DMRB Briefing note

DATE: 01 November 2021 **CONFIDENTIALITY:** Public

CHANGES TO THE ELECTRICITY SUPPLY CONNECTIONS PART OF THE DMRB

The DMRB is undergoing a transformation into a new and consistent format. This briefing note outlines the headline changes that are being introduced to the electricity supply connections documents.

Organisation of the electricity supply connections documents

All of the old-style DMRB document codes are being replaced with new document codes, comprising 2 letters followed by a 3 digit number. All new-style electricity supply connections documents have a document code that begins with a **T.** Refer to Table 1 for the other parts of the DMRB.

Table 1 – Parts of the DMRB

Parts of the DMRB	Disciplines
G - General principles and scheme governance	General principles and scheme governance
L - Sustainability and environment	Sustainability and environment
C - Civil engineering	Road layout; Pavement; Structures and bridges; Drainage; Geotechnics
T - Technology	Control and communications technology; Road lighting

The second letter in the new document code is determined by the life-cycle stage. Table 2 shows how the electricity supply connections documents are organised, with some examples.

Table 2- Organisation of electricity supply connections documents

2-letter part and volume code	Example document
TG - General information	TG 411 – **Electricity supply connections** is a **T**echnical **G**eneral document
TA - Appraisal	TA 501 – Road lighting appraisal
TD - Design	TD 131 – Roadside technology and communications
TC - Construction	(None at this time - refer to MCHW)
TM - Maintenance and operation	TM 101 – Traffic signalling systems
TS - Inspection and assessment	TS 501 – Road lighting inspection
TZ - Disposal	None at this time

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Overview of key updates

The new document is TG 411 Electricity supply connections

The main legacy document used as source for this new document is IAN 132/11 Electricity supply connections. Most of the changes in the electricity supply connections document comprise an editorial consolidation of the material in the previous version of the interim advice note, removing duplications and out-of-date material, achieving more concise and clear definition of the requirements.

For electricity supply connections, the opportunity has been taken to improve the technical content where possible and bring the document up to date, including alignment with European standards and legislation, implementing the findings of research and addressing feedback.

Implementation

The requirements regarding implementation of new documents, including whether new documents apply to existing contracts, are given in **GG 101**. The default position stated in **GG 101** is to use the new documents as soon as they are published, although some exceptions can be proposed in accordance with **GG 101**, for example, where the contract has reached a stage that the implementation of the new documents would result in significant additional expense or delay.

Benefits and Impact

The publication of the updated electricity supply connections document will result in:

- Up to date document in line with current industry practice
- Complementary with European and National standards and reflecting published industry guidance
- Compliance with UK legislation
- Improved clarity on requirements and associated advice by being consistently formatted
- Improved governance in contracts
- Fewer departures from standards
- Easier to update in the future
- Support future innovation
- Improved safety
- Support all National Highways imperatives and values

Feedback

Comments, suggestions and queries on the new documents may be addressed to Standards_Enquiries@highwaysengland.co.uk

DMRB Briefing note

DATE: 01 November 2021 **CONFIDENTIALITY:** Public

CHANGES TO THE RAMP METERING PART OF THE DMRB

The DMRB is undergoing a transformation into a new and consistent format. This briefing note outlines the headline changes that are being introduced to the ramp metering documents.

Organisation of the ramp metering documents

All of the old-style DMRB document codes are being replaced with new document codes, comprising 2 letters followed by a 3 digit number. All new-style ramp metering documents have a document code that begins with a **T.** Refer to Table 1 for the other parts of the DMRB.

Table 1 – Parts of the DMRB

Parts of the DMRB	Disciplines
G - General principles and scheme governance	General principles and scheme governance
L - Sustainability and environment	Sustainability and environment
C - Civil engineering	Road layout; Pavement; Structures and bridges; Drainage; Geotechnics
T - Technology	Control and communications technology; Road lighting

The second letter in the new document code is determined by the life-cycle stage. Table 2 shows how the ramp metering documents are organised, with some examples.

Table 2- Organisation of ramp metering documents

2-letter part and volume code	Example document
TG - General information	TG 411 – Electricity supply connections
TA - Appraisal	**TA 121 – Ramp metering**
TD - Design	**TD 121 – Ramp metering**
TC - Construction	(None at this time - refer to MCHW)
TM - Maintenance and operation	TM 101 – Traffic signalling systems
TS - Inspection and assessment	TS 101 – Traffic signalling systems
TZ - Disposal	None at this time

DMRB Briefing note

DATE: 01 November 2021 **CONFIDENTIALITY:** Public

Overview of key updates

The new documents are:

TA 121 Ramp metering

TD 121 Ramp metering

Many of the changes in the ramp metering documents comprise an editorial consolidation of the material in the legacy documents, removing duplications and out-of-date material, achieving more concise and clear definition of the requirements.

For ramp metering, the opportunity has been taken to improve the technical content where possible and bring the document up to date, including alignment with European standards and legislation, implementing the findings of research and addressing feedback.

Table 3- Some examples of key technical changes in ramp metering documents

Document	Examples of key technical changes
IAN 103/08 – Advice Regarding the Assessment of Sites for Ramp Metering	Details site selection and has been partly retained and enhanced with content contained in the appraisal document TA121. All relevant clauses have been reviewed, edited and restructured into the new DMRB format.
IAN 121/09 – Advice Regarding the Application of Integrated Traffic Management	Relates to Integrated Traffic Management and does not contain DMRB requirements, therefore this content has been retained in an information only Appendix to TA121 offering material regarding this management technique.
MPI 33	Addresses the use of ramp metering with Smart Motorways and has been broadened and included as a National Application Annex for England (with some relevant clauses retained within TA 121). It now relates to existing ramp metering sites and new mainline interventions, rather than being limited to Smart Motorways.
New content	New content regarding the ramp metering design has been created within the TD 121 design document. This includes requirements for the selection, positioning and configuration of ramp metering equipment and general requirements including the design and connection of power supplies and telecommunication services. A NAA has been incorporated to describe the ramp metering signal provision authorised to England.

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New Content	MCH documents 1965 and 2472-2475 have been reviewed and resulted in no relevant clauses being taken forward into the new ramp metering documentation. The review of MCH 2470 and 2471 resulted in relevant design requirements being included within TD 121, and ramp metering limitations being described as a note in TA 121.

Implementation

The requirements regarding implementation of the new documents are given in **GG 101**. The default position stated in **GG 101** is to use the new documents as soon as they are published, although some exceptions can be proposed in accordance with **GG 101**, for example, where the contract has reached a stage that the implementation of the new documents would result in significant additional expense or delay.

Benefits and Impact

The publication of the updated ramp metering documents will result in:

- Up to date document in line with current industry practice
- Complementary with European and National standards and reflecting published industry guidance
- Compliance with UK legislation
- Improved clarity on requirements and associated advice by being consistently formatted
- Improved governance in contracts
- Fewer departures from standards
- Easier to update in the future
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Feedback

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DMRB Briefing note

DATE:	01 November 2021	**CONFIDENTIALITY:**	Public

CHANGES TO THE ROADSIDE TECHNOLOGY AND COMMUNICATIONS PART OF THE DMRB

The DMRB is undergoing a transformation into a new and consistent format. This briefing note outlines the headline changes that are being introduced to the roadside technology and communications documents.

Organisation of the roadside technology and communications documents

All of the old-style DMRB document codes are being replaced with new document codes, comprising 2 letters followed by a 3 digit number. All new-style roadside technology and communications documents have a document code that begins with a **T.** Refer to Table 1 for the other parts of the DMRB.

Table 1 – Parts of the DMRB

Parts of the DMRB	Disciplines
G - General principles and scheme governance	General principles and scheme governance
L - Sustainability and environment	Sustainability and environment
C - Civil engineering	Road layout; Pavement; Structures and bridges; Drainage; Geotechnics
T - Technology	Control and communications technology; Road lighting

The second letter in the new document code is determined by the life-cycle stage. Table 2 shows how the roadside technology and communications documents are organised, with some examples.

Table 2- Organisation of roadside technology and communications documents

2-letter part and volume code	Example document
TG - General information	TG 411 – Electricity supply connections
TA - Appraisal	TA 501 – Road lighting appraisal
TD - Design	**TD 131 – Roadside technology and communications**
TC - Construction	(None at this time - refer to MCHW)
TM - Maintenance and operation	TM 101 – Traffic signalling systems
TS - Inspection and assessment	TS 501 – Road lighting inspection
TZ - Disposal	None at this time

Overview of key updates

The new document is **TD 131 Roadside Technology and Communications.**

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The following documents were reviewed and replaced during the production of the new roadside technology and communications document:

- TD 17/85 – Criteria for CCTV
- TD 71/16 – Technology overview and general requirements
- TD 72/17 – Transmission Infrastructure
- TD 73/16 – Emergency Roadside Telephones (ERT)
- TD 45/17 – Detection Technology
- IAN 161/15 – Smart Motorways
- MPI 66 – Updated requirements to IAN 161/15

Many of the changes in the roadside technology and communications document comprise an editorial consolidation of the material in the above legacy documents, removing duplications and out-of-date material, achieving more concise and clear definition of the requirements.

For roadside technology and communications, the opportunity has been taken to improve the technical content where possible and bring the document up to date, including alignment with European standards and legislation, implementing the findings of research and addressing feedback.

Table 3- Some examples of key technical changes in Roadside technology and communications documents

Document	Examples of key technical changes
TD 17/85 – Criteria for CCTV	The majority of TD 17/85 has been removed due to the document being outdated. There is a more, up-to-date, unpublished version of this document (TD 17/17), clauses relating to business need and CCTV coverage have been retained in TD 131 from TD 17/17
TD 71/16 – Technology overview and general requirements	Majority of the content from TD 71/16 was identified as guidance only and therefore not relevant for the DMRB. However, this guidance is considered as potentially useful to readers unfamiliar with traffic technology and therefore has been identified as content to be relocated outside of the DMRB.
TD 72/17 – Transmission Infrastructure	Design requirements re-drafted and taken forward from TD 72/17 include provision of electrical power, duct networks, chambers, cabinets and a telecommunications services section. Some design advice has been identified as requiring relocation to the National Highways NRTS team to review and form a design guide which has been written concurrently with TD131.
TD 73/16 – Emergency Roadside Telephones (ERT)	All relevant design requirements from TD 73/16 have been captured and retained within an Emergency Roadside Telephone (ERT) section within TD 131.

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TD 45/17 – Detection Technology	Relevant design requirements from TD 45/17 have been reviewed, redrafted and included within TD 131. Non-mandatory detector content and detector product requirements have been identified for relocation outside of the DMRB. This is expected to be published within the TSS Plans Registry in due course.

Implementation

The requirements regarding implementation of the new documents are given in **GG 101**. The default position stated in **GG 101** is to use the new documents as soon as they are published, although some exceptions can be proposed in accordance with **GG 101**, for example, where the contract has reached a stage that the implementation of the new documents would result in significant additional expense or delay.

Benefits and Impact

The publication of the updated roadside technology and communications document will result in:

- Up to date document in line with current industry practice
- Complementary with European and National standards and reflecting published industry guidance
- Compliance with UK legislation
- Improved clarity on requirements and associated advice by being consistently formatted
- Improved governance in contracts
- Fewer departures from standards
- Easier to update in the future
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Feedback

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DMRB Briefing note

DATE:	01 November 2021	**CONFIDENTIALITY:**	Public

CHANGES TO THE TRAFFIC SIGNALLING SYSTEMS PART OF THE DMRB

The DMRB is undergoing a transformation into a new and consistent format. This briefing note outlines the headline changes that are being introduced to the traffic signalling systems documents.

Organisation of the traffic signalling systems documents

All of the old-style DMRB document codes are being replaced with new document codes, comprising 2 letters followed by a 3 digit number. All new-style traffic signalling systems documents have a document code that begins with a T**.** Refer to Table 1 for the other parts of the DMRB.

Table 1 – Parts of the DMRB

Parts of the DMRB	Disciplines
G - General principles and scheme governance	General principles and scheme governance
L - Sustainability and environment	Sustainability and environment
C - Civil engineering	Road layout; Pavement; Structures and bridges; Drainage; Geotechnics
T - Technology	Control and communications technology; Road lighting

The second letter in the new document code is determined by the life-cycle stage. Table 2 shows how the traffic signalling systems documents are organised, with some examples.

Table 2- Organisation of traffic signalling systems documents

2-letter part and volume code	Example document
TG - General information	TG 411 – Electricity supply connections
TA - Appraisal	**TA 101 – Traffic signalling systems**
TD - Design	**TD 101 – Traffic signalling systems**
TC - Construction	(None at this time - refer to MCHW)
TM - Maintenance and operation	**TM 101 – Traffic signalling systems**
TS - Inspection and assessment	**TS 101 – Traffic signalling systems**
TZ - Disposal	None at this time

DMRB Briefing note

DATE:	01 November 2021	**CONFIDENTIALITY:**	Public

Overview of key updates

The new documents are:

TA 101 Traffic signalling systems (Appraisal)

TD 101 Traffic signalling systems (Design)

TM 101 Traffic signalling systems (Maintenance)

TS 101 Traffic signalling systems (Inspection)

The legacy documents replaced by the new documents are:

- TD7/07 Statutory Approval of Traffic Control Equipment
  This document was superseded by changes in legislation and therefore the document was removed. TSRGD was updated in 2016 which removed the statutory function for approvals. It was replaced by a self-certification scheme called TOPAS.
- TD24/97 All Purpose Trunk Roads Inspection and Maintenance of Traffic Signals and Associated Equipment
  This document provided maintenance requirements and advice for equipment on road. Maintenance and inspection requirements which are relevant to the designer have been transferred to the new documents.
- TD35/06 All Purpose Trunk Roads MOVA System of Traffic Control at Signals
  This document related solely to the use of MOVA (Microprocessor Optimised Vehicle Actuation) which is a signal control strategy. As MOVA is no longer mandated all reference to MOVA has been removed. Relevant advice has been transferred to the new document.
- TA12/07 Traffic Signals on high speed Roads
  This whole document was superseded by TSRGD and therefore the document has been removed. None of the content is relevant for the DMRB. An assumption has been added to the new documents to ensure relevant TALs/LTNs are still covered.
- TA16/07 General Principles of Control by Traffic Signals
  This whole document was superseded by TSRGD and therefore the document has been removed. None of the content is relevant for the DMRB. An assumption has been added to the documents to ensure relevant TALs/LTNs are still covered.
- TA56/87 Hazardous Cattle Crossings: Use of Flashing Amber Lamps
  The requirements within the document have been included in the TSRGD 2016 and therefore the document has been removed.
- TA82/99 The installation of traffic signals and associated equipment
  This whole document was superseded by TSRGD and other legislative requirements (e.g. CDM) and therefore the document has been removed. None of the content is relevant for the DMRB. Assumptions have been added to the documents to ensure relevant TALs/LTNs are still covered, and all relevant legislation is adhered to.
- TA84/06 Code of Practice for Traffic Control and Information Systems for All Purpose Roads.
  This document contained Code of Practice information which is widely used within industry. Therefore the content is to be transferred to another publication body: The Traffic Signals Group (TSG).

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Many of the changes in the traffic signalling systems documents comprise an editorial consolidation of the material in the above legacy documents, removing duplications and out-of-date material, achieving more concise and clear definition of the requirements.

For traffic signalling systems, the opportunity has been taken to improve the technical content where possible and bring the document up to date, including alignment with European standards and legislation, implementing the findings of research and addressing feedback.

Implementation

The requirements regarding implementation of new documents, including whether new documents apply to existing contracts, are given in **GG 101**. The default position stated in **GG 101** is to use the new documents as soon as they are published, although some exceptions can be proposed in accordance with **GG 101**, for example, where the contract has reached a stage that the implementation of the new documents would result in significant additional expense or delay.

Benefits and Impact

The publication of the updated traffic signalling systems document will result in:

- Up to date document in line with current industry practice
- Complementary with European and National standards and reflecting published industry guidance
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