
Director of Engineering Memorandum
DEM 182/20
DEM TITLE: TD 37/93 - Scheme Assessment Reporting

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Classification

Level 1 (Title / Key Words) :	Scheme Assessment Reporting, Major Works, Stage 1 - Preliminary Options Report, Stage 2 - Preferred Options Report, Stage 3 Scheme Assessment Report, Engineering Assessment, Environmental Assessment, Traffic and Economic Assessment, Environmental Statement.
Level 2 : (Directorate/Owner):	Major Projects and Procurement
Level 3: (DfI HQ or HoBU Managed Function):	Strategic Road Improvements
Level 4 : (Work Areas)	Design, Major Works, Strategic Road Improvements, major road improvements

Purpose

The purpose of this DEM is to retain TD 37/93 – Scheme Assessment Reporting in amended form for use in the reporting of staged scheme assessments of major road improvement schemes in Northern Ireland as an interim measure following the withdrawal of TD 37/93 from the Design Manual for Roads and Bridges (DMRB).

Scope

TD 37/93 – Scheme Assessment Reporting as amended by this DEM is applicable to all major road improvement schemes in Northern Ireland when work commences on a new stage of scheme assessment. It will not be applicable to schemes where work has already commenced on a scheme assessment reporting stage. Departures from the requirements of this DEM may be considered in exceptional circumstances, subject to the agreement of the Department for Infrastructure (DfI) Roads Strategic Road Improvement (SRI) Programme Manager.

This DEM is aimed at:-

- a) DfI Roads staff involved in the delivery of major road improvement schemes.
- b) Consultants working on behalf of DfI Roads in the development of major road improvement schemes.

Background

In April 2015 Highways England began working on a project to review and update the complete DMRB with a view to having the full update complete by the end of March 2020.

As part of the review, it was decided that large parts of Section 1 of Volume 5 of the DMRB which covers the Assessment and Preparation of Road Schemes would be withdrawn from DMRB without replacement. This included TD 37/93 Scheme Assessment Reporting which has formed the basis for reporting of staged scheme assessments throughout the United Kingdom since its introduction in 1993.

After discussion with Highways England and Transport Scotland, DfI Roads decided as an interim measure to retain TD 37/93 in amended form for use on major road improvement schemes, including Strategic Road Improvement schemes, in Northern Ireland after its withdrawal from the DMRB.

This DEM should be read in conjunction with the DMRB and the Department for Transport's Transport Analysis Guide (WebTAG).

Amendments to TD 37/93

1. On the Contents page and all further instances throughout the document, replace "*Environmental Statement*" with "*Environmental Impact Assessment Report*".
2. In paragraph 1.1, replace "*the Overseeing Department's Project Manager*" with "*the Department for Infrastructure (DfI) Roads Strategic Road Improvement (SRI) Programme Manager*".
3. Replace paragraph 1.2 with the following: – "*This standard is applicable to major road improvement schemes in Northern Ireland.*"
4. In paragraph 1.3, add the following after "progressed beyond Stage 1." – "*this standard will be applicable only when work commences on a new stage.*" replace "*Design Organisations*" with "*The DfI Roads SRI Project Manager*" and replace "*their Overseeing Department's Project Manager*" with "*the DfI Roads SRI Programme Manager*".
5. In paragraph 2.2, replace "*Overseeing Departments*" with "*DfI Roads*".
6. In paragraph 2.4 at the end of the section on Stage 1 and the section on Stage 2, add the following: - "*Environmental considerations shall include reference to the relevant environmental impact assessment regulations and habitats regulations.*"

7. In paragraph 2.4 Stage 2, replace “*engineeering*” with “*engineering*”.
8. In paragraph 2.4 Stage 3, replace “*the Overseeing Department’s*” with “*Dfl Roads*” and replace “*section 105A of the Highways Act 1980 (England and Wales), Section 20A and 55A of the Roads (Scotland) Act 1984, or Article 39B of the Roads (Northern Ireland) Order 1980, implementing EC Directive 85/337*” with “*the relevant environmental impact assessment regulations detailed in Annex E and The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 as amended by The Conservation (Natural Habitats, etc.) (Amendment) (Northern Ireland) (EU Exit) Regulations 2019 which implements the Habitats Directive 92/43/EEC and Wild Birds Directive 2009/147/EC (commonly called the Habitats Regulations)*”.
9. In paragraph 2.5 delete “*England, Wales and* ”, delete the sentence “*In Scotland, Stage 1 is known as preliminary assessment and Stage 2 as route option assessment.*”, replace “*all Overseeing Department’s*” with “*Dfl Roads*” and add the following sentence at the end, “*Progress to Stage 2 or Stage 3 will be subject to achieving Gateway 0 / Gateway 1 approval from the Roads & Rivers Management group (as appropriate).*”
10. In paragraph 2.6 replace “*the Overseeing Department*” and “*the Overseeing Department’s*” with “*Dfl Roads*”.
11. Renumber the second paragraph 2.5 as 2.7.
12. In paragraph 2.7 and all further instances throughout the document, replace “*Overseeing Department’s*” with “*Dfl Roads*”.
13. Renumber the second paragraph 2.6 as 2.8.
14. In the second paragraph 3.5 which should be renumbered 3.5A, replace “*DMRB 11.4.1*” with “*DMRB Sustainability and Environment discipline*”.
15. In paragraph 3.6 replace “*on a single, up to date, large scale Ordnance Survey map*” with “*on up to date, Ordnance Survey of Northern Ireland (OSNI) mapping*”
16. In paragraph 3.7, replace “*at Stage 1 is given in DMRB 11.3*” with “*is given in DMRB Sustainability and Environment discipline*”.
17. Add the following to the start of paragraph 3.11: - “*The requirements and procedures set out in DMRB Sustainability and Environment discipline shall be followed when screening, scoping, assessing,*

reporting and monitoring the environmental effects of projects in line with the requirements of the EIA Directive”.

18. Delete the following sentence from paragraph 3.11: - *“DMRB 11.4.4 describes how an Environmental Impacts Table should be compiled.”*
19. In paragraph 3.13 delete *“(local authority as well as trunk road authority)”*.
20. In paragraph 3.17, delete *“(see TAM (England, Wales and Northern Ireland) or STEAM (Scotland))”*.
21. Replace paragraph 3.22 with the following: - *“Forecasts of conditions on the existing network should be provided. These forecasts will usually be derived by applying suitable growth factors to base year values. The basis for the forecast growth rates used should be stated, confirming consistency with the DfI Strategic Transport Model being developed and maintained by DfI Transport Planning and Modelling Unit (TPMU). Until the TPMU model is verified, growth derived from the TEMPRO-NI model or Road Traffic Forecasts (RTF) may also be acceptable. In all cases, TPMU should be consulted before progressing. The appropriate forecast scenarios should be presented. Where appropriate, the results of sensitivity tests based on other forecast growth rates should be reported, together with reasons for doing them. Reference should be made to best practice documentation including DfT Transport Analysis Guidance where appropriate.”*
22. In paragraph 3.26 delete *“(trunk or local authority)”*.
23. In paragraph 4.10, delete sentence *“Further guidance on this is given in DMRB 11.4.2.”*
24. In paragraph 4.11 replace *“This information should be brought together on a single up to date, large scale Ordnance Survey map.”* with *“This information should be brought together on an up to date, OSNI mapping background.”*
25. In paragraph 4.12 replace *“a trunk road scheme is contained in DMRB 11.3”* with *“a major road scheme is contained in DMRB Sustainability and Environment discipline”*.
26. In paragraph 4.14, delete *“(DMRB 11.4.4)”*.
27. Add a new paragraph *“4.16A Where a project is likely to have a significant effects on the environment in another EEA State, the*

Department must comply with the procedures set out in Article 67B of The Roads (Northern Ireland) Order 1993 as amended.

28. *In paragraph 4.18 delete "DMRB 11.4.4 describes how".*
29. *Replace heading to paragraph 4.20 with "Statutory Consultations"*
30. *In paragraph 4.20 delete "Where these bodies have expressed their view on the route options "In Confidence", these should not be recorded in the Stage 2 report."*
31. *In paragraph 4.21 delete "(local authority as well as trunk)".*
32. *In paragraph 4.22 delete "These reports are not formally requested in Scotland. However, the information will have been gathered using guidance provided in STEAM Part B and hence should be reported upon fully. In addition, Technical Memorandum SH2/91 (DMRB 5.1) gives further advice on Reporting of Results in Scotland, including the use of the 'Appendix A' Form."*
33. *Replace paragraph 4.35 with "Not used."*
34. *Replace paragraph 4.36 with "The DfI Strategic Transport Model is to be the main forecasting tool for inter-urban major road schemes in NI, but until the TPMU model is verified, the TEMPRO-NI model may be used to estimate changes in demand. Specific area studies may also be relevant. In all cases (including urban as well as inter-urban schemes), TPMU must be consulted at project initiation and at key milestones to agree the forecasting methodology. This may include the appropriate use of the DfI Strategic Transport Model either "as is" or as a basis for a scheme-specific model."*
35. *In paragraph 4.40, delete "(both trunk and local authority)" and replace "(see the COBA (in England, Wales and Northern Ireland) or NESAs (in Scotland) manuals for further guidance)." with "(see the Transport Users Benefit Appraisal (TUBA) and Cost Benefit Analysis (COBA) manuals for further guidance)."*
36. *In paragraph 4.41 replace "(for high and low growth, for the opening year and at least one other forecast year)" with "(for appropriate forecast scenarios, for the opening year and at least one other forecast year)".*
37. *In paragraph 4.42 replace "For schemes using COBA (in England, Wales and Northern Ireland) or NESAs (in Scotland) for economic assessment, these journey times should be derived from the COBA or NESAs analysis; for other economic assessment techniques, they*

should come from the traffic model.” with “For schemes using COBA for economic assessment, these journey times may be derived from the COBA analysis; for other economic assessment techniques (such as TUBA), they should come from the traffic model. TPMU must be consulted on the forecasting methodology (including derivation of journey times).”

38. In paragraph 4.43, replace “for both high and low growth should be reported.” with “for appropriate forecast scenarios should be reported.”
39. Replace paragraph 4.47 with “The methods used for economic analysis should be described. The preferred method for economic analysis will be the Department for Transport’s (DfT) TUBA software. COBA may be used in appropriate circumstances. The description should cover both the principles (eg fixed or variable matrix) and the practical aspects. Practical matters include: the geographical area of impact, the extent of any time periods not included (eg night-time, weekends); the handling of seasonality; interpolation between forecast years and extrapolation beyond the last forecast year; accident modelling; non-standard values of time, vehicle operating costs etc; and any other significant differences from a TUBA or COBA analysis.”.
40. After paragraph 4.48 add a new paragraph 4.48A as follows: - “Where TUBA is used for economic analysis, Benefits arising due to changes in the number and type of accidents should be appraised and quantified using DfT’s standard ‘Cost and Benefit to Accidents – Light Touch’ (COBALT) software.”
41. Replace paragraph 4.50 with “For each option, the results of the economic analysis should be reported in tabular form. The layout of these should be consistent with best practice for presenting the results of a scheme appraisal as part of a business case.”
42. In paragraph 4.51 replace “Results for both high and low growth should be given.” with “Results for appropriate forecast scenarios should be given.”
43. Add the following to the start of paragraph 5.1: - “This should report the conclusions of the Stage 2 Assessment Report and the basis of the decision to proceed further with a particular route. Where at Stage 3, an Environmental Impact Assessment Report is produced...”
44. In paragraph 5.2, replace “DMRB 11.4.3” with “DMRB Sustainability and Environment discipline” and “(DMRB.11.4.3.3)” with “(DMRB Sustainability and Environment discipline)”

45. In paragraph 5.3, replace “DMRB 11.4.3” with “DMRB Sustainability and Environment discipline.”
46. Add a new paragraph “5.3A *Where in addition to a requirement for an environmental impact assessment to be carried out, there is a requirement to carry out a Habitats Regulation Assessment, the Department must, where appropriate, ensure that the Habitats Regulation Assessment and the environmental impact assessment are coordinated.*”
47. In paragraph 5.7 replace “descripton” with “description”.
48. Remove the text in Chapter 6 References and replace with: -
- “Documents referenced here are the correct versions as at the date of publication of DEM 182/20. The use of older or newer versions should be agreed with the DfI Roads SRI Programme Manager.*
1. *The Design Manual for Roads and Bridges Sustainability and Environment discipline”.*
 2. *RTF: Road Traffic Forecasts 2018: Department for Transport: 2018*
 3. *COBA: COBA2018 Manual: Highways England: 2018*
 4. *COBALT – Cobalt User Manual: DfT: 2018*
 5. *TUBA – TUBA User Manual: DfT: 2019*
 6. *QUADRO: QUADRO2018 Manual: Highways England: 2018”*
49. In Chapter 7 remove the first three boxes. In the fourth box delete the text and replace with the following: -
- “Deirdre Mackle
Director of Engineering
Department for Infrastructure – Roads
Clarence Court
10-18 Adelaide Street
BELFAST
BT2 8GB”*
50. In Annex C Part 1 replace “DMRB 11.4” with “the DMRB Sustainability and Environment discipline”.
51. In Annex D, add the following to the following as a new second sentence: - “The layout of these should be consistent with best practice for presenting the results of a scheme appraisal and should be adapted

to reflect the requirements of DMRB Sustainability and Environment discipline.”

52. Annex E should be replaced with:

“ ***ENVIRONMENTAL IMPACT ASSESSMENT
REPORT¹***”

Legal Basis of the Environmental Impact Assessment Report

1.1 European Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment has been transposed in respect of trunk road projects into law in Northern Ireland by Part V of The Roads (Northern Ireland) Order 1993 as amended by The Roads (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 and The Roads (Environmental Impact Assessment) (Amendment) (Northern Ireland) (EU Exit) Regulations 2019. In respect of non-trunk roads projects, the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 as amended by The Planning (Environmental Assessments and Miscellaneous Amendments) (EU Exit) (Northern Ireland) Regulations 2018 are applicable.

If the Department for Infrastructure is considering a project for constructing or improving a road, the DfI Roads Project Manager must consult with the relevant authority², before details of the project are published, to allow a determination to be made whether or not the project should be subject to an Environmental Impact Assessment. Where the relevant authority makes a determination, it must publicise that determination, including any accompanying statement of reasons, on the public register or a website used by the Department for the purpose of giving information to the public about projects (as appropriate).

Purpose of the Environmental Impact Assessment Report

1.2 An Environmental Impact Assessment Report (EIAR) is prepared for the relevant authority in accordance with the relevant regulations, which assesses the impact of the project on the environment. The purpose of an EIAR is to create a comprehensive document drawing together all the relevant

¹ For projects assessed under the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017, this is called an Environmental Statement.

² For projects advanced under the Roads Order, the Department for Infrastructure will be the relevant authority. For projects advanced under planning legislation, the relevant authority will be the local Council's Planning Office or the Department for Infrastructure's Strategic Planning Directorate as applicable.

information, as specified in the regulations, about the scheme including plans, maps and figures by subject area and a detailed assessment of environmental effects by subject area and which includes at least:

- (a) a description of the project comprising information on the site, design, size and other relevant features of the project;*
- (b) a description of the likely significant effects of the project on the environment;*
- (c) a description of the features of the project and measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;*
- (d) a description of the reasonable alternatives studied by the Department which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;*
- (e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d) above in terms which are readily understandable by members of the public. The non-technical summary should be bound in to the main volume, but also be available as a free-standing document.*
- (f) any additional information specified in Annex IV / Schedule 4 (as appropriate, see para 1.1) relevant to the specific characteristics of the particular project or type of project and to the environmental features likely to be affected'*

1.3 One of the functions of an Environmental Impact Assessment report, in addition to 1.2 above, is to ensure that the public concerned and the consultation bodies are given a reasonable opportunity to express their opinion before the relevant authority decides whether to give a consent or authorisation which permits the project to proceed.

1.4 Consultee responses and those of the public concerned must be shown to have been considered in making the final decision about the proposed project.

Further Information

1.5 Further information on the Environmental Impact Assessment report (which DMRB and planning regulations refer to as an Environmental Statement) is given in DMRB Sustainability and Environment discipline.

1.6 Further information on the Environmental processes to be followed for schemes being advanced under the Roads Order is contained in DEM 176/20 - DfI Roads Environmental Impact Assessment – Review Procedure.

Procedure

TD 37/93 – Scheme Assessment Reporting is attached as Appendix A to this document.

Equality

An EQIA screening analysis was completed and no Section 75 equality issues arise from the introduction of this Memorandum as it sets out the general requirements for reporting of scheme assessment process for major roads schemes.

Rural Needs and Human Rights Act

As this DEM implements a process a Rural Needs Impact Assessment and a Human Rights Impact Assessment are not required.

Each scheme's impacts should be considered separately.

Equality, Rural Needs and Human Rights impacts on the schemes which are to be reported on will be considered separately at a programme and / or scheme specific level in line with current provision.

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APPENDIX A

TD 37/93 – Scheme Assessment Reporting