

# **High Speed Rail (Crewe – Manchester)**

**Supplementary Environmental Statement 1 and  
Additional Provision 1 Environmental Statement**

**Volume 1: Introduction and methodology**

# **High Speed Rail (Crewe – Manchester)**

**Supplementary Environmental Statement 1 and  
Additional Provision 1 Environmental Statement**

**Volume 1: Introduction and methodology**



Department  
for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited  
Two Snowhill  
Snow Hill Queensway  
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

Website: [www.hs2.org.uk](http://www.hs2.org.uk)

A report prepared for High Speed Two (HS2) Limited:

**ARUP+** ERM | FOSTER + PARTNERS | JACOBS  
RAMBOLL | TYPISA | COSTAIN

**MWJV**

Mott MacDonald | WSP

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2022, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v3.0. To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence/version/3](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3) **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk). Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing 100% recycled fibre.

# Contents

<b>Preface</b>	<b>3</b>
<b>Structure of the SES1 and AP1 ES</b>	<b>5</b>
<b>1 Introduction</b>	<b>8</b>
1.1 Background to High Speed Rail (Crewe – Manchester) and the need for SES1 and AP1 ES	8
1.2 Development of policy since the main ES	9
1.3 Scope of the SES1 and AP1 ES	10
1.4 Terminology used to describe the scheme	12
1.5 Structure of this volume	12
<b>2 Introduction to the SES1</b>	<b>13</b>
2.1 Introduction	13
2.2 New and updated environmental baseline information	13
2.3 Changes to the design or to the construction assumptions	14
2.4 SES1 design changes	14
2.5 Corrections to the main ES	15
2.6 Changes to Volume 1 as a result of the SES1 scheme	15
<b>3 Introduction to the AP1 ES</b>	<b>25</b>
3.1 Introduction	25
3.2 Summary of the AP1 amendments	25
<b>4 Scope and methodology</b>	<b>28</b>
4.1 Scope and methodology for the main ES	28
4.2 Scope and methodology for the SES1 and AP1 ES	28
<b>5 Approach to appendices in the SES1 and the AP1 ES</b>	<b>31</b>
<b>6 Approach to mapping in the SES1 and the AP1 ES</b>	<b>32</b>
<b>7 Approach to mitigation and monitoring in the SES1 and AP1 ES</b>	<b>34</b>
<b>8 Consultation on the SES1 and the AP1 ES</b>	<b>35</b>
<b>Tables</b>	
Table 1: Summary of SES1 design changes	14
Table 2: Fastest standard journey times reported in the main ES and SES1	18
Table 3: Summary of the AP1 ES amendments	25

**Figures**

Figure 1: Structure of the SES1 and AP1 ES	7
Figure 2: Community areas included in the scope of the SES1 and AP1 ES	11
Figure 3: High Speed Rail (Crewe – Manchester) community areas following the removal of the HS2 WCML connection under SES1 (SES1-004-001)	17
Figure 4: Phase One, Phase 2a and the Proposed Scheme (with growth) – peak hour one-way train	20
Figure 5: Peak hourly train flow assumptions for the operational sound, noise and vibration assessment	22

## Preface

This document is Volume 1 of the Supplementary Environmental Statement 1 (SES1) and Additional Provision 1 Environmental Statement (AP1 ES) for the High Speed Rail (Crewe – Manchester) scheme.

Since the High Speed Rail (Crewe – Manchester) Environmental Statement<sup>1</sup> (the main ES), was deposited in January 2022, the need for changes to the design and to the construction assumptions has been identified. New environmental baseline information has also become available since the main ES and the need for a number of corrections to the main ES has been identified.

An Additional Provision to the Bill is required for amendments to the scheme as proposed at Bill deposit.

The SES1 sets out the new or different significant effects that are likely to result from changes to the design and to the construction assumptions within the existing Bill powers and limits, and as a result of the new environmental baseline information and corrections. The AP1 ES reports any new or different significant effects likely to result from amendments to the Bill.

The SES1 and AP1 ES are being deposited as supplementary information under Private Business Standing Order 224A of the House of Commons and Standing Order 83A of the House of Lords (Comments on environmental statement).

The SES1 and AP1 ES includes changes to the design and to the construction assumptions and environmental baseline information for the section of the scheme in the following community areas:

- MA01: Hough to Walley's Green;
- MA02: Wimboldsley to Lostock Gralam;
- MA03: Pickmere to Agden and Hulseheath;
- MA04: Broomedge to Glazebrook; and
- MA05: Risley to Bamfurlong.

Changes to the design and to the construction assumptions and environmental baseline information for the remaining community areas and off-route works will be reported in a separate, future SES (referred to as SES2) and Additional Provision ES (referred to as AP2 ES).

The SES1 and AP1 ES has been prepared by persons who have sufficient expertise to ensure the completeness and technical quality of the ES. The qualifications of the teams responsible

---

<sup>1</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

for producing the SES1 and AP1 ES are set out in the High Speed Rail (Crewe – Manchester) SES1 and AP1 ES Competency Statement.

## **Consultation on the SES1 and AP1 ES**

The SES1 and the AP1 ES will each be the subject of a public consultation in accordance with Parliamentary procedure. Members of the public will have a period of at least 42 days within which to make representations following the deposit of the SES1 and AP1 ES in Parliament and the first publication of the necessary newspaper notices that follows.

There will also be a separate petitioning period in relation to AP1. Within this period, persons whose property or interests that are specially and directly affected by the amendments to the Bill for which powers are sought under AP1 will have the right to petition.

## Structure of the SES1 and AP1 ES

This report is part of the suite of documents that make up the SES1 and AP1 ES for High Speed Rail (Crewe – Manchester). The SES1 and the AP1 ES are separate documents, however, they are bound together and presented in a number of volumes shown in Figure 1 and described below:

- Non-technical summary (NTS). This provides a summary in non-technical language of the SES1 (Part 1) and the AP1 ES (Part 2). It presents a summary of any likely residual significant environmental effects (i.e. effects which are likely to remain after mitigation measures are put in place), both beneficial and adverse, which are new, different or have been removed compared to those reported in the ES submitted to Parliament in January 2022 in support of the hybrid Bill for the HS2 Phase 2b Western Leg ('the main ES');
- Glossary of terms, list of abbreviations and references. This contains any new or different terms and abbreviations used throughout the SES1 and the AP1 ES which are not already explained in the main ES and provides the references cited in each of the volumes listed below;
- Volume 1: Introduction to the SES1 and the AP1 ES. This introduces the supplementary environmental information and changes to the design and to the construction assumptions included within the SES1 and amendments within the AP1 ES. The report explains the environmental impact assessment (EIA) process which has been applied;
- Volume 2: Community area reports and map books. These report the supplementary environmental information and changes to the design and to the construction assumptions included within the SES1 (Part 1), amendments within the AP1 ES (Part 2) and any new, different or removed likely significant environmental effects arising from these changes and amendments in the following community areas:
  - MA01: Hough to Walley's Green;
  - MA02: Wimboldsley to Lostock Gralam;
  - MA03: Pickmere to Agden and Hulseheath;
  - MA04: Broomedge to Glazebrook; and
  - MA05: Risley to Bamfurlong.

These effects are compared to those reported in the main ES (as amended by the SES1 for the AP1 amendments). The maps relevant to each community area are provided in separate Volume 2 map books and should be read in conjunction with the relevant community area report;

The community area reports for MA04: Broomedge to Glazebrook and MA05 Risley to Bamfurlong are combined into one report for Volume 2 of the SES1 and AP1 ES;

Note that changes to the design and to the construction assumptions and environmental baseline information for the remaining community areas (MA06: Hulseheath to Manchester Airport, MA07: Davenport Green to Ardwick, MA08: Manchester Piccadilly Station) will be reported in a separate, future SES2 and AP2 ES;



## Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

### Volume 1: Introduction and methodology

- Volume 3: Route-wide effects. This describes any new or different likely significant environmental effects arising at a route-wide level from the supplementary environmental information and changes to the design and to the construction assumptions included within the SES1 (Part 1) and the amendments within the AP1 ES (Part 2) compared to those reported in the main ES (as amended by the SES1 for the AP1 amendments); and
- Volume 5: Appendices and map book. These contain supporting environmental information and associated maps.

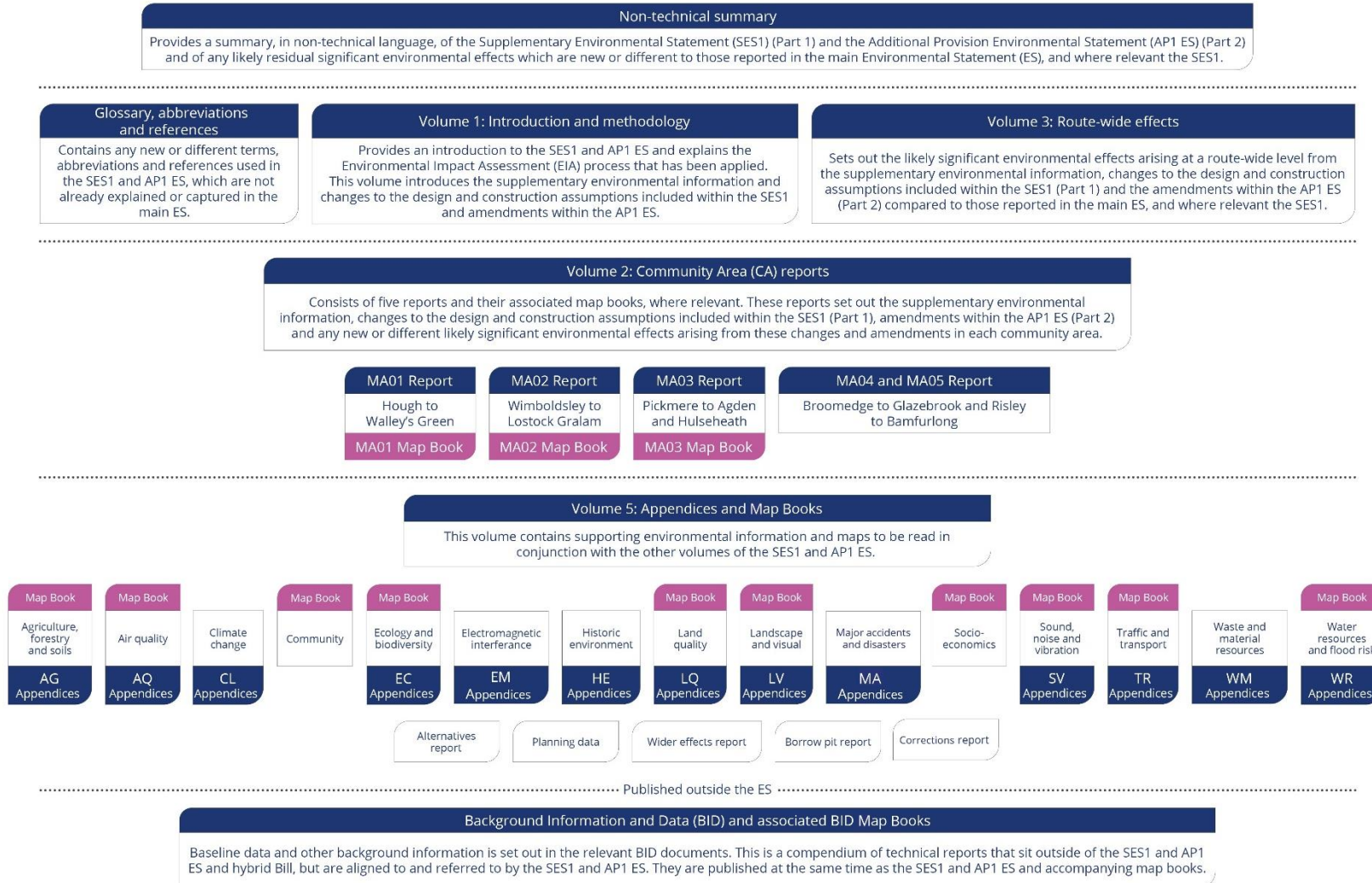
A Volume 4: Off-route effects report was produced as part of the main ES. An Off-route effects report has not been produced as part of this SES1 and AP1 ES. Any new or different off-route effects will be reported as part of SES2 and AP2 ES.

Certain reports and maps containing background information and data (BID) have been produced, which do not form part of the SES1 and AP1 ES. These documents are available online at <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-supplementary-environmental-statement-1-and-additional-provision-1-environmental-statement>. The BID documents and maps present background survey information and other relevant background material.

# Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

## Volume 1: Introduction and methodology

Figure 1: Structure of the SES1 and AP1 ES



# 1 Introduction

## 1.1 Background to High Speed Rail (Crewe – Manchester) and the need for SES1 and AP1 ES

- 1.1.1 The High Speed Rail (Crewe – Manchester) Bill ('the Bill') was submitted to Parliament together with an Environmental Statement (ES)<sup>2</sup> ('the main ES') in January 2022. If enacted by Parliament, the Bill will provide the powers to construct, operate and maintain the HS2 Phase 2b Western Leg.
- 1.1.2 The 'original scheme', that is the Bill scheme submitted to Parliament in January 2022, which was assessed in the main ES, included:
- the HS2 Phase 2b Western Leg from Crewe to Manchester, including:
    - new stations at Manchester Airport and Manchester Piccadilly;
    - a depot north of Crewe;
    - maintenance facilities north of Crewe and at Ashley; and
    - a connection onto the West Coast Main Line (WCML) near Bamfurlong;
  - the Crewe Northern Connection, connecting the route of the Proposed Scheme with the WCML and enabling future Northern Powerhouse Rail (NPR) services to connect with HS2;
  - provision for the NPR London to Liverpool, Manchester to Liverpool, and Manchester to Leeds junctions, to enable these future NPR routes to connect with HS2; and
  - a number of works at locations beyond the Western Leg route corridor, referred to as 'off-route works' which include:
    - works to enable HS2 trains to call at existing stations further north on the WCML; and
    - construction of depots to provide overnight stabling for HS2 trains serving the north of England and Scotland.
- 1.1.3 The original scheme will connect with Phase 2a<sup>3</sup> at Hough, to the south of Crewe.
- 1.1.4 The assessment of the original scheme assumes that construction will commence in 2025, with the start of operation in 2038. The SES1 and AP1 ES assume the same dates for assessment.

---

<sup>2</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

<sup>3</sup> Phase 2a comprises the section of the route between the West Midlands and Crewe. The High Speed Rail (West Midlands – Crewe) Bill and ES was deposited in Parliament in July 2017 and the Bill was enacted as the High Speed Rail (West Midlands – Crewe) Act 2021.

- 1.1.5 Changes made through the SES1 and AP1 ES do not change the principle of the original scheme in terms of provision of a route between Crewe and Manchester nor the essential components of the construction and operation of that scheme.
- 1.1.6 This document is Volume 1 of the SES1 and AP1 ES for the HS2 (Crewe – Manchester) scheme.
- 1.1.7 Following the deposit of the Bill, the need for a number of changes which do not require amendments to the Bill including design changes, changes to construction programme and assumptions, new environmental baseline information and corrections to the main ES have been identified. Any new, different or removed significant effects as a result of these changes, where these do not require amendments to the Bill, are reported in SES1.
- 1.1.8 There is also a requirement for amendments to the Bill to make changes to the original scheme and these require the submission of the AP1. The AP1 ES reports the likely significant environmental effects of these amendments, having taken into account the environmental information in the SES1.
- 1.1.9 These design changes and amendments have arisen through ongoing discussions with stakeholders and as a result of design refinements.
- 1.1.10 The SES1 and the AP1 ES are separate environmental statements, but have been produced as combined volumes. Both the SES1 and AP1 ES provide an update to the main ES, and should be read in conjunction with the main ES. The SES1 is presented first and the AP1 ES follows. The AP1 ES bases its comparison upon effects reported in the main ES, as amended by the SES1. The assessments also report any likely significant cumulative effects.

## 1.2 Development of policy since the main ES

- 1.2.1 The Integrated Rail Plan (IRP), published in November 2021<sup>4</sup>, sets out a plan for the development of train services across Great Britain and how the Government intends to bring together the development of HS2 Phase 2b, NPR, the Midlands Rail Hub, and other major rail schemes and programmes for the North and Midlands.
- 1.2.2 The IRP confirmed the Government’s commitment to build HS2 from Crewe to Manchester with new stations at Manchester Airport and Manchester Piccadilly. The IRP noted that there is a strong case for a connection to the WCML north of Crewe to resolve the capacity constraints and enable both Edinburgh and Glasgow to be served by high speed trains from the original scheme. The IRP referred to the Union Connectivity Review (UCR) which would look at the case for alternatives to the current route of the connection from the original scheme to the WCML near Bamfurlong.

---

<sup>4</sup> Department for Transport (2021) *Integrated Rail Plan for the North and Midlands CP490*, Her Majesty's Stationery Office, London. Available online at: <https://www.gov.uk/government/publications/integrated-rail-plan-for-the-north-and-the-midlands>

- 1.2.3 The UCR was published in November 2021<sup>5</sup>. Its aim was to review how transport connectivity can support economic growth and quality of life across the UK, and to make recommendations as to whether and how best to improve transport connectivity between the nations of the UK.
- 1.2.4 Evidence from the review suggested that alternatives to the HS2 WCML connection included in the original scheme could offer increased benefits. These benefits include reducing journey times, providing additional operational flexibility when scheduling freight services, and the potential for less disruption to the WCML than major upgrades. The review stated that further work is required to better understand the case for and against any such options and recommended the Government considers options for alternative connections north of Crewe between HS2 and the WCML.
- 1.2.5 The SES1 changes and AP1 amendments to the original scheme have been developed to reflect policy decisions by the Secretary of State in the light of the IRP and UCR. This is described further in Section 2.6 of this report. The proposed changes and amendments will continue to support the Government's overarching strategic objectives for a future integrated rail network that improves transport connectivity and enhances quality of life and economic opportunities.

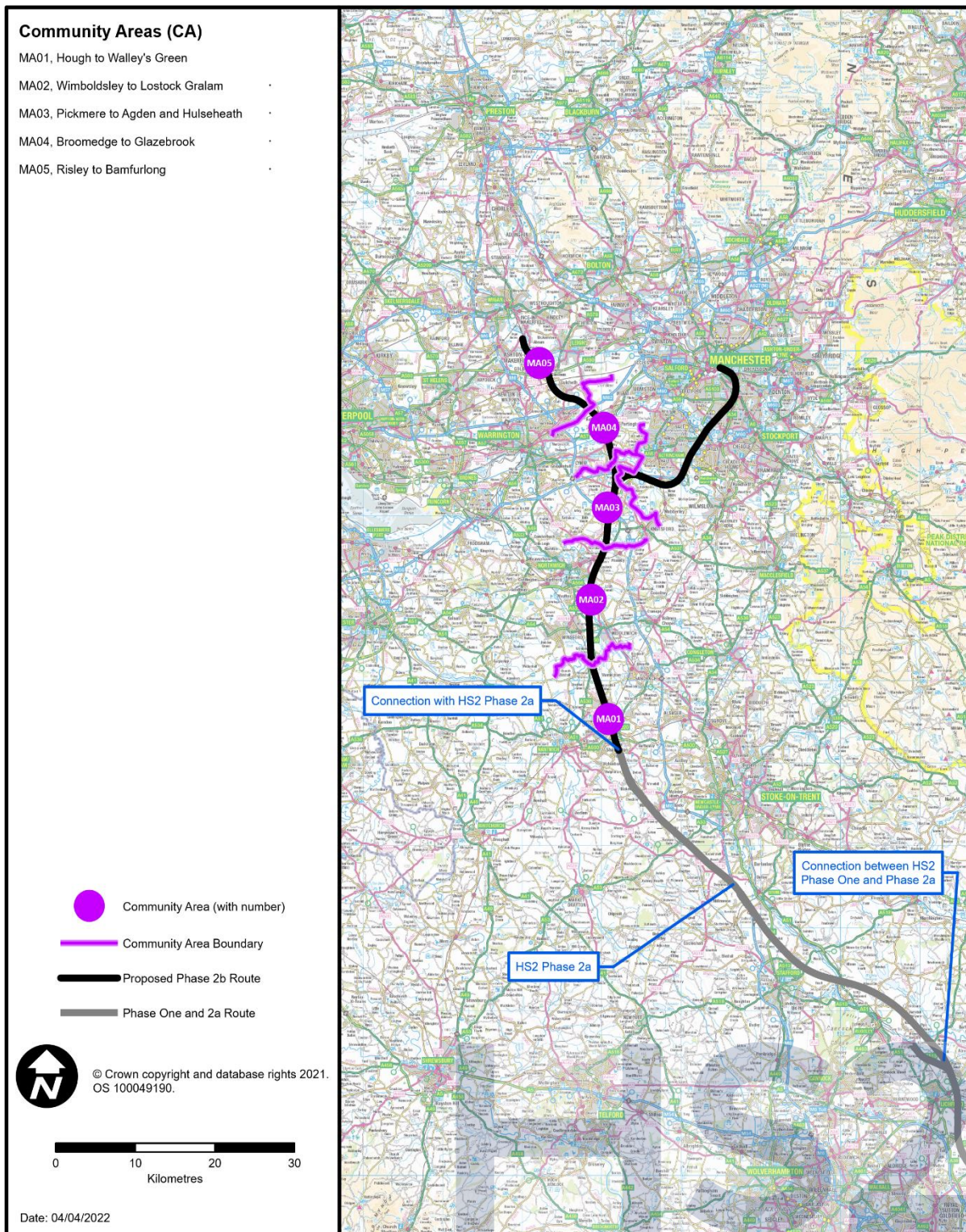
## 1.3 Scope of the SES1 and AP1 ES

- 1.3.1 The SES1 and AP1 ES report the assessment of changes to the design and to the construction assumptions, updates to the environmental baseline information and any corrections to the main ES for the section of the scheme in the following community areas:
- MA01: Hough to Walley's Green;
  - MA02: Wimboldsley to Lostock Gralam;
  - MA03: Pickmere to Agden and Hulseheath;
  - MA04: Broomedge to Glazebrook; and
  - MA05: Risley to Bamfurlong.
- 1.3.2 Changes to the design and to the construction assumptions and environmental baseline information for the remaining community areas and off-route works will be reported in a separate, future SES2 and AP2 ES.
- 1.3.3 The specific technical scope included in each of the assessments is described in the relevant volume or report.
- 1.3.4 Figure 2 shows the community areas that are included in the scope of the SES1 and AP1 ES.

---

<sup>5</sup> Department for Transport (2021) *Union connectivity review, Final Report*, Department for Transport, London. Available online at: <https://www.gov.uk/government/publications/union-connectivity-review-final-report>.

Figure 2: Community areas included in the scope of the SES1 and AP1 ES



## 1.4 Terminology used to describe the scheme

1.4.1 In order to differentiate between the original scheme and the subsequent changes, the following terms are used:

- ‘the SES1 scheme’ – the original scheme with the changes described in SES1 (that is the SES1 changes as defined below); and
- ‘the AP1 revised scheme’ – the SES1 scheme as amended by AP1 (that is the AP1 amendments as defined below).

1.4.2 The following terms are used to differentiate between changes included in the SES1 and those included in the AP1 ES:

- ‘SES1 design changes’ – changes to the scheme design reported in SES1 that do not require additional powers;
- ‘SES1 changes’ – all changes reported in SES1 (including SES1 design changes) that do not require additional powers. These may include new baseline information, changes to the design and construction assumptions, and corrections; and
- ‘AP1 amendments’ – amendments to the scheme reported in the AP1 ES that include requirements for additional powers in the Bill.

## 1.5 Structure of this volume

1.5.1 The remainder of this report is structured as follows:

- Section 2: introduction to the SES1, outlining the approach to:
  - new and updated environmental baseline information;
  - changes to the design or to the construction assumptions within the existing powers of the Bill;
  - SES1 design changes;
  - corrections to the main ES; and
  - changes to Volume 1 as a result of the SES1 scheme.
- Section 3: introduction to the AP1 amendments and the AP1 ES, including a summary of the AP1 amendments;
- Section 4: scope and methodology of the SES1 and the AP1 ES. The section outlines the approach applied to the environmental assessment of the changes and amendments contained within the SES1 and the AP1 ES, including the scope, methodology, assumptions and limitations to the assessment of environmental effects;
- Section 5: approach to the appendices within the SES1 and the AP1 ES;
- Section 6: approach to mapping within the SES1 and the AP1 ES;
- Section 7: approach to mitigation and monitoring associated with the SES1 and the AP1 ES; and
- Section 8: consultation on the SES1 and the AP1 ES.

## 2 Introduction to the SES1

### 2.1 Introduction

2.1.1 The SES1 presents an assessment of any new or different likely significant environmental effects, compared to those reported in the main ES, that result from:

- new and updated environmental baseline information;
- changes to the design or to the construction assumptions;
- SES1 design changes; and
- corrections relating to information within the main ES.

2.1.2 These changes can be made within the existing powers of the Bill and, therefore, no amendments to the powers conferred by the Bill are required for these changes.

### 2.2 New and updated environmental baseline information

2.2.1 Since the main ES, updated and new environmental baseline information has become available from surveys and desk-based research. This includes additional information concerning the environmental conditions for the following environmental topics:

- air quality: revised traffic data for the baseline year of 2018 and the future baseline years for construction and operation have been made available for the air quality assessment;
- climate change: updated assumptions around rolling stock energy consumption figures and updated greenhouse gas conversion factors to reflect the latest Department for Business, Energy and Industrial Strategy (BEIS) publication;
- community: updated baseline based on a review of residential properties, community resources, recreational facilities and open spaces;
- ecology and biodiversity: additional Phase 1 habitat surveys have been undertaken and new baseline data has become available;
- health: updated baseline based on a review of residential properties, community resources, recreational and educational resources and open spaces;
- land quality: updated environmental regulatory data including pollution incidents, radioactive and hazardous substances consents, environmental permits and ecological receptors;
- socio-economics: updates to future baseline and associated changes in job numbers;
- sound, noise and vibration: additional road traffic information used to update existing and future baseline sound modelling;
- traffic and transport: additional information has been obtained to develop the baseline and future models of traffic flows for certain roads/junctions;



- waste and material resources: updated national, regional and local baseline waste arisings and predicted trends, and an update to waste infrastructure assumptions; and
- water resources and flood risk: additional water quality data has been collected from a number of watercourses.

## 2.3 Changes to the design or to the construction assumptions

- 2.3.1 Changes to the design and to the construction assumptions where they result in new or different likely significant environmental effects from those reported in the main ES are provided in the Volume 2 community area reports, where relevant.
- 2.3.2 Changes to the indicative construction programmes from those presented in the main ES are also included in the Volume 2 community area reports.

## 2.4 SES1 design changes

- 2.4.1 Table 1 provides a list of the SES1 design changes. All of the changes are described in Part 1 of the relevant SES1 and AP1 ES Volume 2 community area report and shown in the relevant map books.

**Table 1: Summary of SES1 design changes**

SES1 design change	Community area	Report where change is described
Enhancement of landscape mitigation at Walley's Green embankment (SES1-002-001)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Removal of MA02 Borrow Pit D, north of Moss Lane (SES1-002-002)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02) [Also described in the SES1 and AP1 ES Volume 5: Appendix: CT-008-00000: Borrow Pit report]
Change to the diversion of a Scottish Power 132kV underground route, near Belt Wood (SES1-003-001)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Changes to the Peacock Lane realignment (SES1-003-002)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Removal of the HS2 West Coast Main Line connection (SES1-004-001) <sup>6</sup>	MA03 MA04 MA05	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03) SES1 and AP1 ES Volume 2, Broomedge to Glazebrook (MA04) and Risley to Bamfurlong (MA05) Community Area report

<sup>6</sup> The HS2 WCML connection is also referred to in other published material as the 'Golborne Link' or 'Golborne Spur'. Where reference in the main ES and SES1 and AP1 ES is made to the HS2 WCML connection, this is the same connection as referred to in other documents as the Golborne Link or Golborne Spur.

## 2.5 Corrections to the main ES

- 2.5.1 Since the main ES, the need for some corrections to the contents has been identified. These are set out in Section 2 of each community area report of the SES1, where the corrections relate to a Volume 2 community area report; in Volume 3 where the corrections relate to route-wide matters reported in Volume 3; and in Volume 5: Appendix CT-009-00000 where the corrections relate to Volume 5.
- 2.5.2 Corrections have been made where it was identified that they had the potential to result in a new or different significant effect from that reported in the main ES, or where a factual inaccuracy relating to a significant effect was identified. The community area reports may also clarify elements of the scheme description reported in the main ES. The information provided in the relevant reports identifies the location of the text that is subject to the correction, the reason for the correction, the text from the main ES, and identifies whether the correction changes a significant effect. Where relevant, these corrections have been taken into account in the technical assessments contained within the SES1 and AP1 ES.

## 2.6 Changes to Volume 1 as a result of the SES1 scheme

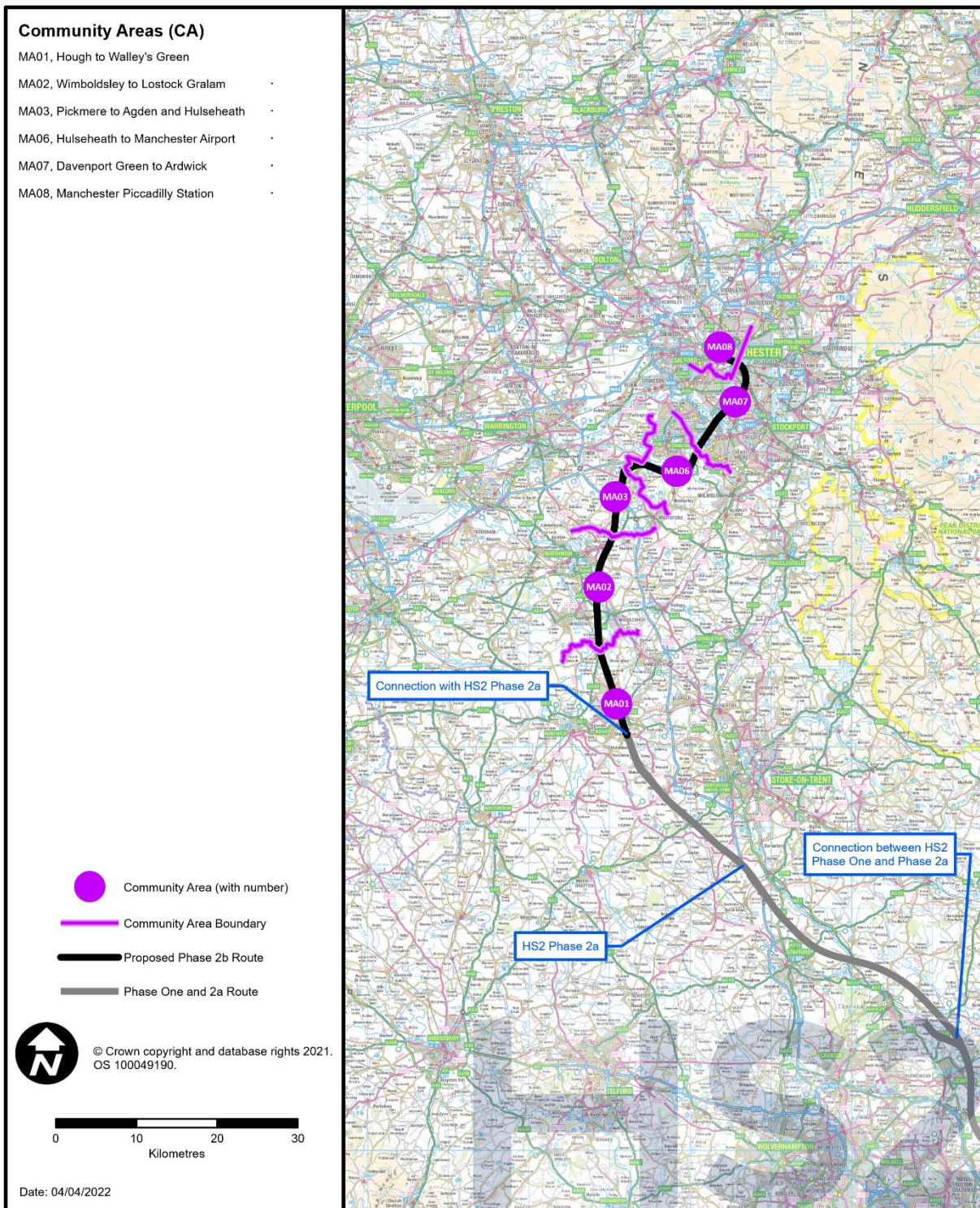
- 2.6.1 This section considers the removal of the HS2 WCML connection (SES1-004-001) and the removal of MA02 Borrow Pit D, north of Moss Lane (SES1-002-002) as these are relevant to the content reported in Volume 1 of the main ES.

### **Removal of the HS2 WCML connection**

- 2.6.2 Since the deposit of the Bill, the Secretary of State has decided to remove the HS2 WCML connection, included in the original scheme, from the High Speed Rail (Crewe – Manchester) Bill and has given this commitment to Parliament. As a result, the WCML connection from near Hoo Green junction on the HS2 network to the Lily Lane junction, near Golborne, on the WCML will be removed. Modifications to the existing WCML for the HS2 WCML connection in this location, as reported in the main ES, would no longer be required. The removal of the HS2 WCML connection will be a SES1 design change (SES1-004-001). A description of this change and the resultant effects are reported in Part 1 of the following SES1 and AP1 ES Volume 2 community area reports:
- SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03); and
  - SES1 and AP1 ES Volume 2, Broomedge to Glazebrook (MA04) and Risley to Bamfurlong Community Area report (MA05).
- 2.6.3 A connection to the WCML will still be provided through the Crewe Northern Connection (see Volume 2, Community Area report: Hough to Walley's Green (MA01) of the main ES).

- 2.6.4 The Secretary of State is actively considering options for a future connection to the WCML north of Crewe, which will be separate to the High Speed Rail (Crewe – Manchester) Bill. Once further work has been completed and a decision made about which option to pursue, this will be promoted through a separate consenting process as necessary.
- 2.6.5 As described in Section 1.2, the HS2 Phase 2b Western Leg will continue to support the Government’s overarching strategic objective for a future connection. As a result, the Secretary of State has decided to retain the following within the High Speed Rail (Crewe – Manchester) Bill scheme:
- a new short stub to provide for a future connection at Hoo Green. This will enable any future connection to the WCML north of Crewe in this location to be built with minimal disruption to the operation of HS2; and
  - powers to undertake works at Preston and Carlisle stations and powers to provide a depot at Annandale (see Volume 4, Off-route works of the main ES) to serve a future connection to the WCML.
- 2.6.6 As a result of the removal of the HS2 WCML connection (SES1-004-001), some of the benefits of the original scheme as described in the main ES will not be delivered through powers sought in this Bill. This includes some additional benefits of the original scheme, over and above those benefits of Phase One and Phase 2a of HS2. These are benefits from faster journeys and increased capacity between England and Scotland; and improved reliability and released capacity on the WCML. However, the retention in the Bill of works at Hoo Green and on the WCML, works to stations at Carlisle and Preston and a depot at Annandale will facilitate the future delivery of a northern connection to the WCML and the benefits that future connection would bring.

Figure 3: High Speed Rail (Crewe - Manchester) community areas following the removal of the HS2 WCML connection under SES1 (SES1-004-001)



## Changes to journey times as a result of the SES1 scheme

2.6.7 The removal of the HS2 WCML connection has led to a change in some of the fastest standard journey times from those reported in the main ES. Table 2 provides a summary of the changes to the fastest standard journey times between key destinations ‘without’ and ‘with’ HS2 in operation. The information from the main ES is provided for context.

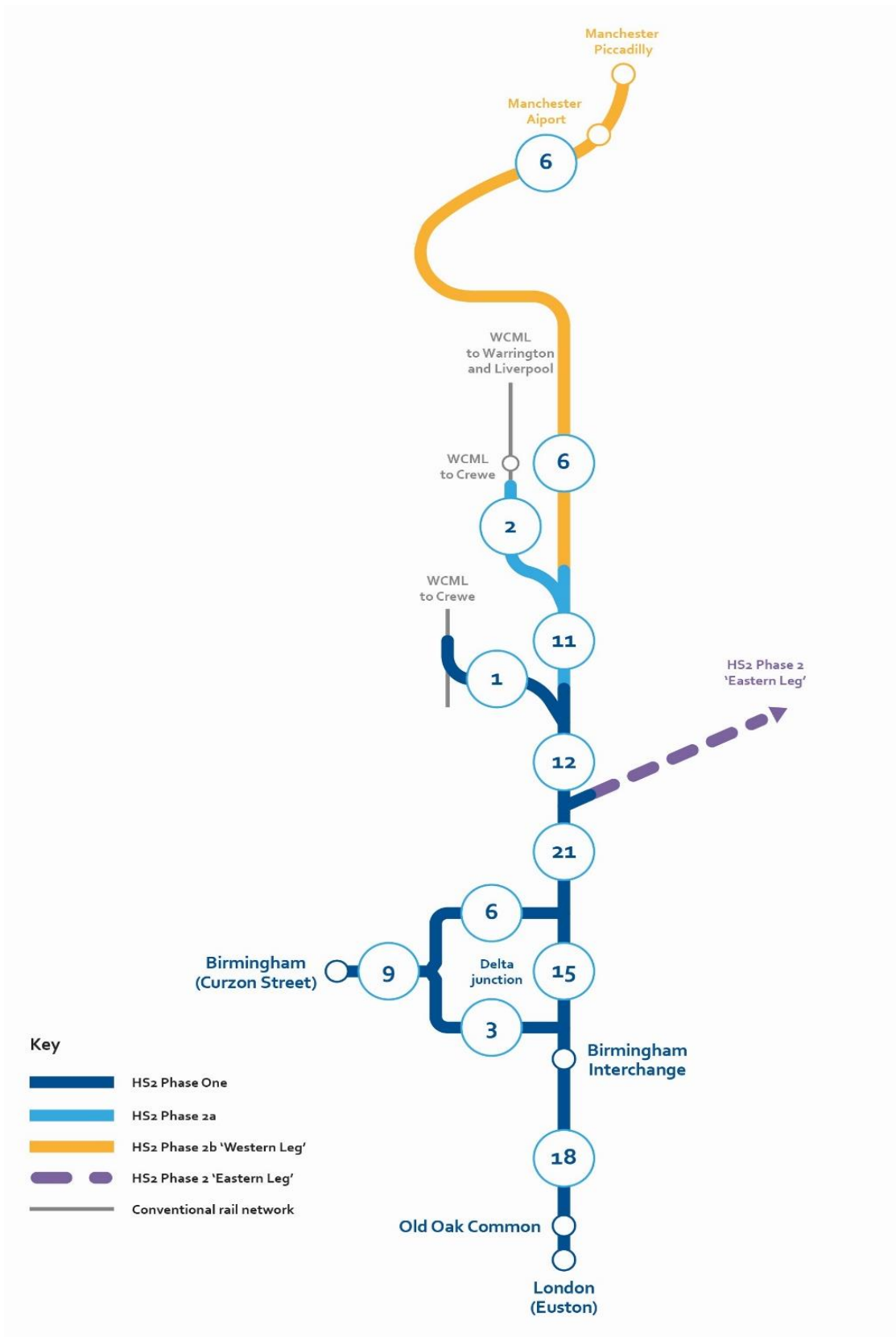
**Table 2: Fastest standard journey times reported in the main ES and SES1**

Train origin/destination	Train destination/origin	Current fastest standard hour journey time by conventional rail (hours:minutes) reported in the main ES	Fastest standard hour journey time with the original scheme (including Phase One and Phase 2a) (hours:minutes) reported in the main ES	Fastest standard hour journey time with the SES1 scheme (including Phase One and Phase 2a) (hours:minutes)
London	Preston	2:08	1:18	1:30
	Liverpool Lime Street	2:14	1:34	1:34
	Glasgow (Central)	4:30	3:46	3:48
	Edinburgh (Waverley)	4:22	3:42	4:07 (not served by HS2)
	Manchester Piccadilly	2:04	1:11	1:11
Birmingham	Glasgow (Central)	4:02	3:23	4:02 (not served by HS2)
	Edinburgh (Waverley)	4:07	3:20	4:06 (not served by HS2)

## Changes to train flows as a result of the SES1 scheme

- 2.6.8 Volume 1 of the main ES reported that HS2 conventional compatible trains would transfer between the original scheme and the conventional rail network via the HS2 WCML connection. With the removal of the HS2 WCML connection, HS2 trains will continue on the conventional rail network from Crewe to the North West and Scotland with one HS2 service per hour from London Euston to Glasgow.
- 2.6.9 As a result of the removal of the HS2 WCML connection, the number of HS2 trains transferring between the high speed network and the conventional rail network has been amended from those reported in the main ES.
- 2.6.10 Figure 4 shows the peak hour train flow in each direction that has been assumed in the SES1. The number of trains shown either side of each junction does not necessarily total the number in the subsequent section of the route of the Proposed Scheme. This is because the values shown are from a combination of flow scenarios describing the reasonable worst case for each route section, enabling flexibility for delivery and future operation.

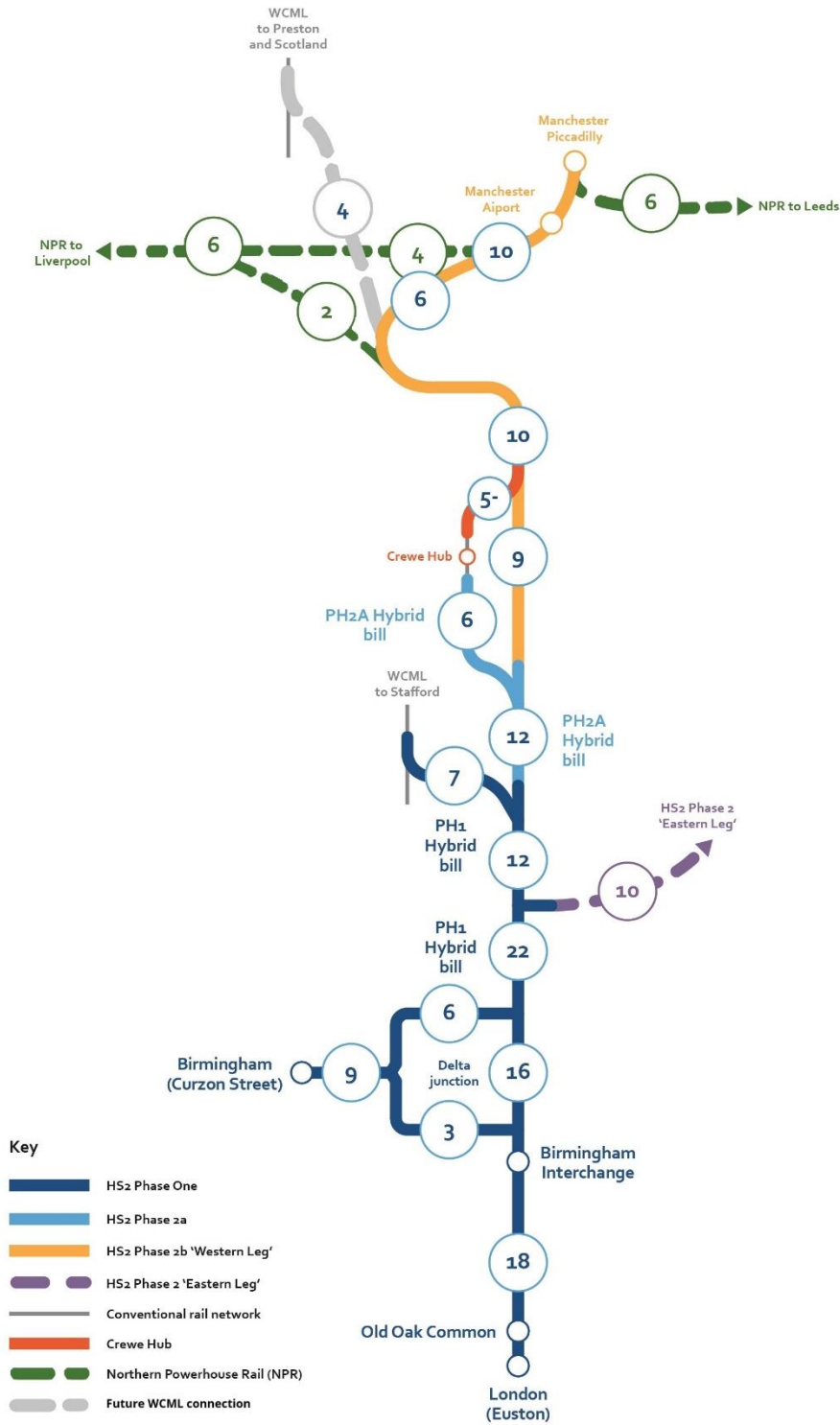
Figure 4: Phase One, Phase 2a and the Proposed Scheme (with growth) – peak hour one-way train



- 2.6.11 The operational effects of noise and vibration are assessed based on the reasonably foreseeable worst case train flows, which differ from the train flows shown in Figure 4.
- 2.6.12 Figure 5 shows the peak hour one-way train flow by route section across the SES1 scheme that has been assumed for the purpose of the sound, noise and vibration assessment. These are the same train flow numbers used in the assessment for the main ES. The number of trains shown either side of each junction does not necessarily total the number in the subsequent section of the route of the Proposed Scheme. This is because the values shown are from a combination of flow scenarios describing the reasonable worst case for each route section, enabling flexibility for delivery and future operation.
- 2.6.13 The assessment of sound, noise and vibration as a result of the removal of the HS2 WCML connection is described in Part 1 of the SES1 and AP1 ES Volume 2 Community Area reports (Volume 2, MA03: Pickmere to Agden and Hulseheath; and MA04: Broomedge to Glazebrook and MA05: Risley to Bamfurlong Community Area report).



Figure 5: Peak hourly train flow assumptions for the operational sound, noise and vibration assessment



## Changes to construction and operational job figures as a result of the SES1 scheme

- 2.6.14 As reported in Volume 1 of the main ES, it was estimated that the construction phase of the original scheme would generate 87,800 person years of construction employment opportunities<sup>7</sup> (equivalent to 8,800 full time construction jobs<sup>8</sup>). As a result of the SES1 changes, particularly the removal of the HS2 WCML connection, there will be a reduction in the amount of new employment created. It is estimated that 67,800 person years of construction employment (equivalent to 6,800 permanent full-time construction jobs) will be created. Details on the socio-economic assessment changes are reported in SES1 and AP1 ES Volume 3, Route-wide effects.
- 2.6.15 The total number of jobs potentially displaced by construction of the original scheme (6,500 jobs) will fall to 6,210 jobs displaced when compared to the main ES, as a result of the SES1 changes. This is as a result of the SES1 design change for the removal of the HS2 West Coast Main Line (WCML) connection (SES1-004-001), meaning that jobs in the Risley to Bamfurlong area (MA05 ) will no longer be displaced.
- 2.6.16 The main ES reported that in total, approximately 1,100 jobs may be lost route-wide from businesses directly and indirectly affected during the construction phase. With the SES1 changes, 1,050 jobs may be lost route-wide from businesses directly and indirectly affected may be directly and indirectly affected during the construction phase.
- 2.6.17 The total number of jobs that are estimated to be lost due to businesses potentially being displaced as a result of in-combination or isolation effects is expected to reduce from a total of 550 jobs to 470 jobs.
- 2.6.18 There will be a reduction from the forecast creation of 4,200 direct operational jobs as reported in the main ES to the forecast creation of 2,720 direct operational jobs as a result of the SES1 design change for the removal of the HS2 WCML connection. This includes changes to operational jobs associated with off-route works at as described in SES1 and AP1 ES Volume 1. This includes the removal of operational jobs associated with Annandale depot, Carlisle Station and Preston Station.
- 2.6.19 The HS2 WCML connection will be removed from the Bill, however, powers to undertake works at Preston Station, Carlisle Station and Annandale depot are to be retained. The operational benefits of new jobs at these locations would be realised by a future connection to the WCML.

---

<sup>7</sup> Construction labour is reported in construction person years, where one construction person year represents the work done by one person in a year composed of a standard number of working days.

<sup>8</sup> Based on the total construction person years generated by the original scheme and a ratio of 10 construction person years to one full time permanent job.

## Changes to material requirements as result of the SES1 scheme

- 2.6.20 As reported in Volume 1 of the main ES, the Bill provides for four borrow pits in the Wimboldsley to Lostock Gralam area (MA02) to provide material to construct elements of the original scheme.
- 2.6.21 The SES1 scheme will remove one of the four borrow pits reported in the main ES in the Wimboldsley to Gralam area (MA02). Further information is provided in Part 1 of the SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report and the SES1 and AP1 ES Volume 5, Appendix: CT-008-00000 Borrow pit report.

## 3 Introduction to the AP1 ES

### 3.1 Introduction

- 3.1.1 Since the main ES, the need for a number of amendments has been identified as a result of discussions with stakeholders and design refinements. These amendments include requirements for the acquisition or use of land outside the existing powers of the Bill, additional access rights, or other extensions of the powers conferred by the Bill. AP1 seeks powers to make these amendments.
- 3.1.2 The AP1 ES reports the likely new or different significant environmental effects of the amendments sought in the AP1. The comparison is based upon effects reported in the main ES, as amended by the SES1 as appropriate.

### 3.2 Summary of the AP1 amendments

- 3.2.1 Table 3 provides a list of the AP1 amendments, the community area in which these changes occur and the name of the report where a full description is provided. All of the AP1 amendments are described in Part 2 of the relevant Volume 2 community area report and are shown in the relevant Volume 2 map books.

**Table 3: Summary of the AP1 ES amendments**

AP1 ES amendment	Community Area	Report where change is described
Additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001)	MA01 and MA02	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01) SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the provision of a power supply to Crewe tunnel (AP1-001-002)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)
Change to Bill powers required for the diversion of Footpath Crewe 12/1 (AP1-001-003)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)
Additional land temporarily required for modifications to Warmingham Road and Groby Road junction (AP1-001-004)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)
Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane, Crewe (AP1-001-005)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)
Additional land permanently required for the provision of landscape earthworks adjacent to Footpath Minshull Vernon 8/1 accommodation overbridge (AP1-001-006)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)

**Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement**  
**Volume 1: Introduction and methodology**

<b>AP1 ES amendment</b>	<b>Community Area</b>	<b>Report where change is described</b>
Additional land permanently required for the provision of landscape earthworks adjacent to Copenhall Moss north embankment (AP1-001-007)	MA01	SES1 and AP1 ES Volume 2, Hough to Walley's Green Community Area report (MA01)
Additional land temporarily required for the provision of surface water drainage at A530 Nantwich Road satellite compound (AP1-002-001)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the provision of landscape mitigation planting at Wimboldsley (AP1-002-002)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Change to Bill powers required for the retention of Footpath Wimboldsley 1/1 between the Shropshire Union Canal towpath and Crewe North Rolling Stock Depot (AP1-002-003)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the provision of a shared use cycle and pedestrian path at Clive Green Lane (AP1-002-004)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land temporarily required for the provision of surface water drainage at Shropshire Union Canal North satellite compound (AP1-002-005)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Change to Bill powers required for the realignment of reception tracks at Crewe North rolling stock depot (AP-002-006)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land required for modifications to the A54 Chester Road/A530 Croxton Lane junction (AP1-002-007)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land required for the provision of temporary traffic signals around the M6 junction 18 (AP1-002-008)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for modifications to the A54 Middlewich Road and Chester Road junction (AP1-002-009)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for modifications to the A556 Shurlach Road and Birches Lane and provision of a shared use cycle and pedestrian path along A556 Shurlach Road (AP1-002-010)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the underground diversion of a 11kV Scottish Power Energy Network overhead line at Birches Lane (AP1-002-011)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the realignment and extension of Smoker Brook viaduct at the A556 Shurlach Road and Winnington Wood (AP1-002-012)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for modifications to A530 Griffiths Road and A559 Manchester Road junction (AP1-002-013)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)
Additional land permanently required for the provision of a combined HS2 maintenance access track from Linnards Lane and accommodation access for Warrens Lake Cottage (AP1-002-014)	MA02	SES1 and AP1 ES Volume 2, Wimboldsley to Lostock Gralam Community Area report (MA02)

**Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement**  
**Volume 1: Introduction and methodology**

<b>AP1 ES amendment</b>	<b>Community Area</b>	<b>Report where change is described</b>
Additional land permanently required to improve visibility to Flittogate Lane junction (AP1-003-001)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Additional land permanently required to modify HS2 access near Heyrose Farm (AP1-003-002)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Additional land permanently required to lengthen the realignment of the M6 between junction 19 and junction 20 (AP1-003-003)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Airspace rights required for the diversion of a National Grid 400kV overhead power line near Warrington Road (AP1-003-004)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Additional land temporarily required for the provision of surface water drainage at Bowden View satellite compound (AP1-003-005)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)
Additional land temporarily required for the provision of surface water drainage at Peacock Lane satellite compound (AP1-003-006)	MA03	SES1 and AP1 ES Volume 2, Pickmere to Agden and Hulseheath Community Area report (MA03)

## 4 Scope and methodology

### 4.1 Scope and methodology for the main ES

4.1.1 The Environmental Impact Assessment (EIA) Scope and Methodology Report (SMR) (Volume 5: Appendix CT-001-00001 in the main ES<sup>9</sup>) was published alongside the main ES in January 2022.

4.1.2 It sets out the scope and methodology for the EIA of the scheme. The assessments presented in the main ES were undertaken in accordance with it.

### 4.2 Scope and methodology for the SES1 and AP1 ES

#### Updates to scope and methodology

4.2.1 Assessment of the impacts and effects of the SES1 changes and AP1 amendments has been undertaken in accordance with the methodology outlined for each environmental topic in the EIA SMR, subject to the methodology amendments in the SES1 and AP1 ES described below.

4.2.2 Since the main ES, there has been an update to the methodology for the assessment of air quality. The air quality methodology was provided in a technical note in Part B of the EIA SMR for the main ES. The updated methodology is provided in SES1 and AP1 ES Volume 5, Appendix CT-001-00003.

4.2.3 Since the main ES, there has been new guidance for the assessment of traffic and transport. In the main ES, future baseline traffic volumes were calculated for 2030, 2038 and 2046. However, the 2046 future baseline in the main ES has been updated to 2051 in order to give the assessment greater resilience to long term growth in travel demand. Consequently, the operational assessment of the AP1 revised scheme has been undertaken for 2038 and 2051. A technical note setting out further details on the traffic and transport assessment methodology is provided in SES1 and AP1 ES Volume 5, Appendix CT-001-00004.

#### Scoping

4.2.4 Prior to the assessment, a scoping exercise was used to determine whether the SES1 changes and the AP1 amendments had the potential to result in any likely new or different significant environmental effects, separately and in combination, compared with those reported in the main ES.

---

<sup>9</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Environmental Impact Assessment Scope and Methodology Report*, Volume 5, Appendix: CT-001-00001. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

- 4.2.5 Any SES1 changes and AP1 amendments identified as having such potential were then subject to assessment, following the methodology outlined for each relevant environmental topic in the EIA SMR and any new or different significant effects arising from the changes and amendments are reported in the SES1 and AP1 ES Volume 2 community area reports.

## **Route-wide effects**

- 4.2.6 Each SES1 change and AP1 amendment has also been considered to determine its potential to give rise to any new or different significant route-wide effects. Potential significant route-wide effects are reported in SES1 and AP1 ES Volume 3, Route-wide effects. The climate change, major accidents and natural disasters, and waste and material resources assessments are only reported at a route-wide level rather than in the SES1 and AP1 ES Volume 2 community area reports. This follows the approach taken in the main ES. The scope of the SES1 and AP1 ES route-wide assessment is set out in SES1 and AP1 ES Volume 3, Route-wide effects.

## **Wider effects**

- 4.2.7 The Wider effects report in Volume 5 of the main ES (Appendix CT-005-000) assessed whether the power to deviate within statutory limits altered the significance of the effects as reported elsewhere in the main ES.
- 4.2.8 Wider effects refer to any changes to the likely significant effects, reported in the SES1 and AP1 ES, that may result if the scheme as built deviates from the centre line of the works within the limits of deviation, as permitted under parliamentary powers. The SES1 and AP1 ES contain mapping within the Volume 2 and 5 Map Books, which show the HS2 route on the centre line for the permanent works.
- 4.2.9 The limits of deviation shown on the Parliamentary plans and sections, as amended by the SES1 design changes and AP1 amendments and described in the Bill, enable the AP1 revised scheme to deviate slightly from the centre line of the works as may be required for reasons of engineering practicability following detailed design.
- 4.2.10 The Wider effects report for the SES1 and AP1 ES assesses whether the power to deviate within these statutory limits would alter the significant predicted effects reported elsewhere in the SES1 and AP1 ES by creating new or different significant effects (SES1 and AP1 ES Volume 5: Wider effects report, Appendix: CT-006-00000).

## **General assumptions and limitations**

- 4.2.11 A precautionary approach is used to identifying impacts and effects in instances where there is uncertainty or limited information.
- 4.2.12 Any assumptions and limitations that affect the assessment of significant environmental effects of the Proposed Scheme are described in the EIA SMR in the main ES, and relevant environmental topic sections within Volume 1, Volume 2 and Volume 3 of the main ES.



**Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement**  
Volume 1: Introduction and methodology

Where amendments have been made to the assumptions and/or limitations they are reported in Volume 2, community area reports or Volume 3, Route-wide effects of the SES1 and AP1 ES.

## 5 Approach to appendices in the SES1 and the AP1 ES

- 5.1.1 As with Volume 5 of the main ES, Volume 5 of the SES1 and the AP1 ES contains supporting environmental information in the form of appendices.
- 5.1.2 Generally, the SES1 and the AP1 ES appendices update the corresponding appendices within the main ES, and should, therefore, be read in conjunction with them. The SES1 and AP1 ES appendices do not repeat information contained within the relevant main ES appendices if that information does not require updating as a result of the changes within the SES1 and the AP1 ES (e.g. policy framework, information on methodologies etc.).
- 5.1.3 The Volume 5 appendices are generally structured as follows:
- Introduction;
  - Part 1: SES1;
    - new environmental baseline (where new environmental baseline has been collated related to the design reported in the main ES);
    - supporting data to the assessment of the SES1 design changes; and
  - Part 2: AP1 ES;
    - supporting data to the assessment of the AP1 amendments.
- 5.1.4 The appendices provide updated information where required for: agriculture, forestry and soils; air quality; ecology and biodiversity; electromagnetic interference; historic environment; land quality; landscape and visual; major accidents and disasters; sound, noise and vibration; town planning; traffic and transport; waste and material resources; and water resources and flood risk.
- 5.1.5 Certain reports and maps containing BID have been produced, which do not form part of the SES1 and AP1 ES. These documents are available online at <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-supplementary-environmental-statement-1-and-additional-provision-1-environmental-statement>. The BID documents and maps present background survey information and other relevant background material.

## 6 Approach to mapping in the SES1 and the AP1 ES

- 6.1.1 Construction (CT-05) and operation (CT-06) mapping have been produced to indicate SES1 design changes and AP1 amendments. In each case, the relevant map from the main ES has been reproduced showing the original scheme and a second map produced showing the SES1 design changes and the AP1 amendments. Map sheets have only been produced where there is an SES1 design change or AP1 amendment.
- 6.1.2 On both the CT-05 and CT-06 SES1 and AP1 ES maps, SES1 design changes and AP1 amendments are indicated with a label that points to the location of the change(s). The label shows the change or amendment number together with a brief description. SES1 design change labels are purple, while AP1 amendment labels are red.
- 6.1.3 The CT-05 maps use a colour code system for changes to land required for construction:
- additional land required for construction is highlighted with a solid red outline and red hatch fill;
  - land no longer required for construction is highlighted with a solid green outline and green hatch fill; and
  - where an AP1 amendment or SES1 design change covers a large area, the primary label may point to a red (AP1) or purple (SES1) extent indicator encompassing the change.
- 6.1.4 The CT-06 maps use a colour code system which highlights the extent of the change:
- SES1 design changes are highlighted with a purple extent indicator; and
  - AP1 amendments are highlighted with a red extent indicator.
- 6.1.5 CT-05 maps and CT-06 maps have not been produced for MA04 and MA05 due to the removal of the HS2 WCML connection.
- 6.1.6 The relevant environmental maps in the Volume 2 and 5 map books have been produced where a new or different likely residual significant environmental effect from those reported in the main ES is predicted to occur. Maps have also been produced when features, resources, receptors or viewpoints have been added or removed compared to the main ES.
- 6.1.7 Generally, three types of change are shown in the Volume 2 and Volume 5 SES1 and AP1 ES environmental maps, with the majority of maps using the following label styles to indicate significant effects:
- a removed or reduced effect shown by a label with green background;
  - an added or increased effect shown by a label with red background; or
  - a different effect shown by a label with grey background.
- 6.1.8 Each map with annotations has a legend used for explaining the text boxes for SES1 and AP1 ES receptors or significant effects that are removed, added or different.

- 6.1.9 Additional environmental baseline and survey data that have become available for ecology and biodiversity, traffic and transport and water resources and flood risk topics since the production of the SES1 and AP1 ES are also presented on the environmental maps, where relevant. These changes are indicated by an appropriate legend item.

## 7 Approach to mitigation and monitoring in the SES1 and AP1 ES

- 7.1.1 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/571) (the English EIA Regulations 2017)<sup>10</sup> require an ES to include “a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment”. Such measures are described generally in the ES as mitigation measures. The Regulations require a description, where appropriate, of any proposed monitoring arrangements of significant adverse effects on the environment. This monitoring is for significant adverse effects associated with both the construction and operational phases of a scheme.
- 7.1.2 The same approach to mitigation and monitoring measures described in the main ES applies to the effects set out in the SES1 and AP1 ES. This includes the draft Code of Construction Practice (CoCP) (see Volume 5, Appendix: CT-002-00000 in the main ES)<sup>11</sup>, which sets out measures to manage and control the effects of construction. The draft CoCP was submitted with the Bill.
- 7.1.3 The approach to mitigation and monitoring is also set out in Volume 1, Section 9 of the main ES. Any new or different site-specific mitigation measures are described within Volume 2 and Volume 3 of the SES1 and AP1 ES where required.

---

<sup>10</sup> *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*. SI 2017 No. 571, Her Majesty's Stationery Office, London. Available online at: [http://www.legislation.gov.uk/uksi/2017/571/pdfs/uksi\\_20170571\\_en.pdf](http://www.legislation.gov.uk/uksi/2017/571/pdfs/uksi_20170571_en.pdf).

<sup>11</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Draft Code of Construction Practice*, Volume 5, Appendix: CT-002-00000. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

## 8 Consultation on the SES1 and the AP1 ES

- 8.1.1 A formal public consultation is required by Parliament on both the SES1 and the AP1 ES. Members of the public will have a period of at least 42 days within which to make representations following the deposit of the SES1 and AP1 ES in Parliament and the first publication of the necessary newspaper notices that follow. Parliamentary officials will appoint an independent assessor who will summarise the issues raised in representations received from members of the public and provide a report to Parliament before the Third Reading of the Bill. The SES1 and AP1 ES and details of how to respond to the consultation can be viewed at <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-supplementary-environmental-statement-1-and-additional-provision-1-environmental-statement>.
- 8.1.2 There will also be a separate petitioning period in relation to AP1. Within this period, persons whose property or interests are specially and directly affected by the amendments to the Bill for which powers are sought under the AP1 have the right to petition against AP1.
- 8.1.3 More information on who may petition against AP1, and how to do so, is available on Parliament's website ([www.parliament.uk](http://www.parliament.uk)).









**High Speed Two (HS2) Limited**

Two Snowhill

Snow Hill Queensway

Birmingham B4 6GA

Freephone: 08081 434 434

Minicom: 08081 456 472

Email: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)