



DMRB and MCHW update webinar

4-monthly updates on the progress of document development

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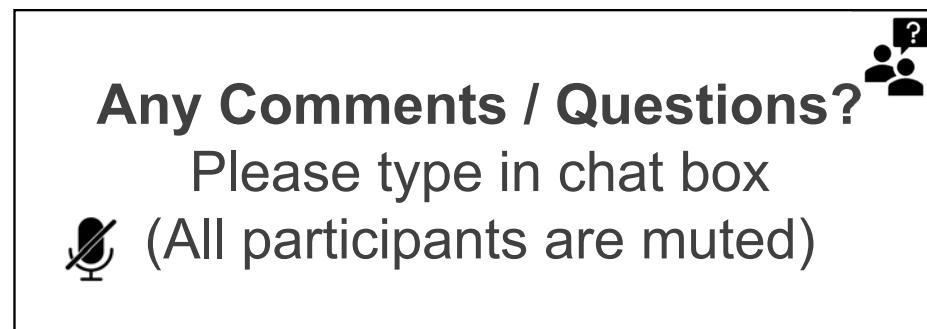
Technical Standards Group (TSG), National Highways
WSP

19th July 2023



Objectives for this webinar

- Provide an update on key topics relevant to meeting RIS2 obligations (keeping DMRB up to date / updating MCHW).
- Share progress.
- Emphasise areas where actions are needed.
- Collect feedback from the audience using Menti & Teams Chat box.



Agenda

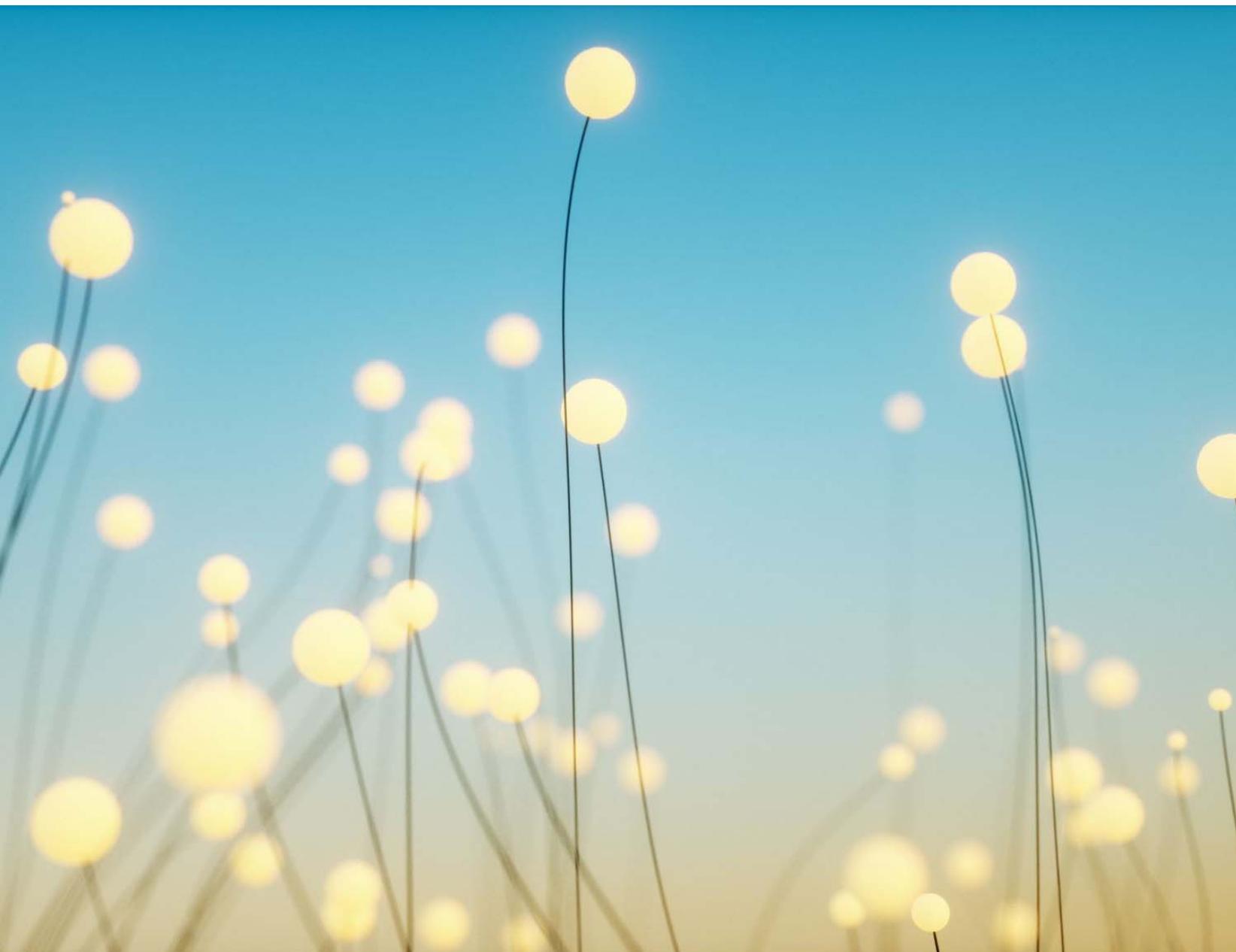
1. Safety moment
2. MCHW Highlights (programme, authoring and review, impact on DMRB, approvals, support provided)
3. DMRB Highlights (programme, feedback management)
4. Governance
5. Key CARS & Jira updates
6. In the news (updates to Standards for Highways Website)
7. Closing remarks (key messages and actions)
8. Where to go for help

Menti Questions



Acronyms used

Term	Definition
CARS	Collaborative Authoring and Review System
CHE	Chief Highways Engineer
DD	Divisional Directors
DMRB	Design Manual for Roads and Bridges
HoS	Heads of Standards
IfS	Instructions for Specifiers
Jira	Workflow management software used for governance of document updates
MCHW	Manual of Contract Documents for Highway Works
MDD	Manual for Development of Documents
MoM	Method of Measurement
RIS2	Road Investment Strategy period 2 (2020 – 2025)
SES	Safety, Engineering and Standards
SHW	Specification of Highway Works
SRP	Standards Review Programme
TSC	Technical Standards Committee
TSG	Technical Standards Group
WSR	Works Specific Requirements



Safety
Moment



Extreme heat

● Climate crisis

Extreme heatwave live updates: hundreds of millions from US to Europe and Asia hit by severe heat

Italy told to prepare for most intense heatwave 'of all time' and 100 million Americans remain under extreme heat advisories as climate crisis bites



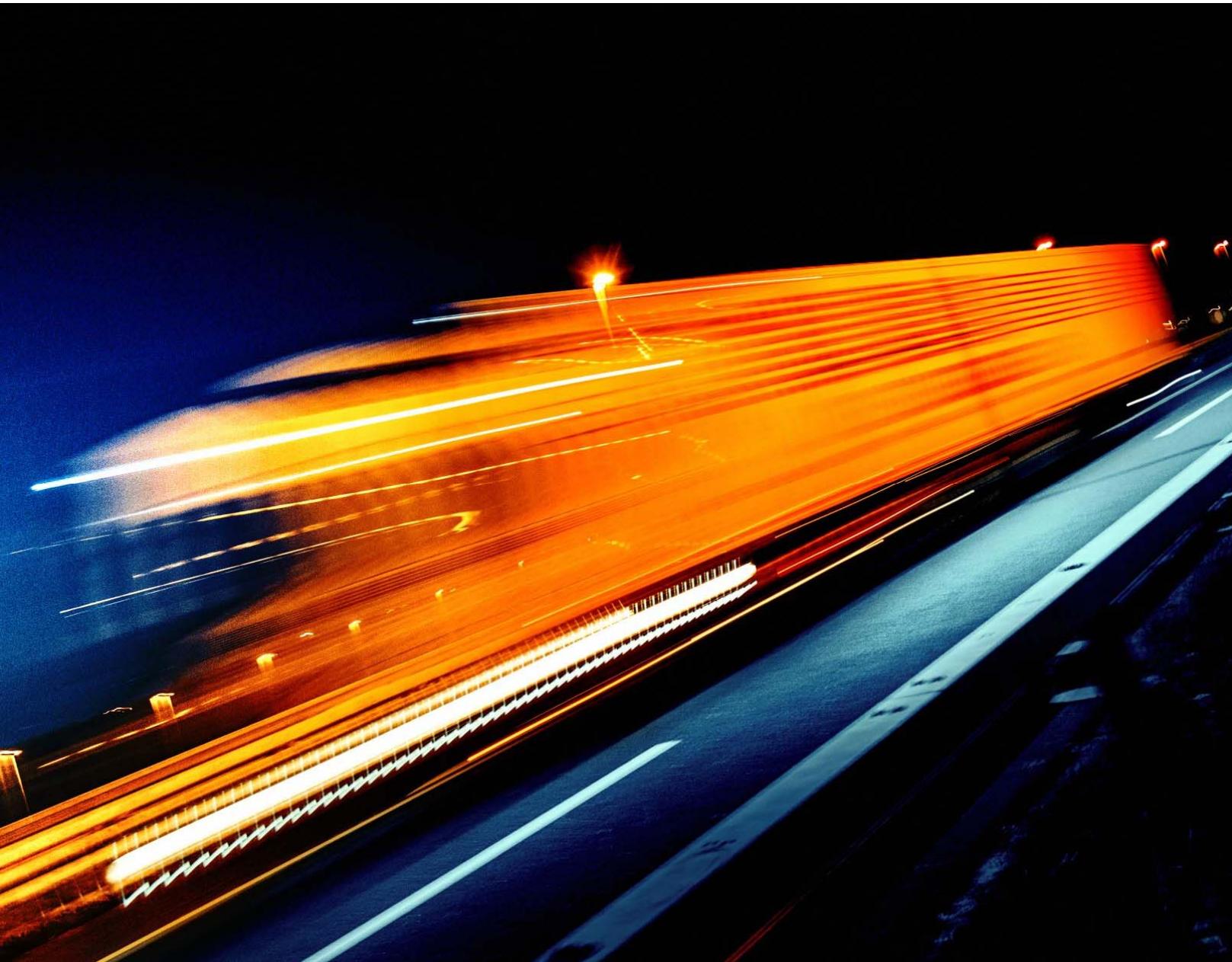
Slip on sun protective clothing

Slop on SPF30 or higher

Slap on a hat

Slide on quality sunglasses

Shade from the sun

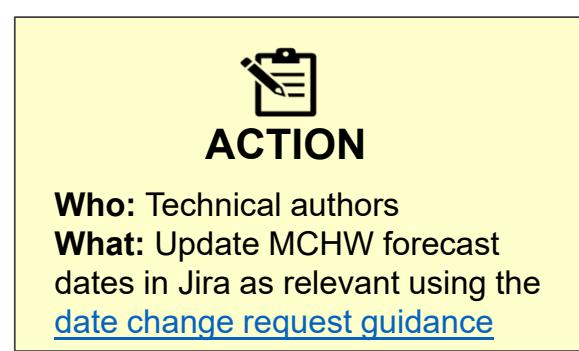


MCHW Highlights

- MCHW Programme
- DMRB consequential amendments
- Identification of key changes
- Programme for approvals and authorisations
- Publication outputs
- Support provided

MCHW programme: Recent request for updates on key dates

- At the end of June TSC chairs were requested to provide updated **consultation** dates and dates of **TSG quality review** submission.
- The information was then cascaded to and reviewed by Divisional Directors before the SES leadership meeting.
- **Thank you for sharing.**
- Please meet the identified dates.

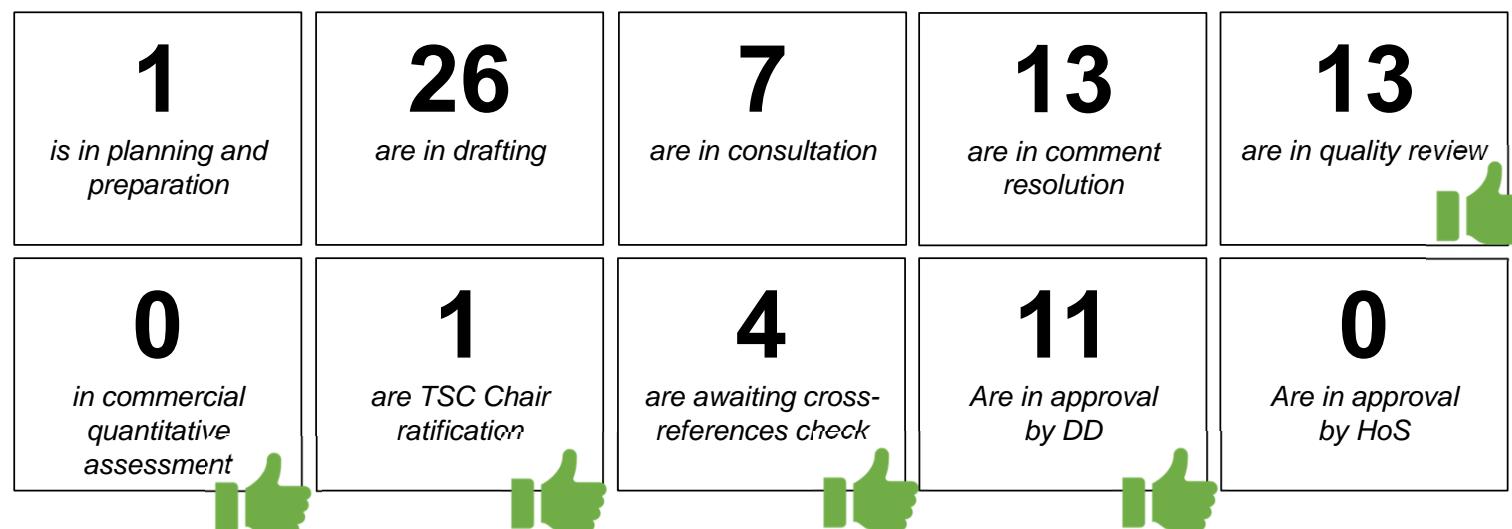
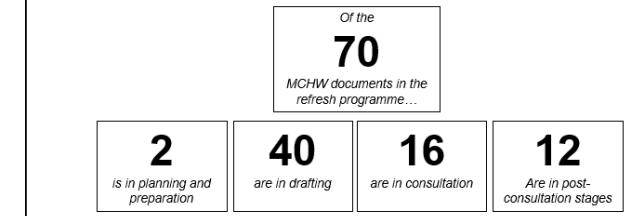


MCHW programme: Volumes 0,1,2,5,6 highlights

Of the
78*
SHW / IfS documents in the
refresh programme...

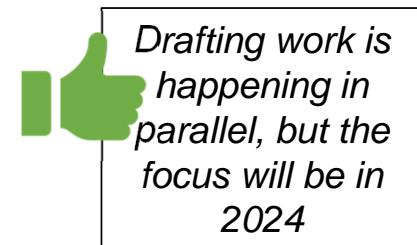
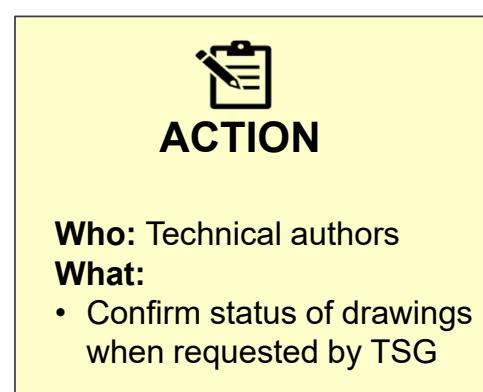
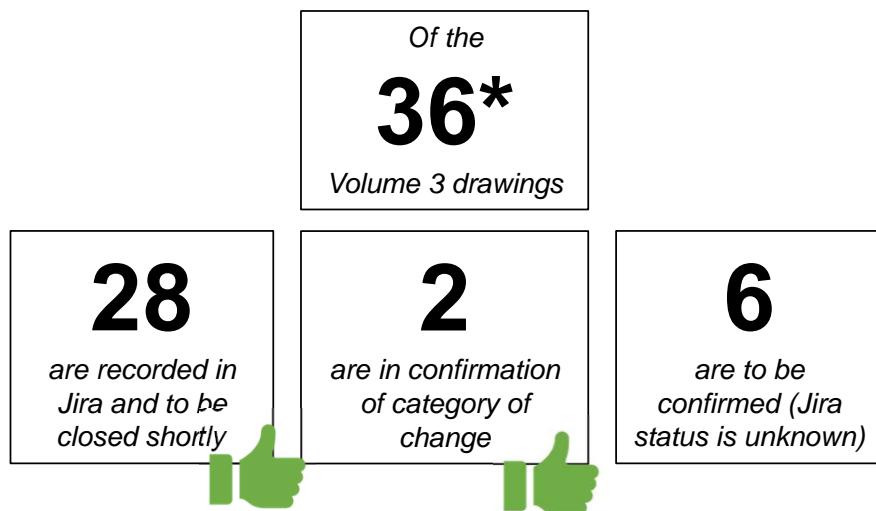
MCHW programme: March 2023 Highlights

- According to TSC chair updates...



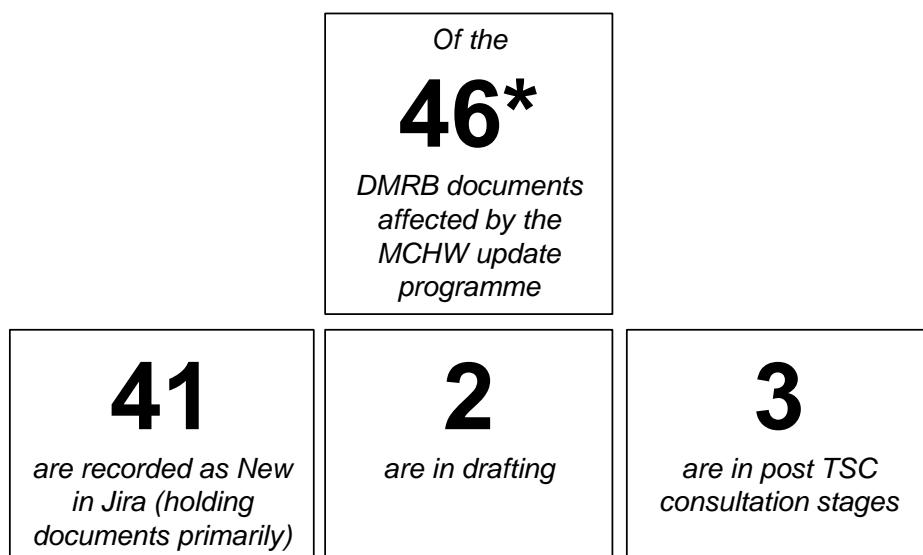
* Notes for guidance are not considered in this figure to avoid double counting

MCHW programme: Volume 3 HCD and Volume 4 MoM highlights (including Method of Measurement content in Volume 5)

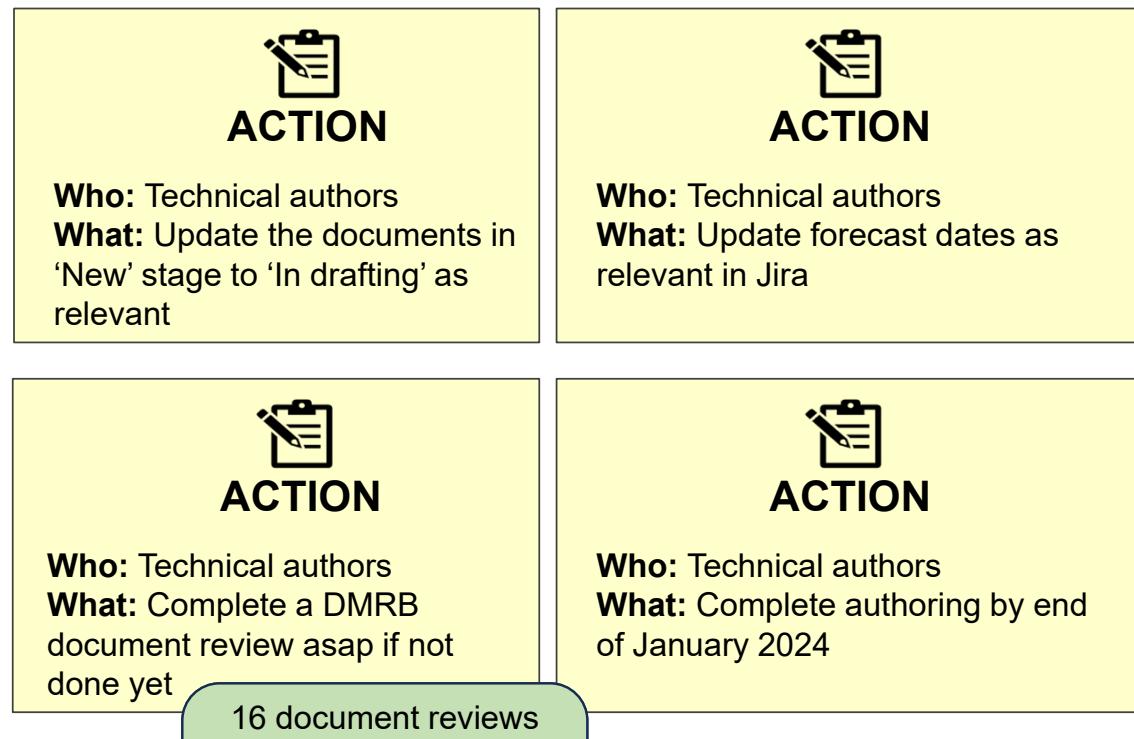


* This figure includes split series as owned by different disciplines

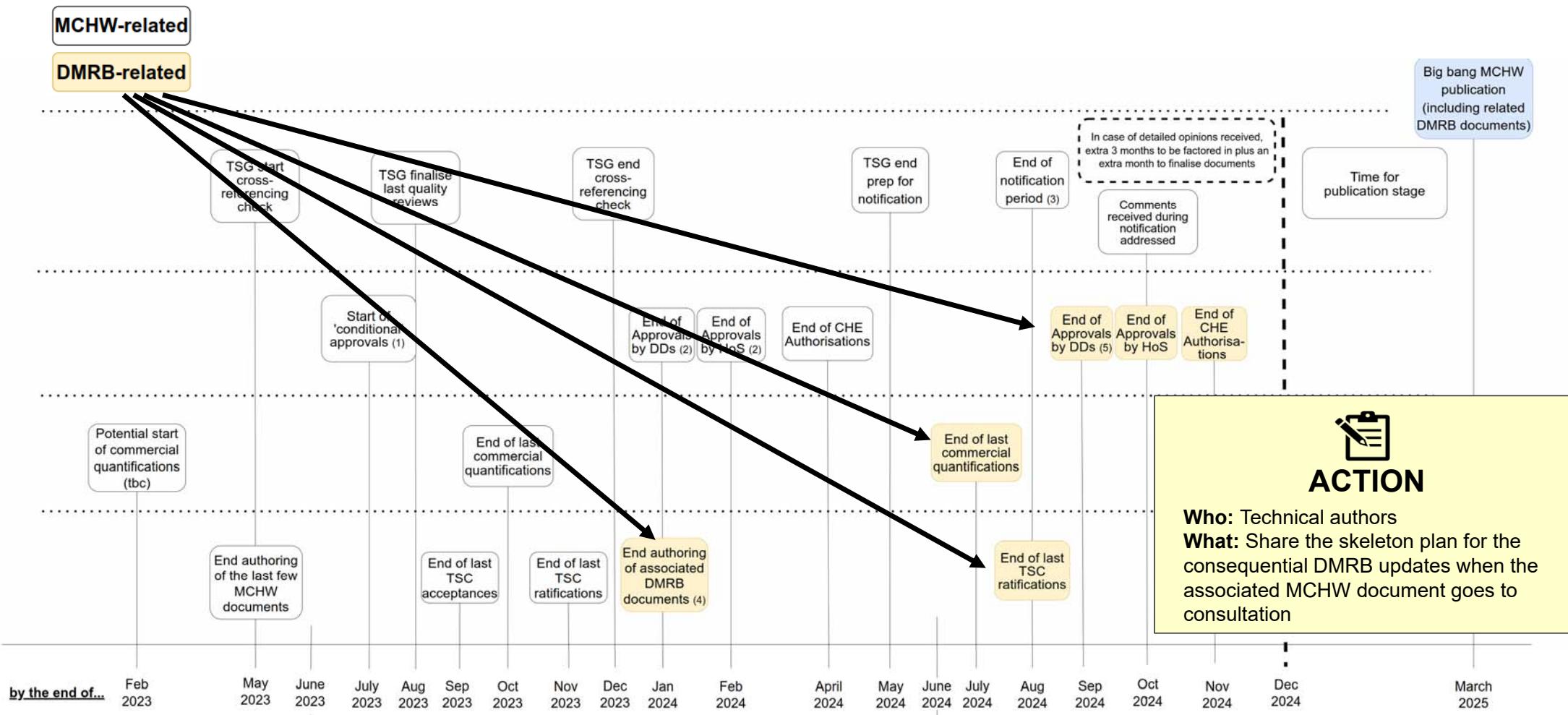
DMRB consequential amendments (1/2)



* 9 new, 37 existing documents



DMRB consequential amendments (2/2)



MCHW programme: Identify key changes

- Being clear on what has really changed in our documents is essential:
 - It helps consultees understand and make focussed comments
 - It helps Commercial understand commercial implications, both as savings and costs
 - It helps Approvers and Authorisers understand what has changed beyond the editorial updates made to enhance clarity and consistency of the documents
 - It will inform communication material being produced

What is a key change?

Any technical change which has got an impact on safety, carbon, etc.

Any change that can lead to both **savings** or **costs**.



ACTION

Who: Technical authors

What:

- Identify **key changes** made to your documents beyond editorial changes

MCHW programme: Sharing key changes (best practice)

- We received feedback from the Chief Highways Engineers that they need a clear narrative of what has really changed.
 - Document Development Plan would be the ideal place to find this information, but it has not been kept up to date
- **To make the life of consultees and approvers easier, please make sure you provide a narrative of key changes.**
 - For example, Structures is sharing a short note to clarify key changes and published outputs, so consultees know what final documents look like



Series 1300 Update

New terminology

Current MCHW	Future MCHW
'Specification for Highway Works' (SHW) series	'Specification for Highway Works' (SHW) documents
Requirements for constructors (in SHW)	Constructor requirements (in SHW)
'Notes for Guidance' (NfG) documents	'Instructions for Specifier' (IFS) documents
Guidance for contract compiler (in NfG)	As relevant: Design requirements / advice (in DMRB) Specifier instructions (in IFS) Constructor requirements (in SHW)
Contract specific appendixes (in NfG)	Works specific requirement (WSR) documents

1. Key changes

The new Series 1300 (CC/CP 481) appears radically different from the current document, but the technical content has only had relatively minor changes. These include:

- **Scope changes.** The scope has been expanded from covering lighting columns, CCTV masts and Cantilever masts to now cover 'Minor Structures', and Noise barriers have been transferred from Series 2500 this Series.
- Design related content has been moved to CD 354

The major change is to the format, layout and phrasing of the content, expanding on the previous DMRB changes.

2. From CARS document to published outputs

The core document in CARS contains both the requirements for the constructor and the instructions for the specifier. This is different from current approach where we were authoring two different documents, the SHW and NfG. The clause numbering system will identify which individual document that clause will be inserted into at the publication stage, i.e. the 'Specification for Highway Works' (SHW) for constructor requirements and 'Instructions for Specifier' (IFS) for specifier instructions.

The core document in CARS will also be used to generate country specific versions, one for each Overseeing Organisation. Moreover, the core document in CARS will generate documents that can be 'tailored' at project / scheme level, which are called

Work Specific Requirement (WSR) documents. These are open format excel-type templates, which replace the static PDFs of current contract specific appendices.

The format has been designed to be contractually clear and ultimately suitable for being used in software packages.

3. New Series 1300 outputs

Based on the above, for the new Series 1300 (CC/CP 481) there will be 78 individual documents automatically generated from CARS, which will be made available to users and distributed as follows:

CC 481 Minor Structures:

- Core SHW document setting out main requirements for the constructor (with reference to CD 354 for the actual design)
- E, S, W & NI IFS variations
- *Total of 5 documents*

CP 481 Instructions for specifiers for CC 481 Minor Structures:

- Core IFS document setting out containing specifier instructions inline with the relevant requirements to set the context
- E, S, W & NI IFS variations
- *Total of 5 documents*

17 WSR templates one for each section in this case, giving the specifier a clear, consistent, and complete format to support the development of a project specific specification:

- 17 x E, S, W & NI variations = 68 documents
- *Total of 68 WSR templates*

Users will select the relevant country and will only be working with a significant smaller number of documents like today, but with the advantage of having all documents in a consistent format and the WSR as editable templates.

CC 481 Minor Structures [Series 1300] (with a variant for E, S, W & NI)
(sets out main requirements for the constructor – with reference to CD 354 for the actual design)

CP 481 Instructions for specifiers for CC 481 [Series 1300] (with a variant for E, S, W & NI)

17 individual WSR templates (with a variant for E, S, W & NI)
(that set out individual requirements for the contractor)

A diagram showing the generated documents is below

Example of notes shared by Structures with TSC consultees



MCHW programme: Consultation

- There are 26 documents in drafting, which will go to TSC consultation over the next couple of months.



ACTION

Who: Technical authors

What:

- Ensure consultees are informed about **key changes** made to the document (beyond editorial changes)



ACTION

Who: Technical authors

What:

- Have **governance deliverables** ready (change log, background commentary, pre-consultation impact assessment report)



ACTION

Who: TSC chairs

What:

- Check **consultees participation** using CARS functionality
- Engage **Devolved Administrations**
- Inform TSG of any issue in a timely manner

MCHW programme: TSG Quality review

- There are still recurrent quality issues to be addressed for MDD compliance (in order of recurrence):

1. Document structure not fit for purpose
2. Poor specification of product, installation, verification and document requirements
3. Limited understanding of harmonised vs non-harmonised standards
4. Limited use of SFRs
5. Inconsistent / not unique terminology used in headings and main text
6. Blanket section references used
7. Design decisions / content left into the MCHW
8. Plan for DMRB clauses (consequential amendments) not in place when MCHW document goes to consultation



ACTION

Who: Technical Authors

What:

- **Address comments** received by Content specialists during Drafting and Consultation stage



ACTION

Who: Technical Authors

What:

- Use this as a **checklist** for your own document before submitting to Quality review stage

MCHW programme: Commercial assessment

- Over the last 18 months TSG has been working closely with Commercial to ensure that the enhanced commercial impact assessment meets the needs of the business
- General feedback is that key changes have not always been clearly identified
- Key actions to address feedback received by Commercial:



Please note...

A direct conversation (with notes recorded) can significantly reduce email traffic.



ACTION

Who: Technical authors

What:

- Respond to **Commercial queries** in a timely manner to help Commercial finalise their reviews



ACTION

Who: Technical authors

What:

- Identify **key changes** made to documents which may have commercial implications; consider both savings and costs



Please note...

Commercial impact assessments are prioritised based on safety, carbon and efficiency. Some reviews may take up to 4 weeks based on complexity.

MCHW programme: Approvals and authorisations (1/2)

- TSG had several meetings with Heads of Standards and Chief Highway / Road Engineers of the four Overseeing Organisations to discuss about next steps.
- We presented a proposed plan for approvals and authorisations and agreed that MCHW documents will be issued for approval and authorisation in **two main packages** starting in September

Proposed package 1 (WIP)

Discipline	New code	Title
General Principles and Scheme Governance	GC 107	Safety file and asset records
General Principles and Scheme Governance	GC 100	Introduction to the Specification for Highway Works
General Principles and Scheme Governance	GC 101	General Requirements for the Specification for Highway Works
General Principles and Scheme Governance	GC 102	Site and work constraints
General Principles and Scheme Governance	GC 103	Environment, Sustainability and Carbon Management
General Principles and Scheme Governance	GC 105	Arrangements for the Overseeing Organisation
General Principles and Scheme Governance	GC 106	Working on the highway
General Principles and Scheme Governance	GC 104	Works data, third party aspects and customer communications
General Principles and Scheme Governance	GC 109	Site Preparation and Clearance
Drainage	CC 500	Drainage
Pavements	CC 201	Pavement foundation construction
Pavements	CC 202	Flexible pavement construction
Pavements	CC 204	Pavement surface treatments
Pavements	CC 205	Maintenance of pavements with an asphalt surfacing
Pavements	CC 203	Rigid pavement construction
Pavements	CC 206	Maintenance of concrete pavement layers
Pavements	CC 207	Footway, cycle track, paved area, kerb unit and access step construction
Road Layout	CC 120	Construction of permanent traffic signs and road markings
Road Layout	CC 130	Construction of temporary traffic signs and road markings
Control and Communications Technology	TC 131	Roadside technology and communications
Geotechnics	CC 602	Piling and Embedded Retaining Walls
Geotechnics	CC 604	Trenchless Installation of Underground Assets
Geotechnics	CC 603	Ground Investigation

MCHW programme: Approvals and authorisations (2/2)

- Third package will comprise **DMRB consequential amendments**
- Fourth package will comprise **withdrawals without replacement**
- Fifth package will comprise **Method of Measurement documents**



ACTION

Who: Technical authors

What:

- Meet **deadlines** for submitting documents



ACTION

Who: Technical authors

What:

- Ensure narrative of **key changes** is provided

Publication outputs

- We presented the publication outputs (i.e. what the published documents will look like) to the Heads of Standards and Chief Highway / Road Engineers of the four Overseeing Organisations. Agreed by all participants.
- This work implements what was presented to SES at the end of 2022.

Future Specification for Highways Works (SHW) documents

Constructor
requirements



CC 130 1.0.0.0

1. General requirements for temporary traffic si...

1. General requirements for temporary traffic signs and road markings

Scope of this document for temporary traffic signs and road markings

This document shall apply to temporary traffic signs, including self-supported traffic signs; road markings; road studs; cones, portable barriers, cylinders and delineators; portable traffic signals; and variable message traffic signs, which are not intended to remain in position on completion of the permanent works.

Design of temporary traffic signs and road markings

The selection, positioning, installation, inspection, maintenance and removal of temporary traffic signs and road markings shall be contractor-designed items, unless otherwise stated in WSR 130/001.

The design of temporary traffic signs and road markings shall be in accordance with CD 130 [Ref 3.N].

The requirements for design ([replacement for Clause 106]) shall apply to temporary traffic signs and road markings.

Electrical installations for temporary traffic signs and road markings

Electrical installations for temporary traffic signs and road markings shall comply with Electrical Work For Road Lighting and Illuminated Traffic Signs in Section 1 of [Ref 4.N].

Installation and removal of temporary traffic signs and road markings

The installation and removal of temporary traffic signs and road markings shall be carried out so that disturbance to road users is minimised.

The installation of temporary traffic signs and road markings shall be carried out by organisations registered to and operating in compliance with a quality management scheme in accordance with ([replacement for Clause 104.8-11]).

Manual of Contract Documents for Highway Works



Road Layout
Construction

CC 130

Construction of temporary traffic signs and
road markings

Version 1.0.0

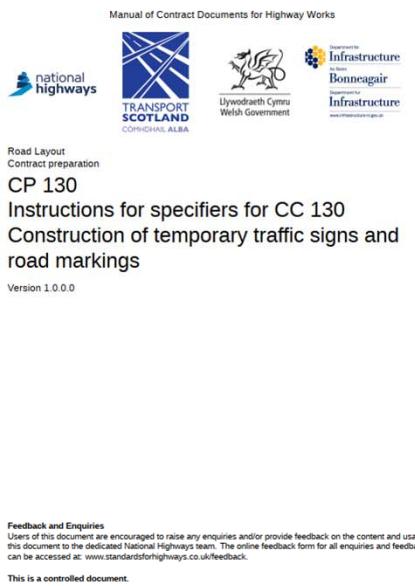
Feedback and Enquiries
Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated National Highways team. The online feedback form for all enquiries and feedback can be accessed at: www.standardsforhighways.co.uk/feedback.

This is a controlled document.



Future Instruction for Specifier (IfS) documents

Example of single specifier instruction



CP 130 1.0.0.0

1. General requirements for temporary traffic si...

1. General requirements for temporary traffic signs and road markings

Scope of this document for temporary traffic signs and road markings

1.1 This document shall apply to temporary traffic signs, including self-supported traffic signs; road markings; road studs; cones, portable barriers, cylinders and delineators; portable traffic signals; and variable message traffic signs, which are not intended to remain in position on completion of the permanent works.

Design of temporary traffic signs and road markings

1.2 The selection, positioning, installation, inspection, maintenance and removal of temporary traffic signs and road markings shall be contractor-designed items, unless otherwise stated in WSR 130/001.

SI.1.2 The following elements of temporary traffic signs and road markings shall not be contractor-designed items [enter free text].

1.3 The design of temporary traffic signs and road markings shall be in accordance with CD 130 [Ref 3.N].

1.4 The requirements for design ([replacement for Clause 106]) shall apply to temporary traffic signs and road markings.

Electrical installations for temporary traffic signs and road markings

1.5 Electrical installations for temporary traffic signs and road markings shall comply with Electrical Work For Road Lighting and Illuminated Traffic Signs in Section 1 of [Ref 4.N].

Installation and removal of temporary traffic signs and road markings

1.6 The installation and removal of temporary traffic signs and road markings shall be carried out so that disturbance to road users is minimised.

1.7 The installation of temporary traffic signs and road markings shall be carried out by organisations registered to and operating in compliance with a quality management scheme in accordance with ([replacement for Clause 104.8-11]).

Specifier instruction

22

Future Instruction for Specifier (IfS) documents

Example of schedule

SHW Output

CC 130 1.0.0.0

2. Temporary traffic signs

2. Temporary traffic signs

General requirements for temporary traffic signs

2.1 Temporary traffic signs specified by the Overseeing Organisation shall be as described in WSR 130/002.

Specifier
instruction

IfS Output

2.1 Temporary traffic signs specified by the Overseeing Organisation shall be as described in WSR 130/002.

Temporary traffic signs specified by the Overseeing Organisation

Unique item or identification number	Installation location	Mounting arrangements	Drawing or model reference(s)	Form of temporary sign	Height of sign face mm	Width of sign face mm	Mounting height m
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)

- a) Enter a unique reference.
- b) Enter a date, to identify the location at which the sign is to be installed.
- c) Enter text, to identify how the sign is to be supported (e.g. self-supported or on a post).
- d) Enter text, to identify the drawing(s) or model(s) in which details of the installation are shown.
- e) Enter text, to identify the unique diagram number(s) from the applicable traffic signs regulations.
- f) Enter a number in units of *mm*, to identify the height of the sign face.
- g) Enter a number in units of *mm*, to identify the width of the sign face.
- h) Enter a number in units of *m*, to identify the height above the carriageway that the lower edge of the sign is positioned.

Temporary traffic signs specified by the Overseeing Organisation (continued)

Unique item or identification number	Coefficient of retroreflection class	Is the temporary traffic sign in an area with high background luminance
(a)	(i)	(j)

- i) Enter text, to identify the retroreflective performance required from the sign face.
- j) Enter a value, from options Yes, No, to identify, for temporary traffic signs, whether the traffic sign will be installed in an area with high background luminance so that the supplier can select the relevant performance class for mean luminance from Table 2.7.

CC 130 1.0.0.0

2. Temporary traffic signs

WSR Template example

WSR templates give the specifier a clear, consistent, and complete format to support the development of a project specific specification.

The image shows two Microsoft Excel spreadsheets side-by-side. The left spreadsheet, titled 'WSR 130_002 Template - Content', contains a table structure for temporary traffic signs. The right spreadsheet, titled 'WSR 130/001 General requirements for temporary traffic signs and road markings', contains a table structure for general requirements. Both spreadsheets use a similar layout with columns A through O and rows 1 through 38.

WSR 130_002 Template - Content (Left):

	A	B	C	D	E					
1	WSR 130/002 Temporary traffic signs									
2	1 Topic level departures									
3	Temporary traffic signs									
4	Section 2, CC 130 version 1.0.0.0, 2023-06-15									
5	1.1 Cancelled requirements (CR)									
6	1.1.1 There are no topic level cancelled requirements.									
7	1.2 Substitute requirements (SR)									
8	1.2.1 There are no topic level substitute requirements.									
9	1.3 Additional requirements (AR)									
10	1.3.1 There are no topic level additional requirements.									
11	2 [Element 1]									
12	Temporary traffic signs									
13	Section 2, CC 130 version 1.0.0.0, 2023-06-15									
14	2.1 Cancelled requirements (CR)									
15	2.1.1 There are no element specific cancelled requirements.									
16	2.2 Substitute requirements (SR)									
17	2.2.1 There are no element specific substitute requirements.									
18	2.3 Additional requirements (AR)									
19	2.3.1 There are no element specific additional requirements.									
20	2.4 Requirements (taken from CP 130 version 1.0.0.0)									
21	General requirements for temporary traffic signs									
22	2.4.1 (CC 130/2.1) Temporary traffic signs specified by the Overseeing Organisation									
23	Unique item or identification number (a)	Installation location (b)	Mounting arrangements (c)	Drawing or model reference(s) (d)	Form of temporary sign (e)	Height of sign face mm (f)	Width of sign face mm (g)	Mounting height m (h)	Coefficient of retroreflection class (i)	Is the temporary traffic sign in an area with high background (j)
24	a) Enter a unique reference.									
25	b) Enter a date, to identify the location at which the sign is to be installed.									
26	c) Enter text, to identify how the sign is to be supported (e.g. self-supported or on a post).									
27	d) Enter text, to identify the drawing(s) or model(s) in which details of the installation are shown.									
28	e) Enter text, to identify the unique diagram number(s) from the applicable traffic signs regulations.									

WSR 130/001 General requirements for temporary traffic signs and road markings (Right):

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	WSR 130/001 General requirements for temporary traffic signs and road markings														
2	1 Topic level departures														
3	General requirements for temporary traffic signs and road markings														
4	Section 1, CC 130 version LIVE, 2023-06-15														
5	1.1 Cancelled requirements (CR)														
6	1.1.1 There are no topic level cancelled requirements.														
7	1.2 Substitute requirements (SR)														
8	1.2.1 There are no topic level substitute requirements.														
9	1.3 Additional requirements (AR)														
10	1.3.1 There are no topic level additional requirements.														
11	2 [Element 1]														
12	General requirements for temporary traffic signs and road markings														
13	Section 1, CC 130 version LIVE, 2023-06-15														
14	2.1 Cancelled requirements (CR)														
15	2.1.1 There are no element specific cancelled requirements.														
16	2.2 Substitute requirements (SR)														
17	2.2.1 There are no element specific substitute requirements.														
18	2.3 Additional requirements (AR)														
19	2.3.1 There are no element specific additional requirements.														
20	2.4 Requirements (taken from CP 130 version LIVE)														
21	Design of temporary traffic signs and road markings														
22	2.4.1 (SI.1.2) The following elements of temporary traffic signs and road markings shall not be contractor-designed items [enter free text].														

WSRs review

- TSG has undertaken a light touch review of WSRs, which shows that over almost 35% of WSRs are referred just in one clause.
- We are keen to reduce the number of WSR templates to support usability of the content by the supply chain.
- **TSG will contact relevant technical authors to address this issue** and further streamline the future contract documentation.

MCHW programme: Communications plan



Work in progress

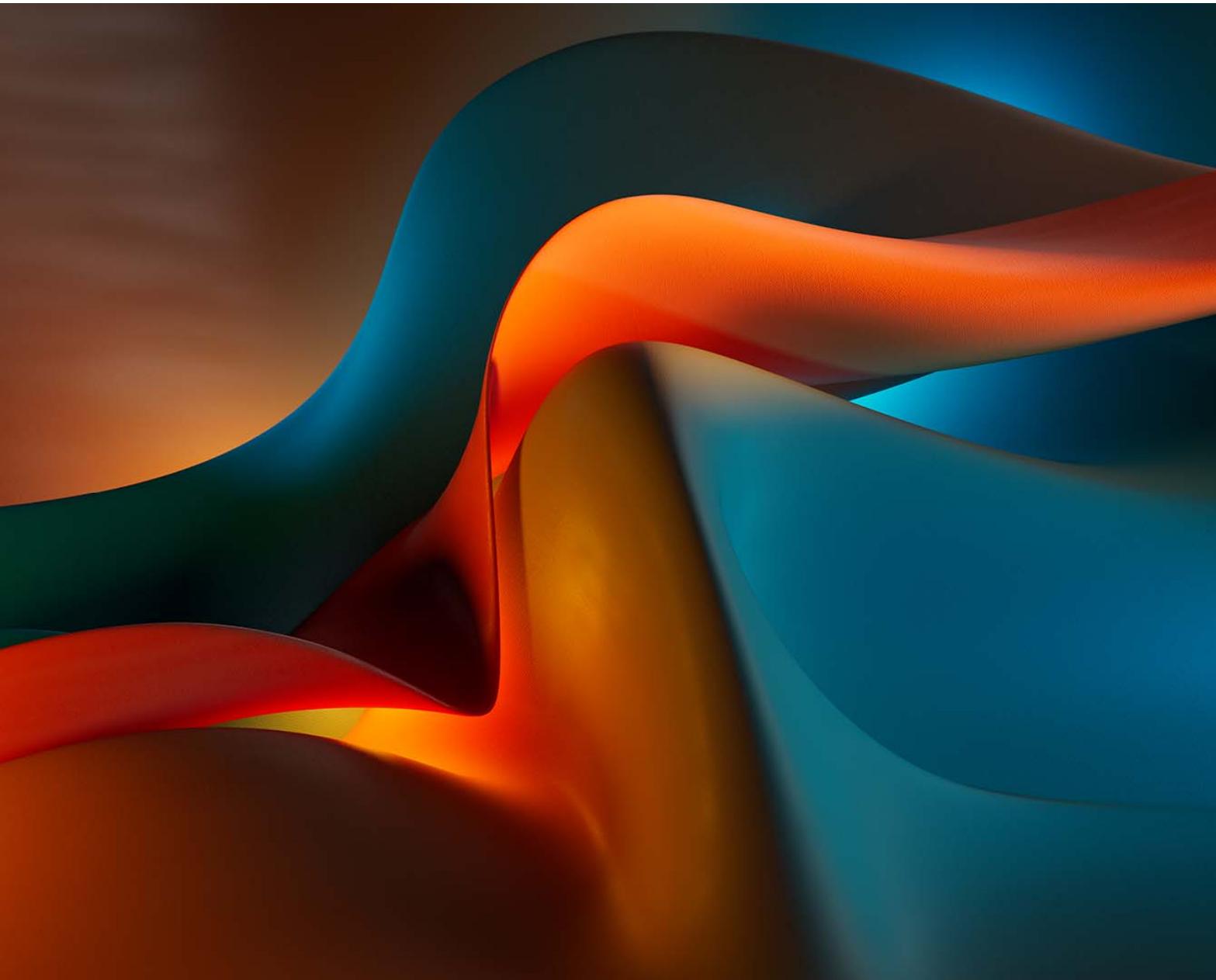
MCHW Support provided

- Weekly drop-in sessions (ad-hoc support provided)
- Targeted Clinics (with clear list of areas to be addressed to deliver compliant documents) – **had 40+ clinics in 5 months**
- Support to WSR mapping
- Content specialists' Quality Reviews
 - Automated checks incorporated into CARS
- MCHW Programme Management – Kirt Surti supported by Brad Baker
- Authoring guidance – Full training provided, [recorded sessions](#)
- Teams Channels
 - [DMRB and MCHW training materials and governance team](#)
 - TSC chairs and secretaries knowledge sharing channel



To support authoring teams and help manage workload

To share updates



DMRB Highlights

- Programme
- Feedback management
- Re-drawing of flowcharts

DMRB programme: keeping it up to date



2

DMRB documents published since last webinar in March 2023

- ✓ [CD 116 Version 2.1.0 - Geometric design of roundabouts](#)
- ✓ [CS 460 Version 1.0.1 - Management of corrugated steel buried structures](#)

169

Number of DMRB Documents

Subject to regular review cycles to keep them less than

5

years old

42

Document reviews currently programmed for March 2024



ACTION

Who: SES Disciplines
What: Complete Document review checklists now where possible to help plan your workload for RIS 2 and remove peaks of document reviews.



78

(+41 last webinar)

No. of document review checklists completed to date



Please note...

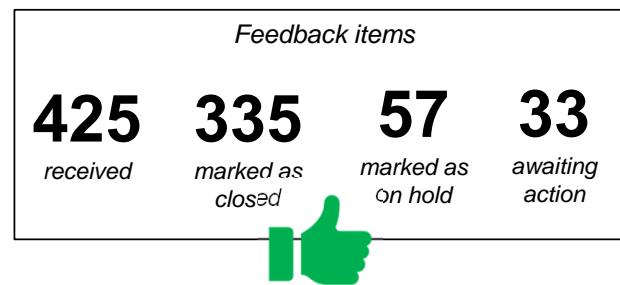
A document review is considered completed when it is marked as such in Jira and the associated change item (if needed) is created



ACTION

Who: SES Disciplines
What: Identify and prioritise aspects to be addressed by the end of RIS 2 and those which can be parked for RIS 3.

Feedback Management



Technical Authors, Please Note...

On Hold

- Feedback to be addressed later
- To be incorporated into later document review / change item

Feedback closed – change required

- Change is being made
- Link to **active** change item

Feedback closed – no change required

For further detail see [feedback management system help page](#)



 national highways

Have you got an idea, query or a challenge to our standards?

... [View more](#)

* Required

1. Please select the type of feedback you are providing *

General idea or opportunity for improvement

General query about the suite of documents, website query, or publication related query

Request for background information and / or clarification on interpretation of a clause within a DMRB/MCHW document

Specific challenge(s) to a clause or clauses within a DMRB/MCHW document

Follow up on previous feedback

[Submit](#)

[www.standardsforhighways.co.uk/
feedback](http://www.standardsforhighways.co.uk/feedback)

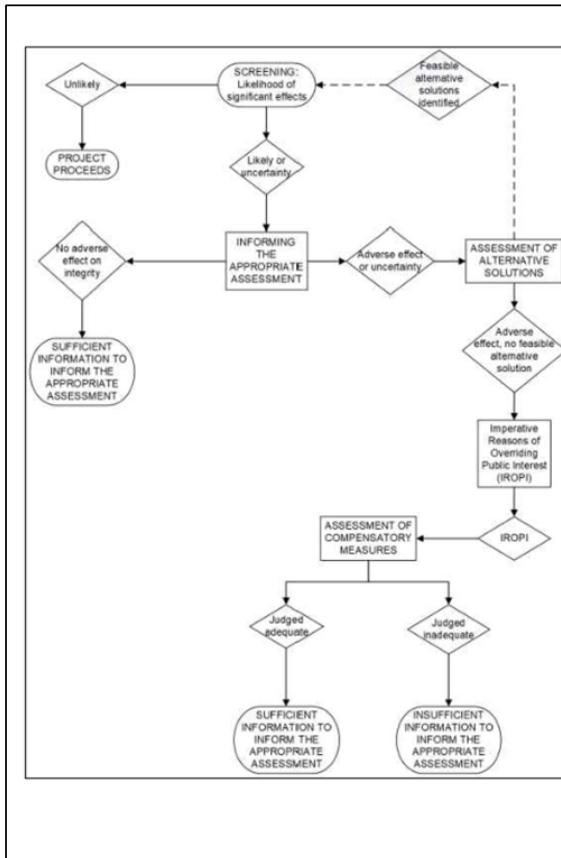


Re-drawing of flowcharts

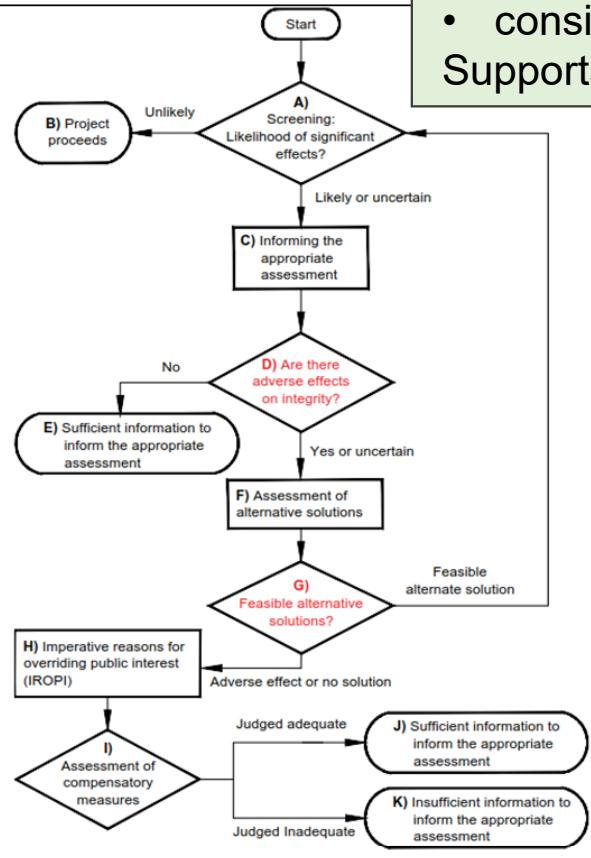
- At the end of last year TSG undertook an audit of all DMRB documents and found MDD non-compliant aspects in many figures, including flowcharts, illustrative layouts and charts.
- As a result, TSG commissioned an external supplier to update DMRB non-compliant figures, thus offering technical authors with new figures for use in their own documents.
- Redrafting work started with flowcharts.

Re-drawing of flowcharts: example

Current



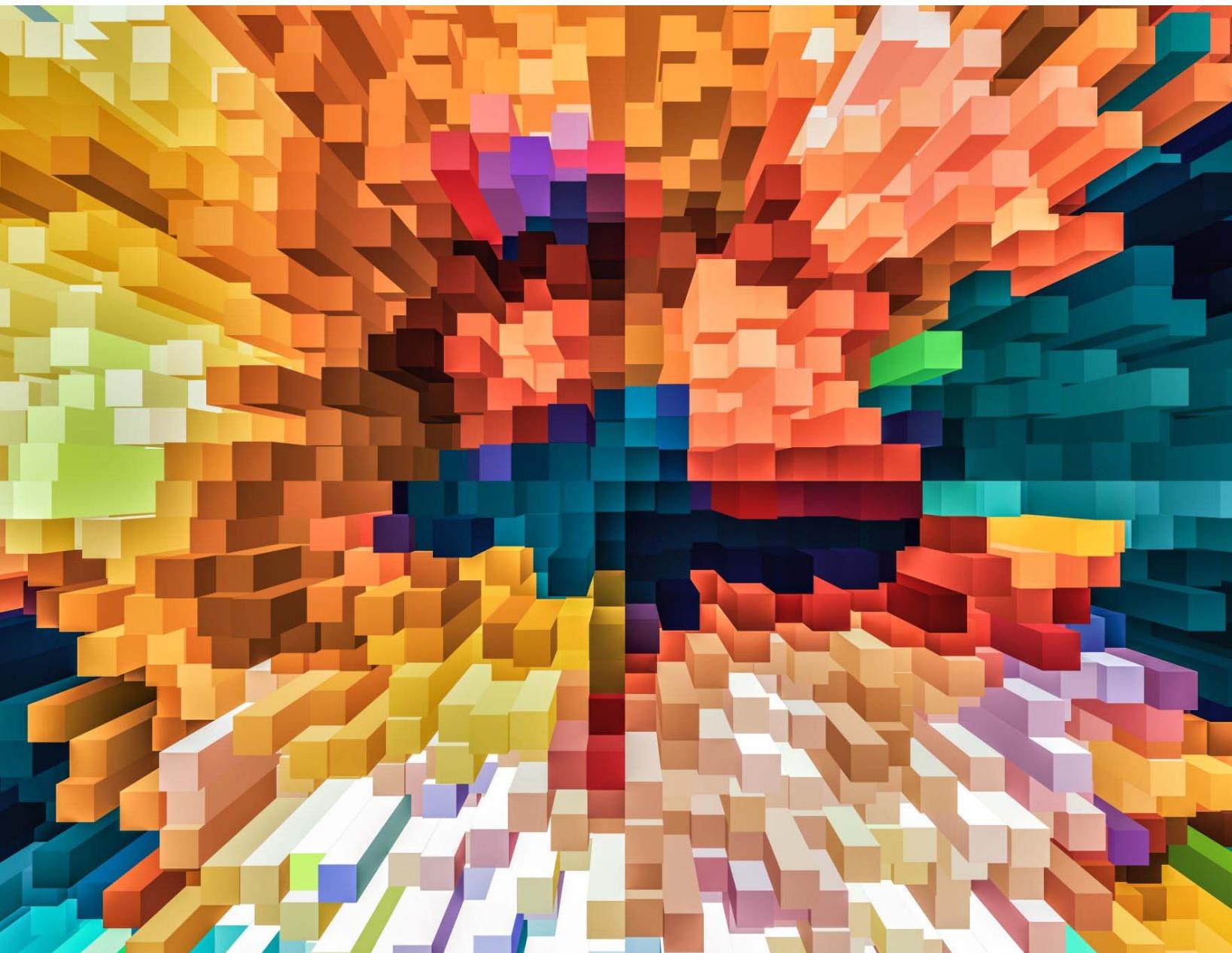
Redrafted



Key areas addressed:

- text size,
- understandability,
- use of appropriate forms,
- consistency with main text.

Supports our accessibility journey.



Governance

- Consultee engagement

Consultee Engagement: Feedback from Technical Standards Committee chairs

- Low representation in some recent Technical Standards Committee (TSC) consultations
- Unclear whether this is because:
 - The consultee does not have adequate time/notice to complete the review
 - The consultee does not have an interest in the review of the document
 - We have the incorrect contact details due to colleagues leaving the business or moving to a different role
 - The review has been completed but not notified via the 'review complete' functionality on CARS
 - The consultee does not understand how to add their comments to CARS

Consultee Engagement: Remit of TSC chair and consultees

- Technical Standards Committee consultations are conducted on the CARS software (unless they are withdrawals without replacement).
- **It is the responsibility of the TSC chair to:**
 1. Share the documents for consultation with the TSC members in a timely manner.
 2. Ensure that all relevant stakeholders are consulted or informed as required, and that consultees comment on the draft document / clauses and the impact assessment reports in time and based on their remit.
- **It is the responsibility of the TSC consultees to:**
 1. Participate fully and in a timely manner in all work, communicating leave / absences / other commitments to the TSC chair and secretary so that the consultation runs smoothly and effectively.
 2. Review the document development plan (for category of change A only) and provide any feedback to the technical author as relevant.
 3. Review the documents for consultation, make comments both on the draft document and impact assessment reports, and suggest appropriate amendments based on their remit.
 4. Review the documents after the comment resolution stage and share any observations on the draft produced in a timely manner.

Consultee Engagement: Typical TSC membership

Typical TSC Members	Key role	Who
TSC chair	Owns the documents within relevant discipline, leads the TSC and ensures that an appropriate governance level is followed.	Different from the technical author. Usually from SES, typically the Group Manager within National Highways for the discipline in which the RAD is developed, however can also be from the other Overseeing Organisations.
TSC secretary	Supports the TSC chair in running the consultation process.	Usually member of the SES team, can be a service provider supporting the drafting of the RAD (e.g. a consultant employed to draft the RAD)
Editorial consultees	Comment on aspects related to compliance with the MDD rules.	Content specialists working in TSG.
Technical consultees	Comment on technical accuracy and acceptability (incl. compliance)	Technical specialists within SES Technical leads for: <ul style="list-style-type: none"> • Department for Infrastructure Northern Ireland • Transport Scotland • Welsh Government, • Wider stakeholders for the subject area and interfacing aspects
Concurrence consultees (essential)	Comment on acceptability and affordability for strategic alignment with other business needs	Non-technical National Highways reviewers from the governance team and from divisions that are likely to be affected by the introduction of a new RAD or revisions of an existing RAD: <ul style="list-style-type: none"> • Technical Standards Group; • Major Projects; • Operations; • Commercial and Procurement; • Health and safety; • Equality Diversity and Inclusion (where needed, see below); • Carbon management, sustainability and environment (where needed, see below); • Customer Experience (where needed, see below).

Consultee Engagement: Additional concurrence consultees or informed parties where required

Optional concurrence consultees – response expected

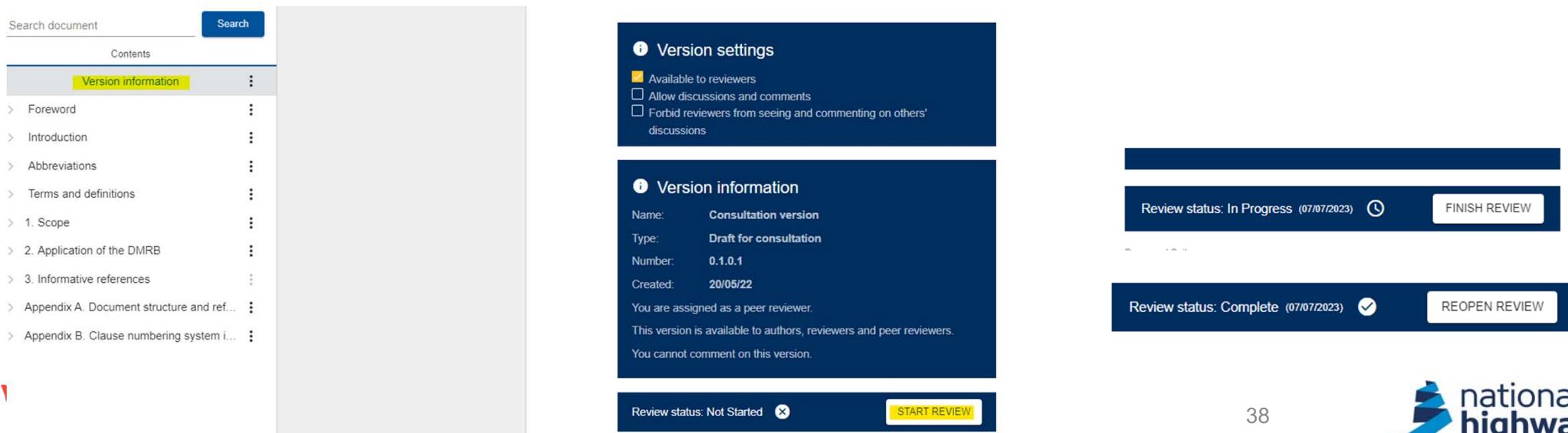
Role	Who
Comment on acceptability and affordability for strategic alignment with other business needs	<ol style="list-style-type: none">1. Transport Planning Division and members from other Safety Engineering and Standards (SES) Directorate.2. Other Specialists (e.g. risk, BEIS, Financial Services, Asset Advisors Group)3. National Highways Legal4. National Highways IT5. National Highways Asset management

Optional informed parties – review document at their discretion but no response expected

Role	Who
Ensure a balanced view between the needs of National Highways, other government bodies, professional groups and the industry as a whole	<ol style="list-style-type: none">1. DfT, DfT Legal, Health and Safety Executive and other governmental and quasi-governmental bodies2. National Police Chiefs Council (NPCC)3. Local Government Association4. Association of Directors of Environment, Economy, Planning & Transport (ADEPT)5. Outside bodies (trade bodies, industry associations, professional institutions, etc.)6. County Surveyors Society Wales (CSS Wales)7. Society of Chief Officers of Transportation in Scotland (SCOTS)

Consultee Engagement: Guidance

- Manual for development of documents v6.3 part 1 (sections 4 and Annex 1C): <https://help.futuredmrb.co.uk/reference-materials/>
- Training page for Technical Standards Committee consultees: <https://help.futuredmrb.co.uk/i-am-a-technical-standards-consultee/>
- Review status button on the version information page on CARS



The image shows a screenshot of the Consultation and Review System (CARS) interface. On the left, there is a navigation sidebar with a search bar, a 'Contents' button, and a 'Version information' button which is highlighted in yellow. Below these are several document sections: Foreword, Introduction, Abbreviations, Terms and definitions, Scope, Application of the DMRB, Informative references, Appendix A, and Appendix B. The 'Version information' section is expanded, showing the following details:

Name:	Consultation version
Type:	Draft for consultation
Number:	0.1.0.1
Created:	20/05/22

Below this, it says: "You are assigned as a peer reviewer. This version is available to authors, reviewers and peer reviewers. You cannot comment on this version." At the bottom of this panel, it says "Review status: Not Started" and has a "START REVIEW" button.

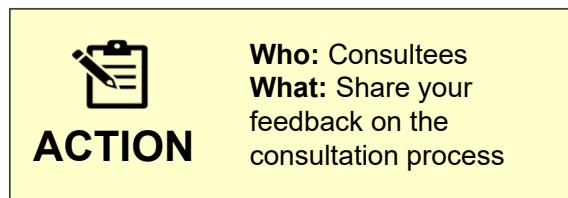
On the right, there are two status boxes:

- A top box for "Review status: In Progress (07/07/2023)" with a "FINISH REVIEW" button.
- A bottom box for "Review status: Complete (07/07/2023)" with a "REOPEN REVIEW" button.

At the bottom left, there is a red 'V' icon. At the bottom right, there is the National Highways logo.

Consultee Engagement: Your feedback as a consultee

- If you are a consultee in one of our Technical Standards Committee consultations, we would be grateful for your feedback on the process.
- We have created a MS form for your feedback and will make this link available in the chat and in a separate follow up email after this session has ended.
- Link to form: <https://forms.office.com/e/Xmg42bMC2E>





Key CARS Updates

- Foreword
- Front end documents
- Revert functionality
- Document Health bug fixes
- Cross-reference check tool

Revert functionality



- What?
 - Introduction of a new functionality that can ~~uhwrruh wkh~~ contents of a previous version of a CARS document in place of the current live document
- Why?
 - Imagine... As a CARS technical author, you have been working on several changes to one of your published documents; multiple clause updates across several sections.
 - A critical update is then identified for a single clause; you have been asked to implement that change as soon as possible.
 - This functionality allows the critical update to be made & published without losing the existing work on the other changes
- How does it affect me?
 - If you need this functionality, speak to TSG
 - For more information see this help page [Reverting to a previous CARS document version | Help pages \(futurdmrb.co.uk\)](https://futurdmrb.co.uk/help/reverting-to-a-previous-cars-document-version)

When? 

Available now



Removing foreword and introductory sections

(MCHW only)



- What?
 - The MCHW Foreword section in each document will be automatically populated
- Why?
 - This section will contain standard text applicable to all standards
- How does it affect me?
 - Any existing text in this section will be **permanently deleted**
 - There should be no text in this section...
 - ...but if there is – **move it now!**

When?



End of July 2023 (aim)

Cross-references check tool

- TSG has been working on a reporting system that can help check references quickly and easily, and which can flag when changes have been made to MCHW documents, sections and clauses to prompt a check.
- We are using CARS for the raw data and Power BI to create refreshable reports.
- Will be made available to TSG and Technical authors / specialists.



When?



Available now

Cross-references check tool

CARS references summary

This report provides details of references within CARS for MCHW document. The report is scheduled to be refreshed daily at 06:00 and can take up to 20 mins to refresh. Please select a discipline or an individual document below:

"Referenced"
Documents referenced by the selected document(s)

No. of documents: 76 No. of references: 554

"Referencing"
Documents with references to selected document(s)

No. of documents: 6 No. of references: 77

Key

- Current (Document)
- Current (Section)
- Withdrawn (Document)
- Not defined
- **CC 607 (Series 2500)
- **GS Master Examples
- **Gx 101 [107, 109, 113, 121 & 124]
- **Gx 101 [110]
- **Gx 101 [111, 112, 114 & 115]
- **Gx 101 [114]
- **Gx 101 [116]
- **Gx 101 [117-120 & 125]
- **Series 0400 [do not use]
- **Series 1200 [do not use]
- [Not defined]

Control & Communications Technology

Drainage

General Principles & Scheme Governance

Geotechnics

Highway Structures & Bridges

Pavement

Road Layout

Road Lighting

Sustainability & Environment

Referenced

Document	Code	Count
GC 101		91
BS EN 295-1		56
CC 500		50
BS EN 598		33
BS 437		28
CC 601		28
BS EN 1916		22
BS EN 124-1		19
BS EN 13476-2		14
BS EN 13476-3		14
CC 495		14
BS EN 13242		13
BS EN 13476-1		10
CC 203		10
CC 491		10
BS 4962		8
BS EN 13252		8
TC 131		8
CD 524		7
BS EN 13285		6
BS 5911-1		5
BS EN ISO 23856		5

Referencing

Document	Code	Count
CC 500		50
TC 131		10
CC 604		9
CC 491		5
GC 109		2
CC 601		1

Clause counts by type of reference

View details

Document: 1
Section: 1
WSR template: 1

Details of documents referenced by the selected document(s)

Document suite	Document code	Clause index	Type of reference	Referenced document code	Is self reference	Is preliminary clause reference
MCHW	CC 500		Document	GC 000	No	No
MCHW	CC 500		Document	GC 000	No	No
MCHW	CC 500	1.1	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.101	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.103	Document	BS EN 13252	No	No
MCHW	CC 500	1.105	Section	GC 101	No	Yes
MCHW	CC 500	1.107	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.108	Document	BS EN 13252	No	No
MCHW	CC 500	1.11	Section	GC 101	No	Yes
MCHW	CC 500	1.110	Section	GC 101	No	Yes
MCHW	CC 500	1.112	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.113	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.114	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.115	Section	CC 495	No	No
MCHW	CC 500	1.116	Section	CC 601	No	No
MCHW	CC 500	1.118	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.119	Section	GC 101	No	Yes
MCHW	CC 500	1.12	WSR template	WSR 500/001	No	No
MCHW	CC 500	1.121	Document	BS EN 197-1	No	No
MCHW	CC 500	1.123	Section	GC 101	No	Yes
MCHW	CC 500	1.124	Document	BS EN 450-1	No	No
MCHW	CC 500	1.126	Section	GC 101	No	Yes
MCHW	CC 500	1.129	Section	GC 101	No	Yes
MCHW	CC 500	1.13	Document	BS EN 1916	No	No

Select a reference from the table alongside to see further details:

Suite: MCHW
Document code: CC 500
Document title: Drainage [Series 0500]
Section: N/A
Clause:
1.101 The bases of trenches formed on water soluble soils to be sealed with a waterproof geotextile membrane shall be stated in REFERENCE_INPUT .
Referenced document code: WSR 500/001
Referenced document title: Pipes for drainage
Referenced section: N/A
WSR document subject: Drainage
Is self reference: No
Is preliminary clause reference: No
Status: Current (WSR)

Clause counts by type of reference

View details

Section: 1

Details of documents with references to the selected document(s)

Document suite	Document code	Clause index	Type of reference	Referenced document code	Is self reference	Is preliminary clause reference
MCHW	CC 500	5.15	Section	CC 500	Yes	No
MCHW	CC 500	23.38	Section	CC 500	Yes	No
MCHW	CC 500	19.4	Section	CC 500	Yes	No
MCHW	CC 604	2.34	Section	CC 500	No	No
MCHW	CC 500	10.3	Section	CC 500	Yes	No
MCHW	TC 131	15.67	Section	CC 500	No	No
MCHW	CC 500	12.3	Section	CC 500	Yes	No
MCHW	CC 601	15.71	Section	CC 500	No	No
MCHW	CC 500	3.19	Section	CC 500	Yes	No
MCHW	TC 131	7.65	Section	CC 500	No	No
MCHW	CC 500	12.4	Section	CC 500	Yes	No
MCHW	CC 500	16.6	Section	CC 500	Yes	No
MCHW	CC 500	22.15	Section	CC 500	Yes	No
MCHW	CC 491	18.16	Section	CC 500	No	No
MCHW	CC 491	18.14	Section	CC 500	No	No
MCHW	CC 500	13.11	Section	CC 500	Yes	No
MCHW	CC 500	23.15	Section	CC 500	Yes	No
MCHW	GC 109	1.14	Section	CC 500	No	No
MCHW	CC 500	11.6	Section	CC 500	Yes	No
MCHW	CC 500	14.6	Section	CC 500	Yes	No
MCHW	TC 131	15.97	Section	CC 500	No	No
MCHW	CC 500	14.20	Section	CC 500	Yes	No
MCHW	CC 500	5.18	Section	CC 500	Yes	No
MCHW	CC 500	8.2	Section	CC 500	Yes	No

Select a reference from the table alongside to see further details:

Suite: MCHW
Document code: CC 500
Document title: Drainage [Series 0500]
Section: 23. Buried Rigid Pipes for Drainage Structures
Clause:
23.38 Connections to existing drainage assets shall comply with the installation requirements of Connection to existing drainage assets installation requirements' in REFERENCE_INPUT .
Referenced document code: CC 500
Referenced document title: Drainage [Series 0500]
Referenced section: 23. Buried Rigid Pipes for Drainage Structures
WSR document subject: N/A
Is self reference: Yes
Is preliminary clause reference: No
Status: Current (Section)

Minor updates to MCHW front end documents



collaborative authoring & review system

- What?
 - GC/GP 000 “SHW introduction” is changing to GC/GP 100
- Why?
 - GC 000 and GP 000 will be the new indices for SHW and IfS respectively
- How does it affect me?
 - For information only – CARS will be automatically updated with the correct references

When?



This week (aim)

‘Document health’ Bugs

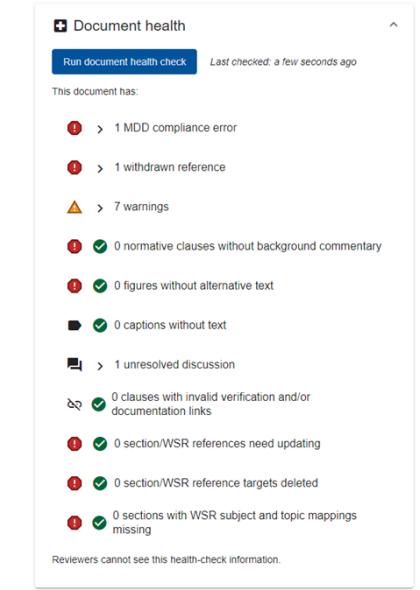
- The document health check – available to lead authors – was incorrectly reporting large numbers of documentation and verification linkage errors on larger documents
- These erroneous warnings were hiding real issues, making it harder for authors to correct them
- A bug fix has been deployed. This also improved the performance of the document health check



When?

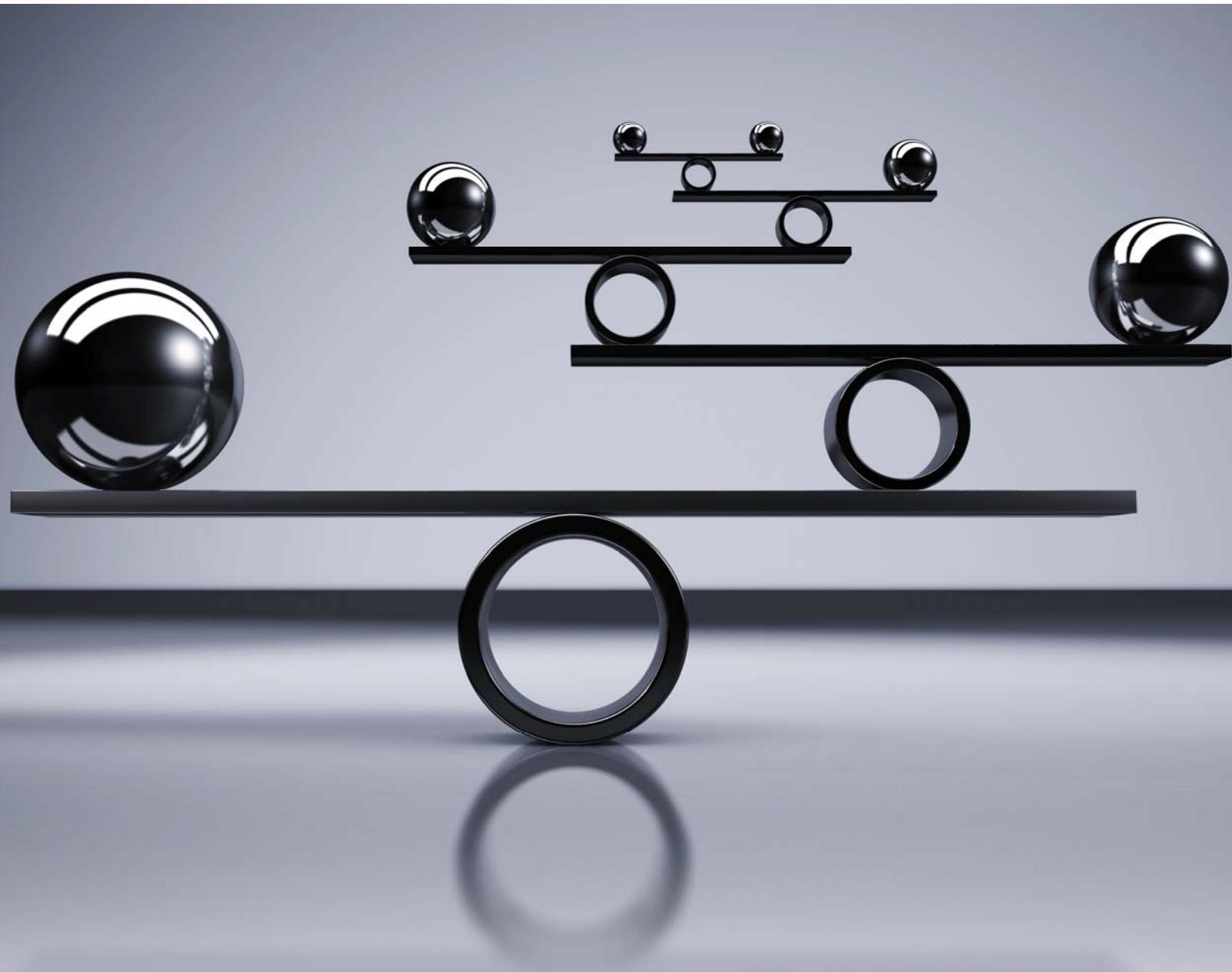


Deployed 7th July

A screenshot of a web-based document health check interface. The top bar shows a blue button 'Run document health check' and the text 'Last checked: a few seconds ago'. Below this, a section titled 'This document has:' lists various findings with icons: a red exclamation mark for errors, a yellow triangle for warnings, and a green checkmark for successes. The findings are:

- 1 MDD compliance error
- 1 withdrawn reference
- 7 warnings
- 0 normative clauses without background commentary
- 0 figures without alternative text
- 0 captions without text
- 1 unresolved discussion
- 0 clauses with invalid verification and/or documentation links
- 0 section/WSR references need updating
- 0 section/WSR reference targets deleted
- 0 sections with WSR subject and topic mappings missing

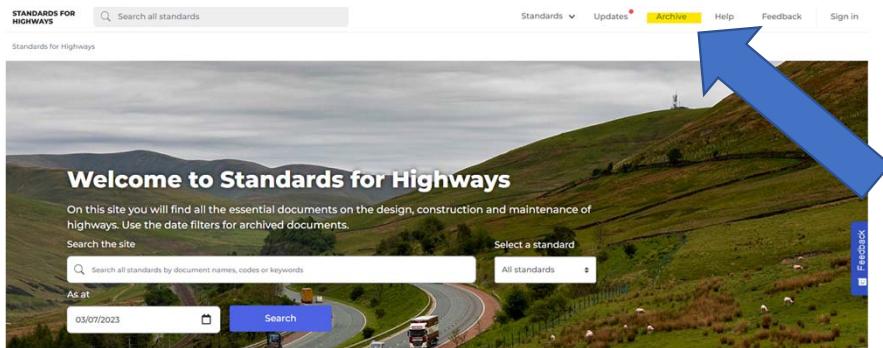
Reviewers cannot see this health-check information.



In the news

In the news

- Enhancements made to the [Standards for Highways website](#) (20th June)



- Archive button added back to top menu bar
- Defaults to earliest date of 2001
- Shows all 2000+ archive records

A screenshot of the 'Download standards' page. The page has a heading 'YOUR STANDARDS FOR HIGHWAYS' and 'Download standards'. Below this, there is a paragraph about downloading full standards as they were at a specific date. There are sections for 'Select standards' (checkboxes for 'All standards', 'DMRB', 'MCHW', and 'IAN'), 'As at' (date input field set to '15/07/2020'), and 'Select files to download' (checkboxes for 'Both files', 'Standards (.zip)', and 'List of standards (.csv)', with 'List of standards (.csv)' highlighted in yellow). A blue arrow points to the 'List of standards (.csv)' checkbox.A screenshot of a Microsoft Excel spreadsheet titled 'C11'. The spreadsheet has columns labeled A, B, C, D, and E. The data includes the following information:

A	B	C	D	E
Document code	Document title	Version number	Published date	Standard
1	The Assessment of Scour and Other Hydraulic Actions at Highway Structures			DMRB
2	Vehicle speed measurement	0	31/05/2012	DMRB
3	Highway link design	1	31/03/2020	DMRB
4	Geometric design of roundabouts	2	29/04/2020	DMRB
5	Geometric design of grade separated junctions	1	31/01/2020	DMRB
6	Geometric design of at-grade priority and signal-controlled junctions	1	29/06/2020	DMRB
7	Cross-sections and headrooms	1	31/03/2020	DMRB
8	Designing for walking, cycling and horse-riding	2	27/05/2020	DMRB
9	Positioning of signalling and advance direction signs	1	31/03/2020	DMRB
10	The design of lay-bys, maintenance hardstandings, rest areas, service areas and observation platforms	1	27/05/2020	DMRB
11	CD 169			



Closing remarks

Objectives for this webinar

- Provide an update on key topics relevant to meeting RIS2 obligations (keeping DMRB up to date / updating MCHW).
- Share progress.
- Emphasise areas where actions are needed.
- Collect feedback from the audience using Menti & Teams Chat box.

Thank you for your work to date

MCHW key messages

- **Good progress** made on work programme, thank you for all your effort!
- We need to **work as one team** to collectively achieve the final goal, i.e. deliver the work programme by the end of RIS2.
- Some forecast dates are now out of date in Jira, please update them using the **date change requests**
- It is of the utmost importance to identify **key changes** made to your own MCHW documents. This is key also for Commercial to better assess costs and savings.
- There are **recurrent quality issues** to be addressed for MDD compliance; use authoring checklist, act on CARS warning messages and engage with provided support.
- **Publication outputs** have now been agreed. Please support TSG in checking the WSRs templates to ensure that they are clear and relevant.
- Work in progress on the communications plan, will share more details in due course.
- TSG is providing **help and support** in many ways, including ad hoc clinics, drop in sessions, help pages, programme management. Do get in touch for any queries.

DMRB key messages

- **Great progress** made in completing the document review forms
- When working on the **DMRB consequential amendments** from the MCHW, please complete the document review form if not already completed.
- **DMRB consequential amendments** have to be planned in advance and a skeleton plan shared at the same time as the associated MCHW document going to consultation.
- When **categorising feedback** received, it is important to distinguish between items 'On hold', items 'Closed with change required' and items 'Closed with no change required'
 - It's best to leave the item as on hold if a change is needed but not yet started as a prompt for what needs to be done

Governance: key messages

- Consultee engagement is low
- Consultation is a key part of the governance process
- Please complete the survey to help us understand the cause
- Roles and Responsibilities are defined in the Manual for the Development of Documents.

MCHW key actions: summary from previous slides

Actions	Owners
• Update MCHW forecast dates in Jira as relevant using the date change request guidance	Technical authors
• Confirm status of drawings when requested by TSG	Technical authors
• Identify key changes made to your documents beyond editorial changes	Technical authors
• Consultation: Ensure consultees are informed about key changes made to the document (beyond editorial changes)	Technical authors
• Consultation: Have governance deliverables ready (change log, background commentary, pre-consultation impact assessment report)	Technical authors
• Consultation: <ul data-bbox="159 827 1051 949" style="list-style-type: none"><li data-bbox="159 827 1051 863">• Check consultees participation using CARS functionality<li data-bbox="159 863 1051 900">• Engage Devolved Administrations<li data-bbox="159 900 1051 936">• Inform TSG of any issue in a timely manner	TSC chairs
• Address comments received by Content specialists during Drafting and Consultation stage	Technical authors
• Use the checklist (in these slides) for your own document before submitting to Quality review stage	Technical authors
• Respond to Commercial queries in a timely manner to help Commercial finalise their reviews	Technical authors
• Identify key changes made to documents which may have commercial implications; consider both <u>savings and costs</u>	Technical authors

DMRB key action: summary from previous slides

Actions	Owners
• DMRB consequential amendments: Update the documents in 'New' stage to 'In drafting' as relevant	Technical authors
• DMRB consequential amendments: Update forecast dates as relevant in Jira	Technical authors
• DMRB consequential amendments: Complete a DMRB document review asap if not done yet	Technical authors
• DMRB consequential amendments: Complete authoring by end of January 2024	Technical authors
• Identify and prioritise aspects to be addressed by the end of RIS2 and those which can be parked for RIS3	Technical authors, with agreement of the TSC Chair
• Complete document review checklists now where possible to help plan your workload for RIS 2 and remove peaks of document reviews	Technical authors

Governance: key actions

Actions	Owners
• Refresh your knowledge of your remit in relation to the consultation	TSC chairs & Consultees
• Share your feedback on the consultation process	Consultees



Where to go
for help



Where to go for help (1/2)

- **Manual for Development of Documents**
(<https://help.futuredmrb.co.uk/reference-materials/>)
- **Weekly Drop-in Sessions**
 - Every Tuesday 11-11.45 (MCHW) – led by Kate and Simon
 - Every 2 weeks Tuesday 2.30 – 3 (Governance) – chaired by Becky
- **Contact Becky for invitation details**
- **Help Pages** containing guidance and training videos
(<https://help.futuredmrb.co.uk/>)

Where to go for help (2/2)

Key contacts for support:

- For **standards governance** policy and processes, please email kirti.surti@nationalhighways.co.uk
- For **training** materials or **Jira** support, please email rebecca.ansell@nationalhighways.co.uk
- For queries on the **MCHW refresh programme**, please email kirti.surti@nationalhighways.co.uk
- For queries on the **DMRB review work**, please email rebecca.ansell@nationalhighways.co.uk
- For **content specialist** support on, please email
maurice.jones@nationalhighways.co.uk (DMRB documents)
kathleen.albon@nationalhighways.co.uk (MCHW documents)
simon.hartshorne2@nationalhighways.co.uk (MCHW documents)
- For **EU legislation / notification** issues, please email simon.hartshorne2@nationalhighways.co.uk

Menti Questions

Please go to
www.menti.com
9166 6936

<https://www.menti.com/blgdk9w91hxa>





Thank You!

WSP