

MachairWind Offshore Windfarm

Appendix 1.1 Competent Experts



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GLOSSARY OF ACRONYMS

Term	Definition
ATC	Air Traffic Controller
BA	Bachelor of Arts
BEng	Bachelor of Engineering
BSc	Bachelor of Science
CIfA	Chartered Institute for Archaeologists
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
GHG	Greenhouse Gas
HRA	Habitats Regulations Appraisal
IEMA	Institute of Environmental Management and Assessment
ISEP	Institute of Sustainability and Environmental Professionals
LVIA	Landscape and Visual Impact Assessment
MA	Master of Arts
MD-LOT	Marine Directorate Licencing and Operations Team
MEng	Master of Engineering
MMO	Marine Mammal Observer
MSc	Master of Science
PAM	Passive Acoustic Monitoring
PhD	Doctor of Philosophy
PEIR	Preliminary Environment Information Report
SEA	Strategic Environmental Assessment
SLVIA	Seascape, Landscape and Visual Impact Assessment
SPR	ScottishPower Renewables
TMZ	Transponder Mandatory Zone
UK	United Kingdom
UXO	Unexploded Ordnance
WFD	Water Framework Directive



GLOSSARY OF TERMS

Term	Definition
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed development over and above the existing circumstances (or 'baseline').
The Applicant	The legal entity submitting consent applications for the MachairWind Offshore Windfarm, namely MachairWind Limited.
The Project	MachairWind Offshore Windfarm including all its Development Areas and associated infrastructure.
Windfarm Development Area (WDA)	The application boundary within the OAA where consent will be sought for the proposed WDA infrastructure. The WDA infrastructure is subject to Section 36 consent and marine licence applications (generation and transmission) which are being applied for separately from the Offshore ECC infrastructure and OnTDA infrastructure.



1 COMPETENT EXPERTS

1. As per the Electricity Works (Environmental Impact Assessment (EIA)) (Scotland) Regulations 2017; and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations, the EIA must be prepared by 'competent experts' with details of that competency (including relevant expertise and qualifications of such experts) provided within the associated EIA Report (EIAR).
2. This information is provided for each of the Applicants' consultants in the following sections.

1.1 LEAD CONSULTANT

3. Haskoning has provided environmental, development and consenting support on over 18 GW of renewable energy projects across the UK. Their EIA activities and EIARs are accredited by the Institute of Sustainability and Environmental Professionals (ISEP) under the EIA Quality Mark Scheme. This demonstrates Haskoning's commitment to ensuring EIAs are undertaken at high quality and in accordance with best practice.
4. The team that undertook the EIA for the Project were predominantly Haskoning professional consultants. A dedicated core team took the lead role in the co-ordination and management of the EIA, and the preparation of this EIAR. The core team was then supported by a wider multidisciplinary group of technical specialists.

1.2 TECHNICAL LEAD AUTHORS

5. The assessments were undertaken by technical specialists, with a lead author for each technical topic who is a recognised expert in their field and has significant experience in the preparation of impact assessments. The lead author takes responsibility for the quality of data gathered, the assessment methodology undertaken, the impact assessments made and any proposed mitigation measures. The lead author was supported by the wider technical team, and their work was subject to both technical and consistency review by the EIA core team and a technical specialist.
6. Some of the technical assessment and associated chapters have been undertaken by specialist consultancies outside Haskoning (see **Table 1.1**).
7. In addition, technical consultation (such as through the Expert Topic Groups discussed in **Table 1.1**) provided additional expert input into the assessment process.



Table 1.1 Lead authors and experience of the EIAR project team

Expert	Company	Relevant Experience
Core Team	Haskoning	The team that undertook the EIA for the Project was predominantly composed of Haskoning professional consultants. A dedicated core team led the co-ordination and management of the EIA and prepared this EIAR. The Project Director is a Technical Director with a background in Civil Engineering and Environmental Management (Master of Engineering (MEng) Hons, University of Manchester) and 23 years' experience delivering environmental management and EIA processes for major infrastructure projects. They are a Chartered Engineer and Member of the Institution of Civil Engineers. They have extensive experience providing strategic direction and technical oversight for complex projects in the UK and internationally, including offshore wind developments such as MachairWind, North Falls, and Sheringham Shoal and Dudgeon Extension Projects. Their expertise spans environmental risk management, stakeholder engagement, and integrating sustainability into design and construction processes. The Project Manager is a principal environmental consultant with a background in Geography and Geology (Bachelor of Science (BSc) Hons, University of Birmingham) and Air Pollution Management and Control (Master of Science (MSc), University of Birmingham). They are a Chartered Environmentalist and member of the Institution of Environmental Science with 17 years' experience delivering complex EIA and consenting programmes for projects across the UK. They have led multidisciplinary teams through site selection and feasibility, coordinated specialist inputs, managed the consenting process, and maintained schedule, risk, and budget control. Their experience includes managing EIA methodologies, coordinating technical inputs, and supporting Development Consent Order (DCO) applications for large-scale projects, including offshore windfarms and major infrastructure schemes. The wider team comprises Principal, Senior and Graduate Environmental Consultants with varied experience and professional memberships, delivering specialist inputs across UK offshore wind projects. Collectively, they have supported projects including Dogger Bank South, Green Volt, Sheringham Shoal and Dudgeon Offshore Windfarm Extension Projects, and the Morecambe Offshore Windfarm. Their capabilities span coordination and authoring of Scoping Reports and Environmental Statements/EIARs, Habitats Regulations Appraisals (HRAs), Supplementary Environmental Information and Marine Licence applications; design and implementation of baseline survey and monitoring programmes; stakeholder and regulator engagement; cumulative and in combination effects assessment; and the development of proportionate mitigation and environmental management plans. They work within multidisciplinary teams to align environmental evidence with engineering design and programme needs, helping to secure timely, robust consents and effective post consent delivery.
Marine Physical Environment Lead	Haskoning	The marine physical environment lead has over 17 years of experience, specialising in coastal and marine processes and geomorphology and leads the geomorphology technical practice at Haskoning. With a background in Physical Geography (BSc Hons, Liverpool John Moores University), Environment and Climate Change (MSc, University of Liverpool) and Drowned landscapes of the eastern English Channel (Doctor of Philosophy (PhD), University of Liverpool), they have provided technical expertise and advice to support marine planning across a range of offshore industries including renewable energy, marine aggregate extraction, interconnectors, ports and harbours, and coastal protection. Working closely with regulators and government bodies, they have contributed to marine planning guidance and strategic frameworks. They have acted as the technical lead on numerous offshore windfarms, including Dogger Bank D, Green Volt and Sheringham Shoal and Dudgeon Offshore Windfarm Extension Projects, working on analysing geophysical, geotechnical, metocean and coastal geomorphological data to understand baseline conditions and assess potential impacts.
Benthic Ecology Technical Lead	Haskoning	The benthic ecology lead is a senior environmental consultant, with a background in Applied Marine Biology (BSc Hons, Heriot-Watt University) and Marine Resource Development and protection (MSc, Heriot-Watt University). They have 12 years of experience in marine ecology, including expertise in benthic and intertidal ecology, EIA coordination, survey management, and stakeholder liaison. Their skills include managing environmental impact assessments, planning and completing surveys, producing technical reports, and developing mitigation measures. They have worked on a wide range of marine energy and transmission projects across the UK and Ireland, providing EIA, consenting, and post-consent support. Key project experience includes Dogger Bank South Offshore Wind Farms, Buchan Offshore Wind, North Irish Sea Array Offshore Wind Farm, Codling Wind Park, and Thanet Wind Farm. Additional roles have involved technical support for dredging projects, interconnector developments, and marine license applications.
Fish and Shellfish (including Basking Shark) Technical Lead	Haskoning	The fish and shellfish ecology technical lead is a senior environmental consultant (marine) with a background in Natural Sciences (BSc Hons, Durham University), Marine Environmental Protection (MSc, Bangor University) and Impacts of noise on aquatic invertebrates (PhD, Edinburgh Napier University). They have six years of experience in marine ecology and consenting, specialising in fish, shellfish, and underwater noise. Their expertise includes EIAs, HRAs, underwater sound and vibration monitoring, and the development of mitigation strategies. They have authored numerous fish and shellfish EIA chapters and provided technical input across all stages of the consenting process, including scoping, Preliminary Environment Information Report (PEIR), and Environmental Statements. Their experience spans major offshore wind projects such as Dogger Bank D, Morecambe Offshore Wind Farm, Green Volt Offshore Wind Farm, Moray West Offshore Wind Farm, and Inis Ealga Marine Energy Park.
Marine Mammals and Leatherback Turtle Technical Lead	Haskoning	The marine mammals lead is a senior environmental consultant (marine) with a background in Marine Biology and Zoology (BSc Hons, Bangor University) and Biodiversity (MSc, University of Plymouth). They have over ten years of experience, are a Chartered Scientist, Chartered Marine Scientist, and member of Institute of Marine Engineering, Science and Technology and specialise in marine mammal consultancy for industries including offshore wind, oil and gas, Unexploded Ordnance (UXO) clearance, and government advisory bodies. Their expertise spans EIA, HRA, European Protected Species risk assessments and licence applications, and the development of Marine Mammal Mitigation Plans and Monitoring Plans. They have extensive experience in marine mammal acoustics and baseline monitoring, as well as acting as a Joint Nature Conservation Committee - accredited Marine Mammal Observer (MMO) and Passive Acoustic Monitoring (PAM) operator during offshore windfarm construction, seismic surveys, and UXO operations. They have led MMO and PAM training courses and advised on PAM equipment for monitoring programmes. Key project experience includes Dogger Bank South, MachairWind Offshore Wind Farm, Norfolk Projects, and Green Volt.
Offshore Ornithology Technical Lead	MacArthur Green (part of SLR)	MacArthur Green's offshore ornithology team has been at the forefront of UK offshore windfarm impact assessment for over 15 years. Their extensive experience has contributed to the successful consenting of numerous windfarms, collectively representing over 16 GW of potential generating capacity. The team is internationally recognised for its expertise in assessing and mitigating the impacts

Expert	Company	Relevant Experience
		of offshore developments on seabird populations. Through robust, evidence-based ornithological assessments and strategic guidance, they continue to support the growth of offshore renewable energy in a way that is environmentally responsible and scientifically sound. The team provides a wide range of services, these include Ornithological Impact Assessments, HRA, and EIA chapters. They also specialise in strategic collision risk modelling for migratory birds, cumulative impact assessment frameworks, and seabird sensitivity mapping. Their work extends to post-construction monitoring and spatial modelling of seabird distributions, as well as the development and delivery of seabird compensation measures to mitigate project impacts. MacArthur Green has made substantial contributions to research and guidance in the field of offshore ornithology. Their studies have explored seabird interactions with tidal stream turbines and wave energy devices, and they have conducted strategic reviews of seabird compensation in Scotland. The team played a key role in the ornithology constraints review for Offshore Wind Leasing Round 4 and developed seabird sensitivity layers for Marine Directorate and Natural England. Their strategic assessment of collision impacts on birds migrating through Scottish waters has informed national policy and planning. Notable collaborations include the Scottish Renewables Ornithology Support initiative, which fosters industry and public sector cooperation to reduce ornithology risks, and several Marine Scotland projects, such as population modelling for Rum Manx Shearwaters, the development of frameworks for combining marine survey data, and simulations of displacement impacts on breeding seabird populations. Their expertise has been applied across a number of high-profile offshore wind projects. For the Norfolk Vanguard Offshore Windfarm, MacArthur Green has led ornithological assessments since 2016, including density modelling, collision risk modelling, and population viability analyses, as well as preparing and supporting the implementation of kittiwake compensation plans. They have supported ScottishPower Renewables across the East Anglia One, One North, Two, and Three projects since 2012, contributing to population modelling, collision risk assessments, and full ornithological assessments, with ongoing monitoring during operational phases. Other key projects include post-construction monitoring for the Beatrice Offshore Windfarm, the Red-throated Diver Energetics Project, and the PrePARED Project, which investigates behavioural changes in seabirds, marine mammals, and fish following offshore windfarm development. More recently, they have supported the development of seabird compensation plans for the North Falls, Morven, and Bowdun Offshore Windfarms. The Ornithology technical lead has a background in Zoology/Animal Biology (BSc Hons, University of Aberdeen), Animal Energetics (MSc, University of Aberdeen) and Animal Behaviour and Endocrinology (PhD, Cardiff University) and over fifteen years' experience as an ornithologist where they have specialised in projects involving estuarine and marine birds. They have held various roles including project manager, lead author of HRA and EIARs, data analyst and surveyor and has contributed to a broad range of schemes from offshore renewable projects (wind, wave and tidal power development) to onshore energy projects and transport infrastructure. Since joining MacArthur Green in May 2018, they have acted as project manager and provided support for a range of onshore and offshore wind energy projects from scoping to consent. In previous roles, they have project managed digital aerial bird surveys for offshore windfarm sites and completed marine bird related projects for NatureScot, Natural England and Marine Scotland.
Commercial Fisheries Technical Lead	NiMa	NiMa Consultants Ltd are marine environmental consultants working globally to provide advice in support of sustainable fisheries, offshore renewable energy, marine planning and aquaculture. NiMa provides high quality outputs and solutions across a range of fisheries and marine environmental projects, delivered by a core team of three experts who together combine expert knowledge in commercial fisheries, EIA and the energy consenting process. The NiMa team understands and applies best practice in undertaking commercial fisheries impact assessments. The team has extensive experience in applying commercial fisheries expertise across all stages of offshore windfarm project development, exploring potential fisheries constraints in the site selection and refinement phase, through EIA and consent determination/examination, and during the post-consent phase, preparing fisheries management plans and undertaking long-term commercial fisheries monitoring to validate impact assessment outcomes. NiMa has undertaken commercial fisheries EIA for nationally significant offshore windfarm projects in the UK and Ireland. This includes projects in the North Sea (Near na Gaoithe, Caledonia, Muir Mhor, Ossian, Hornsea One, Two, Three and Four, Five Estuaries, Outer Dowsing, Sheringham Shoal and Dudgeon Offshore Windfarm Extension Projects), the English Channel (Rampion 2) and the Irish Sea (Awel y Môr Offshore Windfarm and Morecambe Offshore Windfarm). In Irish waters, the NiMa team are currently providing commercial fisheries expertise to Dublin Array Offshore Windfarm Project, North Irish Sea Array, Arklow Bank Wind Park 2 and Codling Project. NiMa's work requires sound understanding of fish and shellfish ecology, the status of commercial stocks and patterns of fishing activity. NiMa also seeks to maintain and continuously build upon strong established relationships with the fishing industry and consider engagement with fishers and fisheries representatives to be a key component of the offshore windfarm consenting process. The lead author is the Founding Director of NiMa Consultants Limited and possesses extensive experience in marine fisheries and aquaculture consulting, spanning over 17 years. With a background in chemical engineering (Bachelor of Engineering (BEng)) and marine biology (BSc), they specialise in assessing the impact of offshore renewable energy on marine environmental sustainability. They are recognised as an expert in Principle 2 (ecosystem) and serves as an assessor for the Marine Stewardship Council (MSC) certification scheme, including Fishery Improvement Projects for shellfish species in the UK. They take the lead in evaluating the effects of offshore wind and wet renewable energy developments, specifically conducting assessments for commercial fisheries. Currently, they are actively involved in offshore renewables projects in the North Sea, Irish Sea, and West of Scotland.
Shipping and Navigation Technical Lead	Anatec	Anatec is a market leader in risk-based decision making, with senior personnel of over 20 years experience in marine and offshore safety. Anatec works within the UK and internationally in a variety of sectors including onshore, offshore, marine, shipping and renewables (wind, wave and tide), and provide marine consultancy services including on safety of navigation for offshore renewables. Anatec has developed a robust and systematic approach for assessing the overall impact of proposed offshore developments based on the formal safety assessment process. This approach has been used to support applications for developments around the world including all parts of the United Kingdom, Ireland, The Netherlands, the United States and Asia. The process has been developed to be compliant with applicable national guidance using Anatec's in-house expertise, data and modelling but also through a process of liaison with stakeholders, industry professionals and regulators. Anatec also have extensive knowledge and experience in ensuring that relevant post consent conditions are discharged successfully and to the satisfaction of the regulators, having already undertaken these conditions successfully for numerous developers.



Expert	Company	Relevant Experience
		The shipping and navigation technical lead is a senior risk analyst at Anatec Ltd with a background in Mathematics (BSc Hons, University of Aberdeen) and over 11 years' experience in shipping and navigation and marine risk assessment. They have been involved in numerous Navigation Risk Assessment processes including for successfully consented UK projects, and have experience in all associated assessment components including stakeholder liaison, leading hazard workshops, and risk modelling.
Offshore Archaeology and Cultural Heritage Technical Lead	Haskoning	The offshore archaeology and cultural heritage lead is a senior marine heritage specialist with a background in Archaeology and Prehistory (Bachelor of Arts (BA) Hons, University of Sheffield) and Maritime Archaeology (Master of Arts (MA), University of Southampton). They have over 25 years of experience, including 10 years with Haskoning, and are a Full Member of the Chartered Institute for Archaeologists (CIfA) and active in the CIfA Marine Archaeology Special Interest Group. They specialise in offshore and coastal archaeology for sectors such as offshore wind, ports and harbours, coastal management, and marine infrastructure. Their expertise spans EIA, Cultural Heritage Impact Assessment, Written Schemes of Investigation, archaeological method statements, and regulatory compliance for planning and marine licence conditions. They lead the development and implementation of mitigation strategies and provide examination support for major offshore projects. They have authored industry guidance documents and contributed to national standards, including the Cultural Heritage Impact Assessment guidance jointly published by CIfA, Institute of Environmental Management and Assessment (IEMA), and Institute of Historic Building Conservation. They have extensive experience in managing archaeological survey programmes, geoarchaeological assessments, and data characterisation. They act as retained archaeologist during pre-construction and construction phases, ensuring compliance with archaeological protocols and mitigation measures. Key project experience includes Dogger Bank Offshore Wind Farms, Norfolk Vanguard and Boreas, Moray East and West, North Falls, Morecambe Offshore Wind Farm, and major port developments such as London Gateway Channel Deepening and Dover Western Docks Revival.
Military and Civil Aviation Technical Lead	Cyrrus	Cyrrus Limited is a leading independent international consultancy providing a range of specialist aviation support services. Cyrrus is focused on bringing creative, contemporary solutions to the challenges facing the airport and air traffic industries. Its industry background and experience enable Cyrrus to provide high quality consultancy services in order to understand and resolve the disparate objectives of the aviation and renewable energy industries. Cyrrus' team has significant strength in depth, and provides the skill sets necessary to ensure project objectives are achieved. The team has successfully worked in collaboration with aviation stakeholders (including the Ministry of Defence and National Air Traffic Service) providing well-reasoned technical arguments and quality outcomes. Additionally, Cyrrus has extensive experience of Air Traffic Control (ATC) radar and Air Defence radar operations regarding the effects of wind turbines and has previously addressed the aviation issues associated with many onshore and offshore wind energy developments. Another core workstream is airspace design and the airspace change process. For example, in order to resolve the impact associated with the development of the London Array offshore windfarm on Manston Airport's ATC radar operation, Cyrrus developed and consulted upon the first Transponder Mandatory Zone (TMZ) to be introduced over an offshore windfarm. The airport has since closed but the TMZ operates successfully to mitigate radar interference at London Southend Airport. The military and civil aviation technical lead has a BEng and over 30 years' experience in the aviation sector, including 20 years as a flight inspector of airport and en route navigation aids. They have provided aviation expertise for numerous windfarm projects, both onshore and offshore. This has included technical modelling of radar impacts and potential mitigations, the drafting of aviation chapters and technical appendices, and consultation with civilian and military aviation stakeholders.
Seascape, Landscape and Visual Impacts Technical Lead	LUC	LUC is an award-winning environmental consultancy providing planning, impact assessment, landscape design, geospatial and ecology services to a wide range of public and private sector clients. With a track record of nearly 60 years and a team of over 250 skilled professionals, LUC brings a passion for the environment and a determination to achieve sustainable development on behalf of their clients. LUC's landscape planning team has been involved in the development of national guidance on Landscape and Visual Impact Assessment (LVIA), including the Landscape Institute's and IEMA's Guidelines for LVIA, and NatureScot's guidance on Coastal Character Assessment. LUC has considerable experience in LVIA, including the development of appropriate methodologies and practical applications. In particular, LUC has been responsible for the preparation of LVIAs for a considerable number of windfarm developments, both onshore and offshore. LUC also provide comprehensive and practical advice on landscape and visual mitigation, to inform design development. Members of LUC's landscape planning team have acted as Expert Witnesses, covering landscape and visual matters at a large number of DCO Examinations, Hearings and Public Inquiries. LUC's recent experience in Seascape, Landscape and Visual Impact Assessment (SLVIA) for offshore windfarms includes: North Falls Offshore Windfarm – LVIA/SLVIA for the onshore and offshore elements of this proposed extension to the Greater Gabbard Windfarm off the coast of Suffolk, and support through DCO Examination; • Dogger Bank South Offshore Windfarm - LVIA for the onshore elements of this proposed offshore windfarm, located in East Yorkshire, including support through DCO Examination; • Neart na Gaoithe Offshore Windfarm – routeing and siting for onshore elements, LVIA/SLVIA for the onshore and offshore elements of this windfarm off the coast of Fife, and post-consent support to discharge planning conditions; and • Broadshore and Bellrock Offshore Windfarms – offshore SLVIA scoping for windfarms off the north-east coast, and ongoing site selection and LVIA for onshore infrastructure. The SLVIA technical lead is a Director of Landscape Planning at LUC and a Chartered Member of the Landscape Institute. They have over 20 years' experience in a range of landscape planning and assessment projects including strategic studies looking at sensitivity to windfarm development, and LVIA for wind energy proposals, both onshore and offshore. They have also appeared as a landscape and visual expert witness at public inquiries and Examinations, and prepared evidence for others.
Infrastructure and Other Marine Users Technical Lead	Haskoning	The infrastructure and other marine users chapter was undertaken by the core team and overseen by the technical lead who is a senior environmental consultant (marine) with a background in Marine Biology (BSc Hons, Heriot-Watt University) and Climate Change: Managing the Marine Environment (MSc, Heriot-Watt University). They have six years of experience, and specialise in consenting and

Expert	Company	Relevant Experience
		environmental assessment for large-scale marine infrastructure projects. Their expertise spans EIA, HRA, Strategic Environmental Assessment (SEA), Water Framework Directive (WFD) assessments, and marine licensing for sectors including offshore wind, subsea cables, and coastal infrastructure. Key project experience includes Dogger Bank South Offshore Wind Farms, Green Volt Floating Offshore Wind Farm, Havhingsten Telecommunications Cable, Greenlink Interconnector, and resilience schemes for Southern Water.
Socio-economic Technical Lead	BiGGAR Economics	BiGGAR Economics is a purpose-led economic consultancy that aims to deliver meaningful impact. The consultancy provides a range of economic development services for central and local government, economic development agencies, universities, other public sector agencies, private sector firms and sector representative bodies. The company has particular experience in the renewable energy sector and has assessed the socio-economic impact of over 200 windfarms in the UK and Ireland. The lead author is the Managing Director of BiGGAR Economics. They have a BA (Hons) in Economics from the University of Strathclyde, and are a Member of the Institute for Economic Development and a Member of the Economic Development Association Scotland. They are an applied economist with more than 30 years' professional experience, have led the socio-economic assessment of more than 100 renewable energy developments over the last two decades, and have given expert witness evidence at more than 20 public inquiries and hearings. Their offshore windfarm experience includes an ex-post economic impact assessment of Beatrice Offshore Windfarm, expert witness input during the consenting process for the grid connection for Seagreen Offshore Windfarm and socio-economic assessments for the proposed Morecambe, Ossian and Morven offshore windfarms.
Greenhouse Gas Assessment Technical Lead	Haskoning	The greenhouse gas (GHG) assessment technical lead is a Senior Carbon Consultant with a background in Mechanical Engineering (MEng, University of Aberdeen), complemented by specialist training in Carbon Management Planning (British Standards Institution Training Academy) and Renewables and the Energy Transition (Robert Gordon University). They have seven years of experience in environmental and engineering consulting, and are a Member of the Energy Institute and an Associate Member of the Institute of Mechanical Engineers. Their expertise spans greenhouse gas emission quantification, carbon footprinting, climate resilience risk assessment, and compliance with UK Emissions Trading Scheme (ETS) and EU ETS regulations. They have extensive experience in EIAs and HRAs for climate change and GHG emissions, as well as developing mitigation strategies aligned with IEMA and Publicly Available Specification 2080 guidance. Their technical skills include atmospheric permitting, monitoring plans, and stakeholder engagement with regulators. They have authored numerous Climate Change and GHG assessment chapters for PEIRs and Environmental Statements across major infrastructure and offshore wind projects. Their portfolio includes offshore windfarms in the UK, petrochemical expansions, port developments, and carbon benchmarking studies. Notable projects include climate change assessments for UK offshore wind farms, the Northern Endurance Partnership Carbon Capture Utilisation Storage development, and compliance support for EU and UK Emission Trading Schemes.
Climate Change Risk Assessment Technical Lead	Haskoning	The climate change risk assessment technical lead is an Environmental & Resilience Consultant with a background in Civil Engineering (BEng, IEST Shibpur, India). Environmental Monitoring, Modelling and Management (MSc, King's College London). They have six years of experience in environmental engineering and climate resilience and have led numerous climate risk and adaptation assessments for major infrastructure and renewable energy projects. Their expertise includes Climate Change Risk Assessments, adaptation planning, resilience assessments for consenting (including offshore windfarms), and integration of climate strategy into infrastructure planning. They have extensive experience in developing climate change chapters for DCO applications, conducting physical climate risk assessments, and modelling potential impacts on assets and operations. Their technical skills also cover nature-based solutions, GIS analysis, and socio-economic impact assessments. They have authored climate change and resilience chapters for multiple offshore wind projects, including Dogger Bank D, Buchan, and Bellrock, as well as ports and maritime infrastructure projects. Their portfolio includes climate risk assessments for national electrification plans, Defra ARP4 submissions for UK ports, and global adaptation projects funded by the World Bank and Asian Development Bank. They have also prepared climate resilience guidance documents for industry and delivered strategic adaptation planning for large-scale urban and coastal developments.
Major Accidents and Disasters Technical Lead	Haskoning	The major accidents and disasters was undertaken by the core team and overseen by the technical lead who is a senior environmental consultant (marine) with a background in Marine Biology (BSc Hons) and Climate Change: Managing the Marine Environment (MSc, Heriot-Watt University). They have six years of experience, and specialise in environmental risk assessment and consenting for complex marine infrastructure projects. Their expertise includes EIA, HRA, SEA and WFD assessments, and marine licensing for high-risk activities such as subsea cable installation, offshore wind development, and emergency resilience schemes. They have coordinated DCO applications and supported examinations, including drafting marine licence conditions and providing technical evidence at hearings. Their experience includes managing environmental constraints and advising on mitigation strategies for projects with potential major accident and disaster risks, such as subsea cable replacements, offshore windfarms, and critical infrastructure resilience schemes. Key project experience includes Dogger Bank South Offshore Wind Farms, Green Volt Floating Offshore Wind Farm, Havhingsten Telecommunications Cable, Greenlink Interconnector, and resilience schemes for Southern Water. .

