



Manual for Development of Documents

Part 1 - Governance of document development

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6.2		<p>New terms and definitions added for document maintenance process.</p> <p>New requirements added to section 5 on CHE memos.</p> <p>Figure 2 updated as incorrectly used the term designers instead of designer.</p> <p>Section 6 on drivers and opportunities for document development and solutions developed to incorporate document maintenance and feedback management principles.</p> <p>Section 18 – Stage 10: Document maintenance fully populated with new requirements on document maintenance process, document review management, feedback management, routine changes management.</p> <p>Annex 1F Contents of draft change issue in Jira guidance moved to CARS help pages: https://help.futuredmrbcars.co.uk/standards-governance/using-jira/</p>	NH/WSP
6.1	November 2021	<p>Highways England changed to National Highways throughout</p> <p>All drafting notes in a blue colour reviewed for latest situation</p> <p>Clause 6.33 clarified to show Technical Standards Committee responsibility for decision making</p> <p>Amendments to Figures 5 and 9 to reflect category D only needing a clause change summary and no impact assessment/consultation report</p>	NH/WSP

		<p>Clauses 13.3 to 13.6 repeated in section 9 for clarity.</p> <p>Annex 1F Contents of draft change issue in Jira created with screenshots</p>	
6.0	March 2021	<p>Terms, definitions, and abbreviations updated.</p> <p>Section 5: MCHW clauses fully updated, including clauses on Nationally Determined Requirements (NDRs).</p> <p>Section 6: drivers for document development updated.</p> <p>Section 7: new section on impact assessment – this includes new coverage of the impact of RADs on customer satisfaction and on carbon assessment and reference to the new impact assessment report.</p> <p>Section 8: new standards governance process introduced – this includes categories A, B, C, D of change.</p> <p>Sections 9 to 17: revised content to cover the new standards governance process in detail; flowcharts introduced to reduce the length of the text and provide clearer guidance. QMR1, QMR2 and additional templates replaced by document development plan, impact assessment report and consultation report.</p> <p>Section 13: TPB process replaced by Technical Standards Committee's process.</p> <p>Section 14: approval stage clarified for different categories of change. Commercial approval no longer required – their input will be collected during consultation as concurrence consultees.</p> <p>Section 18: new document maintenance process – this will help manage document review cycles, routine changes and management of feedback more efficiently and effectively.</p> <p>Old Annexes 1B and 1C removed as QMR process is no longer relevant.</p> <p>Old Annexes 1F and 1I removed as H&S risk assessment and carbon management,</p>	WSP/HE

		<p>sustainable development and good design content now covered in the new impact assessment report.</p> <p>Old Annex 1H removed and background to notification process now provided in section 8.</p> <p>Annex 1E on control process for date changes updated to reflect new milestones.</p>	
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1. Introduction

This Manual for Development of Documents (MDD) is published by National Highways to give procedures, processes, instruction and advice for the development of documents relating to the planning, preparation, design, construction, management and demolition of highway works on the UK Overseering Organisations' motorway and all-purpose trunk roads.

The documents referred to in this Manual are collectively called requirements and advice documents (RADs).

This Manual is made up of three parts:

- Part 1 Governance of document development
- Part 2 Document layout and style
- Part 3 Drafting rules

Different verb forms are used in this Manual to make a distinction between requirements and advice. Specifically:

- the verb 'must' indicates a legislative/regulatory requirement;
- the verb 'shall' indicates a requirement of the Overseering Organisation;
- the verb 'should' indicates advice expressed as a recommendation;
- the verb 'may' indicates an advice expressed as a permissible approach;
- the verb 'can' or verbs expressed in the present tense other than 'must', 'shall', 'should' and 'may' are used to introduce notes, which provide a short clarification of a concept or statement of fact.

Publication of technical documents by other organisations is at their own prerogative and liability, and they need not seek consent for application of this Manual.

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2. Scope

2.1 This Manual for Development of Documents (MDD) shall be followed by those responsible for the review, development and publication of the following requirements and advice documents (RADs):

1. Design Manual for Roads and Bridges (DMRB) documents;
2. National Application Annexes (NAAs) to the documents contained in the DMRB;
3. Manual of Contract Documents for Highway Works (MCHW) following sections:
 - a) Volume 0 Introductory documents
 - b) Volume 1 Specification for Highways Works documents (SHW)
 - c) Volume 2 Instructions for Specifiers documents (IfS)
 - d) Volume 3 Highway Construction Details
 - e) Nationally Determined Requirements (NDRs)
 - f) Nationally Determined Sections (NDSs)
 - g) Works Specific Inputs (WSIs);

4. Chief Highway Engineer Memoranda (CHE Memos).

NOTE *In this Manual, the above documents are collectively referred to RADs, except where specific reference is being made to a particular type of document. They represent a key component of the technical governance for highway works.*

2.2 The procedures given in this MDD shall apply to both DMRB and MCHW unless specifically mentioned in the text.

2.3 The specific rules on CHE Memos given in [Annex 1A](#) shall be followed.

[DRAFTING NOTE: The rules on CHE Memos currently given in Annex 1A need to be updated to align with the new governance process for DMRB and MCHW]

NOTE *Although primarily intended for the RADs, the principles contained in this Manual can be helpful in managing and drafting other technical documents.*

2.4 The information given in RADs shall be used for the Overseeing Organisations' motorway and all-purpose trunk roads in accordance with GG 101 "Introduction to the Design Manual for Roads and Bridges (DMRB)".

[DRAFTING NOTE: Volume 0 of the MCHW is being developed into an introduction document that is currently being reviewed]

2.5 This Manual shall be followed by all those involved in the development of RADs within National Highways (see Section 4 for stakeholders and key responsibilities).

NOTE 1 *Although National Highways generally provides the resources required for the publication of RADs, the documents that comprise the two main document sets, i.e. the DMRB and the MCHW, are produced in collaboration with the other Overseeing Organisations.*

NOTE 2 *This Manual does not cover technical matters, which are the responsibility of the technical author and the drafting team.*

2.5.1 Any other organisations who wish to adopt the principles and guidance of this Manual should take account of their own organisational needs.

2.6 Specialists responsible for cross-cutting disciplines such as health and safety, carbon management, sustainability and environment, equality, diversity and inclusion, customer satisfaction, commercial aspects, shall contact the National Highway's Technical Assurance and Governance Group (TAGG) if they consider that changes or additions are required to this Manual.

3. Terms, definitions, and abbreviations

Terms and definitions

3.1 For the purpose of this Manual, the terms and definitions given in this section shall apply.

NOTE *In addition to the terms given in this section, [Annex 2A to MDD Part 3](#) provides definitions that are specific to legislation.*

Advice

Optional provision conveying advice on a specific topic and helping the user understand how to fulfil the requirement.

Chief Highway Engineer Memoranda (National Highways only)

Means of providing internal information / communication / procedures in connection with the works on National Highway's motorway and all-purpose trunk road network.

Clause

Paragraph providing a requirement or a requirement and related advice.

Clause change summary

Deliverable that is part of an overall technical document management system, which is used for categories B, C, D of change to present incremental changes made to the RAD.

Collaborative Authoring and Review System

Tool used for the authoring and review of DMRB and MCHW documents.

Construction Works

Everything that is constructed or results from construction operations in accordance with [BS ISO 6707-1](#).

Constructor requirements

Requirements contained in the SHW both as core requirements (i.e. common across the Overseeing Organisations), Nationally Determined Requirements (i.e. those relevant to a specific Overseeing Organisation) and Work Specific Inputs.

NOTE 1 *Constructor requirements will apply for every contract in which the associated objects, materials or activities are specified.*

Consultation report

Deliverable that is part of an overall technical document management system, which is used to record the people and organisations that have been consulted or simply informed during the Technical Standards Committee process and to provide a summary of the consultation including any items raised by the consultees that have been agreed to be addressed in future work.

Content Specialist

Person supporting the delivering of high quality RADs fully in line with this Manual for the Development of Documents (MDD).

Customer service standard

Standards which:

- draw on customer insight and seek to address key customer, communities, and stakeholders, needs and expectations;
- are aligned to the customer service strategy of the Overseeing Organisation;
- and, can either:
- reinforce existing policy / standard (in which case the new standard will signpost the existing policy rather than duplicate);
- introduce a new standard where one does not currently exist; or
- seek to identify and address behaviours that are preventing existing policy to be followed.

Departures Approval System (DAS)

The National Highways system for submitting and seeking approval for departures. Other Overseeing Organisations can have similar systems for tracking the submission and approval of departures.

Design, Build, Finance and Operate (DBFO)

Delivery approach through which a single entity designs, builds, finances and operates a project for a specified period.

Document Development Plan

Deliverable that is part of an overall technical document management system, which is used to plan and define the directions of development work for RADs.

Document maintenance process

Set of activities to keep documents up to date and compatible with the policies and objectives of the Overseeing Organisations, comprising document review management, feedback management, and routine changes to documents.

Document review

Scheduled activity to check whether a document is up to date and identify the need for routine changes to bring it up to date.

Document review cycle

Programme of regular scheduled reviews of the whole document.

EU Directive

EU Directives are binding in terms of goals, but it is left up to the member states to decide what action they need to take to achieve those goals.

NOTE *Directives require enabling legislation to transpose them into member state law.*

EU Regulation

EU Regulations are conventional acts of a national legislature.

NOTE *Regulations are directly applicable in that they do not need to be turned into national law; they are binding in their entirety and take immediate effect on a specific date.*

European Standardisation Organisations (EOSs)

European Committee for Standardisation (CEN), European Committee for Electrotechnical Standardisation (CENELEC) or European Telecommunications Standards Institute (ETSI).

Group Manager

National Highways leader accountable for a programme often referred to as a portfolio, i.e. a structured collection of Projects.

Impact assessment report

Deliverable that is part of an overall technical document management system, which is used to identify the impacts of the RAD development work (including when there is no impact or a negative impact) on the following aspects:

- health safety and wellbeing;
- equality, diversity and inclusion;
- carbon management, sustainable development and good design;
- customer satisfaction;
- commercial aspects;
- other aspects including policy, legal, contractual implications

It also contains information on opportunities of innovation that can be realised implementing the RAD under consideration and provides information about publication and dissemination plans as needed.

Incremental change

Change to specific requirements (category B), advice (category C), notes or spelling mistakes (category D), which do not belong to the category “major revision”.

NOTE *Incremental changes follow shorter governance processes compared to that followed for major revision, which are proportionate to the change being made.*

Instructions for Specifier (IfS) document

Published form of a document showing both the constructor requirements and the specifier instructions.

Major revision

Policy change, rewrite of a document or development of a new document, which follow a complete governance process (category A).

Motorway and all-purpose trunk roads

Collective term to indicate those parts of the UK highway and road network for which one of the Overseeing Organisations is or acts on behalf of the highway or road authority.

NOTE *Department for Infrastructure Northern Ireland also manages local roads and their application is dealt with through National Application Annexes in the DMRB.*

National Highway Authority

National Highways operating under licence from the Department for Transport (DfT).

NOTE *The term ‘National Highway Authority’ is for use specifically within the context of the Construction Products Regulation.*

Overseeing Organisations

National Highways and the highways or roads authorities of Scotland, Wales and Northern Ireland and their successors.

NOTE *The meaning of Overseeing Organisation is typically defined by the contract under which the works are procured.*

Portfolio Leader

National Highways leader of an Innovation Programme Portfolio.

NOTE *A portfolio is a structured collection of Projects. Accountability for a Portfolio always remains with a National Highways Group Manager, although the role of Portfolio Leader can be delegated to other National Highways staff.*

Requirement

Provision conveying criteria to be fulfilled in order to comply with the document.

Requirements and Advice Documents (RADs)

Collective term for Design Manual for Roads and Bridges (DMRB) documents, National Application Annexes (NAAs) to the DMRB or Nationally Determined Requirements (NDRs) for MCHW, Specification for Highway Works (SHW), Instructions for Specifiers (IfS), Works Specific Inputs (WSI), Highways Construction Drawings (HCD), Chief Highway Engineer Memoranda (CHE Memos).

Routine changes

Changes needed updates to the document for example to bring it up to date or correct errors.

Safety Engineering and Standards (SES) Directorate

National Highways directorate providing professional and technical solutions to outward facing parts of the organisation.

NOTE *Safety Engineering and Standards was formerly Professional and Technical Solutions (PTS) Directorate and NetServ.*

Specification for Highways Works (SHW) document

Published form of a document only showing constructor requirements.

Technical Assurance and Governance Group (TAGG)

National Highways team responsible for the process of developing and publishing RADs.

NOTE *TAGG was formerly called Knowledge Programme Governance and Implementation Team (KPGI).*

Technical Author

Person responsible for sponsoring a RAD through the development process.

NOTE 1 *Generally technical authors are employed by National Highways or one of the other Overseeing Organisations.*

NOTE 2 *The term “technical author” replaces the term “document owner”.*

NOTE 3 *Technical authors can be supported by authoring teams including technical specialists in the Overseeing Organisations or from the supply chain.*

Technical Standards Committee (TSC)

A committee formed to provide peer review, in order to guide and advise on the production and development of RADs.

NOTE *Technical Standards Committees (TSCs) form an essential part of the governance process by which National Highways develops new and updates existing RADs. They are peer review / governance committees of invited members who represent various interested parties from National Highways, other governmental bodies and parts of the highways industry.*

Technical Specialist

Person employed by the Overseeing Organisations or individual from a supplier firm providing specific technical support.

UK legislation

UK Regulations are conventional acts of a national legislature.

NOTE *Regulations are directly applicable in that they do not need to be turned into national law; they are binding in their entirety and take immediate effect on a specific date.*

United Kingdom Standardisation Organisations (UKSOs)

BEIS Committee for Standardisation designates UK designated standards.

Works graphical information

Model and/or set of drawings associated with the construction works, which are not part of the MCHW.

NOTE *Such model and/or set of drawings are developed at project/scheme level.*

Works specific inputs

Works specific content to be used in conjunction with SHW constructor requirements on a project/scheme specific basis.

Works specific requirements

Text requirements which are used in conjunction with relevant SHW requirements for the particular scheme/project.

Works specification

Set of requirements dealing with the works, which can include requirements on geometry, constructor design, performance, activities, verification, documentation submission and limitations of construction activities.

NOTE *Work specification consists of the SHW and the works specific inputs.*

Abbreviations

ADEPT	Association of Directors of Environment, Economy, Planning and Transport
BEIS	Department for Business, Energy & Industrial Strategy

CARS	Collaborative Authoring and Review System
CHE	Chief Highway Engineer
DAS	Departures approval system
DBFO	Design, Build, Finance and Operate
DDP	Document development plan
DMRB	Design Manual for Roads and Bridges
EnvIS	Environmental Information System Community (National Highways database)
EqIA	Equality Impact Assessment
HAPMS System	National Highways database for Pavement Management
IAMS	Integrated Asset Management Information System
IfS	Instructions for Specifier
KPGI	Knowledge programme governance and implementation
MCHW	Manual of Contract Documents for Highway Works
MDD	Manual for Development of Documents
NAA	National Application Annex
NDR	Nationally Determined Requirement
NDS	Nationally Determined Section
NEC	New Engineering Contract
RAD	Requirements and advice document
SD	Sustainable development
SES	Safety Engineering and Standards
SFP	Standards Forward Programme
SHW	Specification for Highway Works
SRA	Safety risk assessment
SRP	Standards Review Programme (replacing Standards Forward Programme)
TAGG	Technical Assurance and Governance Group
TPB	Technical Project Board
TSC	Technical Standards Committee (replacing TPB)
TSS	Traffic Systems and Signing

4. Key roles and responsibilities

4.1 The key responsibilities of the stakeholders involved in the governance process which are summarised in [Table 1](#) shall be fulfilled.

NOTE 1 *Specific responsibilities are provided in the main text and in other MDD parts as relevant.*

NOTE 2 *For an overview of the workflow stages and governance deliverables please see [Figure 5](#).*

Table 1 Key roles and responsibilities

Audience	Key responsibilities
Technical author	<ol style="list-style-type: none">1. Manage and maintain RADs through proactively planning a programme of document development and reviews and review of feedback received in their respective practice areas based on relevant drivers for change.2. Fill in relevant information in Jira to enter the SRP backlog, including proposed category of change (A,B,C,D).3. Liaise with the TSC chair for the relevant discipline from the inception of the development work through to the TSC chair approval.4. Liaise with the content specialists to ensure the RAD is MDD compliant.5. Deliver governance documents, including document development plan (for category of change A only), draft document / clauses, clause change summary, impact assessment report and consultation report in accordance with the MDD rules, based on his / her technical experience and expertise and on the outcome of the TSC consultation.6. Address comments received during the TSC consultation process and identify areas that can need future work.7. Attend the sign-off meeting to brief National Highways' Chief Highways Engineer regarding the RAD and respond to any questions that the CHE raises.8. Liaise with TAGG notification experts to address any comments received from European Commission.9. Answer any queries from TAGG publication team during the publication process.
TSC chair (supported by the TSC secretary)	<ol style="list-style-type: none">1. Lead the TSC consultation process through leadership and negotiation skills, a collaborative and inclusive

	<p>approach, and technical competence, and ensuring that the TSC procedures are complied with.</p> <ol style="list-style-type: none"> 2. Ensure that the relevant category of change (A,B,C,D) is assigned to the work under consideration and that the relevant governance process is followed. 3. Share the documents for consultation with the TSC members in a timely manner. 4. Ensure that the documents for consultation are reviewed efficiently and effectively, with a focus on the impact assessment. 5. Ensure that all relevant stakeholders are consulted or informed as required, and that consultees comment on the draft document / clauses and the impact assessment report in time and based on their remit. 6. Ensure that the technical author addresses all comments received during the consultation and updates the documents as needed. 7. Liaise with TAGG to ensure that the relevant category of change process is assigned and the related governance process is followed. 8. Approve the document. Ensure that due governance is exercised in decisions made in the TSC process. 9. Engage with Technical Authors and check that document maintenance actions are taken when needed
 Peer reviewers	<ol style="list-style-type: none"> 1. Provide feedback on a RAD (primarily on CARS) as required by the technical author.
 TSC members (editorial, technical and concurrence consultees)	<ol style="list-style-type: none"> 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 report, and suggest appropriate amendments based on their remit.
 TSC members (informed parties)	<ol style="list-style-type: none"> 1. Review the documents for consultation at their discretion; no response is expected.
Divisional Director	<ol style="list-style-type: none"> 1. Approve documents in category of change A.

	2. Approve H&S impact assessment for documents in categories of change A,B,C.
	1. Confirm that the RAD reflects their needs as highways and road operators by approving the document / changes for all categories of change (A,B,C,D).
	1. Review document and supporting documentation and authorise publication and notification (if needed).
	National Highways
	Other Overseeing Organisations
	<ol style="list-style-type: none"> 1. Provide assurance check at the start of the process before adding a document to the SRP backlog. 2. Confirm the category of change (A,B,C,D) before starting the TSC consultation and liaise with the TSC chair if not satisfied with the category of change. 3. Approve the document to proceed to CHE authorisation.
	<ol style="list-style-type: none"> 1. Advise and provide progressive assurance and support on MDD matters (editorial aspects and aspects related to EC notification) during the drafting process. 2. Review compliance of the document to the MDD rules as editorial consultees during the TSC consultations. 3. Review compliance of the document to the MDD rules for approval. 4. Undertake reviews on document proofs during the publication process for 'look and feel' and layout within the document.
	<ol style="list-style-type: none"> 1. Ensure that relevant documents are submitted to EC via BEIS when notification is required. 2. Passes any comments received from EC via BEIS to the technical author for action. 3. Returns document with comments actioned to EC via BEIS for notification.
	<ol style="list-style-type: none"> 1. Support the authorisation, notification and publication processes sending notifications, updating Jira, reviewing proofs of the document, etc.

5. RAD types

Choosing relevant document type

5.1 Technical authors shall ensure that the information they are intending to prepare for publishing is placed in the appropriate RAD type based on the information provided in this section.

NOTE 1 *The Overseeing Organisations' document sets which are not covered by this manual generally relate to H&S documents (Safety Alerts and Safety Instructions), and requirements for traffic systems and signing as given in the TSS Plans Registry (see Annex 1B for more information on the TSS Plans Registry).*

NOTE 2 *The Overseeing Organisations' document sets are mandated through contractual provisions.*

5.2 The decision into which type of document the requirements and/or advice go shall be based purely on the function of each document type, and not on a perceived ease or speed of publishing certain types of document or because historically the requirements or advice has been given in a specific way or document type.

NOTE *Figure 1 provides guidance on the choice among different types of documents based on their function.*

5.3 Technical authors shall be aware of their audience when drafting their RADs and consider the best way to distribute their output through the appropriate document sets.

NOTE *When setting requirements for the development and provision of particular assets, it can be necessary to update or develop new documents in the various document sets in order to cover all the audiences required to deliver the asset.*

5.3.1 Where technical authors need further advice on the type of document to be used for their information, they should contact TAGG.

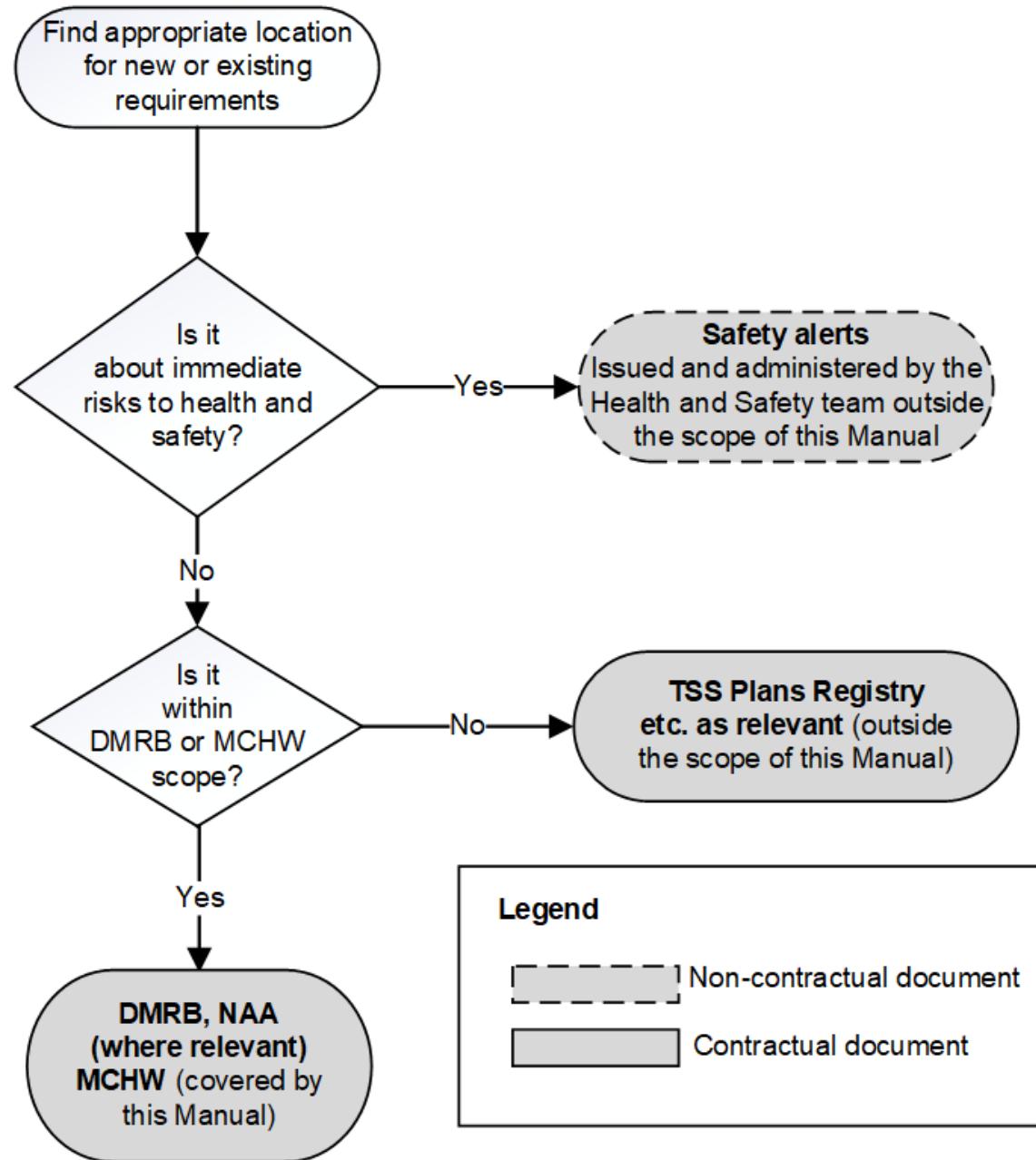


Figure 1. Choice between document sets

Design Manual for Roads and Bridges (DMRB)

5.4 The DMRB shall contain the Overseeing Organisations' requirements and advice for planning, design, inspection, assessment, maintenance, operation and disposal of the Overseeing Organisations' motorway and all-purpose trunk roads.

5.5 The DMRB shall define the criteria and constraints that are relevant to the development of infrastructure solutions.

5.6 The DMRB shall provide requirements and advice for the preparation of project specifications, drawings and other works information that will be used in construction and operational decisions.

5.7 The DMRB shall contain:

1. translations of policy into a set of requirements and advice which affect the design or assessment of assets;
2. planning and assessment processes and requirements which affect the design or assessment of assets;
3. requirements and advice for delivering a design which meets the operational, financial and legislative needs of the Overseeing Organisation's business;
4. technical requirements which affect the design and assessment of assets;
5. procedures for approvals for the design including departures approvals;
6. descriptions of the benchmark requirements for design;
7. quality requirements for the design and assessment of assets and their management and those roles which are within the design and assessment processes;
8. inspection and maintenance documents that affect the assessment of assets and their management;
9. requirements for design, as-built and inspection records;

5.8 The DMRB documents shall not contain:

1. information that specifies product requirements or gives specific construction solutions other than as part of the means to identify the design requirements for those solutions (see SHW for product requirements);
2. design database record requirements (e.g. EnvIS, IAMS, HAPMS), relevant to the Asset Data Management Manual (ADMM);
3. internal Overseeing Organisation procedures (contained in CHE Memos);
4. cost information;
5. contract specific information;
6. requirements and advice which vary nationally in the core document (see National Application Annexes).

National Application Annexes (NAAs)

5.9 National Application Annexes (NAAs) shall be introduced to allow national variation to requirements and advice contained in the DMRB by the Overseeing Organisations.

NOTE *Where there is no National Application Annex to a DMRB document, the DMRB text applies without Overseeing Organisation's modification.*

5.10 National Application Annexes shall be used only when absolutely imperative.

NOTE 1 *Cases where NAAs can be introduced are when there are differing legislations, policies or specific requirements for climatic differences.*

NOTE 2 *The aspiration is to have minimal or no clauses in the NAA and all core content applicable throughout the UK.*

5.11 National Application Annexes shall include:

1. material that is specific to an Overseeing Organisation and not applicable to all of them;
2. material that an Overseeing Organisation wishes to adopt more rapidly than would be possible within the timescales required to amend or revise a DMRB document.

NOTE *National Application Annexes (NAAs) are Overseeing Organisation-specific, not country-specific. However, they are called England NAA, Scotland NAA, Wales NAA and Northern Ireland NAA to reduce the need to review the title when / whether the Overseeing Organisations change their name.*

5.12 National Application Annexes shall not include:

1. issues that should be addressed at a project rather than national level;
2. information outside the scope of the DMRB document itself;
3. requirements and advice for roads which are not part of the Overseeing Organisations' motorway and all-purpose trunk roads.

NOTE *Department for Infrastructure Northern Ireland also manages local roads.*

Manual of Contract Documents for Highway Works (MCHW)

DRAFTING NOTE: The work programme to update the MCHW started in April 2021 and is expected to last three years. Where requirements within the current MDD are not available, please contact TAGG for further guidance].

Document sets

5.13 The Manual of Contract Documents for Highway Works shall consist of the following documents:

1. [DRAFTING NOTE: Volume 0 is currently being drafted and reviewed and will be made available shortly. For any queries, please contact TAGG];
2. the Specification for Highway Works documents, which contain requirements for constructors;
3. the Instructions to Specifier documents, which contain specifier instructions on producing the works specific inputs;
4. [DRAFTING NOTE: exploration into the presentation of Volume 4 "Bill of Quantities" is currently being undertaken; it will remain in the MCHW]

5.14 The content in Volume 5 "Specialist activities" shall be moved to Volumes 1, 2 and 4 and updated as relevant;

5.15 The health and safety content in Volume 6 shall be moved to internal documents maintained by the relevant health and safety team of the Overseeing Organisations. Content on diversionary works in Volume 6 will move to the DMRB.

5.16 The Manual of Contract Documents for Highway Works shall contain information to facilitate the production of works specifications for the construction of the works.

NOTE 1 *The works specification includes the SHW and the works specific inputs.*

NOTE 2 *The works specification is part of a construction contract. For NEC3 contracts, it would be part of the Works Information. In NEC4 contracts, it would be part of the Scope.*

NOTE 3 *The Specification for Highway Works is brought into contracts by reference.*

NOTE 4 *Error! Reference source not found.* below clarifies the link between DMRB design documents, the MCHW and the flow of scheme/project specific information.

5.17 Requirements shall be put in the relevant MCHW part.

5.17.1 As a general guide:

1. if the requirements do not change from contract to contract or there are no specifier options, they should be in the SHW;
2. if they do change, or they are subject to local variations / input that cannot be quantified in the SHW or DMRB, or there are specifier options, they should be provided through the works specific inputs with reference to them in the SHW.

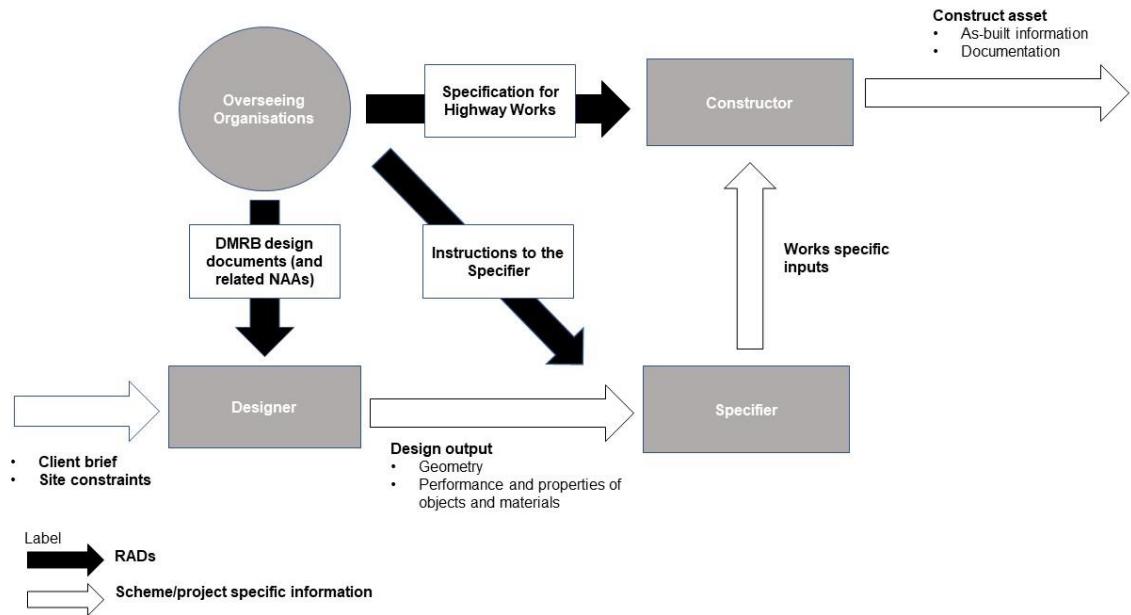


Figure 2. Link between DMRB design documents, MCHW and the flow of project/scheme specific information

Specification for Highway Works (SHW) documents

5.18 SHW documents shall provide a default set of requirements on construction that can be incorporated into works specifications.

NOTE 1 *The function of the SHW is to give contractual requirements to the constructor.*

NOTE 2 *Figure 3 provides an example of content of Specification for Highway Works form of document.*

2. Element

2.1 Elements shall be compliant with BS 2210.

2.2 The class shall be as stated in the works specific inputs.

2.3 The height of the element shall be a minimum of 500mm and a maximum of 1000mm.

Figure 3. Example extract showing content from Specification for Highway Works form of document

5.19 SHW documents shall include only constructor requirements covering:

1. products;
2. materials;
3. activities related to products and materials, including:
 - a) construction activities required to ensure that products and materials are correctly installed (installation/workmanship requirements);
 - b) verification (including testing and inspection) to prove that the works meet the specification;
 - c) documentation to prove that requirements have been carried out.

NOTE For information on constructor requirements, see Section 12, MDD part 2.

[DRAFTING NOTES: Series 100 is currently being drafted and reviewed. For any queries, please ask TAGG]

Instructions for Specifiers (IfS) documents

5.20 Instructions for Specifiers documents shall detail the project/scheme specific information that needs to be included in the works specific inputs to be used in conjunction with relevant constructor requirements.

NOTE For example, if a constructor requirement states that the class of an element is to be as stated in the works specific inputs, Instructions for Specifiers would instruct the specifier to include the class of the element in the works specific inputs.

5.21 For ease of use by specifiers, Instructions for Specifiers documents shall be published with both:

1. the default set of constructor requirements of the SHW and,
2. the specifier instructions on providing the required works specific inputs related to the constructor requirements.

NOTE 1 The specifier is not expected to adhere to the constructor requirements, these are provided for information only.

NOTE 2 [Figure 4](#) provides an example of content of Instructions for Specifiers document, where the blue/grey text contains the specifier instruction whereas the un-shaded text provides the corresponding constructor requirements in the SHW (see also [Figure 3](#)).

1 Element

- 1.1 Elements shall be compliant with BS 2210.
- 1.2 The class shall be as stated in the works specific inputs.

SI 1.2 Insert X, Y or Z to represent the class

- 1.3 The height of the element shall be a minimum of 500mm.

Figure 4. Example extract showing content from a specifier instructions' form of document

NOTE 3 *For information on specifier instructions, see Section 13, MDD part 2.*

5.22 Instructions for Specifiers documents shall not contain guidance or advice.

Highways Construction Details

5.23 Highways Construction Details shall be reviewed and updated in accordance with the requirements in section 7 of MDD part 3 (Transition from current Volume 3 drawings to figures) and requirements in section 9 of MDD part 2 (Figures).

Bill of quantities

[DRAFTING NOTE: exploration into the presentation of Volume 4 "Bill of Quantities" is currently being undertaken and it will remain in the MCHW]

Nationally Determined Requirements (NDRs)

General rules

5.24 Nationally Determined Requirements (NDRs) shall be introduced to allow requirements of the Overseeing Organisations additional to those contained in the MCHW.

5.25 Where one Overseeing Organisation requires a Nationally Determined Requirement, all Overseeing Organisations shall provide country-specific content or confirm that it is not applicable.

5.26 NDRs shall not modify or replace requirements contained in the core text.

5.27 NDRs shall be used only when absolutely imperative.

NOTE 1 *Cases where NDRs can be introduced are when there are differing legislations.*

NOTE 2 *The aspiration is to have minimal or no NDRs and all core content applicable throughout the UK.*

5.28 National Determined Requirements (NDRs) shall include:

1. material that is specific to an Overseeing Organisation and not applicable to all of them;
2. material that an Overseeing Organisation wishes to adopt more rapidly than would be possible within the timescales required to amend or revise a MCHW document.

NOTE 1 *National Determined Requirements (NDRs) are Overseeing Organisation-specific, not country-specific. However, they are called England NDR, Scotland NDR, Wales NDR and Northern Ireland NDR to reduce the need to rename them when / whether the Overseeing Organisations change their name.*

5.29 NDRs shall not include:

1. issues that should be addressed at a project rather than national level;
2. information outside the scope of the MCHW document itself;
3. requirements for roads which are not part of the Overseeing Organisations' motorway and all-purpose trunk roads.

NOTE *Department for Infrastructure Northern Ireland also manages local roads.*

Nationally Determined Sections

5.30 When there is significant variation of content within a section across the Overseeing Organisations, a Nationally Determined Section (NDS) shall be introduced containing NDRs.

5.31 Whilst content can be similar in a number of clauses, no attempt shall be made to align clauses or show similarity between NDRs contained in the NDS for the four Overseeing Organisations.

5.32 Where one Overseeing Organisation requires a Nationally Determined Section, all Overseeing Organisations shall provide country-specific content or confirm that it is not applicable.

5.33 Titles of NDSs related to the same subject shall be consistent.

CHE Memos (National Highways Only)

5.34 CHE Memos shall be used to provide internal information / communication / procedures in connection with the works on National Highways' motorway and all-purpose trunk road network.

NOTE 1 A CHE memo template is available here:
<http://share/Share/llisapi.dll?func=ll&objId=82341472&objAction=browse>

NOTE 2 CHE Memos are subject to the same EU product legislation requirements as the SHW.

NOTE 3 See Annex 1A for the governance process of CHE memos.

5.35 CHE Memos shall not be forwarded to the supply chain.

5.36 Where there is a significant content that requires action by the National Highways supply chain, the CHE Memo shall refer to DMRB or MCHW documents giving those requirements.

5.37 CHE memos shall not be used to publish new or revised technical requirements that belong in the DMRB or MCHW.

5.38 Any instructions to carry out activities that involve a cost shall not be included in a CHE Memo unless suitable funding is provided or the directorate required to undertake the activity has agreed to fund the activity.

6. Drivers for document development and solutions

6.1 A review of the needs of the business and the suitability and coverage of RADs shall be triggered by the drivers and opportunities for change presented in this section.

Drivers

Driver 1: Changes in strategic approach, needs and objectives

6.2 Technical authors shall review RADs following any changes to policies, themes (e.g. greater emphasis on cost reduction), needs and objectives.

6.3 Technical authors shall review RADs to ensure that the RAD fulfils business objectives of National Highways before any research or development (R&D) work is undertaken where needed.

NOTE *Business objectives of National Highways for RADs include:*

- 1) *Convey and support Government and highway policies in the UK.*
- 2) *Set the technical quality requirements.*
- 3) *Support the procurement processes of the Overseeing Organisations.*
- 4) *Provide a benchmark against which new ideas and innovation can be judged.*
- 5) *Enable/support the Overseeing Organisation to meet its corporate responsibilities under relevant legislation.*
- 6) *Maintain the asset to the optimum standard within the funding available.*

6.4 Technical authors shall take account of the requirements of the latest annual SES business planning guidance.

Driver 2: Changes to European, UK and national legislation

6.5 RADs shall complement and not contradict current EU, UK and national legislation.

6.6 Technical authors shall remain informed of new and revised legislation relevant to their area of expertise.

NOTE Refer to [Annex 2A to MDD Part 3](#) for further information on legislation.

6.7 Technical authors shall review and action appropriately any changes or new legislation relevant to the RADs.

6.8 Technical authors shall ensure that RADs satisfy all current legislation.

6.9 Technical authors shall ensure that RADs are not restrictive in permitting or facilitating the adoption of safe working practices.

NOTE Refer to [Section 13 to MDD Part 3](#) for information on Health and safety legislation.

6.10 Technical authors shall review incidents reported that have health and safety implications for the RADs for which they are responsible.

6.11 Technical authors shall ensure that the designer and client responsibilities under the *CDM Regulations* are reflected in RADs (refer to [Section 13 to MDD Part 3](#)).

Driver 3: Changes to standards and the implementation or revision of harmonised European Standards (hENs) and designated standards

6.12 Technical authors shall ensure that RADs incorporate new National, UK and EU standards as well as amendments to National, UK and EU standards.

NOTE 1 *Where new hENs are introduced replacing national standards, the Member States National Highway Authority expresses its performance requirements in terms of the essential characteristics given in hENs.*

NOTE 2 *For New EU harmonised standards, there is a two-year coexistence period during which all national regulations are amended.*

NOTE 3 *For amendments to existing EU harmonised standards there is no coexistence period.*

6.13 Changes to RADs to reflect the requirements of hENs and/or designated standards shall not be delayed.

NOTE *Delay in changing RADs to reflect the requirements of hENs can expose the National Highway Authority to the risk of infraction proceedings under EU law.*

Driver 4: Changes to documents other than legislation and standards (third-parties documents)

6.14 Technical authors shall review relevant third parties' technical documents and action appropriately any changes relevant to the RADs.

Driver 5: Changes to normative and informative references

6.15 Technical authors shall monitor normative and informative references to national, UK, European and international documents and to documents other than standards, and shall review any changes made to these documents.

6.15.1 Normative and informative references to national, UK, European and international documents and to documents other than standards should be checked at least every three months with more frequent checks during the development of documents.

NOTE *National Highways has a subscription service with the British Standards Institution (BSI) and IHS. National Highways staff can require access to subscriptions to British and European standards by contacting the standards_enquiries inbox.*

- 6.16 Technical authors shall understand any changes made to normative references and confirm any subsequent action required, including consequential amendments arising as a result of changes.
- 6.17 Technical authors shall understand changes to informative references so that any such references in RADs can be updated.

Driver 6: Changes in operational practice

- 6.18 Technical authors shall ensure RADs reflect the working practices of suppliers and highway authorities, including industry trends and changes in project procurement practice.

Driver 7: Impact of the updates made to other Overseeing Organisations' documents

- 6.19 Technical authors shall update existing RADs or develop new RADs to cater for the updates made to other Overseeing Organisations' documents.

NOTE *This is for example the case of DMRB documents which can potentially need to be reviewed and updated as a result of the changes made to the MCHW.*

Driver 8: Outcomes from research and development

- 6.20 Technical authors shall be aware of new technology being or having been developed and its impact on any RADs.

NOTE *New technology and practices are continually being developed by research and development funded by National Highways or by others both in the UK and abroad, resulting in improvements and developments to techniques and practices from which the Overseeing Organisations can derive benefits.*

- 6.21 As soon as any new technology becomes established (i.e. business as usual), technical authors shall confirm and undertake any action required to the affected RADs.

- 6.22 Technical authors shall refer to the most recent *National Highways Research Strategy*.

NOTE *The National Highways Research Strategy provides high-level direction for the research and development programme informing Innovation Programmes and assists Portfolio Leaders to align their research portfolios to National Highways' and wider DfT's business priorities.*

Driver 9: Feedback from the TSC consultation process on items for future work

- 6.23 Technical authors shall keep a record of any items raised by the TSC consultees, which have been agreed to be done in future work, in the consultation report ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG. This information will also be added in future as a feedback item in Jira for document maintenance purposes]

Driver 10: Feedback from the DMRB website

[DRAFTING NOTE: TAGG is currently finalising the replacement of the Standards Enquiries mailbox with a new form on the DMRB website, which will drive quality in the submissions received and help overcome the issue of tracking and addressing feedback in a timely manner. The new form will be launched towards the end of March 2022]

6.24 Technical authors shall review and address feedback received on documents through the DMRB website.

NOTE 1 *Typical feedback sources are:*

- *Highways England's Project Sponsors, Project Managers, Directorates, Business Units, Project and Scheme Boards;*
- *other Overseeing Organisations;*
- *UK industry and supply chain;*
- *international forums, committees and industry groups.*

NOTE 2 *Typical areas to be addressed include:*

- *suspected error in a clause*
- *gaps in the content*
- *inconsistencies between documents*
- *content does not reflect latest European, UK and national legislation or standards*
- *content does not reflect latest practice (e.g. in design, construction, operation)*
- *opportunities to harmonise content with other client organisations*
- *opportunities to add outcomes from research and development*
- *opportunities for innovation and improvement*
- *opportunities to add alternative approaches*

NOTE 3 *Specific rules on how to manage such feedback are provided in Section 18.*

6.25 Technical authors shall make available feedback received to those providing support in reviewing and revising documents.

Driver 11: Number and scope of departures from requirements contained in RADs (National Highways only)

6.26 RADs shall be developed to allow sufficient flexibility for the intended range of users and locations to limit applications for departures to unforeseen or uncommon circumstances.

NOTE 1 *Much time and effort is devoted to administering and approving departures by both National Highways and its supply chain and there are efficiency savings that can be achieved by producing RADs that require fewer unnecessary departures.*

NOTE 2 *Departure applications are identified in many projects as having had a significant effect on their programmed delivery and associated increased financial costs.*

6.27 Technical authors shall review areas where a RAD is shown to be unclear, out of date, fails to meet National Highways needs, is subject to frequent departures of a similar nature, or is otherwise deficient and for which departures are being sought.

NOTE 1 *National Highways' Departures Approval System (DAS) provides a source of information on areas where a RAD is unclear, out of date, fails to meet National Highways needs, is subject to frequent departures of a similar nature or is otherwise deficient.*

NOTE 2 *Departures are not applicable to statutory requirements.*

NOTE 3 *Departures from 'advice' are not processed through DAS.*

6.28 Technical authors shall make an assessment on any action required to revise a RAD subject to departures based on the information provided by the National Highways' Departures Approval System (DAS).

Opportunities for change

Opportunity 1: Develop collaboratively with other infrastructure clients

6.29 Technical authors shall identify situations where documents or specific requirements can be developed through collaborative work with other infrastructure clients or providers and develop relevant proposals to update existing RADs or develop new RADs.

Opportunity 2: Transfer responsibility for development of best-practice guidance to industry

6.30 Technical authors shall identify situations where it is convenient to transfer responsibility for development of best-practice guidance to industry and update RADs accordingly.

Opportunity 3: Enhance H&S conditions

6.31 Technical authors shall identify situations where the creation of new documents or the update of existing documents can enhance H&S and wellbeing of road users, road workers and others affected by the Overseeing Organisations' motorway and all-purpose trunk roads, and undertake relevant document development work.

Opportunity 4: Enhance equality diversity and inclusion

6.32 Technical authors shall identify situations where the creation of new documents or the update of existing documents can enhance equality, diversity and inclusion of road-using public or neighbourhoods impacted by the Overseeing Organisations' motorway and all-purpose trunk roads, and undertake relevant document development work.

Opportunity 5: Enhance carbon management, sustainable development and good design

6.33 Technical authors shall identify situations where the creation of new documents or the update of existing documents can enhance carbon management, sustainable development and design outcomes, and undertake relevant document development work.

Opportunity 6: Enhance customer satisfaction

6.34 Technical authors shall identify situations where the creation of new documents or the update of existing documents can enhance customer satisfaction outcomes and undertake relevant document development work.

Opportunity 7: More efficient and effective practices in design, construction, maintenance and operations leading to reduced costs and better value

6.35 Technical authors shall identify situations where the creation of new documents or the update of existing documents can help deliver more efficient and effective practices in design, construction, maintenance and operations leading to reduced costs and better value, and undertake relevant document development work.

Opportunity 8: Introduce other more general business benefits

6.36 Technical authors shall identify situations where the creation of new documents or the update of existing documents can help introduce other more general business benefits, and undertake relevant document development work.

Solutions

Options for communicating requirements and advice

6.37 Technical authors shall select the most appropriate method for communicating new or amended requirements and associated advice among the following options:

1. develop a new RAD;
2. revise and update an existing RAD;
3. withdraw an existing RAD;
4. transfer responsibility for development of best-practice guidance to industry;
5. develop collaboratively with other infrastructure clients;
6. produce an implementation RAD to an existing standard beyond the Overseeing Organisations' document sets;
7. do nothing.

6.38 The “do nothing” option shall apply where the Technical Standards Committee responsible for the proposal conclude and record that there is no business case for the dissemination of the identified new requirement.

6.39 Technical authors shall follow the instruction and guidance provided in [Section 6 to 10 in MDD Part 3](#) on taking forward different options for communicating new or amended requirements or advice.

7. Impact assessment

7.1 Technical authors shall assess how changes to existing RADs or the development of new RADs and their implementation would impact on the following aspects:

- a) health, safety and wellbeing
- b) equality diversity and inclusion
- c) carbon management, sustainable development, and good design
- d) customer satisfaction
- e) commercial / cost
- f) other impacts

7.2 The technical author shall assess the impact of the RAD development work before the TSC consultation based on the draft document / clauses (see pre-consultation impact assessment in [section 11](#)), and revise it after the TSC consultation based on the comments received by the TSC consultees (see post-consultation impact assessment in [section 13](#)).

7.3 The template of the impact assessment provided in [DMRB link](#) or [MCHW link](#) shall be used.

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

The impact of RADs on health, safety, and wellbeing

Overall approach

7.4 Technical authors shall identify how the implementation of RADs would impact on the health, safety, and wellbeing of road users, road workers and others affected by the Overseeing Organisations' motorway and all-purpose trunk roads.

NOTE 1 *DfT, National Highways, the Welsh Government, Transport Scotland and the Department for Infrastructure Northern Ireland are committed to reducing casualties and risks faced by those who use, work on or who are otherwise affected by the Overseeing Organisations' motorway and all-purpose trunk roads.*

NOTE 2 *The overriding considerations are to ensure users of the document can achieve the desired outcome without compromising the health, safety, and wellbeing of either those involved in the construction process or the end user and that the safety of the constructed asset is considered on a whole life basis.*

7.5 Technical authors shall follow the requirements in GG 104 for health and safety risk assessment when considering health and safety issues in relation to RADs.

7.6 Technical authors shall familiarise themselves with the [Home Safe and Well publication](#) available from www.nationalhighways.co.uk to ensure

wellbeing is factored into the development of RADs from the outset and risks eliminated wherever possible.

Health and Safety Risk Assessment (SRA)

7.7 For all RADs, technical authors shall complete the GG 104 Health and Safety Risk Assessment (SRA) contained in the impact assessment report template ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

7.8 A document shall not be signed off by the Chief Highway Engineers if the Health and Safety Risk Assessment (SRA) has not been completed.

NOTE *Health and Safety Risk Assessment (SRA) is a vital part of the document review process and is one of the ways that National Highways will achieve its objective of 'Home Safe and Well'. A properly undertaken SRA enables any unintended consequences of implementing the proposed standard/RAD to be identified, as well as benefits that could otherwise not have been identified to be captured.*

7.9 The health and safety risk assessment section contained in the impact assessment report shall be reviewed as part of the Technical Standards Committee (TSC) process (see [Section 13](#)).

7.10 Technical authors shall record any obstacles to correct compilation or population of the SRA with expected resolution times identified.

7.11 Before any changes are made to a RAD, technical authors shall identify any issues with the existing application of the RAD.

7.12 Where issues identified can be addressed using a control measure/control measures that do not require any research, trials or pilots, these shall be included in the review process.

NOTE *Examples of issues that can be addressed without research, trials or pilots are National Highways specifying controls to minimise risk associated with specific hazards which go above legal compliance or requirements that allow interpretation of legislation that can lead to an inconsistent approach to hazard and risk management.*

7.13 Technical authors shall list all issues that are identified with the existing application of the standard/RAD under review that are not addressed within an editorial change.

7.14 Technical authors shall document an explanation of why the issue(s) are not being addressed with a time-bound programme for when a further revision will be produced that will resolve the issue(s) identified.

7.15 The safety risk report shall be kept readily accessible for the life of assets designed and constructed in accordance with that particular RAD.

Managing residual risks

7.16 Any residual risks known by the technical authors that are to be passed on to users of the document shall be included in the 'Assumptions Made in the Preparation of the Document' of the RAD under consideration.

7.17 Technical authors shall continue managing the identified risks beyond document publication as part of continual on-going document maintenance.

NOTE *On-going risk management of document content helps identify required document updates.*

Random sampling of SRAs

7.18 Random sampling of SRAs shall be completed on a regular basis by the safety risk requirements team and feedback provided to the appropriate senior management team.

NOTE *The appropriate senior management team can be the group manager or divisional director of the person completing the review.*

The impact of RADs on equality diversity and inclusion

7.19 Technical authors shall identify how the implementation of RADs would impact on the equality, diversity and inclusion of road-using public or neighbourhoods impacted by the Overseeing Organisations' motorway and all-purpose trunk roads by using the template provided in the impact assessment report ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

The impact of RADs on carbon management, sustainable development and good design

7.20 Technical authors shall assess documents for carbon management, sustainable development and good design implications by using the relevant template provided in the impact assessment report ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

NOTE *The aim is to assess how best to achieve the requirements set out in GG 103 Introduction and general requirements for sustainable development and design.*

7.21 The screening sections in the impact assessment report shall be completed first to assess potential impacts on carbon management, sustainable development and good design from requirements and advice documents (RADs).

7.22 If the screening flags a potential impact, a full impact assessment shall be undertaken.

The impact of RADs on customer satisfaction

7.23 Technical authors shall identify and record how the implementation of RADs impact on the customer satisfaction of customers, communities and stakeholders, including road users, road workers and others affected by the Overseeing Organisation's motorway and all-purpose trunk roads by using the template provided in the impact assessment report ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

NOTE *The impact on customer satisfaction includes all stages from feasibility and design through to construction, maintenance, operation and decommissioning.*

7.24 Requirements within the RADs shall enable and improve the development of solutions to improve customer satisfaction.

7.25 Where a RAD is identified for development primarily for improving customer satisfaction, a customer service standard shall be developed.

7.26 Technical authors shall use current Overseeing Organisation requirements for customer satisfaction in the development of RADs.

7.27 When amending a RAD, technical authors shall assess the impact of customer satisfaction of the whole document and not those relating to the amendments.

7.28 When developing and amending a RAD, technical authors shall use insight and feedback to understand the needs and expectations of our customers.

7.28.1 Technical authors should assess and review readily available information and insight.

NOTE *Readily available information and insight can include customer calls and emails, Transport Focus and other industry reports, consultations with internal customers and the supply chain.*

Estimating cost implications of RADs

[DRAFTING NOTE: This section shall be updated based on the findings of a specific task to review and enhance the current approach to assess RADs cost implications. It is expected to be concluded before summer 2022]

Cost estimates

7.29 Technical authors shall assess the cost implications (both positive and negative) in developing, reviewing and implementing new requirements or RADs to enable National Highways to take account of the cost changes in its business planning.

NOTE 1 *The proposed RAD can affect the cost of all the future National Highways and third party projects to which it applies. National Highways needs to know how new or revised RADs can impact on its network and operations.*

NOTE 2 *Regardless of the overall benefits expected as a result of implementing the document, the financial implications need to be budgeted for in future years and the costs need to be covered in current spending. Significant cost implications which come to light at a late stage and were not properly anticipated or assessed can prevent the implementation of the RAD.*

7.30 Technical authors shall evaluate cost implications before and after the consultation following requirements indicated in [Annex 1C](#) and [Annex 1D](#) and explain the basis of any cost estimates given, including any assumptions made.

7.31 The *Cost Impact Identification Process* diagram provided in [Annex 1C](#) shall be used by technical authors to:

1. quantify the cost implications of documents;
2. identify the impacts based on the known drivers for the updated or new RAD (see [Section 6](#)); and
3. establish whether costs need to be estimated using the “Cost Impact Toolkit” presented in [Annex 1D](#).

NOTE 1 *The Cost Impact Identification Process includes for consultation with practitioners within National Highways (e.g. Major Projects (MP), Operations Directorate (OD), Contract and Performance teams and/or Commercial teams) and other stakeholders about current costs and to help with the identification of direct and indirect impacts.*

NOTE 2 *Where, at any stage in the development of the RAD, it becomes clear that the cost implications are likely to vary significantly from those initially assessed and, accordingly, there is a need to reconsider the business case for proceeding with the document, the Cost Impact Identification Process can be used to review the assumptions identified when entering the SRP.*

Cost Impact Toolkit

7.32 Where costs need to be estimated using the “Cost Impact Toolkit” as emerged from the assessment carried out to [Annex 1C](#), technical authors shall follow the five steps presented in [Annex 1D](#).

Annual cost implications for National Highways of implementing the document

7.33 Net costs of implementing the proposed RAD shall be identified.

NOTE *Such costs are the cash savings and costs that directly impact on National Highways budgets (e.g. maintenance, construction and inspection costs).*

7.34 Costs shall be estimated on the basis of the likely impact on National Highways budgets in a typical year (e.g. average of the past five years). A broad assessment shall be made of the application of the relevant requirement of the RAD.

NOTE *For example:*

- 1) *If the requirement will affect the cost/km of constructing an asset, the implementation cost should be based on the number of km of the asset likely to be built by National Highways in an average year.*
- 2) *If the requirement will affect the cost of an asset which is normally built by National Highways only once every 10 years, it would be appropriate to take a tenth of the cost.*

7.35 Implementation costs shall be calculated in terms of changes when compared to the costs associated with existing documents in:

1. Construction costs.
2. Ongoing maintenance costs, including consequential costs for maintenance of other road infrastructure.
3. Operational costs, e.g. costs of additional traffic officers.
4. Disposal costs, e.g. changes in costs of demolition.

7.35.1 Cost implications may be difficult to estimate, particularly at an early stage in the development of the RAD. However, it is essential that at least a broad estimate is produced to enable decisions on whether or not to proceed to be informed by affordability considerations.

7.36 Where applicable, account shall be taken of advice contained in CHE Memo 121 HM Treasury's New Green Book On Appraisal & Evaluation In Central Government (<http://share/share/livelink.exe?func=ll&objaction=overview&objid=3925753>; <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-goverment>) regarding optimism bias.

7.37 Technical authors shall estimate the number of years to 'break even' point (return period) in terms of direct costs and savings to National Highways budgets. For the purposes of calculating the 'return period', future costs/savings shall be discounted back to the proposed year of publication of the RAD, using the discount rate set out in the Treasury Green Book.

NOTE *Further advice can be obtained from CHE Memo 121 HM Treasury's New Green Book On Appraisal & Evaluation In Central Government* (<http://share/share/livelink.exe?func=ll&objaction=overview&objid=3925753>; <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-goverment>).

7.38 Technical authors shall include a requirement to assess costs in detail as set out above in any contracts they let for the drafting of new or revised documents.

7.38.1 It may be appropriate to commission a separate costing exercise by specialist quantity surveyors as it is important that costs and benefits are quantified as early as possible, particularly where the implementation costs are likely to be high.

Non-cash benefits of introducing new/revised standards and specifications

7.39 Non-cash Benefits of Introducing New/Revised Standards and Specifications shall be identified.

NOTE *Examples of non-cash benefits include:*

- 1) *Reduced deaths and serious injury incidents.*
- 2) *Improved health and safety of highway operatives.*
- 3) *Improved noise levels*
- 4) *Reduced environmental impacts.*
- 5) *The indirect (non-cash) benefits of reduced construction times (e.g. earlier opening of the road).*

NOTE 2 *Proposals with soundly based quantified benefits are normally be given priority in the allocation of funds.*

7.39.1 Technical authors may need to make broad assumptions about the use of the new/revised RAD to arrive at indicative financial values for the benefits, e.g. x likely instances of the application of this requirement of the RAD over National Highways' motorway and trunk roads in a typical year, with a benefit of £y for each application gives an overall financial benefit (product of the two figures).

Direct cost implications

7.40 Technical authors shall assess the cost implications of implementing the RAD in its final version and shall obtain agreement to the costs from the Technical Standards Committee.

7.41 The updated costs shall be compared with the initial estimates produced at the inception of the work.

7.42 Reasons and impacts shall be given for any variances from initial estimates as this will provide valuable feedback which will help in assessing costs for future proposed changes to RADs.

7.43 The basis of any cost estimates shall be explained, including the results of any cost assessment studies.

7.43.1 It may be appropriate to seek assistance from specialist quantity surveyors to produce the cost estimates.

NOTE *It is important that this information is fully documented so that it may be used by other National Highways directorates in negotiations with the supply chain.*

8. Governance process for document development

- 8.1 Technical authors shall follow the governance process of the Overseeing Organisation that provides the resources for the development of the RAD.
- 8.2 The governance process presented in this section shall be applied to DMRB and MCHW documents developed by and/or on behalf of National Highways.

NOTE *For the governance process of CHE memos, see [Annex 1A](#).*

- 8.2.1 An equivalent process should be determined where development of a RAD is to be resourced by one of the other Overseeing Organisations.

Categories of change A, B, C, D

- 8.3 The governance process for RAD development shall be proportionate to the changes being introduced.
- 8.4 A distinction shall be made between:
 1. major revisions (category A);
 2. incremental changes (categories B, C, D).

NOTE 1 *A risk-based, proportionate approach is applied to the level of governance that is required. Major revisions require a comprehensive governance process, whereas incremental changes require a lighter process, which encourages minor improvements to the document.*

NOTE 2 *[Figure 5](#) provides a high-level document development process for categories of change A, B, C, D.*

- 8.5 The governance process for a major revision to a RAD shall apply to the following (category A):
 1. policy change
 2. rewrite of the document
 3. new document development
- 8.6 The governance process for an incremental change to a RAD shall apply to the following:
 1. change to requirement (category B)
 2. change to advice (category C)
 3. change to notes and/or spelling mistakes (category D)
- 8.7 When there are multiple changes to be made, the category chosen shall be the most onerous.

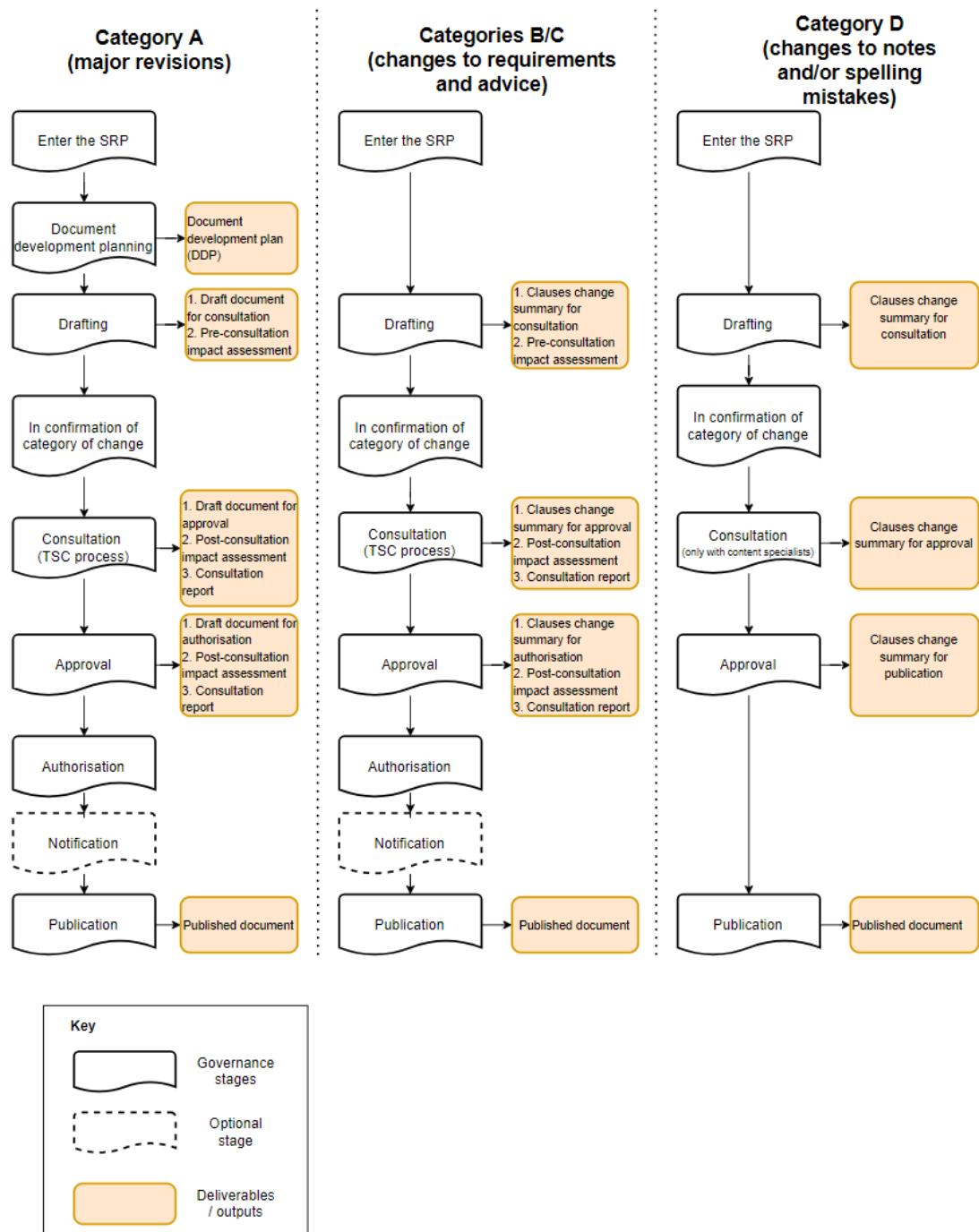


Figure 5. High-level document development process for categories of change A, B, C, D

9. Stage 1: Enter the SRP backlog

9.1 The Standards Review Programme (SRP) for all RADs shall be managed through the TAGG's programme management software JIRA.

NOTE 1 *The Standards Review Programme (formerly called Standards Forward Programme SFP) is the register for tracking progress of document development.*

NOTE 2 *JIRA is a cloud-based solution for teams to manage document development progress through a workflow using Kanban reporting. It gives a simple visual of progress across a set of activities related to the management of documents and provides full visibility and an audit trail of the SRP. For advice on using JIRA, please contact TAGG at standards_enquiries@highwaysengland.co.uk*

9.2 For all categories of change (A, B, C, D), the steps presented in Figure 6 shall be followed to enter the SRP backlog.

9.3 The Jira request to enter a document on the SRP backlog shall contain the following items (see <https://help.futuredmrb.co.uk/standards-governance/using-jira/> for a detailed overview):

- a) Number and title of the document (provisional if the document is new)
- b) Type of document development:
 - new document development
 - update to existing document
- c) Drivers for document development (see Section 6)
- d) Category of change (see Section 8)
- e) Outline summary of the changes proposed
- f) Outline summary of benefits
- g) Urgency of the proposed change
- h) Technical Standards Committee
- i) Forecast dates for document development plan submission (Category A only), start drafting, start TSC consultation, TSC completion, TSC chair approval

9.4 The relevant TSC shall be identified when the technical author submits a request to enter the SRP backlog.

9.5 Consultation dates shall be defined and communicated well in advance to all TSC members (at least one month before the start of the consultation) to enable members to plan their workload and participate.

9.5.1 Where consultation dates change after being communicated, the consultees should be updated with plenty of notice.

9.6 The TSC secretary shall share the draft document / clauses and the pre-consultation impact assessment with the consultees.

9.7 Once the Technical Standards Committee (TSC) chair confirms that the draft document / clauses and the pre-consultation impact assessment are ready for consultation, the TSC chair shall notify the TSC members of the start date of the consultation at least one month before.

Summary of benefits

9.8 The technical author shall clarify why the work is necessary and needs to be done now and the benefits of implementing the new or revised RAD.

Urgent changes

9.9 When developing the business case, technical authors shall assess whether the document is required to be implemented immediately without exception, thus overriding the ability of the Project Manager to assess implementation of the document based on time and cost (see implementation requirements under the Scope heading in section 4 of MDD part 2).

NOTE *Reasons why implementation of a document is required immediately include legislative changes, policy changes and urgent safety items.*

9.10 Where the decision is made that the document is required to be implemented immediately, the following clause shall be included in the scope section of the document *“The requirements of this document shall be applied immediately to all schemes and projects due to (xxxx), in accordance with the implementation requirements of GG 101”.*

Keeping the Standards Review Programme (SRP) up to date

9.11 Technical authors shall ensure that the SRP is up to date with the lifecycle stage of the document by revising relevant milestones in JIRA.

9.12 Where changes to the baseline SRP are needed, technical authors shall submit a request for the proposed change(s) and shall obtain formal approval using workflow functionality in JIRA.

NOTE 1 *The change control process for DMRB documents is formalised in [Annex 1E](#).*

NOTE 2 *Permission to execute an approval for change control processes is only available to those assigned the corresponding role in Jira.*

9.13 Approved changes to the SRP shall be implemented by TAGG.

9.14 Following CHE authorisation, TAGG shall update the SRP with the progress of the document through publication.

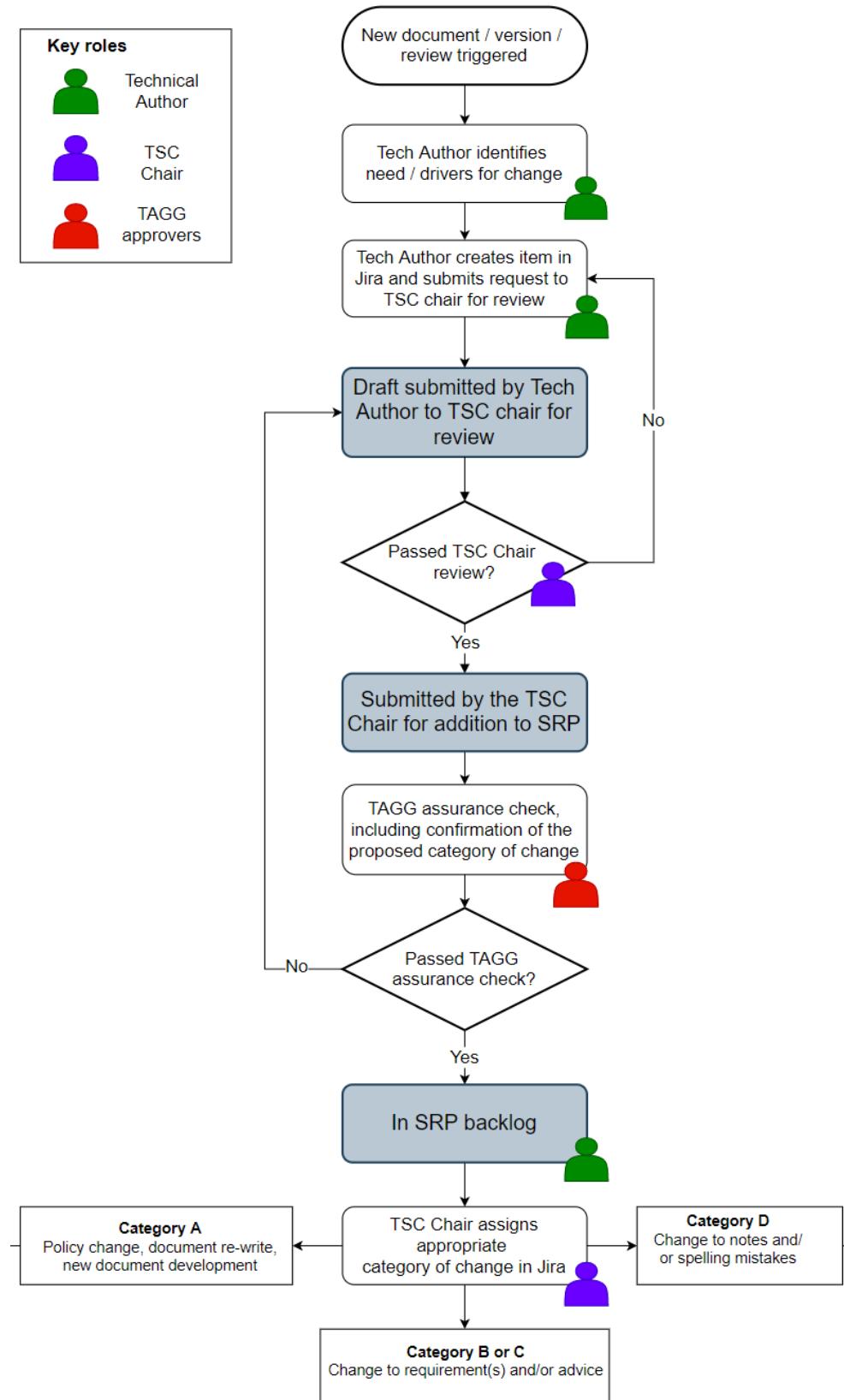


Figure 6. Steps to enter the SRP backlog

10. Stage 2: Document development planning

- 10.1 For category of change A only, once the document has entered the SRP backlog, the technical author shall follow the steps presented in [Figure 7](#) for document development planning.
- 10.2 For categories B, C, D, the stage “document development planning” shall not be followed and the document author shall start drafting promptly after the document has entered the SRP backlog.

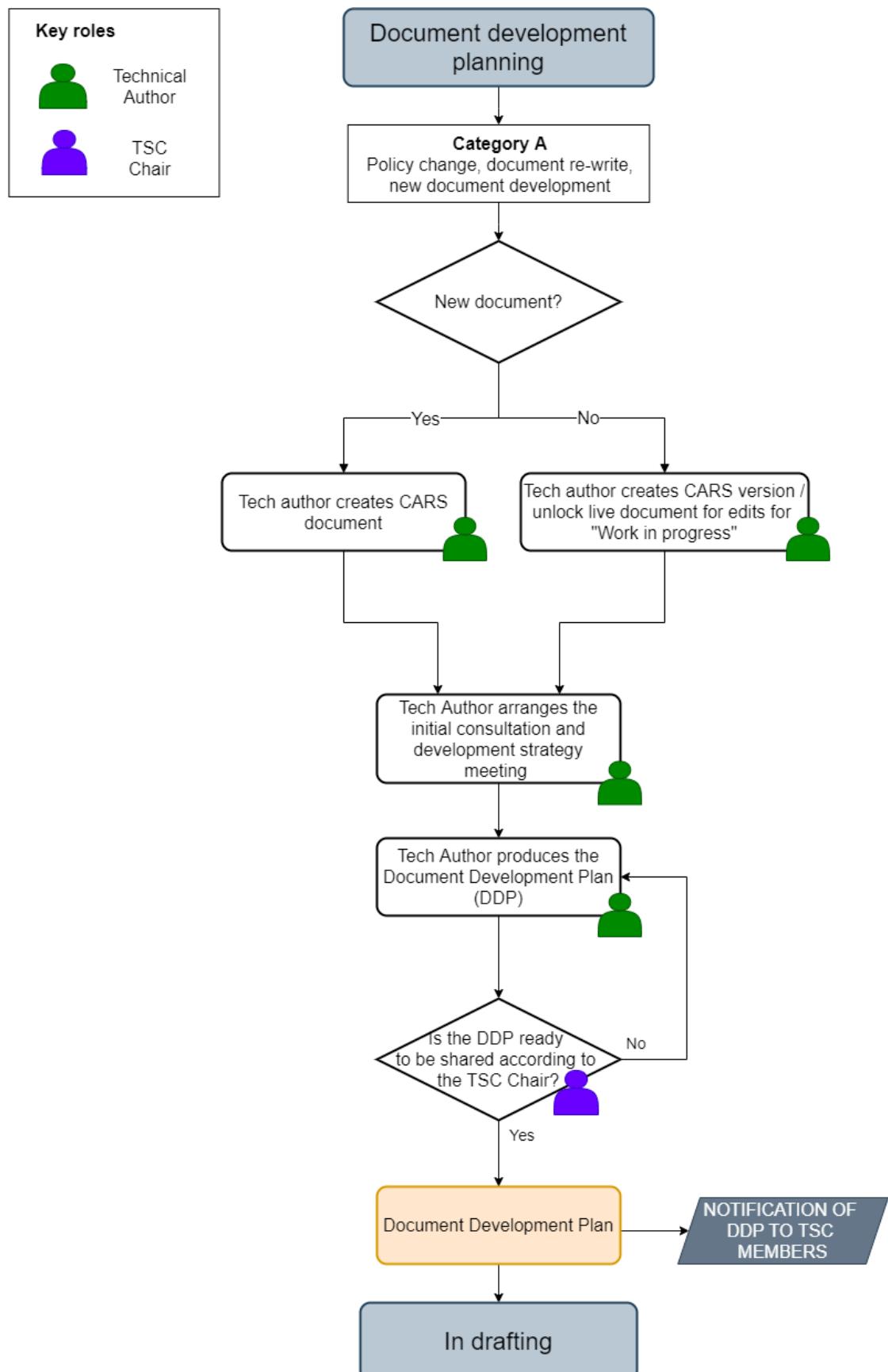


Figure 7. Steps for document development planning

Initial consultation and development strategy meeting

10.3 When drafting a new RAD or reviewing an existing one, the technical author shall organise an initial consultation and development strategy meeting with relevant stakeholders to discuss specific needs, identify key risks and issues that need to be addressed in the document, and set the criteria by which the final document is considered a success.

NOTE 1 *Relevant stakeholders to the initial consultation and development strategy meeting include initial peer reviewers, members of the Technical Standards Committee (TSC) and technical authors of the other Overseeing Organisations.*

NOTE 2 *The initial consultation and development strategy meeting aims at reducing the risk of disagreement in subsequent stages of review and streamlining the approval process by involving key parties at the beginning of the development process. It is also relevant to discuss the strategies to deal with Overseeing Organisations' specific requirements.*

Document Development Plan (DDP)

10.4 Based on the outcome of the initial consultation and development strategy meeting, a document development plan (DDP) shall be developed by the technical author before starting the drafting process.

NOTE 1 *The document development plan aims at defining the criteria by which the final document is considered a success, including its structure, specific content, key stakeholders to be consulted or kept informed, links to other National Highways' document sets.*

NOTE 2 *Key areas to be addressed in the DDP are:*

- *Basic information on the document*
- *Production team*
- *List of deliverables*
- *Summary of drafting needs and approach*
- *Interfaces with other documents and coordination required*
- *High-level section review (for existing documents only)*
- *Proposed outline document structure*
- *Risks and opportunities*

10.5 The template of the Document Development Plan provided in ([DMRB link](#) or [MCHW link](#)) shall be used.

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

10.6 The DDP shall be reviewed by the TSC chair to confirm it is suitable to be shared with the Technical Standards Committee (TSC) members.

10.7 The DDP shall be notified to all TSC members as soon as it is ready using Jira workflow functionality.

NOTE 1 *Sharing the document development plan before starting the drafting process will help mitigate the risk of significant rework in subsequent stages of the drafting process due to the lack of clear understanding of the document's needs and stakeholders' expectations.*

11. Stage 3: Drafting

Authoring

- 11.1 Draft RADs shall be prepared in accordance with the task specification and the requirements provided in [MDD Parts 2 and 3](#).
- 11.2 For category of change A, the technical author shall follow the steps presented in [Figure 8](#) for authoring the document.
- 11.3 For categories of change B, C, D, the technical author shall follow the steps presented in [Figure 9](#) for authoring the clauses.

Engagement with Content specialists (for category A changes)

- 11.4 For category A changes, technical authors shall engage content specialists from the beginning of the drafting process and throughout their work to receive progressive assurance and support.

NOTE *For categories of change B, C, D, there is no requirement to engage with the content specialists from the beginning of the drafting process as incremental changes are typically limited to few clauses and can be reviewed by the content specialists directly during the consultation period.*

- 11.4.1 Technical authors should submit the first two sections of the document to the content specialist to receive feedback.
- 11.4.2 Technical authors should submit the document to the content specialist when roughly 25% to 50% is complete to receive progressive assurance.

NOTE *The % depends on the size of the document. For large documents it is most appropriate to engage the content specialist earlier in the process than later, thus when roughly the 25% of the document is ready.*

- 11.5 Content specialists shall confirm their availability to review the draft to the technical authors and agree when they will provide feedback and comments.
- 11.6 Review of documents by content specialists shall be undertaken in CARS.

Initial peer review

- 11.7 When the draft document has reached an appropriate stage, the technical author shall arrange an initial peer review within his or her team/group.

NOTE *Initial peer review checks that the criteria by which the document is considered a success have been met and ensures that any issues that were identified can be investigated, discussed and resolved before the document progresses to review by the TSC.*

- 11.7.1 Initial peer reviews may require consultation with relevant National Highways specialists from other teams and/or external specialists, depending on the technical nature of the issues raised.
- 11.8 Peer reviewers shall have read and be familiar with the drafting rules given in [MDD Parts 2 and 3](#).
- 11.9 Documents shall not be submitted to the TSC without having had at least one initial peer review.

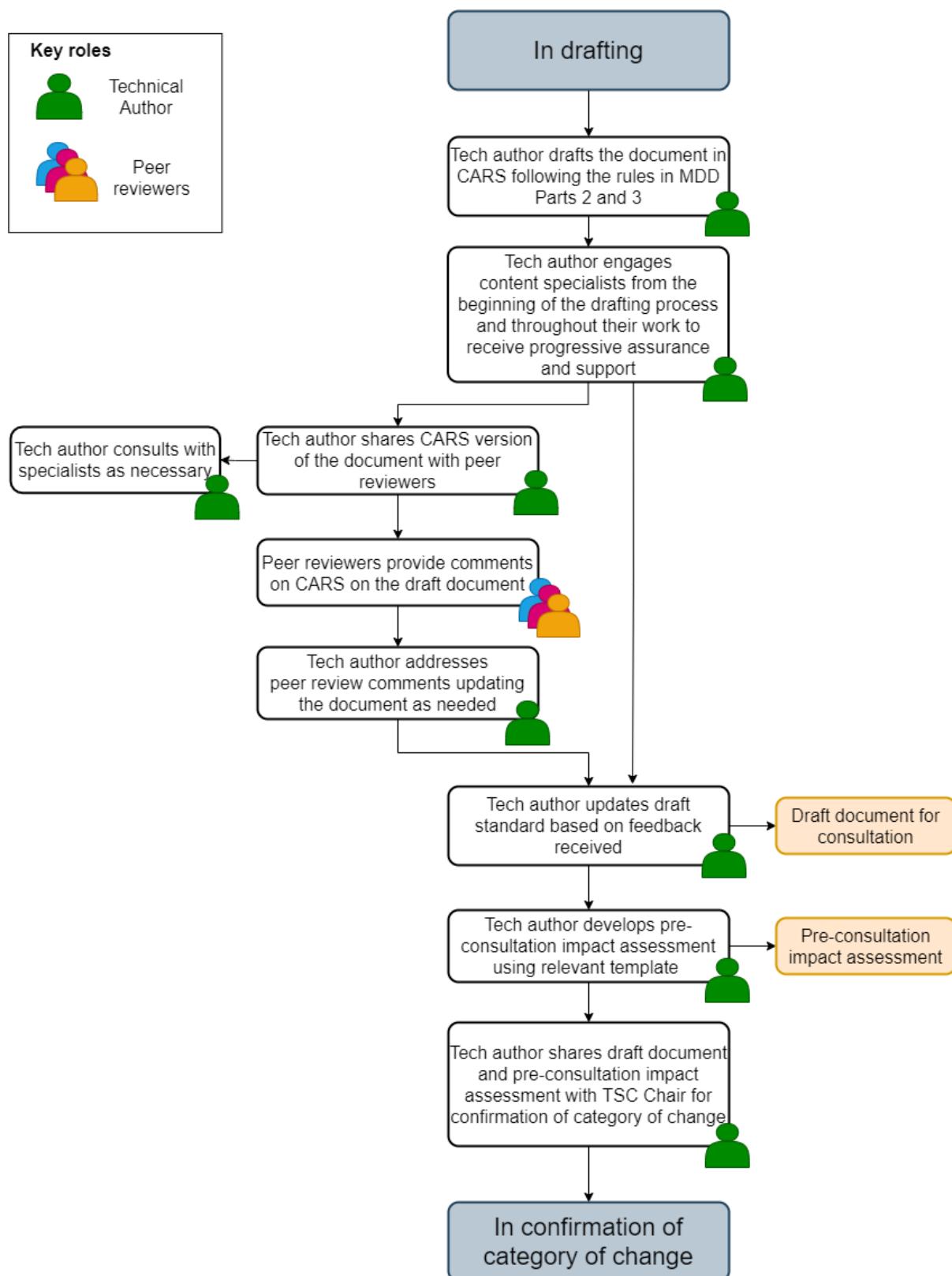


Figure 8. Steps for drafting category A changes

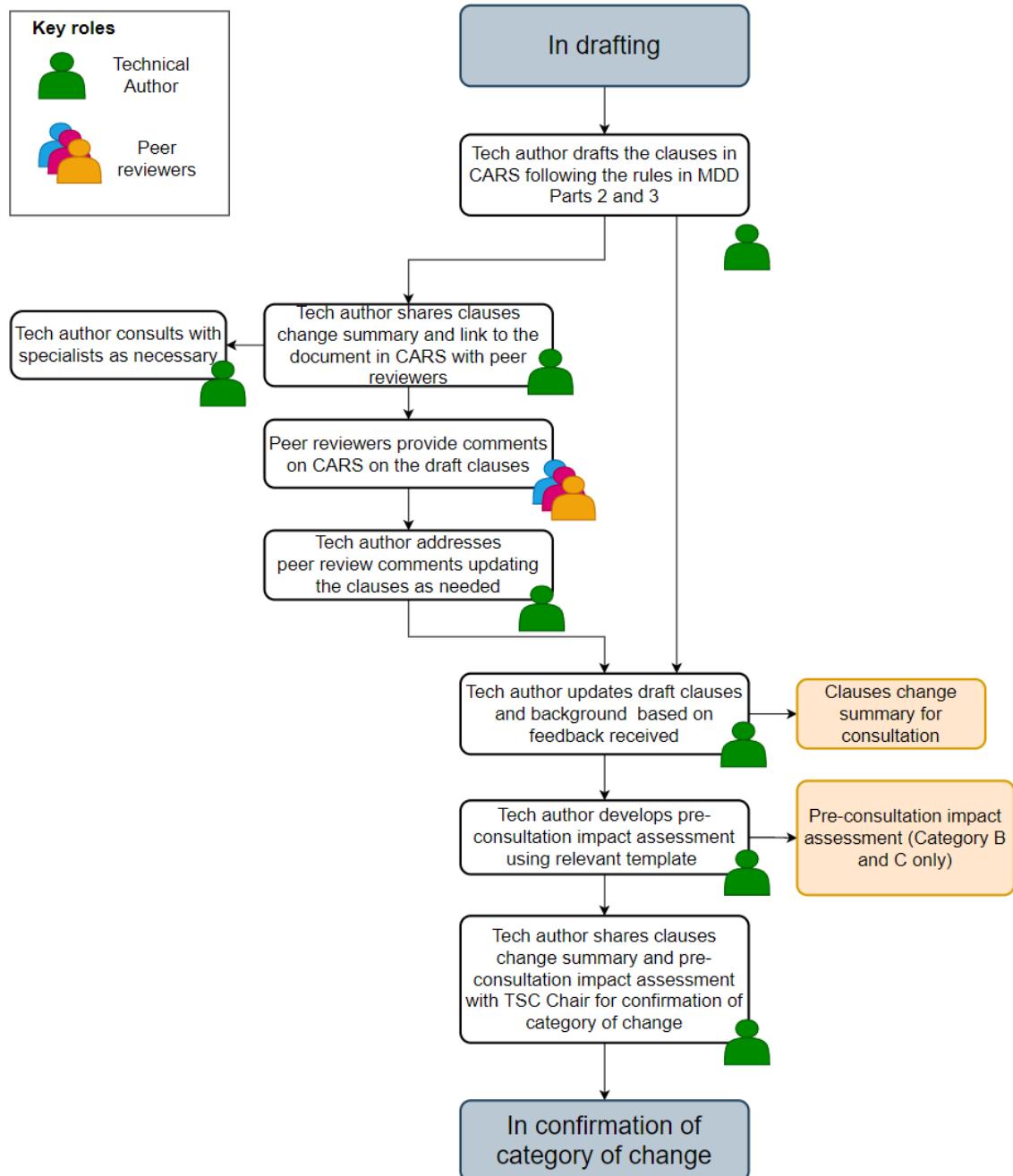


Figure 9. Steps for drafting categories B, C, D changes

Draft document for consultation (category A)

11.10 For category A, the draft document shall be developed in CARS and shared with the TSC consultees.

Clause change summary for consultation (categories B, C, D)

11.11 For categories B, C only the clauses under review / new clauses shall be shared with the TSC consultees, not the entire document, along with the old clauses for comparison (when updating existing clauses) and the background to the changes made or to the new clauses.

NOTE *A new CARS functionality enables this information to be extracted in a tabular format ready to be shared with the TSC consultees, see Table 2 for the tabular format.*

Table 2 Draft clauses for consultation (categories B, C, D)

Existing clauses proposed to be changed, if applicable	Proposed new clauses	Background

NOTE: *Category D changes do not require a TSC consultation, but a clause change summary and draft clauses are produced to enable approval.*

Pre-consultation impact assessment

11.12 Before submitting the draft document (category A) or the draft clauses (categories B, C) to the TSC for consultation, the technical author shall complete a pre-consultation impact assessment identifying the anticipated impacts of the work (including when there is no impact or a negative impact) on the following areas (see also [Section 7](#)):

- a) health, safety and wellbeing
- b) equality, diversity and inclusion
- c) carbon management, sustainable development and good design
- d) customer satisfaction
- e) commercial / financial
- f) other impacts like political, contractual, etc.

11.13 The template of the pre-consultation impact assessment provided in ([DMRB link](#) or [MCHW link](#)) shall be used.

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

12. Stage 4: Confirmation of category of change

12.1 Once the draft document / clauses and the pre-consultation impact assessment report are ready to be shared, the technical author shall inform the relevant Technical Standards Committee (TSC) chair using Jira workflow functionality.

NOTE See [Section 13](#) for the Technical Standards Committees (TSCs), which replace the Technical Standards Boards (TPBs).

12.2 The TSC chair shall review the work done to confirm it is ready for consultation and that the category of change is correct following the steps indicated in [Figure 10](#).

NOTE *During the drafting process, the category proposed to enter the SRP backlog can change for example to address comments received during the initial peer review process, and needs to be confirmed so that the relevant governance process is followed.*

12.3 When satisfied with the category of change, the TSC chair shall inform TAGG using Jira workflow functionality.

12.4 TAGG shall review the work done to confirm the category of change following the steps indicated in [Figure 10](#).

12.5 When TAGG is satisfied with the category of change and the TSC chair confirms that the draft document / clauses and the pre-consultation impact assessment report are ready to be shared with the TSC members, a notification shall be sent to the TSC members using Jira workflow functionality.

12.6 Access to the draft document / clauses and the pre-consultation impact assessment report shall be given to the TSC members by the TSC secretary.

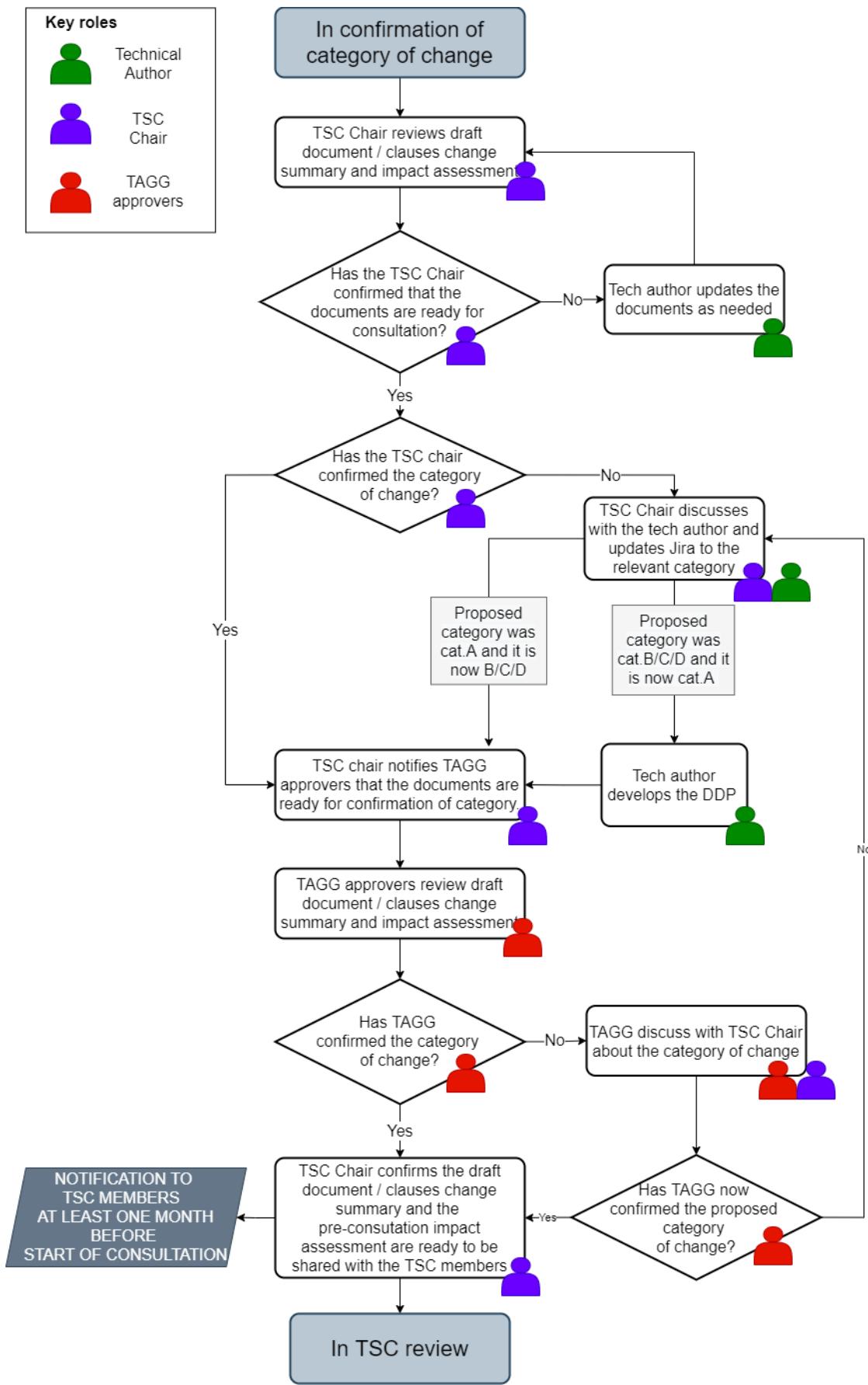


Figure 10. Steps for confirming the category of change

13. Stage 5: Consultation

13.1 The technical author shall deliver the draft document / clauses and the pre-consultation impact assessment and ensure the documentation passes through the approval process.

13.2 Consultation shall be run through a relevant Technical Standard Committee (TSC) following the steps indicated in [Figure 11](#) and [Figure 12](#) for categories A, B and C only.

NOTE 1 *Technical Standards Committees (TSCs) replace the Technical Project Boards (TPBs).*

NOTE 2 *Category D changes do not require a TSC consultation, but a clause change summary and draft clauses are produced to enable approval.*

13.3 The relevant TSC shall be identified when the technical author submits a request to enter the SRP backlog (see [section 9](#))

13.4 Consultation dates shall be defined and communicated well in advance to all TSC members (at least one month before the start of the consultation) to enable members to plan their workload and participate.

13.4.1 Where consultation dates change after being communicated, the consultees should be updated with plenty of notice.

13.5 The TSC secretary shall share the draft document / clauses and the pre-consultation impact assessment with the consultees.

13.6 Once the Technical Standards Committee (TSC) chair confirms that the draft document / clauses and the pre-consultation impact assessment are ready for consultation, the TSC chair shall notify the TSC members of the start date of the consultation at least one month before.

Aims of TSC

13.7 A Technical Standard Committee (TSC) shall:

- a) confirm that the RAD under consideration is compatible with the published aims of National Highways and the other Overseeing Organisations and that meets their policies and objectives in terms of commercial and operational routines, affordability (in short, medium and long term) and legislative obligations.
- b) confirm that the RAD under consideration is technically correct, current and consistent, reflects good practice within the industry and supports innovation where appropriate.
- c) confirm that the RAD under consideration is compatible with other relevant standards and appropriate EU, UK and national legislation.

- d) apply due diligence to the technical decision making and evidence of the rationale for why requirements and advice have been introduced.
- e) assess and comment on the impacts and likely effects of the implementation of RAD under consideration on:
 - health and safety (including the *CDM Regulations*) and other needs of all road users, including pedestrians, protected groups and highway workers;
 - issues of equality, diversity and inclusion;
 - environment and the issues of carbon management and sustainability;
 - customer satisfaction;
 - costs, benefits, affordability and risks;
 - innovation.
- f) advise the United Kingdom Chief Engineers Committee (UKCEC) where financial and operational risks associated with the RAD are considered unacceptable or can become unacceptable.
- g) report issues where additional direction is required from the UKCEC.
- h) complete RAD reviews within the timescales necessary to meet National Highways and other Overseeing Organisation's business needs.
- i) reflect the needs of other infrastructure operator stakeholders that can make use of the RAD under consideration but only in so far as it is practicable to do so, given the requirements of point a) above.
- j) ensure that the documents produced (in case of the DMRB, these include related NAAs as needed) inform the supply chain of the requirements of National Highways and the other Overseeing Organisation's for the design and specification of their highway works.
- k) take account of and maintain contact with research and construction organisations within the EU and worldwide.

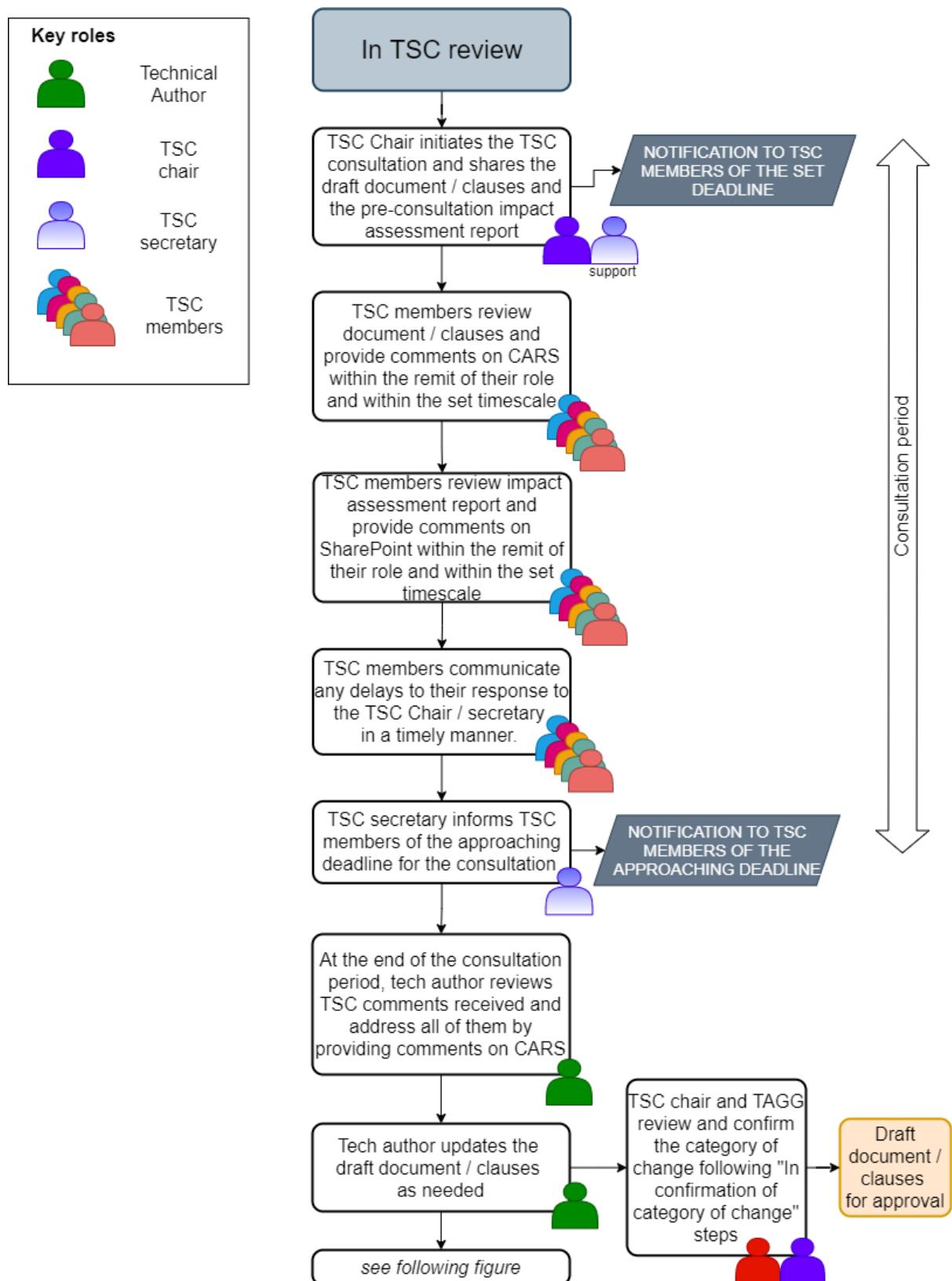


Figure 11. Steps for TSC consultation (continued)

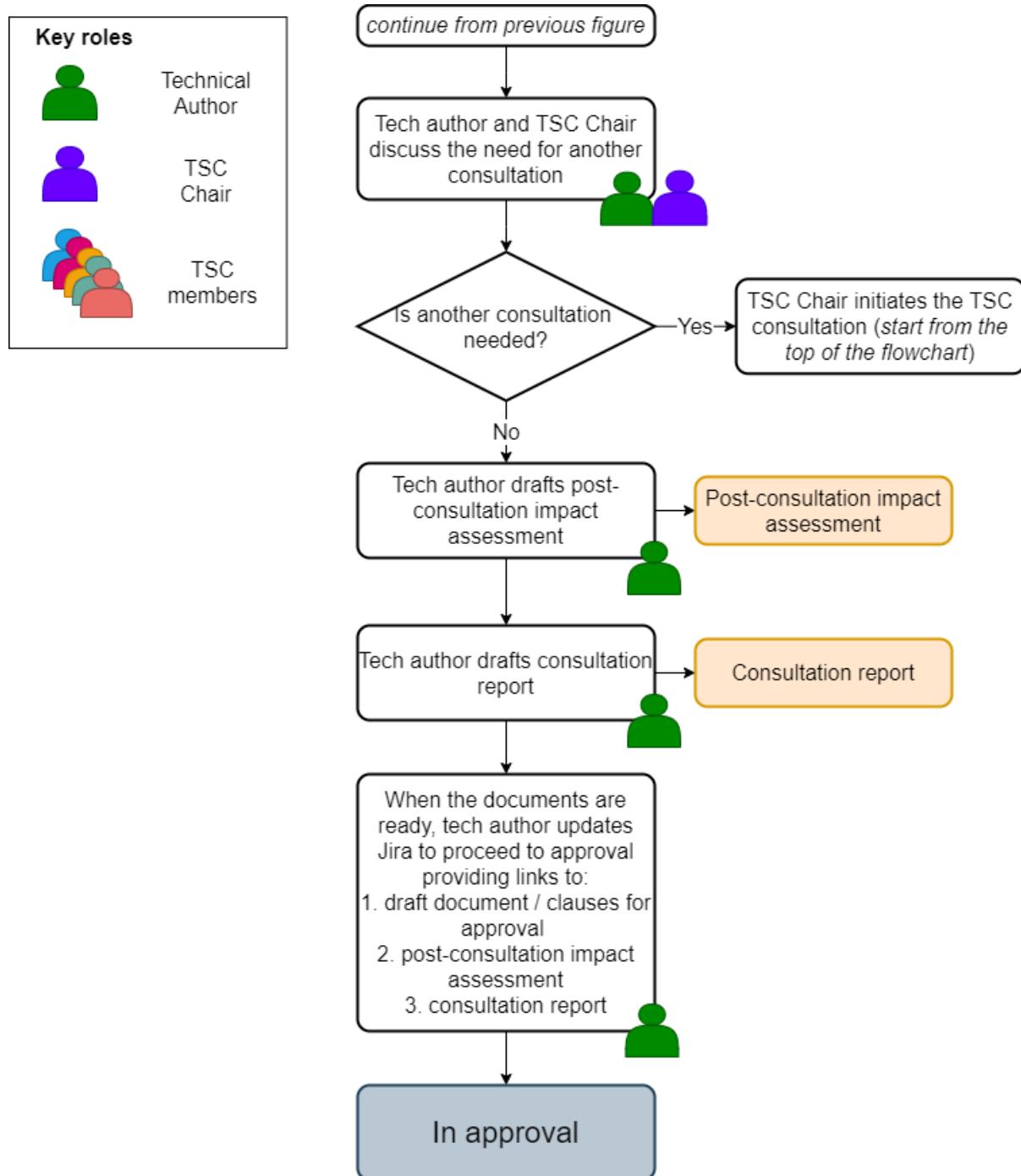


Figure 12. Steps for TSC consultation

Setting up a TSC

Rules for standing committees

13.8 The following standing TSCs shall be established:

- a) Asset information
- b) Control and communication technology
- c) Customer experience
- d) Drainage
- e) Environmental assessment
- f) Geotechnics
- g) Governance
- h) Health, safety and wellbeing
- i) Operations and road works
- j) Pavements
- k) Road layout
- l) Road lighting
- m) Smart roads
- n) Structures
- o) Sustainability and design

13.9 TAGG shall coordinate the setting up of standing TSCs, liaising with the TSC chair and secretaries and inviting National Highways internal stakeholders and the DAs to nominate members.

13.10 SES Divisional Directors shall ensure that the establishment of TSCs is consistent with their business plan.

13.11 TSC secretaries shall keep TAGG informed of any changes required to the central register of TSCs through the [Standards Submission](#) inbox.

13.12 TAGG shall agree any changes in the membership or status.

NOTE *A central register of TSCs is held and maintained within TAGG and owned by the TAGG SRP manager.*

New TSC candidates

13.13 If the proposed document covers a new topic, some nominated members are unable to take part or additional members are needed to comment on specific aspects, a list of potential TSC candidates shall be compiled by the technical author with the assistance of the TSC chair and submitted to TAGG through the [Standards Submission](#) inbox.

13.13.1 TAGG on behalf of the technical author, when requested to do so, may approach the stakeholder organisations for names and details of suitable candidates whom TAGG will invite to attend.

TSC Membership

Typical TSC members

13.14 Typical TSC members and their role shall be as indicated in [Table 3](#).

13.15 The number of TSC members shall be kept to a minimum.

Table 3 Typical TSC members and key roles

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 TAGG.
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"> • TAGG; • Major Projects; • Operations; • Commercial and Procurement; • Health and safety; • Equality Diversity and Inclusion (where needed, see below);

Typical TSC Members	Key role	Who
		<ul style="list-style-type: none">• Carbon management, sustainability and environment (where needed, see below);• Customer Experience (where needed, see below).

Equality Diversity and Inclusion consultees

13.16 Based on the pre-consultation impact assessment report, the TSC chair shall determine whether Equality Diversity and Inclusion representation is essential for that particular document development work.

NOTE *Equality Diversity and Inclusion representation is essential when the screening exercise shows that a full equality impact assessment is required.*

13.17 If Equality Diversity and Inclusion representation is essential:

- a) the TSC chair shall notify the Equality Diversity and Inclusion team;
- b) the Equality Diversity and Inclusion team shall nominate an appropriate consultee to attend the TSC and provide comments as needed.

13.18 In all cases, the pre-consultation impact assessment reports shall be made available to the Equality Diversity and Inclusion team to sample and provide comments.

13.18.1 A specialist advisor may be invited to assist in equality diversity and inclusion issues during the TSC consultation.

NOTE *There are organisations within the DfT with specific expertise on government policies and the relevant legislation which are also familiar with National Highways and its business needs; there are many major organisations capable of providing informed advice on a variety of potential equality and diversity and social exclusion issues.*

Carbon management, sustainability and environment consultees

13.19 Based on the pre-consultation impact assessment report, the TSC chair shall determine whether carbon management, sustainability and environment representation is essential for that particular document development work.

NOTE *Carbon management, sustainability and environment representation is essential when the screening exercise shows that a full impact assessment is required.*

13.20 If carbon management, sustainability and environment representation is essential:

- a) the TSC chair shall notify the carbon management, sustainability and environment team;

b) the carbon management, sustainability and environment team shall nominate an appropriate consultee to attend the TSC and provide comments as needed.

13.21 In all cases, the pre-consultation impact assessment reports shall be made available to the carbon management, sustainability and environment team to sample and provide comments.

Customer Experience consultees

13.22 Based on the pre-consultation impact assessment report, the TSC chair shall determine whether customer experience representation is essential for that particular document development work.

13.23 If customer experience representation is essential:

- a) the TSC chair shall notify the customer experience team;
- b) the customer experience team shall nominate an appropriate consultee to attend the TSC and provide comments as needed.

13.24 In all cases, the pre-consultation impact assessment reports shall be made available to the customer experience team to sample and provide comments.

Additional concurrence consultees

13.25 When needed, the TSC shall also include the additional concurrence consultees indicated in [Table 4](#).

Table 4 Additional concurrence consultees and key roles

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

Additional informed parties

13.26 When needed, the TSC shall also include the additional parties indicated in [Table 5](#).

Table 5 Additional informed parties and key roles

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 bodies 1. National Police Chiefs Council (NPCC) 2. Local Government Association 3. Association of Directors of Environment, Economy, Planning & Transport (ADEPT) 4. Outside bodies (trade bodies, industry associations, professional institutions, etc.) 5. County Surveyors Society Wales (CSS Wales) 6. Society of Chief Officers of Transportation in Scotland (SCOTS)

13.27 Other than in exceptional circumstances, individuals representing a particular company rather than a trade organisation or a professional body shall not be members of TSCs.

TSC review of documents

13.28 Each TSC member shall comment on the draft document / clauses and the pre-consultation impact assessment report based on their specific role, see Terms of reference below.

NOTE *Comments from TSC aim to produce a document which is practical, realistic, affordable and acceptable to all the stakeholders concerned. Key aspects to be address include: safety; equality diversity and inclusion considerations; carbon management, sustainable development and good design implications; impact on customers; commercial implications; operations issues; contractual implications.*

13.29 The Secretary shall email the links to access relevant documentation along with the deadline for comments.

Commenting on the draft document / clauses

13.30 TSC comments on the draft document / clauses shall be provided in CARS, unless technical issues prevent this from happening.

13.31 When the TSC member cannot comment using CARS:

1. TAGG shall be informed;
2. the opportunity to circulate a pdf version only to the stakeholders affected by the technical issues shall be discussed between TAGG and the technical author and granted when there is a justified reason for not using CARS.

13.32 Pdf versions shall not be shared without TAGG approval.

Commenting on the pre-consultation impact assessment

13.33 TSC comments on the pre-consultation impact assessment shall be provided in Word using the SharePoint link provided by the technical author.

TSC members - consulted or informed

13.34 The TSC consultees shall be either “consulted” or “informed” as indicated in [Table 6](#).

13.35 When consultees are “consulted”, they shall review the change and provide comments by the deadline set and communicated by the TSC chair at the start of the consultation, even if that is just to confirm they do not object.

13.36 When consultees are “informed”, they shall review the change at their discretion, but no response is expected.

Table 6 TSC members - consulted or informed

Stakeholder	Who	A. Policy Change / Rewrite / New document development	B. Change to requirement	C. Change to advice	D. Changes to notes and spelling mistakes
Technical Author	Technical specialist within an Overseeing Organisation	Responsible	Responsible	Responsible	Responsible
TSC chair	Leads the TSC	Accountable	Accountable	Accountable	Accountable
Editorial consultees	TAGG Content Specialist	Consulted	Consulted	Consulted	Consulted
Technical consultees	Technical specialists within SES and wider stakeholders for the subject area and interfacing aspects, including Devolved administrations' technical leads	Consulted	Consulted	Consulted	Informed
Concurrence consultees (essential)	<ul style="list-style-type: none"> • TAGG • Major Projects • Operations • Commercial and Procurement • Health and safety • Equality, diversity and inclusion • Sustainable development and good design • Customer experience 	Consulted	Consulted	Consulted	Informed
Concurrence consultees (additional)	<ul style="list-style-type: none"> • Members from other SES Directorate. • Highways England Legal • Highways England IT • Highways England Asset management • Other Specialists (e.g. risk, BEIS, Financial Services, Asset Advisors Group) 	Consulted	Consulted	Consulted	Informed
Additional informed parties	<ul style="list-style-type: none"> • DfT, DfT Legal, H&S Executive and other governmental and quasi-governmental bodies • National Police Chiefs Council (NPCC) • Local government associations • Outside bodies (trade bodies, industry associations, professional institutions, etc.) • Expert (individual) independent advisors 	Informed	Informed	Informed	Informed

Consultation period

13.37 The consultation period shall depend on the category of change as indicated in [Table 7](#).

NOTE *The consultation period is the period where a document is made available to the TSC for commenting, not the entire review process. It excludes peer review, post-consultation review of comments, potential future consultations.*

Table 7 Consultation period

	Major revision	Incremental change		
		A. Policy Change / Rewrite / New document development	B. Change to requirement	C. Change to advice
Recommended consultation periods	On a case by cases basis Indicative time is 6 weeks	4 weeks	4 weeks	2 weeks

13.37.1 Extensions may be granted as agreed with the TSC chair.

NOTE *Extensions of not more than 2 weeks are recommended.*

13.38 The TSC shall complete their work on individual documents within realistic timescales that meet the needs of the business, recognising that TSC members can have other claims on their time.

13.39 More than one consultation may be undertaken if needed, although the introduction of the document development planning stage is expected to reduce the need for multiple consultation periods.

TSC meetings

13.40 The TSC chair shall decide whether TSC meetings are to be held during the consultation period to discuss the draft document and the pre-consultation impact assessment report.

NOTE 1 *Meetings are intended to be relatively informal, with little call for formal motions or for voting, and are usually only open to members nominated by the TSC chair in discussion with the technical author.*

NOTE 2 *For category A changes (e.g. re-write of a document or new document development), TSC face-to-face meetings can be relevant. Six to eight weeks' notice for meetings is sufficient in most cases, depending on the availability of the members.*

NOTE 3 *For categories B and C changes, virtual meetings can be more appropriate than face-to-face meetings to speed up the process, for example using CARS in conjunction with a suitable cloud platform for video and audio conferencing.*

NOTE 4 *For category D changes, TSC meetings are not needed.*

Items discussed

13.41 The TSC shall examine the draft document / clauses and the content of the impact assessment report and confirm their correctness in terms of

technical, safety, commercial (costs), operational and procurement (contractual), equality diversity and inclusion, carbon management, sustainable development and good design, and customer satisfaction aspects among others.

Record of items discussed

13.42 A full audit trail of all decisions taken by the TSC during a meeting shall be maintained in CARS in line with the requirements of the National Highways licence and protocol, and shall be translated into relevant suggestions for changes to be made to the document in CARS.

Attendance by visitors or specialist advisors

13.43 Requests for attendance by visitors or specialist advisors for special purposes (e.g. to provide advice on equality issues) shall need the prior approval of the Chairperson.

Responsibilities

TSC chair

13.44 The skills of a TSC chair shall be: leadership and negotiation skills; collaborative and inclusive approach; technical competence.

NOTE *The TSC chair has a key role which affects the quality of interaction and participation of stakeholders, and ultimately the quality of the RAD.*

13.45 The TSC chair shall be supported by the Secretary in undertaking his / her duties.

13.46 Before the start of the consultation, the TSC chair shall:

- prepare and submit a forward programme of work, including a document review and delivery programme for the coming year to TAGG;
- ensure that the relevant category of change (A,B,C,D) is assigned to the work under consideration and that the relevant governance process is followed;
- update the category of change if needed;
- assess the importance and relevance of the document and the level of involvement and commitment required by the members;

13.47 During the consultation, the TSC chair shall:

- lead the TSC and ensure that documents are reviewed efficiently and effectively and that the TSC procedures are complied with;
- ensure that all relevant stakeholders are consulted, with sufficient time allocated for their consideration and with no one person or aspect dominating the process;
- ensure that liaison takes place with Group Managers, specialist advisors and legal teams if they are not represented;

- d) ensure that RAD reviews are completed within agreed timescales and that those timescales meet the needs of the business;
- e) encourage consultees to comment on the draft document / clauses and the pre-consultation impact assessment report based on their remit (responsibilities of different categories of TSC consultees below);
- f) encourage consultees to be mindful of target dates and priorities;
- g) ensure that the TSC examines the wider technical, safety and commercial (cost) issues (equality, carbon management, sustainable development and good design and customer implications when needed) as presented in the pre-consultation impact assessment report, and the implications for the National Highways business associated with the development, publication and implementation of the new or revised document, and that relevant TSC members provide their comments as relevant;
- h) ensure that the TSC examines opportunities for innovation as identified in the impact assessment report and comment on that as relevant;
- i) ensure that legislation, National Highways' requirements, national policies and strategies and UK and EU legislation that have a bearing on the document, have been explored. These include:
 - Legislation and regulations e.g. health and safety; equality and diversity.
 - Effects of EU legislation & European Standards e.g.
 - European Standards for products
 - European Technical Assessments (ETAs)
 - European Directives and Regulations (e.g. CPR)
 - National Highways and DfT strategy documents.
 - Published DfT and National Highways policies and requirements on equality.
 - Ministerial and Public Service Agreement targets.
 - Environmental and sustainability considerations.
 - Other transport issues.
- j) when arranging a TSC meeting, encourages members to thoroughly prepare material before each meeting, to work decisively and efficiently, to adhere to work programmes;
- k) work in concert with the other Overseeing Organisations seeking guidance from UKCEC via the appropriate SES Divisional Director when necessary. (In the event of an impasse, the Chairperson has final authority);

13.48 At the end of the consultation, the TSC chair shall ensure that the views of all TSC consultees have been reviewed by the technical author and appropriate actions are taken to update the draft document / clauses and the post-consultation impact assessment report to address comments received.

13.49 When the TSC is satisfied with the content of a document, the TSC chair shall confirm that the TSC has achieved the aims set for it by approving the document / clauses and the impact assessment report.

NOTE *By approving the document, the TSC chair confirms that:*

- 1) *The TSC procedures have been adhered to.*
- 2) *The TSC is satisfied with the content of the document (which the Chairperson signs), which has been supported by a register of amendments in the RAD that identifies any new or changes from current content.*
- 3) *The TSC is satisfied with the content of the impact assessment report (which the Chairperson signs).*
- 4) *The requirements of the Document Development Plan (DDP) have been met.*

13.50 The TSC chair shall inform the technical author that the TSC has approved the documentation and that it has been passed to the content specialists for their review for the approval stage (see [section 14](#)).

TSC secretary

13.51 The TSC secretary shall support the TSC chair in his / her duties in running the TSC.

13.52 The TSC secretary shall help the TSC chair to communicate the start of the consultation by preparing the material to be shared with the TSC consultees, including as a minimum the following information where applicable:

- a) a copy of the MDD;
- b) links to CARS for the draft document(s) / clauses;
- c) link to the pre-consultation impact assessment report in SharePoint;
- d) link to the DDP for information;
- e) details of the departures from standards issued under the current published version of the RAD;
- f) any other relevant supporting material like details of research and other development work used to inform the drafting of the document, additional evidence supporting the need to revise an existing RAD or to introduce a new RAD.

13.53 During the consultation, the TSC secretary shall help the TSC chair to:

- a) manage communications with the consultees;
- b) check the status of responses from consultees;
- c) keep a record of other commitments of consultees and monitor potential delays;
- d) identify any blockers to the TSC process and put in place relevant mitigation measures.

13.54 The TSC secretary shall arrange TSC meetings when needed and act as a focal point for requests related to meeting arrangements.

13.55 When the work of the TSC is finished, ensures that all records are archived in accordance with National Highways record retention requirements.

Consultees in general

13.56 In the process of setting up a TSC, all consultees shall provide contact details to TAGG, including an email address to receive CARS notifications.

13.57 Before the start of the consultation, all consultees shall confirm their attendance to the TSC chair and secretary.

13.57.1 Members may, with the TSC Chair's prior approval, arrange for substitutes from within their organisations to attend meetings where they are unable to do so.

13.58 During the consultation, all consultees shall:

- communicate leave / absences / other commitments to the TSC chair and secretary in a timely manner;
- participate fully and in a timely manner in all work;
- clearly and effectively represent the views of their stakeholder organisation and its members;
- consult with their stakeholder organisation and the range of interested parties directly represented;
- review the document, make comments and suggest appropriate amendments, based on the member's knowledge and experience of the subject (technical, operational, commercial or otherwise);
- obtain information from overseas experience through appropriate contacts where necessary.

Editorial consultees

13.59 In addition to the requirements for consultees in general, the editorial consultees (i.e. TAGG content specialists) shall comment on aspects related to compliance with the MDD rules.

Technical consultees

13.60 In addition to the requirements for consultees in general, the technical consultees shall comment on the technical accuracy and acceptability (incl. compliance) of the draft document / clauses.

13.60.1 The technical consultees may comment on the pre-consultation impact assessment report.

13.61 Technical consultees from other Overseeing Organisations shall:

- be responsible for all matters concerning their own organisation;
- ensure that the document is relevant to their specific circumstances, consulting as necessary, commenting on drafts, keeping their respective Heads of Standards and Chief Highway Engineers informed and obtaining approvals from their organisation;
- own any alternative wording or clauses specific to their Overseeing Organisation (i.e. National Application Annexes' content and Nationally

Determined Requirements / Sections for DMRB and MCHW respectively), and any accompanying obligations regarding currency and relevance

Concurrence consultees

13.62 In addition to the requirements for consultees in general, all concurrence consultees shall comment on acceptability and affordability of the draft document / clauses for strategic alignment with other business needs.

13.63 All concurrence consultees in National Highways shall:

- provide the viewpoint specific to their business area;
- provide input on existing practices and proposed changes to ensure that the document reflects the current requirements and responsibilities of their Directorates;
- feedback TSC activities and document development work to colleagues and consult as needed within their own Directorates as necessary.

13.64 The specific responsibilities of concurrence consultees provided in [Table 8](#) shall be followed.

Table 8 Concurrence consultees responsibilities

Concurrence consultee representatives	Responsibilities
TAGG	<ul style="list-style-type: none">• Attends all TSCs.• Provides EU legislation advice.
Major Projects	<ul style="list-style-type: none">• Attends all TSCs.• Comment on the draft document / clauses as needed.• Comment on the pre-consultation impact assessment report, with a focus on the Commercial impact section.• Review and comment on the long-term impact of a document on schemes.
Operations	<ul style="list-style-type: none">• Attends all TSCs.• Comment on the draft document / clauses as needed.• Comment on the pre-consultation impact assessment report with a focus on the Commercial impact section.• Review and comment on the short-term impact of a document on schemes.
Commercial and Procurement	<ul style="list-style-type: none">• Attends all TSCs.• Comment on the draft document / clauses as needed.• Comment on the pre-consultation impact assessment report, with a focus on the Commercial impact section.

Concurrence consultee representatives	Responsibilities
Health, safety and wellbeing	<ul style="list-style-type: none"> • Attends all TSCs. • Comment on the draft document / clauses as needed. • Comment on the pre-consultation impact assessment report, with a focus on the H&S section.
Equality Diversity and Inclusion	<ul style="list-style-type: none"> • When a full equality impact assessment is undertaken: attend the relevant TSC; comment on the draft document / clauses as needed; comment on the pre-consultation impact assessment report, with a focus on the Equality Diversity and Inclusion section. • When a full equality impact assessment is not required, sample impact assessment reports and provide comments on the Equality Diversity and Inclusion section.
Carbon management, sustainability and environment	<ul style="list-style-type: none"> • When a full impact assessment on carbon management, sustainable development and good design is undertaken: attend the relevant TSC; comment on the draft document / clauses as needed; comment on the pre-consultation impact assessment report, with a focus on the carbon management, sustainable development and good design section. • When a full equality impact assessment is not required, sample impact assessment reports and provide comments on the Equality Diversity and Inclusion section.
Customer experience	<ul style="list-style-type: none"> • Sample impact assessment reports and provide comments on the customer satisfaction section.
Other concurrence consultees	<ul style="list-style-type: none"> • Comment on acceptability and affordability for strategic alignment with other business needs.
Additional informed parties	<ul style="list-style-type: none"> • Ensure a balanced view between the needs of National Highways, other government bodies, professional groups and the industry as a whole

All National Highways consultees

13.65 All National Highways members shall:

- deliver the appropriate internal Way we Work procedures (WwW SES Processes
<https://highways.sharepoint.com/sites/intranet/WayWeWork/SitePages/WwWHome.aspx> required by the document);
- develop any internal National Highways procedure arising from a requirement within the RAD and for agreeing it with internal

stakeholders ready for implementation in conjunction with the publication of the RAD.

Confidentiality

- 13.66 To maintain a collaborative approach, disagreements or differences of opinion shall, wherever possible, be resolved within the TSC process and not in the public arena or media.
- 13.67 TSC members shall not make public statements regarding the work of the TSC.
- 13.68 TSC members shall not circulate draft documents to other teams within their organisation without first talking to the Chair regarding any precautions that they should take.

NOTE *Material made available to the members of the TSC during the development process is draft for limited circulation.*

- 13.69 Where draft documents are being circulated beyond the confines of the TSC, such documents shall include a health warning on the front cover:
“This is a draft document for consultation only. The final (published) document may differ significantly from this consultation document.”

Outcome of the consultation

Addressing TSC comments

- 13.70 The technical author shall respond to questions posed by the TSC and provide clarification on any parts of the document.
- 13.71 Where assisted by external consultants to draft the document, the technical author shall ensure that the external consultants' brief requires them to comply with the relevant duties identified for the technical author in the MDD.
- 13.72 Where the TSC is unable to approve the draft document / clauses and the impact assessment report, they shall be returned to the technical author with explanatory comments.
- 13.73 The technical author shall decide the appropriate course of action to resolve any issues raised by the TSC, which can require a further peer review or reviews to be held prior to re-submission of the document to the TSC.
- 13.74 The TSC process shall recommence with another consultation after the technical author has actioned any comments received.

NOTE *A specific focus of the review post-TSC is to ensure that the document is still MDD compliant.*

Confirming the category of change

13.75 Once the document has been updated, the TSC chair and TAGG shall review and confirm the category of change following "In confirmation of category of change" steps.

Notification under the Technical Standards and Regulations Directive

13.76 Where time constraints do not allow further discussion by the TSC on the comments from the EC, the technical author shall make the necessary revisions in discussion with TAGG.

13.77 The Secretary shall circulate the revised document to the TSC members for their information.

14. Stage 6: Approval

14.1 The approval of the document / clauses and the impact assessment report shall be undertaken following the steps indicated in [Figure 13](#) and [Figure 14](#).

14.2 Formal approvals shall be executed using workflow functionality in JIRA.

NOTE 1 *Formal approvers of the draft document / clauses and the impact assessment report comprise:*

- 1) TSC Chair
- 2) Divisional Directors (for category A of change only)
- 3) Heads of Standards of National Highways and the other Overseeing Organisations

NOTE 2 *Permission to execute an approval is only available to those assigned the corresponding role in Jira.*

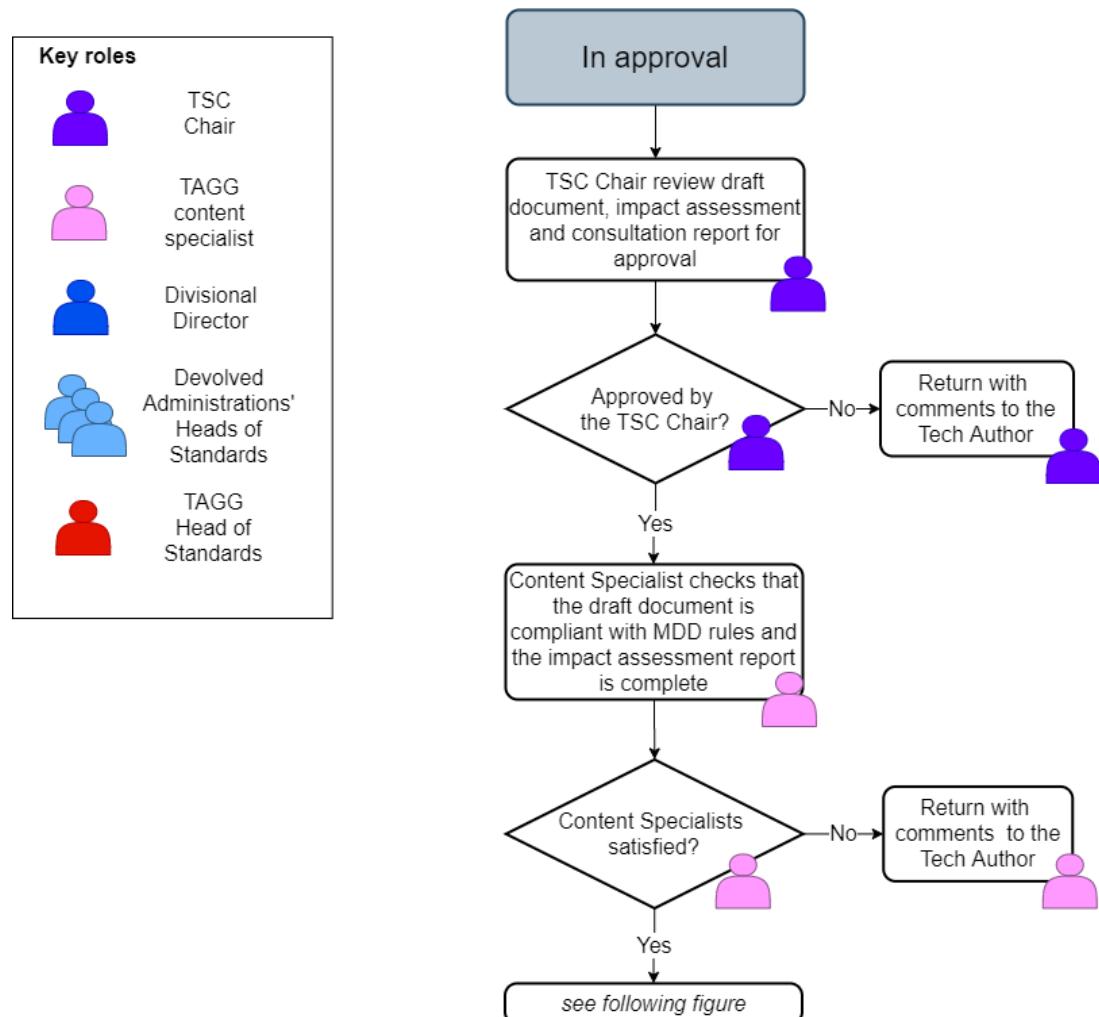


Figure 13. Stages for approval (continued)

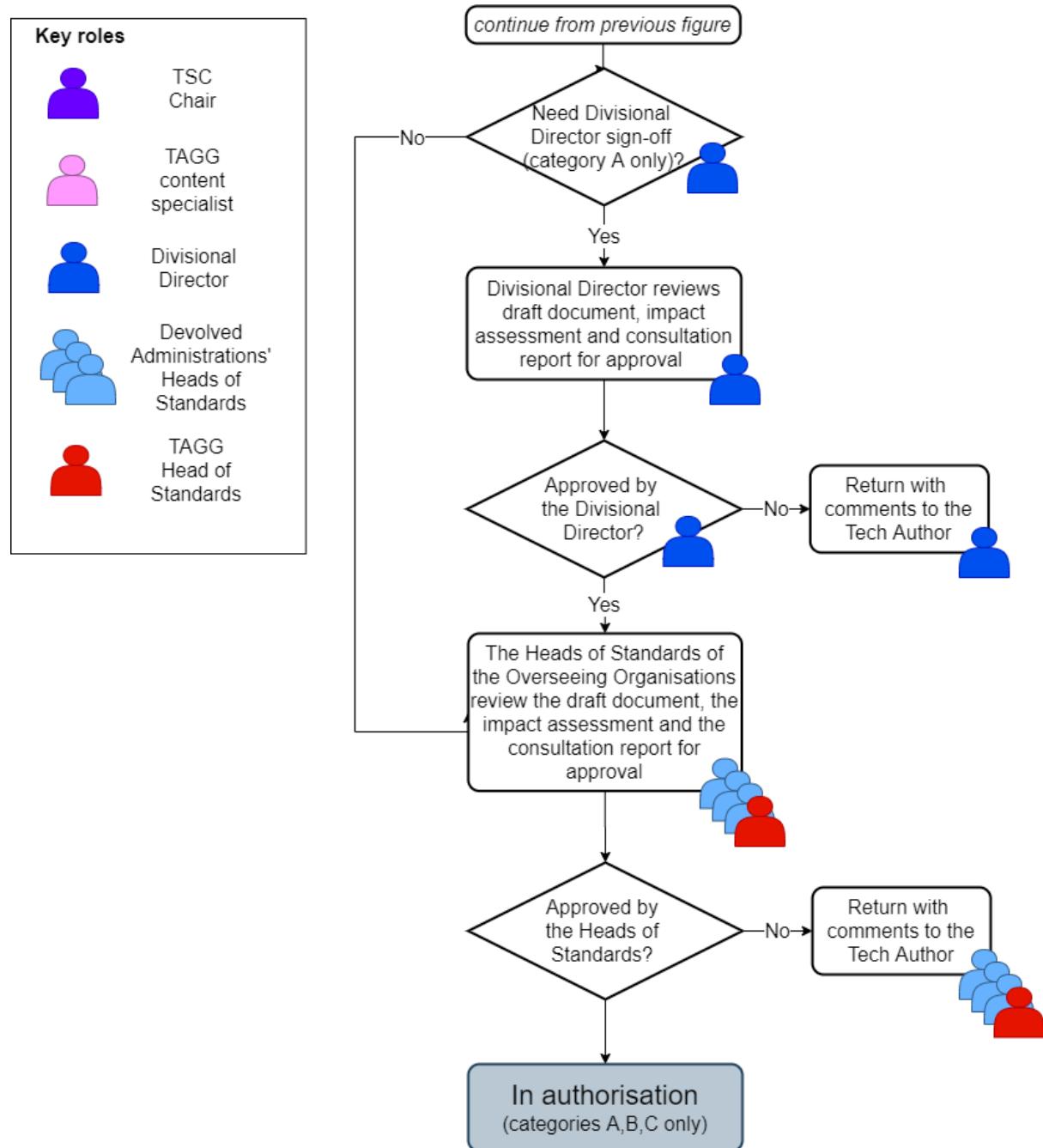


Figure 14. Stages for approval

15. Stage 7: Authorisation

15.1 Authorisation by the Chief Highway / Road Engineers shall be undertaken following the steps indicated in [Figure 15](#).

15.2 Formal authorisation by the Chief Highway / Road Engineers shall be executed using workflow functionality in JIRA for categories of change A, B, C only.

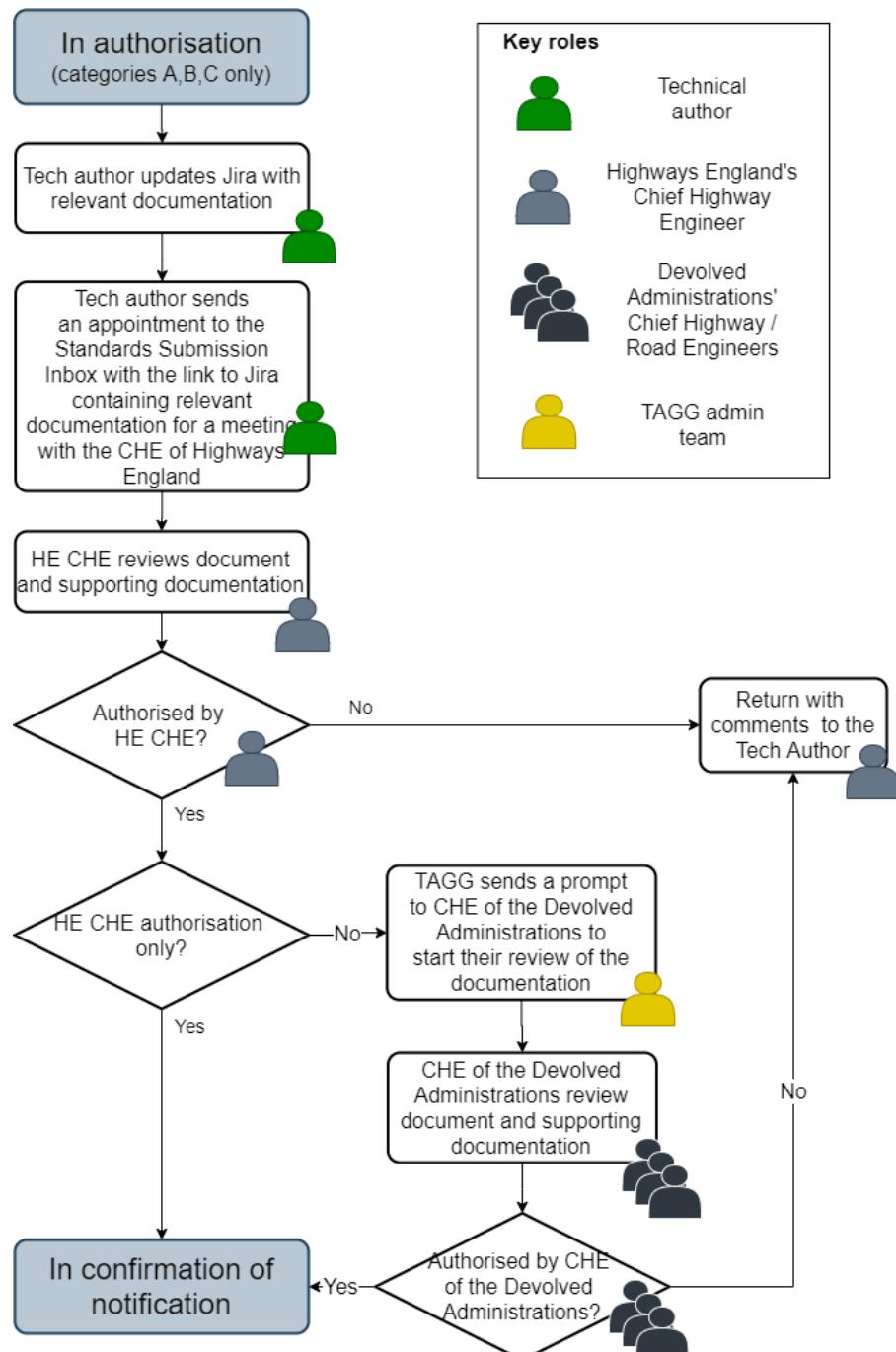


Figure 15. Steps for authorisation

Documentation for CHE sign-off

15.3 The technical author shall ensure the following documents are available on CARS and JIRA before emailing an appointment request to the [Standards Submission](#) inbox for CHE sign-off:

1. approved document / clauses (in CARS);
2. clause change summary (for changes against documents that have previously been published in CARS) or change log (when reviewing existing documents that have not ever been published in CARS);
3. background document;
4. impact assessment report; ([DMRB link](#) or [MCHW link](#))
5. consultation report; ([DMRB link](#) or [MCHW link](#)) **[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]**
6. any other relevant documents, e.g. Form A and Normative Document bundle if the submitted document is to be notified to Europe ([Section 16](#))

NOTE For change log and background document, see “Deliverables” in [MDD Part 3](#).

Approval by the CHE of National Highways

15.4 The technical author shall send an appointment to the [Standards Submission](#) Inbox for a CHE appointment for the same time/date as the corresponding appointment in the Standards Submission calendar.

NOTE 1 *CHE Sign off meetings are usually scheduled every 2-3 weeks, in which documents are presented by the technical author to the Chief Highway Engineer (CHE) for their approval to progress either to publication or notification.*

NOTE 2 *Appointment slots can be found in the “Standards Submission” Calendar.*

15.5 The meeting invite shall contain the link to Jira with the relevant documentation for CHE sign-off.

15.5.1 The invite should be sent at least 72 hours before the meeting to ensure that adequate time is allowed for review of the material by the CHE

15.6 Documents submitted after the deadline, and/or incomplete and/or unapproved, shall not be considered for presentation.

NOTE *Each meeting is run on a first come, first served basis subject to the matter of spaces and time available. Up to 4 documents per session are usually accommodated based on the complexity and significance.*

15.7 Once the document has been accepted, the technical author shall be provided with joining information.

15.8 The technical author shall attend the sign-off meeting to brief the CHE regarding the document and respond to any questions that the CHE raises.

16. Stage 8: Notification

16.1 The notification process shall follow the steps indicated in [Figure 16](#) and [Figure 17](#).

NOTE 1 *Even though the UK has left the European Union, the Northern Ireland Protocol means we have to treat Northern Ireland as if it were still part of the EU for the purposes of regulation. Any document that applies in Northern Ireland and is required to be notified under the Technical Standards and Regulations Directive (TSRD) will be notified. While NAAs for other Overseeing Organisations (E, S & W) are exempt, the base document and the NAA(NI) will have to be notified.*

NOTE 2 *The Technical Standards and Regulations Directive (TSRD - Directive 2015/1535/EU) imposes an obligation upon each Member State to inform the EC and every other Member State of technical regulations and technical standards in draft. This need arises because the documents are used as point of reference by other highway authorities and transport infrastructure owners. This results in our product requirements having a significant impact on the marketing of highway construction products in Northern Ireland.*

NOTE 3 *The procedure laid down by the Directive is consultative. Information is disseminated on the proposed new measure to advise and stimulate dialogue, thus enabling Member States and the EC to identify and prevent barriers to trade. Once requirements in documents have been notified, CEN (the European Committee for Standardisation) and the EC have to take account of the requirements in any documents or legislation that they develop.*

NOTE 4 *The notification process also provides the Overseeing Organisation with information on the technical requirements being applied by other EU Member States that could be useful in drafting Overseeing Organisation documents.*

16.2 A record of the steps shall be kept using workflow functionality in JIRA.

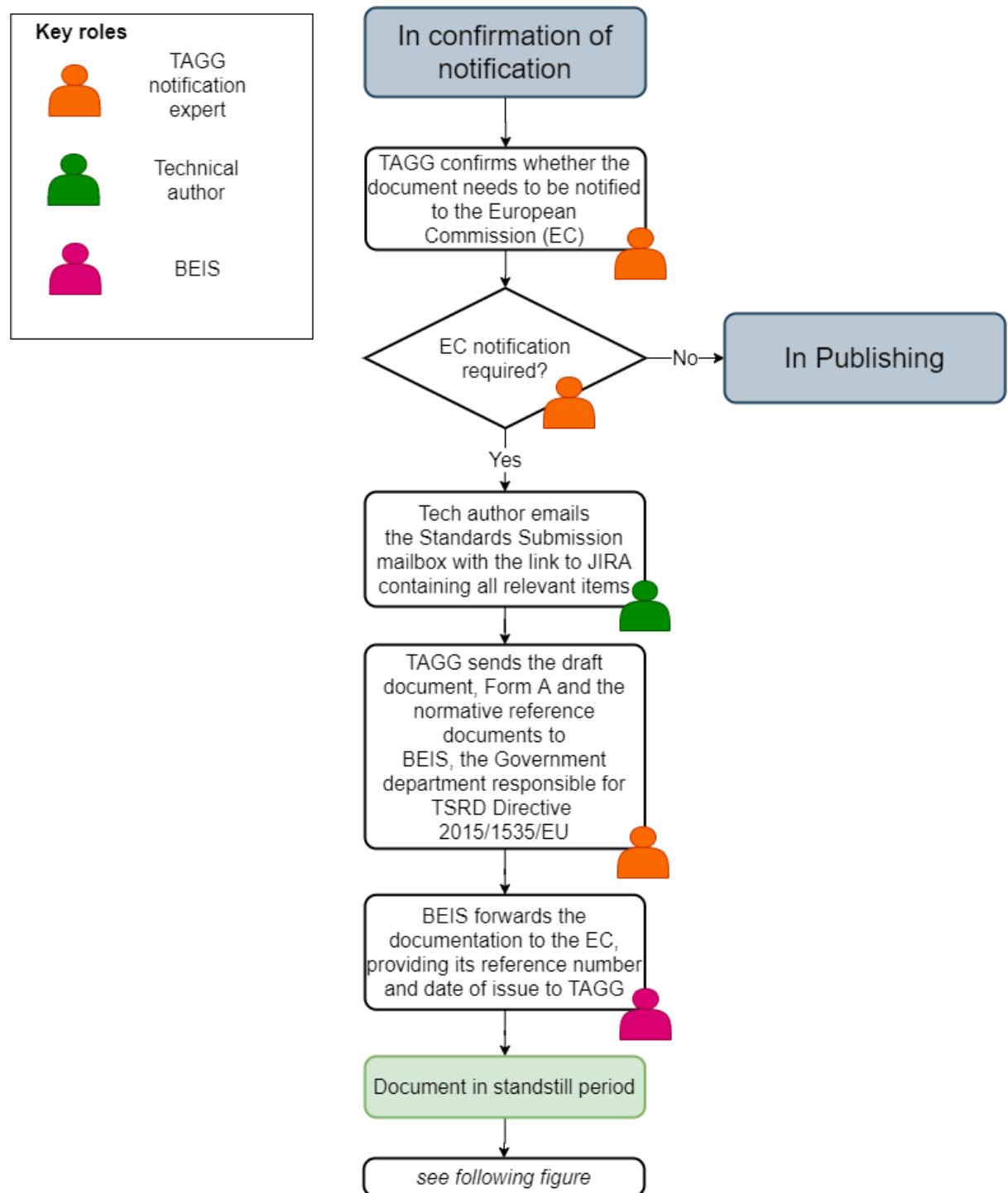


Figure 16. Stages of notification (1 of 2)

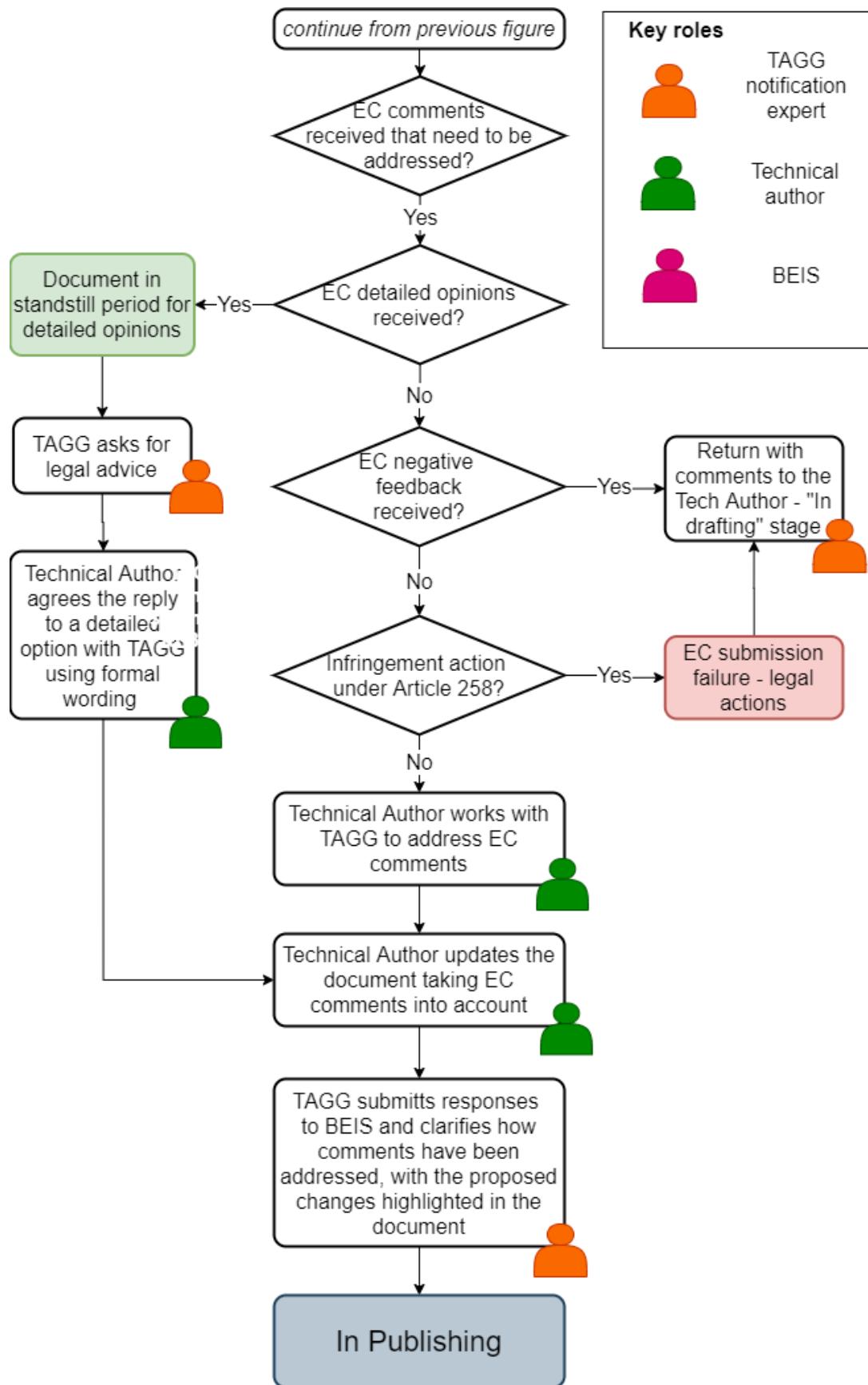


Figure 17. Stages of notification (2 of 2)

How to decide if RADs are notifiable

16.3 Once a document has received approval from all Overseeing Organisations, TAGG shall confirm whether the document needs to be notified to the European Commission (EC) before moving it to the publication stage (see [Section 17](#)).

16.3.1 TAGG should be given the opportunity as early as possible in the document development process to review the document with a view to giving the technical author a preliminary decision on whether the document will require notification.

NOTE 1 *During the TSC consultation, the TAGG representative comments on the need for EC notification.*

NOTE 2 *Documents giving requirements for products are likely to need notification.*

NOTE 3 *Documents that exclusively give criteria for the layout or deployment of products or give operational processes or procedures generally do not need notifying.*

NOTE 4 *Common indicators of the need to notify include:*

- 1) *Reference to any National or International standard or other specification or code of practice that refers to products i.e. any Designated Standard, BS, BS EN, PD, ASTM, MIL.*
- 2) *The document gives testing or compliance requirements for any products.*
- 3) *The document gives marking requirements for products.*
- 4) *Generally all Specification for Highway Works documents will require notification, and some other MCHW documents and DMRB documents will require notification.*

NOTE 5 *Maintaining a document as an internal document does not prevent the need for notification if that document has the effect of influencing the market for a product in the UK.*

16.3.2 Including product requirements in documents that would otherwise not require notification should be avoided unless there is an imperative to give them.

16.3.3 Products should not be specified; rather criteria that should be fulfilled should be given.

16.4 Where a requirement for a specific product is a repeat of that for the same specific product in an already notified (Overseeing Organisation) document, the document shall not be notified for that requirement rather the parent document shall be referenced.

16.4.1 Repetition of requirements should be avoided (it is better to make reference to the existing clause).

16.5 Vaguely expressed or scattershot requirements, such as “must comply with the MCHW”, shall be avoided as these make the document notifiable.

Documentation for notification

16.6 Once a document is complete and all approvals obtained, the technical author shall update Jira with relevant links to the following documentation relevant to EC notification:

1. The final approved draft of the document in '.doc' format for ease of translation into other EU languages (TAGG can assist with the creation of the word document);
2. impact assessment report;
3. TSRD Directive 2015/1535/EU Form A (available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/489196/BIS-16-23-New-Form-A.pdf completed by the technical author in accordance with the guidance available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/490271/BIS-16-15-directive-2015-1535-guidance.pdf
4. Electronic versions of all documents listed as normative references in the completed Form A.

16.7 Technical authors shall ensure that any document submitted for notification is the final document ready for publication with no further amendments required other than those that can be required by the EC.

NOTE 1 *Failure to do this can result in the document having to be re-notified if the document is changed during or after the notification process is complete.*

NOTE 2 *Although the document is referred to as "draft", this is in relation to the document not being published and the EC being able to ask for changes.*

16.8 As the normative reference documents will be on a public-facing website, the technical author shall obtain permission from the owners before notification.

16.9 A copy of the originally notified version of the document shall be maintained in MS Word.

Standstill period

16.10 The draft document shall be at a standstill for 3 months while it is under consideration by the EC and Member States.

NOTE 1 *During the standstill period, the EC or Member States can ask for additional information, make comments or give a detailed opinion to the effect that the measure envisaged can create obstacles to the free movement of goods within the internal market.*

NOTE 2 *The EC requests for additional information during the notification period are sent via BEIS and normally have a timescale of 5 working days for a response. The same comments can be received in parallel from the Foreign and Commonwealth Office via the DfT*

16.11 The 3-month standstill period shall be allowed for by the technical author in the document delivery programme.

Detailed opinions

16.12 Where a detailed opinion is given by the EC, the technical author shall resolve the issues raised by the EC within an additional 3-month period.

NOTE 1 *Detailed opinions are formal letters from the EC addressed to the UK Government and will come to National Highways through BEIS and the Foreign and Commonwealth Office. Detailed opinions normally concern issues of EU law and failure of the document to comply with this.*

NOTE 2 *Where a detailed opinion is raised, the document cannot be published until the issues have been resolved with the EC.*

16.13 Whenever a detailed opinion is received, the technical author shall confirm the route by which the response is to be made.

NOTE *Failure to act on a detailed opinion will result in the EC proceeding to infract the UK.*

Comments from EC

16.14 Any comments made by the EC on a notified document are sent to BEIS who are responsible for passing them to TAGG, which shall pass them to the technical author for action.

16.15 Technical authors shall ensure that the resources are available to respond quickly to comments raised by EC, especially where legal advice is required.

NOTE 1 *Comments received to date on documents have concerned minor changes to documents to correct references to EU legislation or address particular forms of expression where the meaning is not entirely clear. These comments are normally sent at the end of the notification standstill period and in the publication process, a period of grace of 2 weeks is allowed for these comments to arrive before moving to enter the document into the publication process.*

NOTE 2 *Experience to date indicates that the timescale given to respond to comments has been between 3 days and 2 weeks.*

Changes to already notified documents

16.16 When changes are proposed for an already notified document, a version of the notified original with the proposed changes highlighted shall be produced to enable TAGG to determine if notification to the EC is required.

NOTE *Highlighting changes ensures that costs of notification of documents are minimised by enabling those in the EC and Member States reviewing documents to focus on the changes and reduces the risk of the EC examining parts of the document that they have already passed as compliant.*

16.17 The only changes that can be made to the draft document notified to the EC shall be in response to opinions and comments made by the EC or Member States.

16.17.1 Cosmetic changes such as correction of spelling, etc., may be made, providing they do not affect the requirements as given in the notified document.

Normative and informative references

16.18 Where any document referred to in the submitted document has not been notified to the EC, the technical author shall check whether it is a dependent document, i.e. a document that contains additional requirements and which is required to be implemented in order for the submitted document to be followed.

NOTE *Each draft document is submitted for notification as an isolated document. Any reference to any other document within the submitted draft document can mean that the referenced document will be assessed, depending on how it is referred to in the draft document. This is not a problem if the document referred to has previously been notified to the EC.*

16.19 Dependent documents shall accompany the submitted document.

NOTE 1 *Dependent documents are those that are included in the “Normative Reference” chapter (refer to [Section 9 to MDD Part 2](#)).*

NOTE 2 *Where any document referred to in the submitted document contains no requirements or is not required in order to implement the draft document and the document referred to is only providing the source, it is not a dependent document. Non-dependent documents are those that are included in the “Informative Reference” chapter (refer to [Section 9 to MDD Part 2](#)).*

NOTE 3 *Detailed guidance on the inclusion of normative and informative references in RADs is provided in [Section 9 to MDD Part 2](#).*

Reference to the Technical Specifications and Regulations Directive

16.20 Any document submitted for notification shall include the following text:

“This document was notified in draft to the European Commission in accordance with Technical Standards and Regulations Directive 2015/1535/EU.”

Timing of adoption

16.21 Draft documents shall not be adopted into any existing contract or scheme during the notification standstill period.

NOTE *There is a significant contractual risk both to the Overseeing Organisation and the supply chain if the draft document, having been adopted, is then subject to revision after comments from the EC.*

17. Stage 9: Publication

- 17.1 The technical author shall produce the document to the point where it is ready for publication.
- 17.2 TAGG shall manage the document through the publication process.
- 17.3 Following notification (if required), the publication process detailed in this section shall be followed.

NOTE *Before the introduction of CARS, on average it took between 3.5 and 4 months from a document entering the publication process to the document being published, which is in addition to time spent during the EC notification standstill period (see [Section 16](#)). With the use of CARS and the in-built editing and formatting tool, it takes between 6-8 weeks from a document entering the publication process to the document being published.*

When is a document ready for the publication stage?

General

- 17.4 In order for a document to enter the publication process, the following criteria shall be met:
 1. The document is included in the agreed Standards Review Programme.
 2. The document has been reviewed by the TSC and any required changes have been made.
 3. Where applicable, the other Overseeing Organisation representatives have made any changes to their own National Application Annexes or Nationally Determined Requirements/Sections to make the document compatible with their processes and procedures.
 4. The technical author is satisfied that no other content changes are required.
 5. The document has been authorised by the CHE and the other Overseeing Organisations.
 6. Where applicable, the document has been reviewed for EU notification and has subsequently been through notification or has been deemed not notifiable by TAGG.
 7. The two week 'cooling off' period has passed following the end of the notification period to allow time for comments on the document to be received from the EC.
- 17.5 Publication resource from TAGG shall not be given to any RADs that are not in the Standards Review Programme (SRP).
- 17.6 Publication resource from TAGG shall be available to publish National Application Annexes (including those of the other Overseeing Organisations) related to any DMRB document on the SRP and national variations to any MCHW document on the SRP.

DMRB and related NAAs

- 17.7 A formal agreement shall be made between the technical author and the representatives from the other Overseeing Organisations as to whether National Application Annexes (where needed) are to be published at the time of publication of the related DMRB document, or at a later stage (i.e. after the publication of the DMRB document).
- 17.8 Where National Application Annexes of the other Overseeing Organisations are to be published at a later stage, a holding statement (see “Postponing publication of NAAs” in [Section 6 to MDD Part 3](#)) shall be used to communicate how relevant requirements can be accessed by users in the interim period.
- 17.9 National Application Annexes shall be subject to governance checks and CHE approval by the relevant other Overseeing Organisation before being submitted for publication to TAGG.
- 17.10 TAGG shall review the National Application Annexes developed by the other Overseeing Organisations for EU notification and legal compliance.

NOTE 1 *TAGG reserves the right to reject National Application Annexes submitted by the other Overseeing Organisations for publication if they do not meet legal compliance checks.*

NOTE 2 *TAGG can be contacted for further advice on how to publish NAAs.*

Reviewing proofs of documents

- 17.11 The technical author shall not review proofs of documents during the publication process.
- 17.12 TAGG content specialists shall undertake reviews on document proofs during the publication process for ‘look and feel’ and layout within the document.
- 17.13 TAGG shall not provide support in terms of the technical quality of the content of RADs.

Content changes during publication

- 17.14 No content / technical changes, further edits or amendments shall be made by the technical author once a document passes CHE sign off(s) and enters the publication process or, in the case of documents that have been notified to the EC, once the document has been notified.
- 17.15 Where content / technical changes, further edits or amendments are required, the document shall be removed from the publication process until changes have been actioned and it shall re-enter the publication process from the start.

Documents required for publication

Documents developed in CARS

17.16 Technical authors shall attach to SharePoint any figures drawings and charts in their native file format as separate files (see [Section 9 to MDD Part 2](#) for the quality requirements of figures and drawings).

NOTE 1 *CARS will provide the final document in pdf with the right formatting.*

NOTE 2 *Providing the native file format is essential to avoid future re-work: Figures are added to CARS as image files which means if they need to be subsequently edited for a future update, an author is expected to recreate the file. To reduce future rework, any process diagrams and charts that have been drawn using third party software, such as visio, and converted to a picture format for CARS need to be attached to SharePoint in their native file.*

NOTE 3 *DMRB figures and drawings will be stored in the DMRB folders here:
<https://highways.sharepoint.com/sites/UpdateoftheMCHWtrainingmaterials/DMRB/Forms/AllItems.aspx>*

NOTE 4 *MCHW figures and drawings will be stored in the MCHW folders here:
<https://highways.sharepoint.com/sites/UpdateoftheMCHWtrainingmaterials/MCHW/Forms/AllItems.aspx>*

NOTE 5 *Please contact TAGG for any queries related to the SharePoint folders.*

Documents provided in Word

17.17 For documents that are not expected to be developed in CARS (e.g. CHE memos), technical authors shall attach to Jira:

- 1) *a Microsoft Word compatible file format version of the document;*
- 2) *any figures, photos, tables and charts in separate files (see [Section 9 to MDD Part 2](#) for the quality requirements of figures and drawings).*

17.18 TAGG shall arrange for the document to be formatted.

18. Stage 10: Document maintenance

18.1 The document maintenance process shall be implemented through three components and related Jira workflows (see Figure 18):

1. Document Review management;
2. Feedback management;
3. Routine Changes management.

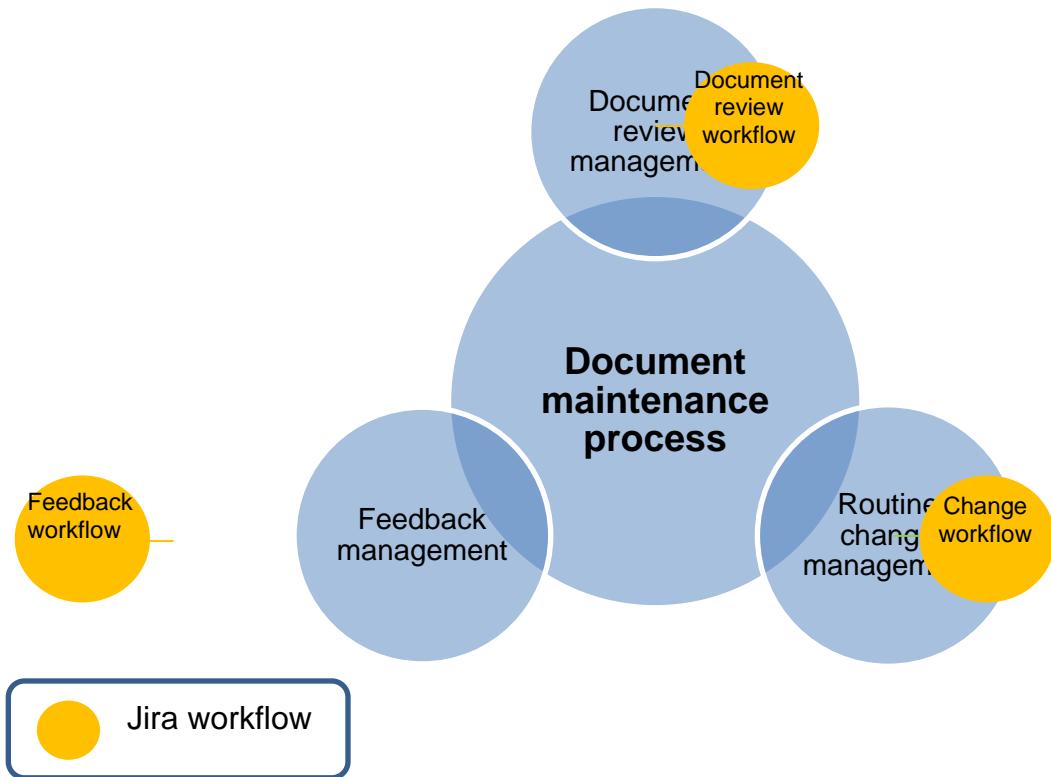


Figure 18. Components of the document maintenance process and related Jira workflows

Document Review Management

Scope

18.2 Document reviews shall be undertaken to check if the whole document is up to date and to identify what clauses need to be changed in order to bring the document up to date.

Timeline

18.3 The whole document shall be reviewed at least every 5 years.

18.4 Document reviews shall be programmed to start allowing enough period of time before the deadline for completion.

NOTE *For example, a default window for carrying out the document review would begin 6 months before the deadline for completion.*

18.5 The first document review shall be scheduled for completion 4 years after the document's initial publication date, allowing up to a year for the changes to go through the governance process and be published within a 5-year cycle.

NOTE *The first document review date reflects the first time the document was published into the new DMRB e.g. if published in March 2020, the document review date would be March 2024.*

18.6 Subsequent document reviews shall occur on a 5-year cycle, based on the date of the previous document review.

NOTE *For example, the second document review is scheduled to be completed 5 years after completion of the first document review.*

Jira

18.7 Document reviews shall be managed using Jira.

NOTE *Key stages in Jira are:*

- *document review to be done*
- *in document review*
- *document review completed with no changes*
- *document review completed with proposed changes to enter the SRP*

Template for document review

18.8 Document Reviews shall comprise a review of drivers and opportunities for change using the document review template provided in the governance SharePoint folders ([DMRB link](#) or [MCHW link](#)).

[DRAFTING NOTE: If you need access to these folders, please contact TAGG.]

NOTE *Drivers and opportunities for change are provided in Section 6.*

Outcomes triggered by document reviews

18.9 The outcome of the document review shall be recorded on the template and on Jira.

NOTE *The outcome from Document Review can be:*

- *The document needs no changes.*
- *The document needs some specific incremental changes (categories B, C or D).*
- *The document needs a major revision, e.g. due to a policy change (category A).*

Actions when changes are not needed

18.10 When the document review is completed and no changes are needed:

- a) the document version number shall not be incremented;
- b) only Jira and the index manager shall be updated to record the conclusion of the review and reflect last review date.

Actions when changes are needed

18.11 When a document review is completed and changes are needed, a relevant Change item shall be created on Jira (category A/B/C/D as relevant), ensuring that the review outcome is recorded in Jira and captured as actions to be scheduled.

18.12 The drafting of the changes and associated governance shall be carried out as soon as possible following the rules for major revisions (category A) and incremental changes (categories B/C/D).

18.12.1 When a category A change needs to be undertaken, the outcome of the document review may be used to populate the Document Development Plan (DDP), for example as an annex to the DDP.

Bringing Document Reviews forward

18.13 The opportunity to bring document reviews forward shall be assessed.

NOTE 1 *Where a document change is needed between scheduled document reviews, in some cases it can be convenient to carry out the document review early, in combination with the drafting of the change.*

NOTE 2 *It can be relevant to bring forward Document Reviews forward in the following cases:*

- *short documents (where the document review can usually be done very rapidly and efficiently), or,*

- *major revisions (where a Document Development Plan is required and therefore a full review of the document is carried out);*
- *for resourcing reasons or in response to a policy change (see also Prioritisation and programming).*

18.14 If a document review is brought forward, the subsequent document review date shall be reset to be 5 years after the completion of the document review.

Prioritisation and programming

18.15 Document Reviews shall be programmed to be evenly distributed instead of all being done at the same time.

18.15.1 A system to prioritise the initiation of Document Reviews should be introduced to support programming.

18.15.2 A scoring-based system may be used based on the following key metrics to help with prioritisation:

- a) date of initial publication / completion of last document review
- b) policy changes
- c) feedback based triggers
- d) resourcing based triggers (e.g. retirement of key resource)
- e) documents with most departures
- f) most searched for documents

Feedback management

Scope

18.16 Technical authors shall address any feedback received relating to the content of technical documents quickly and efficiently and record the outcome.

NOTE *Feedback can come from multiple sources, see also drivers and opportunities for change.*

18.17 Technical authors shall identify and manage any changes to the documents, which are needed in response to the feedback received.

Jira

18.18 The process of ensuring Technical Authors respond to feedback and monitoring the actions resulting from feedback shall be managed using Jira.

NOTE *Key stages in Jira are:*

- *new feedback item*
- *responded to sender*
- *feedback on hold*
- *completed*

18.19 Jira feedback items shall be associated with the relevant document through the use of 'issue links'.

[DRAFTING NOTE: TAGG is currently finalising the replacement of the Standards Enquiries mailbox with a new form on the DMRB website. The new form will be launched towards the end of March 2022. There may be minor tweaks to the following clauses as a result of the forthcoming launch]

Dismissing Standards Enquiries mailbox to capture feedback

18.20 The **Standards_Enquiries** mailbox shall no longer be used as a separate channel to collect feedback and it shall be replaced by a new online form on the DMRB website (see below).

[DRAFTING NOTE: DMRB standards still refer to Standards_Enquiries on the cover page. Until the cover pages will be updated, senders to the Standards_Enquiries will be automatically notified of the new form and the relevant link to the MS form will be automatically provided]

Online form to collect feedback on standards

18.21 An online form on the DMRB website shall be used to collect the following feedback:

- general ideas,
- general queries,

- request for background information,
- specific challenges to standards.

18.22 TAGG shall review general ideas and queries.

18.23 Technical authors shall review and address requests for background information and specific challenges.

18.24 Technical authors shall assess whether a change to a standard is needed based on the feedback received and, if so, its urgency.

NOTE *This is particularly relevant when there are errors that result in a change to the technical outcome (e.g. an error in an equation or an incorrect value for a parameter).*

18.25 Receipt of feedback shall be automatically acknowledged to the sender, accompanied by an overview of the process that is followed to manage expectations.

18.26 Jira feedback items shall be automatically generated once a submission is received from the online form.

18.27 A track of the feedback received shall be kept for reporting purposes.

Putting feedback on hold

18.28 Feedback items shall be addressed as soon as possible.

18.28.1 Feedback items may be put on hold for the following reasons only:

- a) Requires major policy change - to be incorporated into a change
- b) Requires change to requirement(s) - to be incorporated into a change
- c) Requires change to advice / editorial - to be incorporated into a change
- d) To be covered as part of document review

Closing out feedback items

18.29 Feedback items shall be marked as closed in the following circumstances:

- a) When no change is needed
- b) If changes are needed, they have to be incorporated into a future release of a document as a change item and actioned through the SGP (they do not need to wait until the document is published); in such a case, the relevant change number shall be recorded on Jira.

Discussing challenges to standards

18.30 The Technical Standards Committees (TSCs) shall be used as a platform to share and discuss changes arising from standards challenges.

18.30.1 Representatives of the Innovation group should be invited into the relevant TSCs when standards challenges involving innovation are to be discussed.

Routine changes management

Scope

18.31 The routine changes management process shall help manage changes needed to the document for example to bring it up to date or correct errors.

NOTE *Changes to the document can be necessary as a result of feedback management or document reviews.*

Jira

18.32 Routine changes shall be processed using the workflows for categories of change A, B, C, D.

Assessing and managing urgency of change

18.33 Technical Authors shall proactively assess the urgency of change to a document.

18.34 All required changes shall be actioned by the Technical Author as soon as possible, except where a change is judged to be non-urgent.

18.35 All changes required as a result of a document review shall be implemented as soon as possible, to ensure that the document is brought up to date.

Non-urgent changes

18.36 The default position shall be that a change is considered urgent unless justification is provided as to why it can be delayed.

18.37 Where a non-urgent change is identified, the reasons for it being non-urgent shall be justified and recorded in Jira.

18.37.1 A change may be judged to be non-urgent where there is no impact on safety and no risk associated with deferring the change.

18.37.2 Non-urgent changes may be deferred for a short time until the next change is made or the next Document Review, whichever comes first.

Escalation procedures

18.38 When urgent changes are not implemented in a timely manner, TAGG shall follow relevant escalation procedures.

Controlling timescales for document maintenance actions

18.39 Timescales for document maintenance actions shall be controlled through:

- a) a suite of dashboards, reports and automated alerts to visualise status and notify action holders;
- b) escalation procedures for urgent changes that are not actioned within appropriate timescales.

Annex 1A CHE Memos

[DRAFTING NOTE: The rules on CHE Memos currently given in this annex need to be updated to align with the new governance process for DMRB and MCHW]

A1.1 The governance process of CHE memos illustrated in [Figure 20](#) shall be followed.

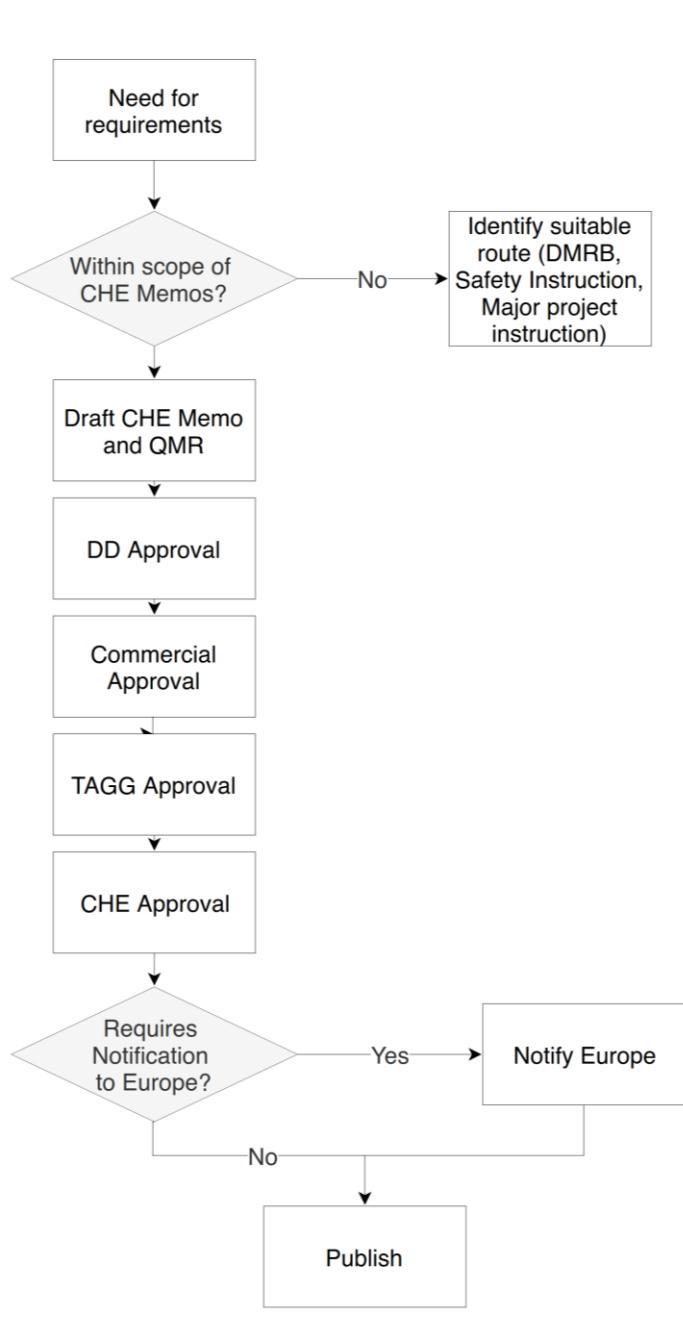


Figure 20. Governance process of CHE Memos

A1.2 The technical author of the CHE Memorandum shall complete the Quality Management Report (QMR) for the CHE Memo using the CHE memo template on Jira.

Formal approvals using JIRA

A1.3 Formal approvals of CHE Memos shall be executed using workflow functionality in JIRA.

NOTE 1 *Formal approvers comprise:*

- 1) *Divisional Directors (for QMR)*
- 2) *Commercial team (for QMR)*
- 3) *TAGG Team Leader (for QMR)*
- 4) *Chief Highway Engineer of National Highways*

NOTE 2 *Permission to execute an approval is only available to those assigned the corresponding role in Jira.*

Approval by SES Divisional Director and TAGG

A1.4 If satisfied with the document and QMR, the SES Divisional Director shall mark their approval using JIRA.

A1.5 TAGG shall approve the QMR using JIRA to confirm that appropriate governance has been carried out.

Authorisation by the CHE of National Highways

A1.6 The approval process by the CHE of National Highways valid for DMRB/MCHW documents shall be followed for CHE Memos.

Annex 1B TSS Plans registry

The Traffic Systems and Signing Plans Registry (TSS) contains National Highways documents in the field of traffic systems and signing including technical requirements and specifications for works, equipment and testing, as well as technical drawings and diagrams.

It includes:

- MCE - specifications for equipment.
- MCG - specifications for acceptance testing.
- MCH - instructions for use in handbooks, guides, instructions, request forms, procedures, reports and records (e.g. standard installation drawings, cabinets, circuit diagrams and printed circuit boards).
- MCS – indexes and circulars dealing with the administration of technical documents.
- MCX - drawing layouts and details used for general equipment and other items that are not site-specific.
- TR – overarching requirements and specifications.
- TRG – acceptance procedures and specifications for testing.

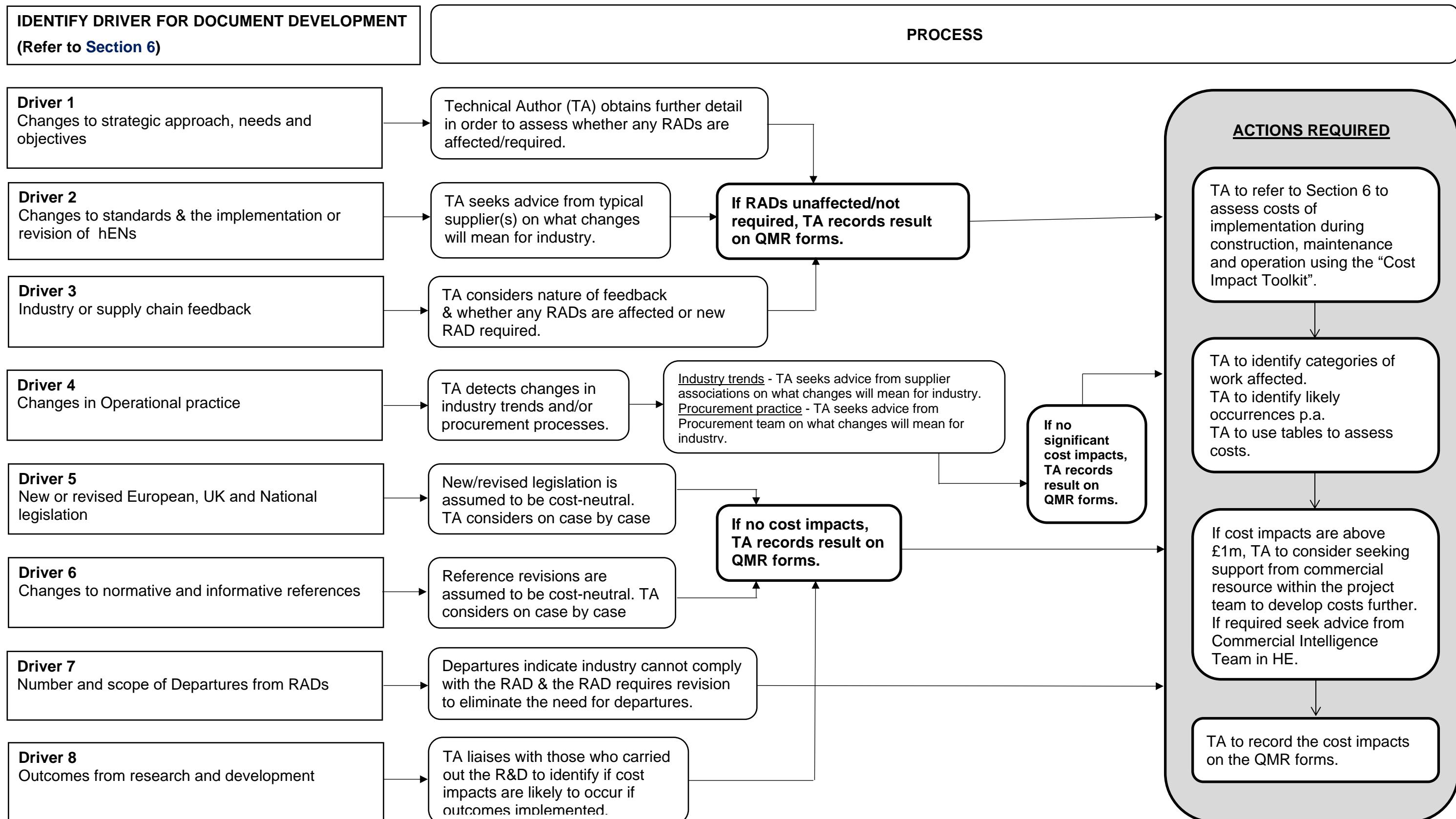
TSS Plans Registry documents are related to the series 1500 of the Specification for Highway Works (SHW), as well as communication technology documents in the DMRB.

TSS Plans Registry documents are subject to the same EU product legislation requirements as the SHW.

The TSS Plans Registry are only used in connection with works on the Overseeing Organisations' motorway and trunk roads in England.

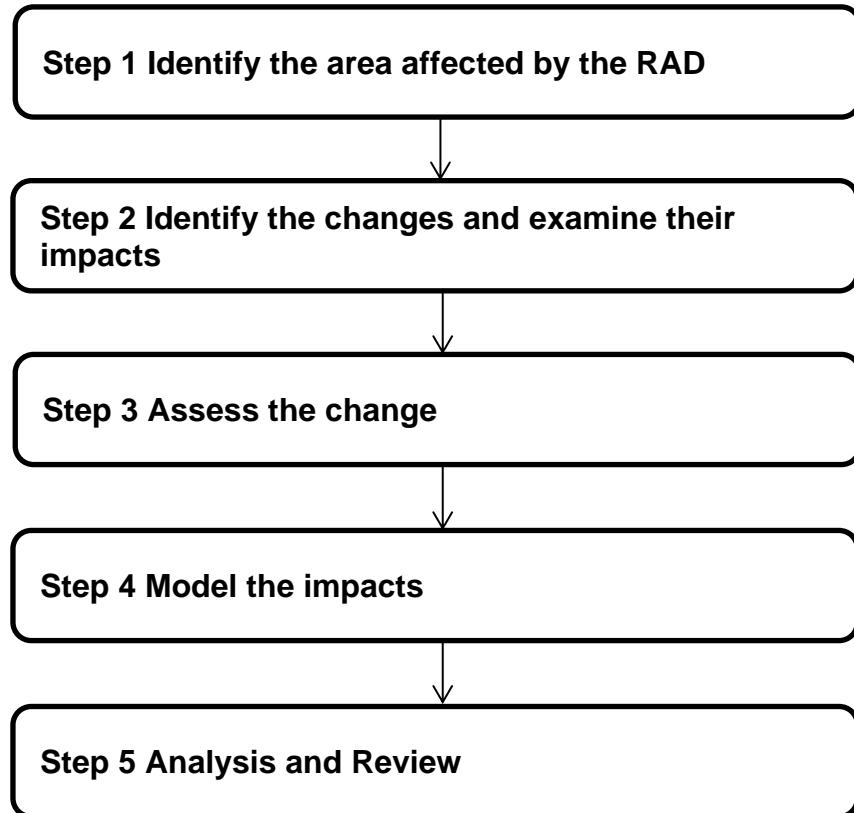
NOTE For any enquiries regarding content and numbering, please contact the TSS Plans Registry Helpline: 0117 372 8475.

Annex 1C Cost impact identification for technical authors [DRAFTING NOTE: Will be updated in Spring 2022]



Annex 1D Cost impact toolkit

[DRAFTING NOTE: This annex will be updated in spring 2022]



Step 1 – Identify the Area Affected by the RAD

Technical authors shall identify and assess the area affected by the RAD so that the total cost of the impact can be evaluated.

The cost impact of implementing specific requirements within a RAD depends on the nature of additional or reduced activity required and the timing and contractual arrangements within which the requirement is to be implemented. For example, a requirement that is implemented by a Managing Agent Contractor or Agency Support Contract, and which involves additional costs, can be incorporated into a ‘scheme’ with National Highways bearing the costs.

Changes to RADs can affect individual DBFO contracts differently. For example; the Tranche 1 and 1a DBFO contracts have RADs fixed at a point in time and any change to a RAD could have cost impacts; the Tranche 2 DBFO contracts accept new or changed RADs based on a step change procedure, which could also have cost impacts; the M25 DBFO contract uses current RADs, with cost impacts considered if more than a certain sum.

Some RADs can have implications across a number of National Highways operations, such as works carried out by MP, those carried out by Operations regional teams and Traffic Technology Division, and those carried out across the other Overseeing Organisations. These impacts need to be looked at separately.

a) Design and construction RADs

The impact of changes to design and construction RADs can be broken down into:

- i. Design costs.
- ii. Labour costs.
- iii. Plant costs.
- iv. Materials costs.

When preparing a new or revised RAD, questions a technical author shall ask include:

- How does it change the cost of construction?
- How does it change the cost of maintenance?
- What are the indirect costs associated with the implementation?
- What are the information costs?
- What are the one-off costs of implementation and training?
- What are the implications under different forms of contract?

b) Major maintenance RADs

These are similar to those used for design and construction in that they can be broken down in the same way. However, major maintenance takes place on an existing road and thus the way the works are undertaken and the type of traffic management needed become a greater part of the cost.

c) Routine maintenance and operations RADs

These are concerned with the day-to-day activities carried out by National Highways' supply chain and cover such areas as inspections, routine repairs, data gathering, asset management and cleaning. The major cost component of these activities tends to be staff resources.

These activities are primarily staff time dependent and many are often paid for on a lump sum activity basis. This may mean that the cost impact may not become immediately apparent but will manifest itself when new contracts are tendered.

Step 2 – Identify the Changes and Examine their Impacts

Technical authors shall identify the changes and document their impact (i.e. what the new RAD requires to be done now that was not required to be done previously).

Technical authors can use two impact assessment matrices to identify impact areas based on the subject of the RAD:

- *Routine Maintenance and Operations Impact Assessment Matrix* - The day-to-day work of the service providers in the OD areas

- *Design and Construction Impact Assessment Matrix* - M P and many of OD's Local Network Management Schemes (LNMS), especially major maintenance.

These matrices can be found at:

<http://share/share/livelink.exe?func=ll&objId=31441612&objAction=browse&viewType=1>

It is helpful to look at the implementation of the RAD through the eyes of those that have to implement it. Even changes that reduce/simplify requirements within RADs may lead to short-term cost increases if procedures need to be re-written, staff trained, databases re-formatted, etc.

Some additional questions that may help when considering factors that affect costs include:

- a. What additional work is being required (e.g. increased frequency of detailed inspections, increased frequency of servicing/cleaning, etc.)?
- b. Will new methods of working be required (e.g. quicker secondary response to incidents may require heavy cranes to be made available in a very short time)?
- c. What skills/specialists are involved and what is the scale of input required?
- d. Will different equipment be necessary to meet the requirement?
- e. How would any data be collected?
- f. Is a more restricted range of materials required, are they available and at what cost?
- g. Are there any adverse indirect costs? (e.g. a change to the edge of carriageway detail may also affect road restraint systems, drainage, earthworks, road markings and communications equipment, utilities and maintenance operations)?

Step 3 – Assess the Change

Technical authors should consult with practitioners within National Highways (e.g. MP and/or OD Commercial teams) and also those in National Highways' supply chain for advice about current costs and help with the identification of direct and indirect impacts.

Any impacts identified need to be assessed such that a cost increase or reduction can be assigned to the RAD. The aim of the assessment is to identify 'ball park' cost estimates for the likely impact, in the form of a percentage increase or decrease, relative to the current costs. The same process also needs to be applied to any potential indirect impacts.

Example - A revision to a RAD may reduce the frequency of inspections from once every two years to a three-yearly cycle so it is reasonable to assume that direct costs will reduce by around 33%. However, it may be that these inspections are currently carried out along with other two year inspections using

the same traffic management. Therefore, under the new regime, every other inspection might now need its own traffic management which could result in an indirect cost increase of 25%. It is thus the 8% net saving which needs to be considered when the QMR is being prepared.

Step 4 – Model the Impacts

Technical authors shall use the estimates of the impacts on costs of the RAD to assess the overall impact on National Highways' budgets.

In a simple case, the cost implications may be calculated directly.

The larger cost component of the OD budget covers the renewal and improvement schemes. These schemes are similar to Major Projects and thus should be assessed separately.

Step 5 – Analysis and Review

Technical authors shall analyse the cost figures emerged from Step 4 against the cost estimates assumed at the Business Case and QMR stages.

The following questions may help technical authors decide whether changes to the RAD should be made:

- a. Should some of the requirements proposed be abandoned as the cost implications are unaffordable or have increased to the point where the related benefits cannot be justified?
- b. Can the scope or application of the requirements be reduced to reduce the cost of implementation while still achieving worthwhile benefits?
- c. If the changes are the result of new legislation, has the legislation been correctly interpreted? Can the RAD be amended to reduce the implementation costs while still achieving compliance with the relevant legislation?
- d. If new and costly requirements have to be introduced, are there other requirements within the RAD that can be eliminated or reduced in scope to compensate?

Introducing costly and unaffordable requirements in RADs may result in an increased number of departures being sought. This in turn leads to increased costs as a result of programme delays and the additional design costs involved in developing and considering the departures. If such departures are likely to be routinely approved, it may be better to reduce the scope of the requirement within the RAD.

Where the impact on National Highways' budgets is more adverse than previously anticipated, the technical author shall assess whether changes to the RAD should be made.

Annex 1E Control process for SRP date changes (DMRB/ MCHW)

E.1.1 The control process presented in this annex shall apply to SRP date changes related to DMRB/MCHW documents only.

NOTE *This process is separate to the change control process which applies to the Portfolio Change Control Process.*

Definitions

Change

In the context of the Programme a change is a departure from the baseline Standards Review Programme (Signed off by the Chief Highway Engineer) and subsequent departures to the amended programme

Programme Year

In terms of periods, a programme year aligns with a financial year e.g. 2021/2022 refers to a period from 1st April 2021 up to and including 31st March 2022.

“In year” Change

Change of milestone dates and hence delivery dates of a single entry in the Standards Review Programme within a programme year, i.e. delivery date remains within its current programme year.

“Across Programme Year” Change

Change of delivery date of a single entry in the programme from one programme year to the next programme year.

Other (administrative) Changes

This will include changes such as change in technical author, change in Group Manager or other changes that are not material to the delivery date of the entry on the programme.

Type of date changes and approvers

Date changes to final deliverables for approval

E.1.2 The technical author shall submit a Date Change Request to TAGG using JIRA.

NOTE *Within the change issue that records the governance, technical authors can create a 'date change request' as a sub task. Please contact TAGG for any assistance.*

- E.1.3 For any date changes to the Forecast submission date for TSC Chair approval, either forwards, backwards or across programme year, the technical author shall discuss the reasons for the date change with the relevant Divisional Director.
- E.1.3 The Divisional Director shall discuss and obtain approval for the date change from the National Highways Chief Highways Engineer (CHE). Once the approval is recorded in Jira, the request will be passed to TAGG to implement the change.

DDP & TSC Date Changes

- E.1.5 For date changes to DDP and TSC dates, the technical author shall submit a change control request to TAGG using JIRA.
- E.1.6 For these changes the technical author shall confirm in JIRA that changes in dates to DDP and TSC dates will not impact and subsequently require a change in date of the submission of final documentation for approval.
- E.1.7 TAGG shall approve and implement the change to the programme.

Other (administrative) changes

- E.1.8 These changes include technical author and document title changes.
- E.1.9 The technical author shall submit a change control request to TAGG using JIRA.
- E.1.10 TAGG shall approve and implement the change to the programme.

Repeated changes to the programme

- E.1.11 Where repeated requests for changes to delivery dates are submitted for the same document, this will lead to an escalation by TAGG to Group Managers.
- E.1.12 The technical author will be required to provide reasons for delays and offer mitigation of delivery by bringing forward other documents in future years to current programme year.

Revision history

Version	Date	Description	Author
2.0	7 May 2015	Revisions for CDM 2015. Name change to Highways England throughout. New Section 3.0 Roles and Responsibilities added. New Section 15 Technical Project Board added. New Annex A Drafting Content of RADs added. Minor changes throughout.	CH2M
2.1	1 June 2015	Revisions to Section 6 for Cost Impact Toolkit. Addition of Annex B Cost Impact Identification for document owners. Revisions to Section 10.	CH2M
2.2	October 2015	Revisions made throughout to make suitable for use by a wider audience. References to Peer Review Board amended to Technical Project Board. Minor changes throughout.	CH2M
3.0	January 2017	Restructure of the Manual into two parts. Part 2 on drafting rules reviewed in a pilot project. Revisions and changes made throughout including: new drafting rules, new Annexes, new concepts such as content specialist, National Application Annexes, performance-based requirements for assets.	WSP Parsons Brinckerhoff
4.0	April 2017	The entire Manual is reviewed to reflect the style of the new DMRB drafting rules. The Manual is developed into two separate Parts to acknowledge their different audiences.	WSP Parsons Brinckerhoff
4.1	September 2017	No changes have been made to requirements contained in MDD 4.0. This version provides additional requirements and guidance, and addresses feedback and comments received from users.	WSP
4.2	March 2018	No changes have been made to requirements contained in MDD 4.1. This version provides additional requirements and guidance to addresses feedback and comments received from users.	WSP
5.0	November 2018	The Manual has been restructured into three parts in recognition of different	WSP

		<p>audiences and feedback received by users:</p> <ul style="list-style-type: none"> Part 1 – relevant to those involved in the governance process, with a clearer identification of roles and responsibilities. Key updates include: <ul style="list-style-type: none"> improved tables providing key roles and responsibilities for different parties; content relevant to document drafting moved to Part 2; drafting, review and approval stages have been split into separate sections for ease of navigation; document development plan made mandatory; single submission for sign-off by all CHEs; new template for GG 104 health and safety risk assessment. New Part 2 on document layout and clause style. New Part 3 on drafting rules relevant to document authors. 	
5.1	October 2019	<p>Wellbeing clauses added to section 8, The impact of RADs on health, safety and wellbeing.</p> <p>Reference to Temporary Instruction Notes (TINs) removed.</p> <p>Clauses added to section 8, The impact of RADs on sustainable development and good design.</p> <p>Sustainable development and design screening and assessment template added to Annex 1I.</p>	WSP/HE