

Principal Designer Working Group (PDWG)

HIGHWAY ENGLAND SMART MOTORWAY PROGRAMME

Meeting No.8

**Minutes of the Principal Designer Working Group Meeting / Workshop No.8 – 20th December 2017**

**Location: WSP Offices, 1 Queens Drive, Birmingham B5 4PJ**

**Time: 10.00am to 3:30pm.**

**Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Initials** | **Position** | **Organisation** |
| Jeremy Bird  | JB | Head of H&S Delivery | Highways England |
| Etienne De Toney | EDT | H & S Lead CIP (HE) | CH2M / HE |
| Leventia Stoiou | LS | Structural Advisor | Highways England |
| Steve Davey | SD | Head of Technical Standards | Highways England |
| Pav Singh  | PSi | Principal Designer Manager | Arcadis |
| Tim Goddard  | TG | Principal Designer Manager | Arcadis |
| Nicola Knowles  | NK | Principal Designer Manager | Arcadis |
| Ed French | EF | Principal Designer Manager | Arcadis |
| Mark Lamport | ML | Principal Designer Manager | Arcadis |
| Simon Wilkinson | SWi | Technical Director | Aecom |
| Doug Potter (Chair)  | DP | M1 J28-35a SM Handover Manager / Principal Designer | WSP Group |
| Paul Brown  | PB | Technical Manager  | WSP Group |
| Jonathan Giles | JG | Divisional Team Manager, Principal Designer | WSP Group |
| Jon Horrill | JH | Principal Designer / H & S | WSP Group |
| Tim Metcalfe (Minutes) | TM | Graduate Engineer | WSP Group |
| Rob Wood | RW | Associate Director | Amey |
| Cristina Vanella  | CV | LTC HSSW Team, CDM Manager | CH2M |
| Roger Swainston  | RS | PD / CDM Advisor | CH2M |
| Liz Braithwaite  | LB | H&S Manager | Skanska |
| Nick Boyle | NB | Technical Solutions Director | Balfour Beatty |
| Malcolm Shaw | MS | Principal Designer SMP M1 23-25a | Arup |
| Paul Storey | PS | SMP Operations Efficiency Lead | CH2M/ HE |
| Tim Bowes | TB | Principal Designer | Atkins |
| Ray Filip | RF | Temporary Works Designer  |  |

**Apologies:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Initials** | **Position** | **Organisation** |
| Julia Johnson | JJ | Director of Operations | Jacobs |
| Andrew Finch  | AF | Director of Operations | Jacobs |
| Dave Morrow | DM | Principal Designer | WSP Group |
| Ian Lockwood  | IL | RIP North Lead | Highways England |
| Dave Garton | DG | Portfolio Lead H&S, HE & RA | CH2M |
| Peter Foster | PF | Principal Designer Area 9 & Section 278 Project Manager | Kier |
| Shirley Worrell | SWo | PCF Assurance Manager | Highways England |
| Steve Yates  | SY | Principal Designer | CH2M |
| Rob Butler | RB | PD & Q.A Manager | Highways England |
| David Townsend  | DT | Head of Policy and Compliance, H&S Team | Highways England |
| David Owens | DO | Highways England BIM Team | Highways England |
| Nigel Yeatman | NY | Area 12 Asset Manager | AOne+ |

**Actions:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Ref** | **Topic** | **Action** **Owner** | **Deadline** |
|  | **General** | Note |  |
|  | The general purpose of the meeting was to discuss and provide actions for the relevant issues within the structure of the agenda. The agenda is categorised into ten sections, and it forms the basis of the minutes. | **Note** |  |
| **1.0** | **Welcome and Safety Moment** |  |  |
| 1.1 | Attendees introduced and apologies for absentees noted |  |  |
| **1.2** | **Safety Moment**  |  |  |
| **1.3** | **Driving safety presentation –**Video shown of victim of car crash caused by a driver texting whilst driving. It highlighted the risk of mobile phone usage whilst driving. | **All** | None |
| **2.0** | **DMRB Review – Progress update and Future Digital Design Support** | **SD** |  |
|  | **Implementation of DMRB Update**Following the December 2016 DMRB Update Presentation to the PDWG, SD has very kindly offered to provide a further progress up: - SD presented a slide show focusing on the future of the DMRB standards (see attached) which is to be completed by April 2020. The main aims are to: * Rationalise documents that are often bulky, often not up-to-date or have not been regularly reviewed;
* Resolve unclear distinctions between requirements and advice, which are currently leading to a huge number of departure requests being received by Highways England;
* Address the fact that a large proportion of the advice is not linked to requirements;
* Incorporate IAN’s to address the current unstructured nature of IANs that have been issued, which means it is hard to locate relevant content and requirements.
* It was confirmed the I Cert process was currently on hold

The intention is to remove current inconsistencies within the standards across the UK, which will be reduced through the review process.SD also discussed the impact that digital design will have in the future and how this will be incorporated within the DMRB. **Performance based approach*** The DMRB is to move to a more performance based approach, compared to the current method requirement approach, the standard levels of performance are yet to be determined.
* The review started in 2015 had been completed as part of requirements of the protocol.
* SD set out the findings of the review, with the main aims being to reduce the number of standards, reduce the number of resultant compensation event and minimise the number of NEC Clause 17.1 events, which currently resulted from inconsistencies in the resultant Works Information.

**Progress todate - Use of JIRA and development of CARS*** JIRA has now been introduced which is a new programming and workflow tool.
* JIRA will run together with CARS which is a Collaborative Authoring and Review System to allow quick turn-around of technical commentary.
* The proposal is that the DMRB will function in conjunction with rapid engineering modelling software, with development and database work currently in progress to instigate this. All to be accessible by March 2020.

**Asbestos documentation*** Asbestos documentation is currently being reviewed, 1st draft is expected next in early 2018.
 | NoteNoteNoteNoteNote**Note** | **Ongoing****Jan/Feb 2018** |
| **3.0** | **Temporary Works Design (TWD) and the responsibility of the Permanent Works Designer/ Principal Designer – Ray Filip** | **RF** |  |
|  | RF is a Temporary Works Designer with over 30 years’ experience over a broad range of schemes. He is a member of the Temporary Works Forum and is currently assisting BSi in the update of various temporary works standards:* RF asked that all consider what Temporary Works are and how they are best defined – he provided a number of photographic examples – see attached presentation, e.g. the Concordia incident. Other examples included:
* Hoists mast climbers; anchor points to harness to; temporary bridges; foundation to plant - outrigger loads; trench boxes; cut ground to angle in temporary state; trench shoring; facade retention; stability of reinforcement; protection of services and public; site setup; testing; Coffer dams; tunnelling; dewatering; temporary stability of structures during construction; bridge slides movement and stop; demolition and lifting.
* RF provided guidance for designers as to their responsibilities under CDM and the considerations that should be made around buildability and the need for temporary works during the construction phase.
* He highlighted examples of the resultant temporary works required, which was often highly complex to design. RF felt that far too often not enough thought was put into temporary works requirements when developing permanent works proposals.
* Consideration of how something could be built safely was a fundamental keystone of CDM Legislation. He suggested that temporary works designers should have greater early involvement in the permanent works design process, to minimise build issues, reduce risk and minimise safety problems.
* Overall it was key that Principal Designers ensured design teams consider temporary state design, the erection process, cost, accessibility and location, as part of the basic design development process, to ensure that TW’s are kept to a minimum and that the construction process be as simple as possible.
* RF requested that Designers and Design Organisations and members of PDWG need to have greater participation in the Temporary Works Forum – who can be contacted at [www.twforum.org.uk](http://www.twforum.org.uk). He asked PD’s to actively promote corporate membership of the organisation.
* RF highlighted and recommended that all PD’s become familiar with the HSE Guide - The Management of Temporary Works within the Construction Industry.
* RF indicated that it was proposed to create a new PCF product which would cover TW’s design, as this was currently not addressed within the PCF process
* The TW Forum are currently working closely with BSI to develop BS 5975: 2008 +AI: 2011 the Code of practice for Temporary Works Procedures which was due out in the spring.
* The code would mirror the structures checking categories starting with Cat. 0 – Standard Solutions to Cat. 3 Complex/Innovative Designs
* RF, also referenced PAS 8811 Code of Practice for temporary works – Client procedures (June 2015)
 | Note**All****All****All****All****Note** | **TBC****April 2018** |
| **4.0** | **IAN 105 Implementation of CDM*** Picking up from comments and actions from PDWG No.7 of September 6th, ML set out the PDWG’s current understanding in respect to CDM implementation; and asked JB if he could clarify subsequent developments within Highways England, in respect to IAN 105 and the formalisation of instructions/standards setting out the delivery of CDM within Highways England Projects.
* JB confirmed that IAN 105 will be superseded and subsumed within an updated Safety Management System (SMS), which is being developed by his team. His aspiration was that this would be drafted by end of February 2018.
* JB noted that the H&S File content requirements would be included within the SMS review. The aim was to formalise consistency of H&S file format.
* PS queried Occupational H&S as this was not part of DMRB. SD to review.
* JB confirmed that work was currently underway to improving Asbestos management and that this was integral to the SMS, which was being developed and that consultations were ongoing with the trade unions.
* JB felt that it was important to note that CDM Legislation was very clear as to what was expected and mandated of the Supply Chain. The SMS would only look to set out what was specifically required by Highways England to ensure a consistent approach was adopted by all.

**H&S File Contents and links to ADMM update*** JB was keen to understand potentially linkages with AIG and the inclusion of a restructured H&S File within the Asset Data Management Manual (ADMM) current being developed. Version 6 had been issued in September with further iterations due out on a 6-monthly cycle.
* PDWG had been speaking with Dave Owens of AIG on this matter. DO had recently presented a paper to AIG on the structure of the H&S File – *Health and Safety File Asset Data Requirements* - this was part of SPaTS Task 1-395. The report was net yet formally available. DP offered to follow up on this with DO and would arrange a meeting between ED, DO, PDWG and representatives from SMP to move the matter forward.
* **Related actions from 6/9/17**
* JB is reviewing the current delegated Highways England additional duties, and what is required to enable Highways England, as Client, to take these back from the Principal Designer. – see also item 9 below
* JB is to propose a Highways England representative to participate in the HSF working group meetings. TBC
* **GD05 Asbestos Management update - Leventia Stoiou**
* LSprovided an update on the latest Asbestos Management proposals (see presentation attached)
* Arrangements being put in place with HSE to finalise details.
* The majority of HE assets have been inspected and registered. The main outstanding area is asbestos in the ground (see CIRIA guide C765). It is currently unclear how to resolve this issue.

Outstanding Actions:* Continue to obtain ongoing feedback from industry specialists
* TPB process to be initiated for further wider feedback from industry
* Proposal is to undertake audits with HE H&S Team to better understand compliance and process issues
* Review feedback and work with Atkins, Major Projects, Operations Directorate and H&S Team to redraft documentation
* Ensure Surveys comply with ISO 17020
* Designated duty holders for Area Teams
* Provide Asbestos Training
* Increase Asbestos Awareness
 | Note**JB**Note**SD****DP/DO****JB****JB** | **Feb 2018****ASAP** |
| **5.0** | **HUB and H&S Group Feedback** |  |  |
|  | * **RIP**
* H&S managers want to have greater insight into what is happening within schemes – they would like greater visibility
* Improvements to Risk Register proposed – this needed to be linked to the new SMS being developed by ED.
* Use of drones to capture survey data and monitor progress was highlighted as a developing area which could mitigate hazards and deliver customer benefits.
* **SMP HUB**
	+ Passport scheme discussed
	+ Lantra training for HE inductions to be taken in-house by Arcadis
	+ Lucy Fell stepping down from her position in February to concentrate on Routes to Market. HE will employ an interim person to take over until Mark Byard, who has been appointed to take over in May.
	+ John Broadhurst Health & Wellbeing Manager for Highways England wants a collaborative approach between HE and their suppliers as part of a National Programme linked to the wellbeing action in the 5-year plan.
	+ After much deliberation on how the Raising the Bar documents are to look and several different ways tried, Highways England have decided that there will be a guidance document and a minimum standards document. The minimum standards will be grouped together with other documents of the same nature i.e. RTB 16 - Working at height and RTB 7 Overhead Structures and Service Protection grouped together in 1 document.
	+ Highways England want the Supply Chain to look at the HSE Stress Tool and look to implement it.
* **H&S Group Feedback:**
* LB noted that safety passport take-up had been slow within the construction sector. A letter and application form are currently being drafted to prompt improved employers and employee take up.
* TFL will be adopting the passport scheme.
 | Note**ED**NoteNote**All** |  |
| **6.0** | **Task Group Feedback** |  |  |
|  | * **RtB 26 Whole Life Design for H&S – update (Doug P)**
* DP provided a brief update. The version reviewed by PDWG Task Group had now been reviewed by WSP. A draft update had been provided back today (20/12) to DP, who would issue out to all Task Group members. The intention was that the revised version would including and refer to Human Factor (see PDWG No.7 Minutes) and an associated PCF product that was being developed. It was not clear if the CPF scoring system present in the previous revision would be retained.
* Pav Singh was keen to understand where poor design had had a direct influence on safety outcomes on sites, in line with Network Rails’ protocol. Psi asked all attendees to provide examples, where possible, so that issues and lessons learned may be better captured and shared across the community.
* **IAN 182 Major Scheme Handover into Operation and Maintenance – update (Doug P)**
* DP indicated that IAN 182 was now with the Chief Engineer for sign off, this had been pending for some time and he was unsure what the delay was. He reiterated that PDWG had had significant input into the re-drafting of the document – with linkages between modelling – PCI – risk capture and the role of the PD being significantly strengthened. He hoped the revised document would be out shortly.
* **PCF update (Paul Brown)**
* PB indicated that a number of new product owners have been appointed and he was hopeful of having constructive dialogue in the new year. He understood David Townsend was currently reviewing a number of safety related products. PB to consult with DT and report back.
* **PAS 1192 Part 6 BIM for H&S – update (Andrew Finch)**
* Unfortunately, AF could not make the meeting. AF has subsequently confirmed that a meeting is to take place with HSE on 19/1/18 with a view to issue the final draft of PAS 1192 Part 6 by the end of March.
* **CIRIA – Lean for H&S – update (Doug P)**
* DP reminded all that the new CIRIA Guide (C799) Implementing Lean in Construction – *Health & Safety synergies of Lean* had been published in September 2018 with significant input from the PDWG. CIRIA and Highways England (who had sponsored the work) were now keen to receive feedback on the documents uptake and usefulness.
* DP had presented a number of Case Studies from the M1 J28-35a SMP schemes highlighted in the Guide, which had generated safety benefits from the use of Lean, at the October Lean Construction Institute (LCI) Summit on behalf of Highways England.
* He was now looking to approach CIRIA to share the work that had been undertaken at the next PDWG meeting.
* Psi noted that PDWG members need to consider Learn training to deliver safety improvements through the use of Lean both in the Highway Sector and Rail Sector.
* **Whole Life Design Sub Group Feedback (Pav Singh)**
* PSi provided an update from the last group meeting – (See presentation attached)
 | **DP****All****PB/DT****All****DP****All** |  |
| **7.0** | **Issues Tracker and Actions 6/9/17** |  |  |
|  | * **Key actions – way forward**
* DP ran through the latest Issues and Action Tracker – a copy is appended to the minutes

**Key Issues*** See section 9 below
* ML suggested that PDWG achievements in 2017 be captured in an Outturn Report to demonstrate the added value created by the group. DP to action
 | DP |  |
| **8.0** | **Lunch** |  |  |
| **9.0** | **Afternoon Workshop** |  |  |
|  | * **Objectives for 2018**

**- The following key aims were identified for 2018**1. Promote a link-up between ADMM and new H&S File Structure
2. Promote increased BIM integration and capture of health, safety and environmental hazards within our Project Information Models
3. Capture health and safety links to, and benefits from the use of Lean.
4. Close out outstanding actions sat with last years task groups
* **The following objectives were identified for 2018**
1. It was proposed that Highways England Chair the group in the future. JB to consider
2. Support Highways England in the delivery of the 5-year plan and promote the inclusion of greater design awareness within it.
3. Continue to Improve Design Risk Management and Whole Life Design
4. Capture good and bad practice
5. Promote a consistent risk management approach
6. Capture Lessons from other industries e.g.
	1. Nuclear (Andrew Finch?)
	2. Network Rails – Safe by Design Approach
7. Support the role out of CDM Compliance Audits - John Winson of Atkins is acting as lead auditor
8. Improve feedback from Contractors.

- It was suggested that a Survey Monkey pole be developed to confirm what members felt should be the Groups main objectives over the coming year. * **Highways England Additional Duties (Mark Lamport)**
* ML presented a document created for the recent Arcadis M4 J3-12 SMP scheme (See attached presentation and Report), which set out the current legal framework, in respect to the Additional Duties currently instructed by Highways England. This detailed the role of the Principal Designer in supporting the client, in reviewing and advising the client on H&S arrangements using GD02 as guidance.
* ML noted that for AIRSweb recording pre-construction phase H&S incidents, in accordance with IAN 128 (3.9) had been rewritten to cover period before Principal Contractor is appointed.
* JB noted that Highways England are aiming to align procurement processes, and H&S process within the new SMS.
* Review of Construction Phase Plan to be made using feedback taking into account feedback from Principal Designers and Principal Contractors.
* The issue of adequate provision of resources was discussed, as this is seen as a difficult area for Principal Designers to control. JB accepted the points raised and was generally happy with the proposals set out by Arcadis. He would however take a view on this going forward.
 | **JB****ML****NK****JB** |  |
| **10.0** | **AOB****10.1 Recent HSE PD Prosecution**- See Hyperlink attached - <https://www.iosh.co.uk/Membership/Our-membership-network/Our-Groups/Construction-Group/Construction-News/News-archive/HSE-conclude-rare-prosecution.aspx> | **Note** |  |
| **11.0** | **Next meeting:** **Friday – 10.00 am until 3.00pm - 18th May 2018:****Venue: Arcadis Office, Cornerblock, 2 Cornwall Street, Birmingham. B3 2DX**  |  |  |