

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 2 and Additional Provision 2 Environmental Statement

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Competency statement: High Speed Rail (Crewe – Manchester) Supplementary Environmental Statement 2 and Additional Provision 2 Environmental Statement

1 Overview of the SES2 and AP2 ES delivery structure

- 1.1.1 The High Speed Rail (Crewe Manchester) Supplementary Environmental Statement (SES2) and the Additional Provision Environmental Statement (AP2 ES) submitted to Parliament in support of the High Speed Rail (Crewe Manchester) Bill in July 2023, has been prepared by a team of competent experts.
- 1.1.2 The team comprised 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 institutes and practical experience in undertaking EIA.
- 1.1.3 The consultancy support to carry out and report the EIA was structured into two teams, an 'Environmental Overview Consultant' (EOC) team and a 'Civils Design and Environmental Services' (CDES) team.
- 1.1.4 The EOC team was responsible for setting out the scope and methodology of the assessment, the technical guidance to ensure a consistent assessment, the form of reporting, the collation and assurance of the ES and the assessment of topics which have route-wide effects such as climate change and waste material and resources. The EOC was managed by the Arup+ consortium.
- 1.1.5 The CDES team was responsible for the assessment of effects on a geographic basis.
- 1.1.6 The assessment of the SES2 and AP2 ES was managed by the MWJV consortium and covered the following community areas:
 - MA01: Hough to Walley's Green;
 - MA02: Wimboldsley to Lostock Gralam;
 - MA03: Pickmere to Agden and Hulseheath;
 - MA06: Hulseheath to Manchester Airport;
 - MA07: Davenport Green to Ardwick; and
 - MA08: Manchester Piccadilly station.

- 1.1.7 The SES2 and AP2 ES also includes the assessment of the route-wide effects and the offroute works.
- 1.1.8 The following sections outline the consultancy teams, their qualifications and membership of relevant professional institutes.
- 1.1.9 This information is provided in support of the statements set out in Volume 1 of the SES2 and AP2 ES.

2 Environmental Overview Consultant team

2.1.1 The EOC team included an EIA management team, technical lead authors/managers for each Volume of the ES, and technical lead authors for each environmental topic which the EIA addresses. Table 1 outlines the team, their qualifications and membership of relevant professional institutes.

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
EIA management	
EOC Project Director	BA (Hons) Geography MSc Environmental Impact Assessment Chartered Environmentalist Fellow of the Institute of Environmental Management and Assessment Registered IEMA Environmental Auditor
Cross-AP Project Manager	BSc Environmental Science MSc Environmental Assessment and Management Chartered Environmentalist Member of the Institute of Environmental Management and Assessment
Cross-AP Technical Lead	BEng (Hons) Mineral Engineering Chartered Environmentalist Member of the Institution of Environmental Sciences
Lead author (Non-technical summary)	BSc (Hons) Environmental Sciences MSc Environmental Assessment and Management Practitioner Member of the Institute of Environmental Management and Assessment
Lead author (Volume 1)	BSc (Hons) Environmental Sciences MSc Environmental Assessment and Management Practitioner Member of the Institute of Environmental Management and Assessment
Lead manager (Volume 2)	BEng (Hons) Engineering Acoustics and Vibration MSc Planning Studies (Transport) Chartered Environmentalist Member of the Institute of Environmental Management and Assessment
Lead author (Volume 3)	BSc (Hons) Bachelor of Science Member of the Institution of Environmental Sciences
Lead author (Volume 4)	BA (Hons) Planning Studies Postgraduate diploma in Town and Country Planning Member of the Royal Town Planning Institute
Lead manager (Volume 5 and background information and data)	MA (Hons) Town Planning MSc Environmental Assessment and Management Chartered Member of the Royal Town Planning Institute Practitioner Member of the Institute of Environmental Management and Assessment

Table 1: Qualifications and professional memberships of the EOC team

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
Technical author	
Topic leads manager	BA (Hons) Urban Studies and Planning Postgraduate Diploma in Town and Regional Planning Cities Masters 'Urban Power and Influence' Boston University Chartered Town Planner Member of the Royal Town Planning Institute
Agriculture, forestry and soils	BSc (Hons) Geography PgCE Education Fellow of the British Institute of Agricultural Consultants Chartered Environmentalist Member of the Institution of Agricultural Engineers Practitioner Member of the Institute of Environmental Management and Assessment Member of the Institute for Apprenticeship's Agriculture, Environment and Animal Care Route Panel
Air quality	 BEng (Hons) Communication and Control PhD Air pollution modelling and neural networks Member of the IET (Institute of Engineering and Technology) Member of Environment Industries Commission: Air Quality and Noise Working Group Member of the Aviation Group Executive Board of the US Transportation Research Board (AV000) Chair of the US Transportation Research Board International Aviation Committee Member of the US Transportation Research Board Committee on Environmental Impacts of Aviation, AV030
Greenhouse gases	BSc (Hons) in Environmental Science MSc Environmental Management and Technology Chartered Environmentalist Associate Member of the Institute of Environmental Management Assessment Life Cycle Assessment Practitioner
Climate change (adaptation and resilience)	MSc Environmental Management BSc (Hons) Geography Certificate in Strategic Environmental Assessment Member of the Chartered Institution of Water and Environmental Management Chartered Water and Environmental Manager Chartered Environmentalist
Community	BSc (Hons) Regional Science (Economics and Human Geography) Postgraduate Diploma in Town and Regional Planning and Master of Civic Design Member of the Royal Town Planning Institute Professional Certificate in Management
Ecology and biodiversity	BSc (Hons) Biological Sciences Master of Philosophy (MPhil)

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
	Chartered Environmentalist Member of the Chartered Institute of Ecology and Environmental Management
Electromagnetic interference	BSc Electronic and Electrical Engineering Chartered Engineer Member of the Institution of Engineering and Technology
Health	BSc (Hons) Environmental Conservation and Management PG Dip Environmental Monitoring and Assessment Chartered Environmentalist Member of Institute of Environmental Management and Assessment
Historic environment	BSc (Hons) Heritage Conservation Member Chartered Institute for Archaeologists
Land quality	BSc (Hons) Geology MSc Geochemistry Fellow the British Geological Society Member of the Institution of Environmental Sciences Associate Member of the Institution of Environmental Management and Assessment and accredited auditor Chartered Geologist Chartership Assessor for the Geological Society
Landscape and visual	Bachelor of Landscape Architecture BA (Hons) Landscape Architecture Chartered Member of the Landscape Institute
Major accidents and disasters	MEng Civil Engineering PhD in Earthquake Hazard and Risk Chartered Engineer
Socio-economics	BSc (hons) in Marine Biology MSc in Environmental Management Associate Member of the Institution of Environmental Sciences
Sound, noise and vibration	BEng (Hons) Engineering Acoustics and Vibration Chartered Engineer Member of the Institute of Acoustics
Town Planning	BA (Hons) Urban Studies and Planning Postgraduate Diploma in Town and Regional Planning Cities Masters 'Urban Power and Influence' Boston University Chartered Town Planner Member of the Royal Town Planning Institute
Traffic and transport	BA (Hons), Geography Chartered Member of the Institute of Logistics and Transport Member of the Chartered Institute of Highways and Transportation Member of the Transport Planning Society
Waste and material resources	MEng Civil and Environmental Engineering Masters Chartered Environmentalist with Society for the Environment Chartered Member of the Chartered Institution of Waste Management

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
Water resources and flood risk	BSc (Hons) Earth Science
	MSc Hydrogeology - Groundwater resources, pollution and management
	Fellow of the Geological Society of London
	Chartered Geologist
	European Geologist
	Member International Association of Hydrogeologists

3 Civils Design and Environmental Services Consultancy team

3.1.1 The CDES team that prepared the documents was led by an EIA management team and technical authors. Table 2 outlines the team, their qualifications and membership of relevant professional institutes.

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
EIA management	
EIA Manager	BSc (Hons) Environmental Science MSc Environmental Impact Assessment, Auditing and Management Systems Member of the Institution of Environmental Sciences
SES2 and AP2 EIA Lead	MTCP (Hons) Town and Country Planning Chartered Member of the Royal Town Planning Institute
ES Lead Author	BSc Transport Management and Planning University of Science and Technology Chartered Member of the Royal Town Planning Institute
Technical author	
Agriculture, forestry and soils	BSc (Hons) Combined Sciences (Biology and Geography) MSc Landscape Ecology, Design and Management Fellow of the British Society of Soil Science Chartered Scientist
Farm Holdings	BSc (Hons) Agriculture Fellow of the British Institute of Agricultural Consultant
Air quality	BSc (Hons) Environmental Science Member of the Institution of Environmental Sciences Member of Institute of Air Quality Management
Community	BSc (Hons) Geography MSc Environmental Assessment Associate Member of Institute of Environmental Management and Assessment
Ecology and biodiversity	BSc (Hons) Ecology Postgraduate Certificate in Environmental Technology PhD (Ecology)
Electromagnetic interference	 BEng (Hons) Electrical Engineering MSc (Eng) (by research), "Optical Fibre Acoustic Monitoring of Partial Discharges in Gas Insulated Substations" PhD in Acousto-optic Monitoring of Electrical Power Equipment Using Chromatic Signal Processing Chartered Engineer Member of the Institution of Engineering Technology
Health	BSc (Hons) Geography

Table 2: Qualifications and professional memberships of the MWJV CDES team

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
	MSc Environmental Assessment, University of Brighton Associate Member of Institute of Environmental Management and Assessment
Historic environment	BA Ancient History and Archaeology MA Practical Archaeology MClfA Member Chartered Institute for Archaeologists
Land quality	BSc Physical Geography, Cheltenham & Gloucestershire College MSc Engineering Geology, University of Portsmouth Fellow of the Geological Society of London Member of the Institution of Environmental Sciences Chartered Environmentalist Specialist in Land Condition National Quality Mark Scheme for Land Contamination Management, Suitably Qualified Person
Landscape and visual	BSc Landscape design and plant sciences MA Landscape design, Sheffield University PgDip Environmental Management, University of London Chartered Member of the Landscape Institute
Major accidents and disasters	BSC (Hons) Environmental Science MSC Environmental Management NEBOSH National General Certificate in Occupational Health and Safety Member of the Institute of Environmental Management and Assessment (MIEMA) Chartered Environmentalist Technical Member of the Institute of Occupational Safety and Health
Planning	BSc in Property Economics MSc in Urban and Regional Planning MSc in Urban and Rural Design Chartered Member of the Royal Town Planning Institute Project Management Qualification, Association of Project Managers
Socio-economics	BSc Geography MSc Environmental Monitoring for Management Practitioner Member of Institute of Environmental Management and Assessment Chartered Geographer and Follow of the Royal Geographical Society
Sound, noise and vibration	BA (Hons) Environmental Management Post Graduate Diploma, Acoustics and Noise Control Chartered Scientist Member of the Institute of Acoustics Member of the Institute of Environmental Sciences
Sound, noise and vibration	BSc (Hons) Physics MSc in Acoustics Member of the Institute of Acoustics
Traffic and transport	MSC Traffic and Transport Planning Chartered member of Institute of Logistics and Transportation

Discipline	Discipline Lead's Qualifications and Membership of Professional Institute
	Member of the Institute of Highways and Transport
Waste and material resources	Meng, Civil and Environmental Engineering MCIWM, Chartered Waste Manager CEnv, Chartered Environmentalist
Water resources and flood risk	MEng (Hons) Chemical Engineering MSc Hydrogeology Member of the Chartered Institution of Water and Environmental Management Chartered Water and Environment Manager Chartered Environmentalist Member of the International Association of Hydrogeologists