

High Speed Rail (West Midlands - Crewe)

Supplementary Environmental
Statement 2 and
Additional Provision 2
Environmental Statement
Competency Statement

Competency statement:

HS2 Phase 2a (West Midlands to Crewe)

Supplementary Environmental Statement 2 (SES2) and Additional Provision 2 Environmental Statement (AP2 ES)

This document is the Competency Statement for the HS2 Phase 2a Supplementary Environmental Statement 2 (SES2) and Additional Provision 2 Environmental Statement (AP2 ES) submitted in February 2019.

The team that prepared the SES2 and AP2 ES comprises HS2 Ltd technical specialists together with experts drawn from leading consultancies who have extensive experience in the production of Environmental Impact Assessments (EIAs) for a range of major infrastructure developments including high speed railways. The individual experts can demonstrate their competence through degree level qualifications, membership of relevant professional institutions and practical experience in undertaking EIAs.

The consultant team that prepared the SES2 and AP2 ES was led by:

- Nick Mitchard, Associate Director, Arup;
- Paul Johnson, Environmental Fellow, Arup; and
- Ian Gilder, Technical Director and Head of Planning, ERM.

Table 1 lists the qualifications and memberships of professional institutions of the technical discipline lead authors, the lead authors for each volume and the lead reviewers of the SES2 and AP2 ES.

The information in Table 1 is provided in support of the statement of competency set out in Volume 1 of the SES2 and AP2 ES.

Table 1: Qualifications and professional memberships of the experts responsible for the production of the HS2 Phase 2a SES2 and AP2 ES

Discipline	Qualifications and Membership of Professional Institutions
Agriculture, forestry and soils Technical lead author	BA (Hons) Geography, University of Durham. MSc Agricultural Economics, University of Reading. Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA). Member of the British Institute of Agricultural Consultants (MBIAC). Member of the British Society of Soil Science (M I Soil Sci).
Air quality Technical lead author	BSc (Hons) Chemical Engineering, University of Exeter. DIC Public Health Engineering, Imperial College, London. PhD Public Health Engineering, Imperial College, London. Fellow of the Institute of Air Quality Management (FIAQM). Member of the Institution of Chemical Engineers.

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Discipline	Qualifications and Membership of Professional Institutions
	<p>Member of the Institution of Environmental Science (MIEnvSc).</p> <p>Chartered Engineer (CEng).</p> <p>Chartered Scientist (CSci).</p> <p>Chartered Environmentalist (CEnv).</p>
<p>Climate Change (adaptation and resilience)</p> <p>Technical lead author</p>	<p>BEng (Hons) Building Services Engineering, Northumbria University</p> <p>MSc Water Resources Systems Engineering, Newcastle University</p> <p>Chartered Engineer (CEng)</p> <p>Member Chartered Institution of Building Service Engineers (MCIBSE).</p>
<p>Climate Change (carbon emissions)</p> <p>Technical lead author</p>	<p>BSc (Hons) Environmental Science, University of Stirling.</p> <p>MSc Environmental Management and Technology, Oxford Brookes University.</p> <p>Member of the Institute of Environmental Management and Assessment (MIEMA).</p> <p>Member of the Institution of Environmental Sciences (MIEnvSc).</p> <p>Chartered Environmentalist (CEnv).</p>
<p>Community</p> <p>Technical lead author</p>	<p>BA (Hons) Town and Country Planning, Manchester University.</p> <p>BPI Town and Country Planning, Manchester University.</p> <p>Member of the Royal Town Planning Institute (MRTPI).</p>
<p>Cultural heritage</p> <p>Technical lead author</p>	<p>MA (Hons) Archaeology, University of Edinburgh.</p> <p>Member of the Chartered Institute for Archaeologists (MCIfA).</p>
<p>Ecology and biodiversity</p> <p>Technical lead author</p>	<p>BA (Hons) Geography, University of Nottingham.</p> <p>MSc Environmental Management, University of Nottingham.</p> <p>Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM).</p> <p>Chartered Environmentalist (CEnv).</p>
<p>Electromagnetic interference</p> <p>Technical lead author</p>	<p>Electrical Engineering Apprenticeship, Royal Navy.</p> <p>BTEC Marine Engineering, Electrical, The Royal Navy School of Engineering, HMS Caledonia, Rosyth, Fife.</p> <p>Safety Critical System, Institution of Electrical Engineers.</p> <p>Railway Signalling and Control Systems, Institution of Electrical Engineers.</p> <p>Health and Safety at Work Management, Birmingham University.</p> <p>Electromagnetic Compatibility in Railways, York EMC Services.</p> <p>Fast Track Systems Engineering, University of Oxford.</p>
<p>Health</p> <p>Technical lead author</p>	<p>BSc (Hons) Environmental Conservation and Management with Chemistry, Nottingham Trent University.</p> <p>Dip Environmental Monitoring and Assessment, London South Bank University.</p> <p>Chartered Environmentalist (CEnv).</p>
<p>Land quality</p> <p>Technical lead author</p>	<p>BEng Civil and Structural Engineering, University of Sheffield.</p> <p>MSc Geotechnical Engineering, University of Surrey.</p> <p>Member of the Institution of Civil Engineers (MICE).</p> <p>Chartered Engineer (CEng).</p>

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Landscape and visual Technical lead author	BSc (Hons) Landscape Design and Plant Science, University of Sheffield. Dip Landscape Architecture, University of Sheffield. Chartered Member of the Landscape Institute (CMLI).
Major accidents and natural disasters Technical lead author	MEng (Hons) Civil Engineering, Imperial College, London. PhD Earthquake Loss Estimations: Modelling Losses due to Ground Failure, Imperial College London. Member of the Institution of Civil Engineers (MICE). Chartered Engineer (CEng).
Planning Technical lead author	BA (Hons) Geography, University of Cambridge. MA University of Cambridge. PGDip Town and Country Planning, Anglia Polytechnic University (Dip TP). Member of the Royal Town Planning Institute (MRTPI). Fellow of Royal Society of Arts (FRSA).
Socio-economics Technical lead author	BSc (Hons) Town Planning Studies, University of Wales. Dip Town Planning, University of Wales. MBA, University of Aston. MSc Advanced Energy and Environmental Studies, University of East London. Member of the Royal Town Planning Institute (MRTPI).
Sound noise and vibration Technical lead author	BEng (Hons) Engineering Acoustic and Vibration, University of Southampton. Member of the Institute of Acoustics (IOA). Chartered Engineer (CEng).
Traffic and transport Technical lead author	BSc (Hons) Mathematics and Economics, University of Salford. MSc (Hons) Transport Engineering and Planning, University of Salford. Member of the Chartered Institution of Highways and Transportation (MCIHT).
Waste and material resources Technical lead author	Dipl.Ing. (FH) Environmental Technology (Waste Management and Recycling Technology), Hochschule Bremen. Member of Constructing Excellence, Building and Environment Working Group. Member of the British Standards Institution Steering Group PAS908 Automated Waste Collection Systems. Member of the Institution of Civil Engineers (MICE) London Waste Panel. Chartered Engineer (CEng). Chartered Waste Manager. Chartered Water and Environmental Manager (CWEM).
Water resources and flood risk Technical lead author	MA (Hons) Geography, Edinburgh University. PGDip Engineering Hydrology, Newcastle University. Fellow of the Royal Geographical Society (FRGS). Fellow of the Royal Society of Arts (FRSA). Member of the Institution of Environmental Science (MIEnvSc). Member of the British Hydrological Society (BHS). Chartered Scientist (CSci). Chartered Water and Environmental Manager (CWEM).

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<p>Non-technical Summary and Volume 1</p> <p>Lead author</p>	<p>BA (Hons) Planning Studies, Oxford Brookes University.</p> <p>PGDip Town and Country Planning (EIA), Oxford Brookes University.</p> <p>Member of the Royal Town Planning Institute (MRTPI).</p>
<p>Volume 2</p> <p>Lead author</p>	<p>BSc (Hons) Environmental Pollution Science, University of Glamorgan.</p> <p>National Diploma in Pollution Assessment and Control, Sligo Institute of Technology.</p> <p>National Certificate in Food Science, Sligo Institute of Technology.</p> <p>Member of the Institution of Environmental Sciences (MIEnvSc).</p> <p>Chartered Environmentalist (CEnv).</p>
<p>Volume 3</p> <p>Lead author</p>	<p>BSc (Hons) Environmental Geography, University of York.</p> <p>MSc Sustainability (Environmental Consultancy and Project Management), University of Leeds.</p> <p>Member of the Institute of Environmental Management and Assessment (MIEMA).</p>
<p>Volume 5</p> <p>Lead Co-ordinator</p>	<p>MA (Hons) Town Planning, Heriot Watt University.</p> <p>MSc Environmental Assessment and Management, Oxford Brookes University.</p> <p>Chartered Member of the Royal Town Planning Institute (MRTPI).</p> <p>Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA).</p>
<p>Lead reviewer: Ian Gilder</p>	<p>BA (Hons) Geography, University of Cambridge.</p> <p>MA University of Cambridge.</p> <p>PGDip Town and Country Planning, Anglia Polytechnic University (Dip TP).</p> <p>Member of the Royal Town Planning Institute (MRTPI).</p> <p>Fellow of Royal Society of Arts (FRSA).</p>
<p>Lead reviewer: Paul Johnson</p>	<p>BSc (Hons) Botany, University of Hull.</p> <p>PhD Applied Ecology, University of Liverpool.</p> <p>Fellow of the Institution of Environmental Sciences (FIEnvSc).</p> <p>Fellow of the Royal Society of Biology (FSB).</p> <p>Member of the Royal Town Planning Institute (MRTPI).</p> <p>Chartered Scientist (CSci).</p> <p>Chartered Environmentalist (CEnv).</p> <p>Chartered Biologist (CBiol).</p>
<p>Lead reviewer: Nick Mitchard</p>	<p>BA (Hons) Business Studies, De Montfort University.</p> <p>MSc Environmental Management, University of Nottingham.</p> <p>Member of the Institution of Environmental Sciences (MIEnvSc).</p> <p>Associate Member of the Institute of Environmental Management and Assessment (AIEMA).</p> <p>Chartered Environmentalist (CEnv).</p>

