald</i>
<i>David Riley</i>	<i>DR</i>	<i>H&S Business Partner</i>	<i>Amey</i>
<i>Andrew Finch</i>	<i>AF</i>	<i>Director of Operations</i>	<i>Jacobs</i>
<i>Robert Butcher</i>	<i>RB</i>	<i>Technical Director CDM</i>	<i>Jacobs</i>
<i>Beverley Mears</i>	<i>BM</i>		<i>National Highways</i>

<i>Martin Partington</i>	<i>MP</i>	<i>Principal Engineering Man.</i>	<i>Jacobs</i>
<i>Robert Legg</i>	<i>RL</i>	<i>Highways Safety Co.</i>	<i>Motts</i>
<i>Helen Richardson</i>	<i>HR</i>	<i>NH Regional Lead</i>	<i>National Highways</i>
<i>Steve Willoughby</i>	<i>SW</i>	<i>Technical Director</i>	<i>Pell Frischmann</i>
<i>Stephen Pettifer</i>	<i>SP</i>		<i>Volker Fitzpatrick</i>
<i>Stephen Larkin</i>	<i>SL</i>		<i>Aecom</i>
<i>Tony Wallis</i>	<i>TW</i>		<i>Tetra Tech</i>
<i>Sophie Gwynne</i>	<i>SG</i>	<i>Graduate Highway Engineer</i>	<i>Arcadis</i>
<i>Charlotte Cook</i>	<i>CC</i>	<i>WHS Lead</i>	<i>Arcadis</i>
<i>Eleanor Brennan</i>	<i>EB</i>		
<i>Matthew Murrell</i>	<i>MM</i>		
Guests:			
<i>Andrew Cox</i>	<i>AC</i>	<i>Safety Lead</i>	<i>FM Conway</i>
<i>Gary Mees</i>	<i>GM</i>	<i>Safety Lead</i>	<i>KPWC Working Group</i>
<i>Tony Putsman</i>	<i>TP</i>	<i>Safety Lead</i>	<i>KPWC Working Group</i>
Apologies:			
<i>Paul Boddy</i>	<i>PB</i>	<i>Director</i>	<i>Interserve</i>
<i>Stephanie Goldsmith</i>	<i>SG</i>	<i>Senior H&S Advisor</i>	<i>Skanska Infrastr.</i>
<i>Katie Swanick</i>	<i>KS</i>	<i>Contracts Manager</i>	<i>Motts</i>
<i>Aimee Blay</i>	<i>AB</i>	<i>Design Manager</i>	<i>Galliford Try</i>
<i>Thomas Merry</i>	<i>TM</i>	<i>H&S Lead</i>	<i>National Highways</i>
<i>Ronan Finch</i>	<i>RF</i>	<i>Principal Designer</i>	<i>WSP</i>
<i>Shaun Pidcock</i>	<i>SP</i>	<i>Director LTC</i>	<i>National Highways</i>
<i>Paul Claydon</i>	<i>PC</i>	<i>H&S Manager</i>	<i>WSP Group</i>
<i>Phil Samms</i>	<i>PS</i>	<i>Engineering Man. (Area 3)</i>	<i>Kier</i>
<i>Kevin Morgan</i>	<i>KM</i>	<i>PD / CDM Advisor</i>	<i>Jacobs</i>
<i>Mark Riordan</i>	<i>MoR</i>	<i>Principal Engineering Man.</i>	<i>Amey</i>
<i>Paul Wilkins</i>	<i>PW</i>	<i>Ass. Tec. Director Structures</i>	<i>Arcadis</i>
<i>Dave Townsend</i>	<i>DT</i>	<i>H&S Team Standards</i>	<i>National Highways</i>
<i>Jon Horrill</i>	<i>JH</i>	<i>Principal Designer / H & S</i>	<i>WSP Group</i>
<i>John Migoski</i>	<i>JM</i>	<i>Technical Manager</i>	<i>Network Rail</i>
<i>Suryakant Patel</i>	<i>SP</i>	<i>Principal Designer Manager</i>	<i>Costain</i>

Steve Ristow	SR		Transport for London
Sean Connon	SC	Principal Designer Manager	Costain
Ben Moulton	BM	Safety Lead	Balfour Beatty
David Lumb	DL	Health and Safety Business Partner – RIP North	National Highways
Steve Yates	SY	PD / CDM Advisor	Jacobs
Mark Bridges	MB	Former H&S Hub Lead	Galliford Try
Jordan Flint	JF		Kier
Lawrence Weller	LW	Safety Manager	TfL
James Washington	JWa	Safety Lead	Kier
Owaiz Khan	OK	Technical Manager	MGF
Richard Horan	RH		Telent
Glen Matthews	GM		Kier
Robert Mullen	RM	Asset Information Group	National Highways
Marcus Anning	MA		National Highways
Nick Boyle	NB	Technical Manager	Balfour Beatty
Jim Tod	JT	Temp Works Designer	Tony Gee/Twf
Jason Glasson	JG	Asset Information Manager	National Highways
Tarandeep Atwal	TW	Associate Director	Arcadis
Rob Eagles	RE	Temp Works Designer	MGF
Charlotte Taylor	CT		Morgan Sindall
David Owens	DO	Digital Manager	WSP
Russell Brookes	RB		National Highways
Paul Dennis	PD		Arup
Chris Griffin	CG	Design Innovation Manager	National Highways
Greig Houghton	GH	Design HSE Lead	Jacobs
Saskia Lear	SL	Principal Designer Manager	Arup
Terry Meadows	TM	Safety Lead	Kier
Paul Watson	PW		Amey
Steve Haviland	SH	Partnership Lead	Farrans
Simon Wilkinson	SWi	Technical Director	AECOM
Richard Delaney	RD	Senior H&S Consultant	Capita
John Quarless	JQ	Safety Manager	Kier

Tom Bolton	TB	Principal Designer Manager	Amey
Ken Harrison	KH	Principal Engineer	Amey Consulting
Samuel Hogan	SH	Principal Engineering Man.	Balfour Beatty
Liz Brathwaite	LBr	H&S Lead	Skanska
Craig Simmonds	CS	Managing Director	Macleod Simmonds
Elliot Galvin	EG		Mott Macdonald
Sulagna Ghosh	SG	Ass. H&S Rep Leeds	WSP Group
Adrian Shawcross	AS	Rail Associate	Ramboll
Clare Brown	CB	Safety Lead	Link Connex (Bam Nuttall)
Darren Allen	DA		Tellent
Euan McRobie	ER		Capita
Mark Lawton	MLo	Head of Engineering Surveying and GIS	Skanska
Dave Avery	DA	H&S Manager	Kier
Malcolm Shaw	MS	Principal Designer Manager	Arup
Oliver McMann	OM		Atkins
Liam Burns	LB		National Highways
Elizabeth Bennett	EB	Director	Safety in Design
Ed French	EF	Principal Designer Manager	Arcadis
Katie Harman	KH	YNE Safety Lead	National Highways
Philip Farrar	PF	Highways Safety Hub Website	Galliford Try
Tom Bolton	TB		Amey
Andrew Koutsouki	AK		Arup
Simon Hawley	SH		Rambol
Nicola Tweedie	NT	SA – Road User Safety	National Highways
Chris Gee	CGe	Head of Utility Diversions	National Highways

1.0 (9.15 – 9.30) Welcome and Introductions (Doug Potter)



Wellbeing, Health and Safety Moment

- Given by RW noting complacency and we are all to remain vigilant with our actions, abide by the procedures / rules and be conscious of the dangers present around us.

Future meeting arrangements

RW proposed that future meetings could potentially alternate between Teams and face-to-face in Birmingham - Feedback from the group as to a Sept 29th face to face meeting and reverting to quarterly – Generally supportive. WSP have offered their Corner Box office. PB has arranged.

DP/PB

Key Actions and matters arising from PDWG 26 – 31/03/22.		
Minutes		
1.1	Design Close calls –Does PDWG wish to have a Hub point of contact for Design Close calls. RW indicated that the wider issue is currently with SES? RW to discuss with DP offline.	RW/DP
1.2	National Highways Predictive Indictors for utilities - Mark L to chase this up with Helen Richardson from National Highways. MLa to take up with Chris Gee. HR confirmed there is an appetite to develop indicators and HS2 are being consulted.	MLa
1.3	A63 Safety Shares – Capture of Lessons Learned - MP to discuss this further with Phil Leng of Balfour Beatty. Note PL is leaving BB shortly.	MP/DP
1.4	SCSLG 2 Year Strategy – Andrew Cox presented on this and is to update further at next meeting.	AC
1.5	Passport Scheme – Designer Module T&F Group formed. NM to provide an update later in the agenda.	
1.6	Hazard Management / Linear hazards - Mark L to discuss this further with Paul Brown to review the capture of linear hazards within a GIS environment. MLa to update later in the agenda.	
1.7	Safe Gantry Access T&F Group - There is currently no date for the formal issue of the groups initial report. PB to update later in the agenda.	
1.8	Safe Gantry Access - DR had confirmed that his piece of work was now complete, but he was keen to ensure it was shared with the SMP Alliance T&F Group and that outputs were fed back to PDWG on a regular basis. PB has actioned.	
1.9	PB flagged that there was also a back-to-basics Gantry Design Group within the SMP Alliance. JG was aware. PB would provide the feedback to this group also	PB
1.10	A63 TTM issues - PS asked if the Principal Designer could have improved the preconstruction information by the inclusion of a social risk assessment? RW suggested this be taken back to Jo Goulding. Also, has the learning been taken back for potential updates to the RtB. NM to clarify.	RW NM
1.11	Similarly, PS asked if the DMRB GG142 WCHAR assessment process could be widened to include the construction stage of a project, as part of the pre-construction design process? RW to take back to JoG.	RW
1.12	Incident Trend Analysis - DP was working with David Lumb to develop this initiative further.	DP
1.13	SP&TS issues – see Item 3.0	
1.14	DP noted that feedback from the Chat Room had been issued with the previous minutes.	
1.1	SCSLG/Safety Hub update – (15 min) Ian Nixon	
<div><div></div><div><p>PDWG Highways Safety Hub Update May 2022</p></div><div></div></div>		

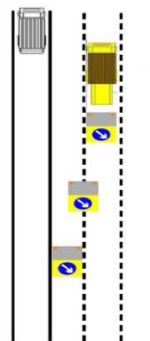
Common Intent & RtB Progress

Last Updated 16-05-2022	SCSLG Member Lead	Common Intent Drafted	Common Intent Released	Raising the Bar Drafted	Raising the Bar Released	Hub Lead	Support Members (inc PDWG Lead)	Comments / Progress Update
Archaeology	Richard Wilson (HE)	Sep-21	Target - Oct 2021	N/A	N/A	N/A	N/A	https://www.highwaysafetyhub.com/archaeology.htm
Live Lane Working / Carriageway Crossing	Dave Shaw (HWM)	Target Sept-21	Target Oct-21	Target January 2022	New RTB 39 - Carriageway Crossings and Live Lane Working - Target Jan 2022	David Riley - Amey	Dave Riley - Amey Liz Brathwaite - Skanska Maureen Gargan - Telent Phil Gregson -	Ready for SCSLG sign off.
Health by Design	Adam Green - (FM Conway)	TBC	TBC	TBC	New RTB 40 - Health by Design - Target TBC	Natalie Mansell - Atkins Andrew Cox - FM Conway		1st draft of CI issued for comment. As part of this work we will also look to revise RTB's 8, 12, 18, 19, 22, 24 and 33. On hold awaiting confirmation of SCSLG significant risk areas.
Suicide Prevention	Nicola Tweedy (HE)	Jun-21	Mar-21	Mar-22	Target March 2022	Paula Parsons (Tilbury Douglas)	N/A	Update from Paula 06/05 - At final formatting and terminology checking stage. We have a final meeting on Monday 06/05 to finish off this task then should be ready for issuing.
Excavations	TBC	TBC	TBC	TBC	Revision to RTB 13 - Excavations - Target TBC	Mark Bridges - GT	Matt Wright - Osbornes Ryan McLean - MWay Jeremy Blom - NMCN	Awaiting new SCSLG members to assign project sponsor to determine full scope and timescales but proposal is for new Common Intent on Excavations with revision to RTB13
Revisions								
B1 Plant and Equipment					Nov-21	Bob Tootell		Proposal to amend 30MC wording to mandate for bulk earthworks and require for drainage and pavement unless a business case is provided. Bob T to request the plant group to define earthworks and gain views from maintenance contracts. Draft due 01/06.
B2 Traffic Management Entry Exit					Jul-12	Liz Brathwaite		B2 & B11 being taken to incursions group for confirmation but believe is s/s by common induction
B11 Influencing driver behaviour					Jun-13	Liz Brathwaite		
B13 Excavation protection access and egress					Jun-13	Liz Brathwaite		Review & update. Draft issued for comment by 19/05
B15 Task Lighting					Aug-13	Bob Tootell		Review & update. Draft due 01/06
B16 Working at height					Sep-13	Bob Tootell		Review & update. Draft due 01/06
B22 Fatigue					Mar-14	Phil Gregson		Review & update. Draft due 01/06
B17 Traffic Marshalls, B25 Loading/Unloading Vehicles, B35 Loading/Unloading Plant, New Safety Critical Communications					Oct 13/ Jul 14/ Dec 20	Tom George	Mark Cartright	Proposal from lost loads working group to combine B25, B35 & B36.
						Liz Brathwaite		Draft issued for comment by 19/05.



Key Topics (April & May):

- Carmont learnings – applicability to Highways.
 - https://youtu.be/6iPOPJMu_8s
- Utility avoidance – M42 Learning – Skanska & Augmented Reality Utility Avoidance – FM Conway
- Highways Passport – agreement to add confirmation of medical and date of expiry.
 - Sub group to trial competencies for specific job roles.
- Deployable IPV – Amey
 - Support request to pre review before review at NSCRG
- Gantry Access – Handrail height.
 - Alert being produced to encourage reporting of sub standard handrails to understand the extent of the issue.
- Newsletter
 - [newsletter_april_2022.pdf \(highwaysafetyhub.com\)](https://www.highwaysafetyhub.com/newsletter_april_2022.pdf)



Deployable IPV

Deployable IPV - Amey (Andy Wood) ongoing with trials with detachable IPV vehicles. Amey will be circulating a document on the trial for comment prior to going to NSCRG, aim to remove people from the zone.

Gantry Access / Insufficient handrail heights - Amey have completed Sub-standard handrail heights review and a Tactical Safety Alert will be released to gain an understanding into the issue. The alert will standardise the way in which the issue can be flagged.

JG noted the previous IAN, which is still available, notes the requirement for low handrails to be identified and captured in the asset database. Some low handrails appear to have been missed, hopefully the safety alert will highlight the process required. Access should not be allowed to the gantries until work to raise the handrail has been completed.

Dave Riley will forward a template (devised within Amey) to the Highways Safety Hub for use by asset inspection teams for now, to remove the risk of taking down the current gantry and using alternate MEMF access.

The issue needs understanding and removing ASAP, through remedial works. Requires a co-ordinated approach to reporting within the Technology support chain and a centralised / co-ordinated NH response to request upgrades / retrospective repairs. JG / RW to follow this up.

DR

JG/RW

1.2 SCSLG – Strategy and Direction – (15 min) Andrew Cox (FM Conway)

 SUPPLY CHAIN SAFETY
LEADERSHIP GROUP



Supply Chain Health & Safety Leadership Group

■ Significant Risk: Strategic Direction

 IDENTIFYING THE RISKS








What's gone before

- Shift in membership
- Operations and SME's now involved
- New members increasing gravitas and diversity of the group
- Consultation and Engagement
- Created a National Highways Risk Profile
- Common Intent not adding value as anticipated





 SUPPLY CHAIN SAFETY
LEADERSHIP GROUP



Vision

Vision - To eradicate any occurrences of fatal harm from “**significant risks**” throughout the complete lifecycle of all National Highways assets by 2030 and prevent occupational health life-changing harm by 2040, by elimination, substitution, isolation and/or engineering controls.

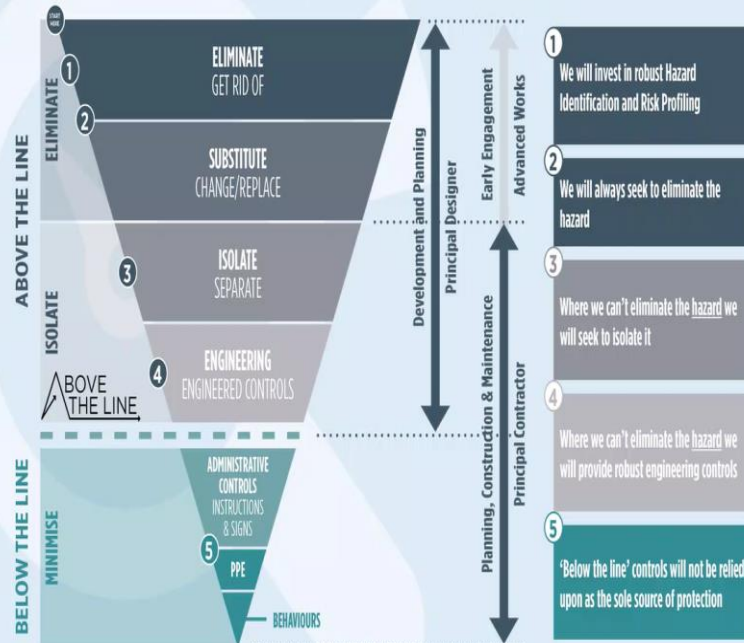
 SUPPLY CHAIN SAFETY
LEADERSHIP GROUP



New Strategic Overview

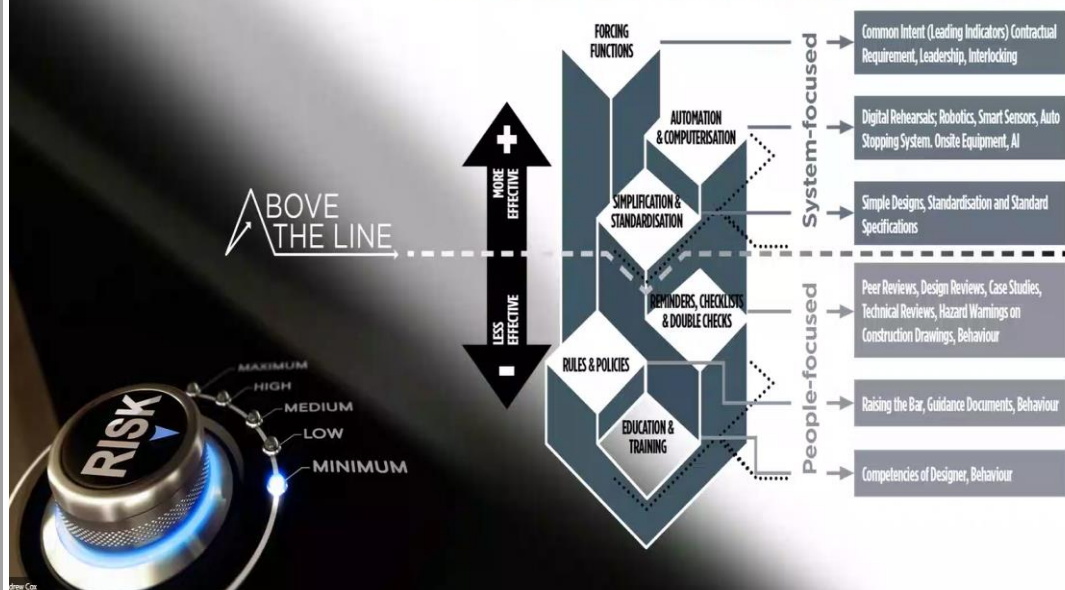
HIERARCHY OF CONTROL

- We still kill and have health concerns - WHY!
- **Health and Safety Performance** - needs to be sustainable with Leading Indicators as a measure of performance. We can decide what H+S performance looks like rather than what we do at the moment which is the absence of accidents
- Framework to be used is the Hierarchy of Intervention



Significant Risk Thinking

HIERARCHY OF INTERVENTION EFFECTIVENESS



Industry Engagement

"The Risk Profile Process has led to some very interesting discussions on the differing perceptions of risk across our organisational

"Telent



SUPPLY CHAIN SAFETY LEADERSHIP GROUP

HSE Thoughts

- HSE Head of Construction Sarah Jardine: Help GB work Well 2016 was all about this approach. Industry helps industry work well. Sarah stated she has been looking for something like this approach.
- Support
- Recognition
- Opportunity to influence construction as a whole
- Innovation with HSE
- Machine learning near misses in the process

SUPPLY CHAIN SAFETY LEADERSHIP GROUP



Risk Profiling Results



PRIORITY GROUPS




IDENTIFYING THE RISKS

RISK PROFILE - A FIRST FOR INDUSTRY

SUPPLY CHAIN SAFETY LEADERSHIP GROUP

Occupational Road Risk
People Plant Interface (including Incursions)
Working at Height
Temporary Works
Underground – Overground Services (Electrical)
Occupational Health – Noise – Dust – Manual Handling
Plant Turnover
Lifting Operation

Benefits for our industry

- Leading Industry - others will follow
- Legacy of true risk mitigation to the roadworkers and road going public
- Measuring performance by the presence of something rather than the absence
- Innovation - leading to carbon reduction, efficiency, cost, fatal risk elimination
- New way of driving change in industry
- New way of monitoring Contract and Supply Chain operational performance
- Different culture within the industry





How Can We Improve Value and Impact?

- Reduce the creation of complex process and procedures - strip out the health and safety clutter
- Do not try to fix every risk
- Less focus on reducing lagging indicator (LTI and RIDDOR)
- Stop prioritising training and briefings as a learning outcome
- Remain focused on priorities
- Ensure delivery of the learning outcomes



- AC noted that Supervision Common Intent now completed, courses consultation ongoing with CITB to arrange a course / training material for create a standard for supervision
- Toria Thomas to share information from Safety & Health Expo on consistent measure how to score H & W against how to score fatalities and injuries and where to prioritise improvements.
- SCSLG are considering developing lead indicators for designers to reduce NH risk profile – the proposal is that Strategic Risk consideration will be a leading indicator going forward.
- PS asked if sufficient time and resources would be a consideration and the challenge this often posed due to Client aspirations. AC indicated the Bow Tie process would be considered here and this would look at historical issues.
- Human Factors would also be considered – safety critical controls needed to be highlighted so that learning is captured. Where failures occurred due to a human intervention e.g., Banksman, contributing to the incidents and accidents needed to be understood better.

TT

AC

2.0 (10.30 – 11.15) Presentations for Learning Opportunities

2.1 Keeping Pace with Change Working Group - Tony Putsman (Representing ICE) / Gary Mees (Architectural Technologist)



CDM 20-20 vision- changing the culture

- ▶ The aims of the report
- ▶ Who has produced the content for the report?
- ▶ HSE involvement
- ▶ How will it change the culture?



CDM 20-20 vision- changing the culture

Aims

- ▶ To demonstrate the need for strategic analysis of the CDM aspects of every project – in the initial stage.
- ▶ To illustrate the management arrangements, appropriate to different types of projects which are CDM compliant.
- ▶ To address often raised questions and provide clarity from both a legal and professional perspective.
- ▶ To show the flexibility of the CDM Regulations.

CDM 20-20 vision- changing the culture

Who has produced the content for the report?

- ▶ KPWC Working Group
- ▶ Membership of the task group
- ▶ Input from HSE
- ▶ Authors of case studies



Institution of Civil Engineers

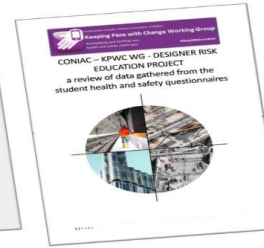


CDM 20-20 vision- changing the culture

KPWC Working Group

- ▶ One of the six CONIAC working groups set up in 2017
- ▶ Two areas of work
 - technological advances (digital)
 - professional education (H&S risk management)
- ▶ Two previous reports

2019 - CDM 2015- from compliance to consultation & collaboration
2020 - Designer Risk Education



CDM 20-20 vision- changing the culture

Membership of the task group

- ▶ Gary Mees – CIC H&S Champion (CIAT)
- ▶ Tony Putzman (ICE)
- ▶ Paul Bussey (RIBA)
- ▶ Alan Mead (IOSH)
- ▶ Randolph Lavelle (IOSH).
- ▶ Gavin Bull (HSE)

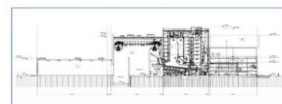


CDM 20-20 vision- changing the culture

Authors of case studies

Each case study was developed by members of the task group working with other construction professionals from various sectors of the Industry.

Each case was based on a real-life scenario – anonymised and adapted to demonstrate a fully CDM compliant set of arrangements.



CDM 20-20 vision- changing the culture

HSE involvement

Gavin Bull HM Specialist Inspector of Health and Safety.

Advised the task group throughout and suggested using a timeline to illustrate how duties are allocated through the various stages of a project.

Reviewing the final drafts and advised on suitable wording.

Chris Lucas Head of Construction Technology and Innovation Unit
Gordon Crick HM Inspector of Health and Safety.

Plan of work stage	0 – 1	2 – 3	4 – 5	6 – 7
Role				
Client (Domestic)				
Architectural Designer (Client Duties)				
Architectural Designer (Principal Designer & Designer)				
Structural Design (Designer)				
Building Surveyor Design (Designer)				
Contractor (Principal Contractor)				

NB: See appendix 2, for explanation of the plan of work stages.

CDM 20-20 vision-changing the culture

How will it change the culture?

'Change will only come one project at a time.'

'New project teams can adopt the strategic approach if client and lead professionals jointly commit at an early stage.'



CDM 20-20 vision-changing the culture

How will it change the culture?

The contents of the report can be used at a project workshop level or in formal training sessions.

ICE, RIBA, APS and IIRSM already include this approach in their CPD programmes.

CDM 20-20 vision-changing the culture

The frequently asked questions were derived from the commonly raised queries encountered by the task group both in project level discussions and at CPD training sessions

What is the preconstruction phase?

How many PD's can there be on any single project with multiple buildings?

What is the principal designer role during the construction phase?

Do designers have to identify all risks?

Should a designer offer to take on client duties on a domestic project?

Do designers have a duty to report health and safety concerns when visiting site?

What should the health and safety file contain and who should produce it?

How far should designers go when mitigating risks?

Can a non-contributory designer be a PD on a project?

Do health and safety risks take priority over other issues?

Which is the most appropriate organisation to take on the principal designer function and why?

CDM 20-20 vision- changing the culture

The strategic approach to analysing a project from a CDM perspective at the outset aligns with other initiatives :

- ▶ The Construction Playbook (Published 2020)
- ▶ Project 13 (2018)
- ▶ Egan – Rethinking Construction (1998)
- ▶ Latham- Constructing the Team (1994)



CDM 20-20 vision- changing the culture

Hosted on CIC
website <https://www.cic.org.uk/admin/resources/cdm-20-20-vision-changing-the-culture.pdf>
Also at website – www.cdmdifferently.com
Resources page – CDM 20-20 report
Designing Differently page – DRM toolkit



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CDM 20-20 Vision - changing the culture.pdf



Construction Industry Advisory Committee (CIAC)
Keeping Pace with Change Working Group
Anticipating and tackling new health and safety challenges
#HelpGBWorkWell

CDM 20-20 Vision - changing the culture



Applying CDM 2015 strategically to diverse projects.



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Case Study 9 – The Yorkshire Airport

Programme description

Expansion of a regional airport including runway extension, new terminal building and demolition of the existing terminal, new control tower, rail link from existing branch line and dual carriageway link to nearest motorway junction.

Project Value Over £900 Million

Key Duty Holders

The client is Yorkshire Airports Group (YAG). The Programme was privately funded by owner PAM Capital through debt and equity.





Plan of Work Stage	0 – 1	2 - 3	4 – 5	6 – 7
Role				
YAG (Client with coordination responsibility during the various stages of the programme)				
Lead Designer (On airport) (Principal Designer & Designer and Design Supply Chain)				
Lead Designer (Highways) (Principal Designer & Designer and Design Supply Chain)				
Lead Designer (Rail) (Principal Designer & Designer and Design Supply Chain)				
Programme/Project Manager (Principal Designer)				
Principal Contractor (Advanced Works)				
Principal Contractor (On airport)				
Principal Contractor (Highways)				
Principal Contractor (Rail)				
Third Parties – Rail/Road etc				

Existing Management Arrangements

The client had a suite of 'business as usual' construction activities as part of their Asset Management Programme (AMP), which had allocated funding envelopes. The arrangements for management of their AMP works included:

- Contractual requirements for design and construction management
- A process to manage regulatory required appointments
- Administrative requirements for management of pre-construction information, construction phase plans and the health and safety file

Construction management arrangements were based on isolated projects and there were established relationships between YAG and their framework contractors to manage design, construction and bringing into use/handover.



The client had an operations and maintenance programme including:

- Winter operations
- Cleaning / Maintenance
- Ground Service
- Surface access and transportation

There were multiple franchises and concessions within the terminal space for retail outlets.

Airport Expansion Programme Management Arrangements

From the outset of the Expansion Programme, the client recognised that it was essential to strategically analyse their CDM arrangements. A strategic leadership group (SLG) was established to develop the key management arrangements and to create a programme wide governance structure. 'Hold Points' were built into the programme to enable the effectiveness of the arrangements to be challenged and checked.

Hold Point 1

- Has the client considered the nature of the proposed programme and if existing arrangements transfer to a complex programme (a programme of projects)?
- What is the client's philosophy (strategic brief) for the management of design and construction and is this transferable to a complex programme?
- Has the client the necessary experience to lead on a programme of such magnitude?




The SLG recognised that different phases of the programme may require different management arrangements.

Phase 1 - Preparatory Design

The proposed programme was discussed with the SLG. The client appointed their framework contractor to begin feasibility studies for the various elements of the programme. The YAG 'standard' contract form was used as the mechanism to appoint the framework contractor as a designer and principal designer.

The feasibility study identified multiple stakeholders and design scopes:

- On airport asset owners/maintainers
- Civil Aviation Authority
- Environmental Regulator
- Off airport Road Authorities
- Local Authorities

	<div data-bbox="252 194 1327 1124">  <p>CDM 20-20 Vision - changing the culture.pdf</p>  <p>Construction Industry Advisory Committee (CONIAC) Keeping Pace With Change Working Group</p> <h3>Health & Safety File (HSF)</h3> <p>The client's arrangements for the HSF were discussed during the initial phase of the programme. Assets were broadly split between those that would be owned, operated and maintained by YAG and those that would be owned, operated and maintained by third parties.</p> <p>Assets owned, operated and maintained by YAG:</p> <ul style="list-style-type: none"> Where an asset category exists, there was no need to create a new 'data file'. The asset was tagged (identified) and relevant asset information was added to the Client's existing database The fundamental requirement was to tag the asset and confirm which existing group the asset information was filed with There was no need for the traditional Part A of the file describing the project as this information did not support operation and maintenance of the asset The process was owned by the client but managed by a 'file' team. At the beginning of the design phase the client and design team identified the relevant parties required to complete the asset information and ensure it was compatible with the existing data models. The principal designer was involved in the process with the Client, relevant design teams and component manufacturers, but not solely responsible <p>Assets owned, operated and maintained by third parties:</p> <ul style="list-style-type: none"> In respect of the third-party asset owner, the asset information was presented in the format required by that third party and by the required duty holders/teams The requirements were agreed in a memorandum of understanding between both clients and design teams prior to works beginning <h3>Summary</h3> <p>Perhaps the most important points to consider when developing arrangements to manage major programmes are:</p> <ul style="list-style-type: none"> A proportionate set of arrangements for the given phase – arrangements that develop as the project evolves and the risk profile changes The most effective systems evolve over time – they are not achieved on day one of the programme Marginal improvements – a suite of minor improvements will often be more effective than holistic review and change Arrangements described in L153 are a framework – the chosen and agreed method of implementation can be moulded to meet the needs of the programme <p>54 Page</p>  </div>				
	<ul style="list-style-type: none"> S Allin & P Singh to discuss what is currently happening on LTC with Tony and Gary to review findings and the approach - PS / SA to present findings at next meeting. GM promoted the use of QR codes given the vast majority of staff have SMART phones. TP was very keen to improve workforce engagement which was always a difficult area. 	PS/SA			
3.0	<p>(11.10 – 12.00) T&F Group Updates - (SCSLG – H&S Hub Support)</p> <p>3.1 Whole Life Design Safety Shares – (15 min) (Martin Partington – Jacobs)</p> <p>MP provided an update on the progress being made by the Safety Shares Group</p> <div data-bbox="252 1514 1327 1995"> <h4>PDWG Task Group – Safety Shares</h4> <p>Summary on a page</p> <p>Purpose of the Meeting - to investigate whether a Design Close Calls process similar to that used by Network Rail might provide learning and sharing benefits for health, safety and wellbeing considerations for the National Highways community</p> <table border="0"> <tr> <td> Attendees <ul style="list-style-type: none"> Martin Partington (Jacobs) - Chair Doug Potter (Arcadis) Sophie Gwynne (Arcadis) Rob Butcher (Jacobs) Sam Allin (Jacobs) </td> <td> Attendees <ul style="list-style-type: none"> Tang Solomon (Arcadis) Sam Allin (Jacobs) </td> <td> Apologies <ul style="list-style-type: none"> Jim Gallagher (National Highways) Tim Goddard (Arcadis) Stephanie Goldsmith (Skanska) </td> </tr> </table> <p>Last meeting reviewed 3 specific draft safety shares</p> <ul style="list-style-type: none"> There was no meeting in April due to Easter holiday impact, however This enabled time to be spent on developing the safety share template and developing how the wording enables a share to be developed that has specific meaning and targeted audiences <p>3 Draft Shares</p> <ul style="list-style-type: none"> Location of technology box affecting maintenance safety and need to expose more people ie: Traffic Management Use of flags instead of faster laying materials Bridge abutment slopes – what's the options, linking to all past information <ul style="list-style-type: none"> Expanded to a further 6 being developed, some are within this presentation </div>	Attendees <ul style="list-style-type: none"> Martin Partington (Jacobs) - Chair Doug Potter (Arcadis) Sophie Gwynne (Arcadis) Rob Butcher (Jacobs) Sam Allin (Jacobs) 	Attendees <ul style="list-style-type: none"> Tang Solomon (Arcadis) Sam Allin (Jacobs) 	Apologies <ul style="list-style-type: none"> Jim Gallagher (National Highways) Tim Goddard (Arcadis) Stephanie Goldsmith (Skanska) 	
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We've come quite a way

The original layouts were in portrait, but you will see they are now landscape

They were wordy, and the messaging was a mixed

In some cases there was no linkage to other information

HIGHWAYS – Flag on Edge

Ref: 700.000

Issue
A19 Norton to Wymondley had a requirement for low height retaining walls along the north and southbound carriageways.
Over-excavation of the slopes along the A19 posed a significant risk of slope instability during the temporary works phase.
Flag on edge was utilised as a solution.

Mitigation
Design
Initially various options were considered, with differing material costs, impact on the environment, time / complexity to install, aesthetic appearance, maintenance demands and safety, all being part of the consideration. The flag on edge solution, it was felt involved a minimum temporary works excavation footprint, generating reduced volumes of arisings. Construction was considered to be relatively straightforward and low tech, meaning multiple trades were not all vying to work in the same constrained site area at the same time, and measures could be implemented to mechanise lifting and placing of paving flags as required to minimise manual handling.
Construction
Although mechanised lifting was originally specified, with 3000 x 600mm slabs to be used, actual site access restrictions meant that hand installation of the flag on edge was required. Smaller 300 x 600mm slabs were eventually used to reduce the extensive manual handling.
Maintenance / Operations
The use of the smaller slabs would mean that they would be more easily replaced; however, the increased number of joints would increase potential water ingress and weed growth.
Actual Incident
A three-man team using a small mechanical excavator installed ~43m of flag on edge paving on both north and southbound carriageways during night and day shifts.
There were no H&S incidents or injuries from manual handling during the installation.

Lesson Learnt
Working area had not been considered during design development. Alternatively, a pre-cast L section, or TCB, could have been substituted for the flag on edge. This could have been placed mechanically and backed up with concrete. There would have been a considerable reduction in manual handling, a reduced duration of the works and consequently this would have limited the exposure of the workforce to injury; and also enabled the TM to have been removed earlier reducing the impact on the travelling public.

Significant Risks
A risk comparison has been undertaken on side 2 of this Safety Share to highlight the potential benefits (hazard reductions) that could have been achieved by utilising an alternative form of construction.

Send similar issues or best practice to the ?????????? Peer review group for consideration for upload to this sharing site

LEAN	Material Reduction	Alternative Materials	Reduced Plant	Alternative Plant	Reduced Labour	Reduced Land	Reduced Transport	Improved end user benefits	Reduced Activity Duration	Reduced Defects	Reduced Repeatable Accidents
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Almost there

GROUNDMAINTENANCE – REVETMENT FINISHES

Ref: WLD.001

Description of Event
A designer has specified a block paving finish for a bridge revetment.

Population at Risk
Construction Workers, Maintenance and Inspectors

Hazardous Activity and Residual Risk Description
Constructing, maintaining and inspecting a bridge revetment may expose workers to tripping on uneven ground hazards, slipping and falling on slopes with an assessed residual risk of an almost certain likelihood of minor harm and a may happen likelihood of moderate harm being incurred.

Potential consequences of this event
• This residual risk may require a safe working at height solution to be designed and implemented, such as a rope access system.
• A finish that cannot be easily and quickly maintained or one with a short design life which increases the number of man-hours to which workers are exposed to the hazards and risks.
• A soft landscaped revetment exposes maintenance and inspection workers to a higher number of man-hours compared with a hard landscaping finish.

Safety Hub Alert Database
• Sub-category 2 Slips trips & falls (same level) for Housekeeping has 13 alerts.

Please send ideas for Whole Life Design safety shares to wholifedesign@nationalhighways.co.uk

Potential Mitigation Measures
Design
• Design bridges without sloping revetments.
• Specify revetment with a hard landscaped finish.
• Evaluate block paving with sprayed concrete solutions.
Construction
• Submit Request for Clarification.
• Raise safety observations.
Maintenance / Operations
• Submit Works Request to provide a hard landscaped finish and raise safety observation.
• Design suitable engineering controls when working on sloping revetments.

Further Guidance and Reading
• BD 97/12 – The Assessment of scour and other Hydraulic Actions at Highways Structures.
• CD 351 The design and appearance of highway structures
• LD 117 Landscape design
• DMRB GD 304 – Designing health and safety into maintenance
• RIB 26 – Safety by Design
• CIRIA C543 Bridge detailing guide
• CIRIA C686 Safe access for maintenance and repair. Guidance for designers

Photo of a bridge revetment without surface stabilization treatment

Photo of a bridge revetment with block paving surface treatment

LEAN	Material Reduction	Alternative Materials	Reduced Plant	Alternative Plant	Reduced Labour	Reduced Land	Reduced Transport	Improved end user benefits	Reduced Activity Duration	Reduced Defects	Reduced Repeatable Accidents
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3

LIFTING AND CARRYING – LOW-LEVEL RETAINING STRUCTURES

WLD.003

Description of Event
A flag on edge solution was designed as a low-level retaining structure

Population at Risk
Construction and Maintenance Workers, Inspectors and Travelling Members of Public (MoP)

Hazardous Activity and Residual Risk Description
• Construction of low-level retaining structure using flag on edge that requires manual handling with an assessed residual risk of 'an almost certain' likelihood of extreme harm being incurred.
• A flag on edge retaining structure has a shorter design life than other solutions, increased construction period and requires a shorter interval between inspections.

Potential consequences of this event
• In 2021 HSE estimated that there were 40,000 workers suffering with musculoskeletal disorders.
• The musculoskeletal disorder incident rate is 1.8%.
• Extended period of TTM required leading to greater exposure to workers and public.

Safety Hub Alert Database
• Sub-category 2 MoP Incursions has 8 alerts including 1 fatality.

Please send ideas for Whole Life Design safety shares to wholifedesign@nationalhighways.co.uk

Potential Mitigation Measures
Design
• Eliminate manual handling of materials by designing a pre-cast concrete panel solution that requires mechanically handling.
Construction
• Ensure mechanical handling option is used.
• Minimise TTM requirements.
Maintenance / Operations
• Periodically assess safety and serviceability of retaining structures in accordance with CS459.
• Submit Works Request and raise safety observations.
• Design a suitable TTM solution before working on live carriageway.



Further Guidance and Reading
• CS 459 The assessment of bridge substructures, retaining structures and buried structures
• DMRB GD 304 – Designing health and safety into maintenance
• RIB 8 – Manual Handling
• RIB 26 – Safety by Design
• INDG 143 Manual handling at work – a brief guide
• L23 Manual handling. Manual handling operations regulations 1992. Guidance on regulations.
• CIS No 57 Handling kerbs: Reducing the risks of musculoskeletal disorder (MSDs)

Photo precast concrete panels



Photo of flag on edge retaining structure

LEAN	Material Reduction	Alternative Materials	Alternative Plant	Reduced Labour	Improved end user benefits	Reduced Activity Duration	Reduced Defects	Reduced Repeatable Accidents
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4

Bridge Strike – Material Deliveries		Ref: WLD.XXX
Description of Event <i>Material delivery location in proximity to overhead structure.</i>		
Population at Risk Construction Workers, Maintenance Workers and Rail and Road Users	Hazardous Activity and Residual Risk Description <ul style="list-style-type: none"> Driving off with Tipper Lorry in unsafe condition Tipper lorry operations in close proximity to overhead structures with an assessed residual risk of an almost certain likelihood of major harm. 	ECI is recommended to highlight potential hazards that could be present along internal and external site access and egress routes.
Potential consequences of this event <ul style="list-style-type: none"> Impact to overhead bridge structure causing damage to rail infrastructure, line and road closure and potentially injuries to road and rail users The residual risk requires additional checking that delivery vehicles are safe to re-join the carriageway. 	 <p>Photo of wagon having hit bridge deck with tipper body dislodged and resting on road and against the rail edge beam.</p>	Construction <ul style="list-style-type: none"> In this instance the process was changed for the acceptance of delivery tickets. Tickets could not be signed off by the site team until the delivery vehicle had been inspected and deemed safe to leave the site. Additional checks were introduced to ensure that the vehicle was safe to join the carriageway after delivery/offload of the materials. Temporary goalposts could also have been provided dependent on the location of the structure in relation to the site.
Safety Hub Alert Data Base <ul style="list-style-type: none"> Subcategory 2, overhead hazards has 7 alerts relating to bridge strikes including 2 with injury. 	Potential Mitigation Measures Design <ul style="list-style-type: none"> Confirm that there are safe road access and egress routes to the site and that these are highlighted in the PCI. Material delivery or storage areas within the site should be considered within the PCI and sited at locations where safe access can be gained. The location of warning devices e.g., goalposts should be considered in the PCI. 	Maintenance / Operations <ul style="list-style-type: none"> This is applicable to maintenance works e.g., re-surfacing operations. Raise safety observations.
Further Guidance and Reading <ul style="list-style-type: none"> TBC 		 <p>Photo of tipper body having collided with bridge deck. Rail bridge was shut until structural inspections could take place to ensure track and edge beam were undamaged.</p>
To be presented to subgroup. Confirm if this is to be developed into a safety share.		
Please send ideas for Whole Life Design safety shares to wholelifedesign@highways.co.uk		
LEAN		Reduced Reportable Accidents

5

Collision/Impact – Hit by falling object		Ref: WLD.XXX
Description of Event <i>Principal Contractor and Designer required work to be done at night. They did not consider how lighting may be secured to a scaffold tower.</i>		
Population at Risk Maintenance Worker, Contractor and Inspectors	Hazardous Activity and Residual Risk Description <ul style="list-style-type: none"> Working below temporary scaffold. Working at night with unsecured lighting equipment on scaffold towers has an assessed residual risk of an almost certain likelihood of minor to moderate harm. 	Potential Mitigation Measures Design <ul style="list-style-type: none"> Provide a safe working area by specifying exclusion zones around mobile scaffold towers. Ensure the Principal Contractor provides information and instructions for workers on working at height. All working at height should have a specific Risk Assessment and Permit to Work. Toe boards to be specified in design in accordance with PASMA guidance.
Potential consequences of this event <ul style="list-style-type: none"> The residual risk requires the Principal Contractor to account for safe working at height during nighttime shifts. 	 <p>Photo of worksite, tower on left was where the light fell from</p>	Construction <ul style="list-style-type: none"> Always request toe boards to be fitted when there is a risk of materials/equipment falling from height and ensure exclusion zones in place. Consideration should be given to whether it was necessary to carry out the work at night. If not, this would eliminate the need to introduce an additional light on the scaffold tower. Ensure all attachments are suitable fixed and secure.
Safety Hub Alert Data Base <ul style="list-style-type: none"> Subcategory 1 scaffolding with subcategory 2 falling item has 7 alerts including 2 with injury. 	Potential Mitigation Measures Maintenance / Operations (Unsafe) <ul style="list-style-type: none"> Use stop work authority. Raise safety observations. Submit works request to provide toe boards. 	 <p>Photo of Night Searcher Task light – approx. 2 kg in weight</p>
Further Guidance and Reading <ul style="list-style-type: none"> RtB26 – Safety by Design TBC 		To be presented to subgroup. Confirm if this is to be developed into a safety share.
Please send ideas for Whole Life Design safety shares to wholelifedesign@highways.co.uk		
LEAN	Alternative Plant	Reduced Reportable Accidents

6

IMPACT WITH MOVING VEHICLE - POSITIONING OF ASSETS		Ref: WLD.001
Description of Event <i>A designer has positioned assets (a traffic loop box) on live carriageway side of vehicle restraint system</i>		
Population at Risk Maintenance Contractor Workers and Inspectors	Hazardous Activity and Residual Risk Description <ul style="list-style-type: none"> Live carriageway working exposes workers maintaining and inspecting assets to the potential of being struck by a Member of Public (MOP) vehicle with an assessed residual risk of an almost certain likelihood of extreme harm being incurred. A low load class of an asset cover is a hazard to vehicles driving on the shoulder with an assessed residual risk of an unlikely likelihood of minor harm being incurred. 	Potential Mitigation Measures Design <ul style="list-style-type: none"> Provide a safe working area by positioning assets set back from a suitable vehicle restraint system. Provide information and instructions for workers on load class of cover and safe route from maintenance vehicle to working area within a Maintenance and Repair Statement.
Potential consequences of this event <ul style="list-style-type: none"> The residual risk requires Temporary Traffic Management (TTM) solution to be designed and implemented, which has a negative impact on the road users' wellbeing. Putting TTM solutions in place is a hazardous activity placing workers at risk of harm. In September 2021 National Highways performance report showed 49 vehicle incursions reported by operations. 	 <p>Photo of a traffic loop box on live carriageway side of vehicle restraint system</p>	Construction <ul style="list-style-type: none"> Submit Request for Clarification to National Highways Project Manager. Raise safety observations.
Safety Hub Alert Database <ul style="list-style-type: none"> Sub-category 2 MOP incursions has 8 alerts including 1 fatality. 	 <p>Photo of an impact Protection Vehicle following a vehicle strike</p>	Maintenance / Operations <ul style="list-style-type: none"> Submit Works Request to provide a safe working area and raise safety observation. Design a suitable TTM solution before working on live carriageway.
Further Guidance and Reading <ul style="list-style-type: none"> DMRB TD 131 Roadside technology and communications DMRB GD 304 – Designing health and safety into maintenance RtB 26 – Safety by Design 		Reduced Plant Reduced Labour Reduced Transport Improved end user benefits Reduced Activity Duration Reduced Defects Reduced Reportable Accidents
Please send ideas for Whole Life Design safety shares to wholelifedesign@highways.co.uk		
LEAN		

7

Monthly Highlights

Designing for Maintenance

MS3's previously had off carriageway access

- a layby and a hard standing –
- one or two maintenance persons parked, walk down a path behind a barrier and accessed the MS3's.

Handover (Now): One of the MS3's is pictured.

- Sheet pile too close behind barrier
- no steps down from verge, behind,
- no path from repositioned layby down the road.
- Handover certificate excerpts above stated "it is not deemed that Incident Management requirements are greatly different to existing" GREEN status.
- No residual risks identified in the H&S file information.

OD have been engaged in the regional process to agree the compliance strategy and any MSUs with category 1 responders.	Yes	Status: GREEN It is not envisaged that the A19 scheme will have any effect on the current processes which will remain in place.
OD work instructions for the scheme are available and accessible (Sheet Piling/beam) and have been approved by the OD Incident Management Requirements team for use.	Yes	Status: GREEN The scheme CT1 is returning a CSAP to operational use with limited existing Technology it is not deemed that Incident Management requirements are greatly different to existing.

Access (Now)
installing temporary traffic management out of hours on a Sunday.

1. increased work force exposure (deploying and within TM – TTM is highest risk activity),
 2. decreased breaks (fatigue is silent killer),
 3. increased carbon impact
- MS3's are aging and will require increased no of interventions as time moves on (1-3 above likelihood will increase)



Outstanding issues

Who will be using these, and how will they be found

- one source of truth
- which websites:
 - Supply chain Safety Hub,
 - National Highways Home, Safe and Well,
 - or both: saved on one but a webpage developed for both

Ensure the key risk and event are clear, as are the mitigations.
Ensure the messaging is clear and understandable.

Outcomes and Next Steps



- This presentation has given a better flavour of what a Safety Share is and the issues being considered before publishing
- There are a further 5-10 in draft stages
- Next meeting on 25th May will finalise the layout and content of the shares in this presentation
- Early June, shares to be published and posted on Supply Chain Hub site
- End of July develop page for Home, Safe and Well site or link back to Supply Chain Hub site
- Every meeting after that aim to get 2-3 shares completed and published

Safe Gantry Access by Design WG – (10 min) - (Paul Brown - WSP)

3.2

- Update from SMP Alliance Working Group - Draft document released, and now considering what further risk assessments are required. Discussed with the gantry design self-delivery team within the alliance. The delivery date is the end of June to review the cost benefit and pro's and con's relating to gantry access. Currently having a challenge in obtaining the background data for the risk assessment due to the varying methods currently adopted in undertaking maintenance within each region. PB has requested consideration of a scenario of an unconscious person on the gantry and their safe removal.
- PB reiterated the concerns over sub-standard height of certain gantry handrails - WSP are reviewing internally.
- Rob Butcher – Consideration should be given to the retro fitting of handrails to raise the inadequate heights on gantries. Any alterations to the handrails would have to go through the appropriate governance processes. RB noted that there are currently a number of Safety Alerts relating to this, RB locate and circulate.

RB

	<ul style="list-style-type: none"> Jim Gallagher – In respect to the Gantry alterations mentioned, he managed gantry design standards - the technical governance should always be through the current Technical Approval route. JG requested that if people have comments / concerns then please approach him directly. 	All
3.3	BIM Risk Library – (Pav Singh – Arcadis) <ul style="list-style-type: none"> PS indicated that there was no update in this period. MLa would provide an update on discussions he has had with Gordon Crick of HSE. A new report had been published in April 	
3.4	Suicide Prevention Tool <ul style="list-style-type: none"> No update available for the period other than the Phase 1 report had been finalised. Nicola Tweedie to present at the next meeting 	NT
3.5	Utilities Avoidance <ul style="list-style-type: none"> No update. There have been ongoing discussions between Chris Gee / Mark Lamport. MLa noted updates with CG and particularly the issue of clarity of the CDM roles for utility works. The lack of clarity has caused confusion across schemes previously. MLa is to meet with CG shortly to progress this matter. CG is very interested in using the proposed Pre-Construction Phase plan to bridge the gap between PCI and PC CPP. CG will be attending the July meeting to provide an update. Currently reviewing engagement and programme of utility works. 	MLa CG
3.6	H&S File Digital Development – (15 min) (Mark Lamport – Arcadis) <div>  <p>Principal Designer Working Group Event No 27</p> <p>Health and Safety Files Digital Development Mark Lamport, Arcadis</p> <p>19th May 2022</p> </div> <div>  <p>Task and Finish Group Meetings</p> <ul style="list-style-type: none"> Task and Finish Group Kick-off Meeting held on 18/1/2022 Next meeting to be held on 7/6/2022 </div>	

Task and Finish Group Team

Mark Lamport – Arcadis
Doug Potter – Arcadis
Toria Thomas - Arup
Natalie Mansell - Atkins
Tim Bowes – Atkins
Rob Butcher – Jacobs
Richard Wilson – National Highways, PDWG Chair and T&F Group Sponsor
Jason Glasson - National Highways, Head of Asset Management
Kevin Clague - National Highways, Asset Needs Manager - Operations NW
Darren Allen – Telent
Jon Horrill – WSP
David Owens – WSP

Task and Finish Group Terms of Reference, Objectives and Tasks

Reviewed with Richard Wilson on 17/5/2022:

- The T&F Group will move forward on the **assumption** that the various National Highways actions needed to align PCF and National Highways Business Collaborator (BC) with the new CDM Standard and Health & Safety File template will have been undertaken.
- This T&F Group will look specifically at Health and Safety Files Digital Development and how the transition can be made from the current document-based Health and Safety Files to a digital platform.

Task and Finish Group Sub-Tasks

Sub-Task 1

Establish which other National Highways group(s) are working on H&S File digitalisation and liaise with them to avoid duplication.

Sub-Task 2

Establish what progress consultant organisations who are members of PDWG have already made with respect to Health & Safety File digitalisation.

Sub-Task 3

Establish end-user requirements – clients, operators, maintainers, designers (of future modifications and upgrades), decommissioners/demolishers.

MLa requested assistance from members of the PDWG to assess where people are in the digital journey for H & S Files. How are people reviewing residual risks and communicating these within BIM models / GIS? Potentially a survey will be going out to gather this feedback.

MLa

Task and Finish Group Sub-Tasks

Sub-Task 4

Identify which of the National Highways H&S File content requirements set out in the H&S File PCF product guidance can be presented in digital form. Is this all or some of the content?

Sub-Task 5

Produce a draft process map – to help ensure consistent approach and format of data and risk tagging for point, linear and areal hazards (including shape, size and colour of hazard symbols [triangles, polygons] and fields within the associated tagged data set).

Task and Finish Group Sub-Tasks

Sub-Task 6

Identify any specific requirements of the National Highways 5 Year Digital Transformation Plan and Digital Roads document which would be relevant to H&S File digitalisation.

Sub-Task 7

Produce Outputs and Deliverables

Task and Finish Group Outputs & Deliverables

Ultimate objective - to produce a "Best Practice Guide for Health and Safety File Digitalisation" - but this is a significant piece of work and probably beyond the reasonable scope of this T&F Group. A more realistic deliverable could perhaps be a report which covers:

- Summary of current situation on H&S File digitalisation – where are we now, what are National Highways and supply chain organisations currently doing? How this links into PCF and 3D processes?
- What is working well/what needs to be improved?
- What are the blockers eg interface/incompatibility issues between MP and OD, progress of OD adoption of digital, software limitations (eg can the existing software available in the marketplace be used to present H&S File content in digital form?)
- What are the future-proofing considerations – the digital H&S File information must be retrievable and readable in 50+ years?
- A proposed roadmap for the transition to digital of National Highways Health and Safety Files

Alignment with BIM4 Working Group

"Sharing Data, Saving Lives" Report recently published:

"This Report explores the potential that sharing design risk data can have in reducing the levels of risk and uncertainty encountered on the construction site. The Sharing Data Saving Lives project has explored some key practical issues around how data can be shared, and what are the blockers and enablers, incentives and disincentives that prevent this happening."

Quote from the BIM4 Working Group meeting on 12/4/2022:

"Data sharing frequently falls down at the practical level"

PS provided links to recent documents produced by HSE.

Digital Health and Safety Risk Library Use Case

04/04/22 **REPORT**

This report presents the work undertaken during the Phase 2 – from June 2020 to June 2021 – of the BIM Risk Library Use Case of the Discovering Safety programme.

<https://www.discoveringsafety.com/reports/digital-health-and-safety-risk-library-use-case>

<https://www.discoveringsafety.com/works/construction-risk-library-project>

Digital Health and Safety Risk Library Use Case | Discovering Safety

RW provided a copy of the New NH Asset Management Approach Published today by National Highways

New NH Asset Management Approach https://nationalhighways.co.uk/media/si2pi4yz/approach-to-asset-management_v_final.pdf

New NH Asset Policy https://nationalhighways.co.uk/media/2mvhwhsi/asset-management-policy-v_final.pdf

[Digital Roads - Highways England \(nationalhighways.co.uk\)](https://nationalhighways.co.uk/digital-roads)

Digital Roads - Highways England

Digital Roads

[Digital, data and technology strategy - Highways England \(nationalhighways.co.uk\)](https://nationalhighways.co.uk/digital-data-and-technology-strategy)

Digital, data and technology strategy - Highways England

Digital, data and technology strategy

Paul B expressed surprised that he couldn't find either "handover" or "health and safety file" references featuring in the NH Asset Management Approach. He quired how Handover processes, correct formats / recipients, or content of H & S Files would impact on asset management.

Passport Scheme – Designer Module (5 min) (Update) Natalie Mansell

3.7

Background

Current HCI adds little benefit for designers as it is primarily aimed at site based activity.

Proposed Overview / Scope

To collaboratively develop an additional module for the HCI specifically tailored for designers.

General comments

What is the suggested length of the module

Data heavy – can we include work already published (such as videos from M4 – BB)

Sign post to other activity in the industry

To put together a programme of meetings – including one face to face

CDM – to include basics / simple slide / have a visual approach



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Stakeholders

Passport steering group

PDWG

NH – Richard Wilson / Teresa Moss



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Feedback for PDWG

Updates from the Passport Steering Group today;

Suggested we get the view from PDWG on whether designers should be included in the Who need to be registered segment of the Passport expectations document. This would be the “do minimum” approach to the designer module.

Teresa wasn't on the call today but it was also suggested we separately get her and Richards view on the separate designer module vs adding designer content to the existing modules debate.



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- NM referenced the need to understand what designers require from the module, so that the development team could gain some feedback, currently tailored specifically for designers' requirements.
- TT requested that the module should include facility to include pre-construction site visits to undertake survey and inspection and promote improved landowner engagement. Different risks to those experienced on construction sites.
- TWf have engaged with the group to cover the temporary works elements of design.

	<ul style="list-style-type: none"> RW wanted a broad-brush approach across the industry so greater clarity was required over the scope. PS wanted the proposals being put down in bitesize chunks NM/OM to touch base with RW/TM to agree the preferred way forward. 	NM/RW
3.8	Eliminating Risk from The Outset (ERFO) – SPaTS2 – (15 min Update – (Paul Dennis - Arup) <ul style="list-style-type: none"> Design as a process - Documents currently in Draft <ul style="list-style-type: none"> Reviewing Pre-Construction Phase H & S Plan - Reviewing Stage 0 PCI work. Currently no H & S products before Stage 2 at present. Paul B requested that the CDM Strategy brief from CDM 20-20 be considered when developing the Pre-Construction Phase Plan? PD indicated this will be considered prior to formal issue. Documents to be shared with PDWG. Learning from Design - Draft documents due out in June <ul style="list-style-type: none"> Building on the work previously completed as part of the Eliminating Risk from the Outset T&F Group, this is reviewing amendments to GG128 and the drafting of a standard template for Safety Alerts which will support the development of Safety Shares. MP to note. Measuring Designers H & S Performance - Draft documents due out in May 2022 <ul style="list-style-type: none"> H & S CPF Metric (1.1b) Developing Analytics within HART to measure Designers performance – work concluding shortly. Update to RtB26 and development of the Pre-Construction Phase Plan. PB and TT to discuss further and hold some further workshops around this subject. Update to be provided on the proposal for the Design Strategy Record becoming a PCF product within all schemes, this will be fed in and discussed within the working group. MLa had spoken with TT and volunteered to assist further in the discussions building on his previous input in this area. PD keen to link up with MLa and the interface with Chris Gee. PS asked PD link with the Xactium team and risk management. PD agreed a common language was essential. PD to update at the next meeting. 	PD MP PD/TT MLa/PD PD
4.0	Information for Discussion	
4.1	No presentations	
5.0	AOB <ul style="list-style-type: none"> CDM process and procedures – RW asked that any comments on these documents are to be discussed / forwarded to Dave Townsend from National Highways. It was suggested that DT be invited to a future meeting to discuss the current updates to the WHS PCF Products. DP to action. Handover Lessons Learned – RW suggested that Liz Brathwaite (Skanska) and Phil Leng (Balfour Beatty) be approached to capture the issues that arose on the A14. ML added that capture of Handover experiences here would be good. NM noted that Tim Bowes could support here also RW suggested that Jo Goulding be invited to a future meeting 	All DP DP DP
6.0	Date of Next Meeting – 21st July 2022 (PDWG 28) – Teams Meeting	