Mooir Vannin Offshore Wind Farm
Preliminary Environmental Information

Impacts Register

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This document is part of a suite of preliminary environmental materials prepared to fulfil pre-application consultation requirements under The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (of Parliament) as applied to the Island by the Climate Change (Infrastructure Planning) (Environmental Impact Assessment) (Application) Order 2024.

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Version B

Mooir Vannin

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Mooir Vannin

1. Impacts Register Explained

Consent	*Description*															
	Impact Background								**Scoping**				**Environmental Statement (Example)**				
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping?**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**	**Project position at ES**	**Justification for position at ES**	**Magnitude at ES**	**Sensitivity at ES**	**Likely Significant Effect at ES?**
DCO / MIC or Both	Unique ID for each impact which can be used to refer between those impacts in the ES and those in the Impact Register.	Identifies that part of the Mooir Vannin development where the impact is anticipated to arise.	Identifies the phase of the Mooir Vannin development. I.e when the impact is anticipated to arise.	The impact and the activity that the impact arises from.	The Maximum Design Scenario (MDS) as defined by the techncial consultant accounting for the Project Description at Scoping for the specific impact and activity.	The justification of why the MDS as defined is the MDS, providing reference to other developemnt scenarios or options.	The receptors identified that may be effected by the impact.	Commitments that are relevant to reduce and/or eliminate Likely Significant Effects (LSE). Primary (Design) or Tertiary (Inherant) are commitments that are embedded within the assesment at the relevant point in the EIA. Secondary commitments may be incorportated to reduce LSE to acceotable levels following assessment.	Presents the findings of the EIA at Scoping. Assessed as LSE or No LSE.	Proposed process for presenting further evidence or assessment via either the ES (for LSE impacts) or the EPP (No LSE impacts).	Presents either: Any further baseline data or modelling to be collected or undertaken to inform assessments; or Position Papers to be provided through EPP.	Presents any updates to the Proposed Approach, including whether No LSE has been agreed via the EPP with the corresponding Decision Log ID.	Identifies the approach taken to the Impact within the ES.	Details the justification for the projects appraoch taken to the Impact at Scoping.	Identifies the expected magnitude of the impact considered within the ES, derived from topic-specific criteria.	Identifies the sensitivity of the receptor considered within the ES, derived from topic-specific criteria.	Presents the findings of the EIA within the ES.
Example																	
MIC	BE-02	All-Offshore	Operation	Long term seabed habitat loss/ disturbance due the presence of structures.	Presence of: Up to 100 WTGs on gravity based foundations; Up to 5 OSSs on piled jacket foundations; Associated scour protection. Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection	The MDS results in the greatest area of seabed affected by the presence of infrastructure.	Seabed habiats and sensitive species.	Tertiary Co7	**LSE**	**Assessed in ES.**	**Site-specific benthic survey data.**	**No Change**	**LSE**	Scoped into assessment at ES based on Scoping Opinion (DoI Scoping Opinion, Month 20XX, ID:X).	Minor	Medium	**No significant effect (Slight adverse)**

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Impacts Register
7. Marine Geology, Oceanography & Physical Processes

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Impact Background									Scoping			
Consent	**ID**	**Project Element**	**Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
MIC	MP-01-C	All offshore	Construction	Increases in suspended sediment concentrations as a result of seabed preparation, cable installation, cable repair/replacement and decommissioning (pathway).	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest volume of excavated and/or disturbed seabed sediment.	N/A (pathway)	Primary: Co3 Tertiary: Co2 Co6	No LSE (pathway)	Assessed in ES.	A validated hydrodynamic model will be developed to investigate sediment plume scenarios.	No change
	MP-01-O	All offshore	Operation									
	MP-01-D	All offshore	Decomissioning									
MIC	MP-02-C	All offshore	Construction	Deposition of sediments resulting in bed-level changes as a result of seabed preparation, cable installation, cable repair/replacement and decommissioning (pathway).	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest volume of excavated and/or disturbed seabed sediment.	N/A (pathway)	Primary: Co3 Tertiary: Co2 Co6	No LSE (pathway)	Assessed in ES.	A validated hydrodynamic model will be developed to investigate sediment plume scenarios.	No change
	MP-02-O	All offshore	Operation									
	MP-02-D	All offshore	Decomissioning									
MIC	MP-03-C	All offshore	Construction	Modifications to seabed morphology as a result of seabed preparation, cable installation and decommissioning (pathway).	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest disturbance to the seabed.	N/A (pathway)	Primary: Co3 Tertiary: Co2 Co6	No LSE (pathway)	Assessed in ES.	N/A	No change
	MP-03-D	All offshore	Decomissioning									
MIC	MP-04-C	All offshore	Construction	Subsequent effects on sandbanks and notable bathymetric depressions as a result of seabed preparation, cable installation and decommissioning.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest disturbance to the seabed.	Seabed features	Primary: Co3 Tertiary: Co2 Co6	LSE	Assessed in ES.	N/A	No change
	MP-04-D	All offshore	Decomissioning									
MIC	MP-05-C	Landfall	Construction	Modifications to littoral transport at landfall (pathway) as a result of the installation and decommissioning of cables at landfall.	Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest potential for interaction with the seabed at landfall.	N/A (pathway)	Primary: Co3	No LSE (pathway)	Assessed in ES.	N/A	No change
	MP-05-D	Landfall	Decomissioning									
MIC	MP-06-C	Landfall	Construction	Subsequent effects on coastal behaviour and morphology at landfall.	Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique).	The MDS results in the greatest potential for interaction with the seabed at landfall.	The coastline at the proposed landfall location.	Primary: Co3	LSE	Assessed in ES.	N/A	No change
	MP-06-D	Landfall	Decomissioning									
MIC	MP-07-O	All offshore	Operation	Modification of the wave and tidal regime due to the presence of structures (pathway).	Presence of up to 100 WTGs on suction caisson jacket foundations; Presence of up to 5 OSSs on suction caisson jacket foundations; and Presence of cable and scour protection.	The MDS is based on the largest foundation types which have the greatest potential for blockage effects.	N/A (pathway)	Primary: Co3 Tertiary: Co2	No LSE (pathway)	Assessed in ES.	A validated hydrodynamic model will be developed to investigate potential impacts to the wave and tidal regime	No change

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Impacts Register
7. Marine Geology, Oceanography & Physical Processes

Ørsted

Impact Background									Scoping			
Consent	**ID**	**Project Element**	**Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
MIC	MP-08-O	All offshore	Operation	Subsequent modifications to the sediment transport regime due to the presence of structures(pathway).	Presence of up to 100 WTGs on suction caisson jacket foundations; Presence of up to 5 OSSs on suction caisson jacket foundations; and Presence of cable and scour protection.	The MDS is based on the largest foundation types which have the greatest potential for blockage effects, with subsequent effects on the sediment transport regime.	N/A (pathway)	Primary: Co3 Tertiary: Co2	No LSE (pathway)	Assessed in ES.	A validated hydrodynamic model will be developed to investigate potential impacts to the wave and tidal regime	No change
MIC	MP-09-O	All offshore	Operation	Subsequent modifications to seabed morphology due to the presence of structures (pathway).	Presence of up to 100 WTGs on suction caisson jacket foundations; Presence of up to 5 OSSs on suction caisson jacket foundations; and Presence of cable and scour protection.	The MDS is based on the largest foundation types which have the greatest potential for blockage effects, with subsequent effects on seabed morphology..	N/A (pathway)	Primary: Co3 Tertiary: Co2	No LSE (pathway)	Assessed in ES.	A validated hydrodynamic model will be developed to investigate potential impacts to the wave and tidal regime	No change
MIC	MP-10-O	All offshore	Operation	Subsequent effects due to the presence of structures on the coastline.	Presence of up to 100 WTGs on suction caisson jacket foundations; Presence of up to 5 OSSs on suction caisson jacket foundations; and Presence of cable and scour protection.	The MDS is based on the largest foundation types which have the greatest potential for blockage effects, with subsequent effects on seabed morphology..	The eastern coastline of the Isle of Man.	Primary: Co3 Tertiary: Co2	LSE	Assessed in ES.	A validated hydrodynamic model will be developed to investigate potential impacts to the wave and tidal regime	No change
MIC	MP-11-O	All offshore	Operation	Scouring of the seabed due to the presence of structures (pathway)	Presence of up to 100 WTGs on suction caisson jacket foundations; and Presence of up to 5 OSSs on suction caisson jacket foundations.	The MDS is based on the largest foundation types which have the greatest potential for scour. The MDS excludes secondary scour around scour protection material.	N/A (pathway)	Primary: Co3 Tertiary: Co2	No LSE (pathway)	Assessed in ES.	N/A	No change
MIC	MP-12-O	Array	Operation	Modifications to stratification and frontal features due to the presence of structures.	Presence of up to 100 WTGs on suction caisson jacket foundations; Presence of up to 5 OSSs on suction caisson jacket foundations; and Presence of cable and scour protection.	The MDS is based on the largest foundation types which have the greatest potential for blockage effects.	The Irish Sea frontal system.	Primary: Co3 Tertiary: Co2	No LSE	Further evidence to be provided via the Evidence Plan process.	A baseline description including characterisation of the Irish Sea frontal system.	No LSE agreed through EPP (MP-D.1.01)
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above.	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above.	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above.	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
8. Marine Water & Sediment Quality

Ørsted

Impact Background									Scoping			
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments	Likely Significant Effect identified at Scoping?	Proposed Approach	Further Evidence	Updates Since Scoping
MIC	WQ-01-C	All offshore	Construction	Deterioration in water quality due to suspension/re-suspension of sediments resulting from seabed prepataration, cable installation, cable repair/replacement and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for increases in suspended sediments.	Designated and non-designated bathing waters.	Tertiary Co1 Co2 Co4 Co6 Co7	LSE	Assessed in ES.	N/A	No change
	WQ-01-O	All offshore	Operation									
	WQ-01-D	All offshore	Decomissioning									
MIC	WQ-02-C	All offshore	Construction	Release of sediment-bound contaminants from disturbed sediments resulting from seabed prepataration, cable installation, cable repair/replacement and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for increases in suspended sediments, combined with the identification of contaminant levels from site-specific contaminants analysis.	Designated and non-designated bathing waters.	Tertiary Co4 Co6 Co7	LSE	Assessed in ES.	Site-specific sediment contaminants analysis.	No change
	WQ-02-O	All offshore	Operation									
	WQ-02-D	All offshore	Decomissioning									
MIC	WQ-03-C	Landfall	Construction	Deterioration in water clarity due to the release of drilling mud during cable installation at landfall.	Landfall infrastructure installed in the intertidal using trenchless techniques (including HDD).	The MDS results in the potential release of drilling mud from cable installation at landfall.	Designated and non-designated bathing waters.	Tertiary Co4 Co7	LSE	Assessed in ES.	N/A	No change
MIC	WQ-04-C	All offshore	Construction	Accidental releases or spills of materials or chemicals during construction, operation and decommissioning.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	Designated and non-designated bathing waters.	Tertiary Co4 Co7	LSE	Assessed in ES.	N/A	No change
	WQ-04-O	All offshore	Operation									
	WQ-04-D	All offshore	Decomissioning									
MIC	WQ-05-O	All offshore	Operation	Deterioration in water quality due to re-suspension of sediments and contaminants resulting from scour around foundations during operation.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for increases in suspended sediments, combined with the identification of contaminant levels from site-specific contaminants analysis.	N/A as no LSE.	Tertiary Co1	No LSE	Further evidence to be provided via the Evidence Plan process.	Presentation of information regarding the low likelihood of secondary scour.	No LSE agreed through EPP (WQ-D1.01)
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
9. Offshore Ornithology

Ørsted

	Impact Background								Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	O-01-C	All offshore and Landfall	Construction	Temporary habitat loss/ disturbance and displacement due to vessel actvity during construction and decommissioning.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	Guillemot; Razorbill; Red-throated diver.	Tertiary Co6 Co7	LSE	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change
	O-01-D	All offshore and Landfall	Decomissioning									
MIC	O-02-C	All offshore and Landfall	Construction	Reduced prey availability due to indirect effects on prey species and habitats.	See Impacts Register for Benthic Subtidal and Intertidal Ecology, and Fish and Shellfish Ecology.	MDS defined by impacts to prey species.	All seabird species.	Tertiary Co4 Co6 Co34	LSE	Assessed in ES.	N/A	No change
	O-02-O	All offshore and Landfall	Operation									
	O-02-D	All offshore and Landfall	Decomissioning									
MIC	O-03-O	Array	Operation	Disturbance and displacement due to WTG presence.	Presence of 100 WTGs and up to 5 OSS over the full extent of the Offshore Array (250 km^2).	The MDS results in the greatest potential for disturbance from WTGs.	Guillemot; Razorbill; Red-throated diver.	Tertiary Co7	LSE	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change
MIC	O-04-O	Array	Operation	Mortality due to risk of collision with WTGs.	Presence of 100 WTGs over the full extent of the Offshore Array (250 km^2); Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT (20.66 m above HAT).	The MDS results in the greatest potential for disturbance from WTGs.	Kittiwake; Great black-backed gull; Herring gull; Lesser black-backed gull; Gannet.	Tertiary Co7	LSE	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change
MIC	O-05-O	Array	Operation	Barrier effects due to WTG presence.	Presence of up to 100 WTGs.	The MDS results in the greatest potential for disturbance from WTGs.	N/A as no LSE.	Tertiary Co7	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of assessment methodology note that incorporates consideration of barrier effects within the disturbance/displacement assessment.	No LSE agreed through EPP (O-D.1.01)
MIC	O-06-C	All offshore	Construction	Accidental releases or spills of materials or chemicals during construction, operation and decommissioning.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	All seabird species.	Tertiary Co4 Co6 Co7	LSE	Assessed in ES.	N/A	No change
	O-06-O	All offshore	Operation									
	O-06-D	All offshore	Decomissioning									
MIC	O-07-O	Array	Operation	Attraction to lit structures by migrating birds.	Presence of 100 WTGs and 5 OSSs lit with nautical and aviation warning light systems, ID board lighting and low intensity lighting for helicopter winching operations.	The MDS results in the greatest number of lit structures.	All seabird species.	Tertiary Co7	Low - impacts are expected to be minimal, with limited evidence on the impacts of artifcial light on birds.	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
10. Benthic Subtidal & Intertidal Ecology

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Impact Background									Scoping				Environmental Statement				
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**	**Project position at ES**	**Justification for position at ES**	**Magnitude at ES**	**Sensitivity at ES**	**Likely Significant Effect at ES?**
MIC	BE-01-C	All offshore	Construction	Temporary seabed habitat loss/ disturbance.	Seabed preparation for: Up to 100 WTGs on suction caisson jacket foundations ; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS results in the greatest area of seabed disturbed.	Seabed habiats and sensitive species.	Tertiary Co6 Co7	LSE	Assessed in ES.	Site-specific benthic survey data.	No change					
	BE-01-O	All offshore	Operation														
	BE-01-D	All offshore	Decomissioning														
MIC	BE-02-O	All offshore	Operation	Long term seabed habitat loss/ disturbance due the presence of structures.	Presence of: Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled jacket foundations; Associated scour protection. Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Associated cable protection.	The MDS results in the greatest area of seabed affected by the presence of infrastructure.	Seabed habiats and sensitive species.	Tertiary Co7	LSE	Assessed in ES.	Site-specific benthic survey data.	No change					
MIC	BE-03-C	All offshore	Construction	Temporary increase in suspended sediment concentration due to suspension/ re-suspension of sediments as a result of seabed preparation, cable installation and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for increases in suspended sediments.	Seabed habiats and sensitive species.	Tertiary Co2 Co7	LSE	Assessed in ES.	Numerical modelling to investigate sediment plume scenarios.	No change					
	BE-03-D	All offshore	Decomissioning														
MIC	BE-04-C	All offshore	Construction	Susbequent deposition of suspended/ re-suspended sediments as a result of seabed preparation, cable installation and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for subsequent deposition of suspended/ re-suspended sediments.	Seabed habiats and sensitive species.	Tertiary Co2 Co7	LSE	Assessed in ES.	Numerical modelling to investigate sediment plume scenarios.	No change					
	BE-04-D	All offshore	Decomissioning														
MIC	BE-05-C	All offshore	Construction	The release of sediment contaminants due to suspension/ re-suspension of sediments as a result of seabed preparation and cable installation.	See Impacts Register for Marine Water and Sediment Quality.	The MDS is defined by the identification of pathway for increases in suspended sediments, combined with the identification of contaminant levels from site-specific contaminants analysis.	Seabed habiats and sensitive species.	Tertiary Co4	LSE	Assessed in ES.	Numerical modelling to investigate sediment plume scenarios.	No change					
MIC	BE-06-C	All offshore	Construction	Increased risk of introduction and/or spread of Marine Invasive Non-Native Species (MINNS) due to increased vessel traffic.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for introduction and/or spread of MINNS.	Seabed habiats and sensitive species.	Tertiary Co1	LSE	Assessed in ES.	Site-specific benthic survey data.	No change					
	BE-06-O	All offshore	Operation														
	BE-06-D	All offshore	Decomissioning														
MIC	BE-07-C	Array area	Construction	Particle motion effects from foundation installation.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	N/A as no LSE.	Tertiary Co2 Co7	No LSE (further evidence).	Further evidence to be provided via the Evidence Plan process.	Provision of note on particle motion effects on benthic receptors.	No LSE agreed through EPP (BE-D1.02)					
MIC	BE-08-C	All offshore	Construction	Accidental releases or spills of construction materials or chemicals from vessels.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	Seabed habiats and sensitive species.	Tertiary Co4	LSE	Assessed in ES.	N/A	No change					
	BE-08-O	All offshore	Operation														
	BE-08-D	All offshore	Decomissioning														
MIC	BE-09-O	All offshore	Operation	Colonisation of hard surfaces leading to a localised change in biodiversity.	Presence of: Up to 100 WTGs on jacket foundations; Up to 5 OSSs on jacket foundations; Associated scour protection; and Cable protection.	The MDS identifies the greatest potential for new hard substrate habitat creation in terms of surface area.	Seabed habiats and sensitive species.	Tertiary Co2 Co7	LSE	Assessed in ES.	N/A	No change					
MIC	BE-10-O	All offshore	Operation	Disturbance due to Electro-Magnetic Fields caused by subsea cables.	Presence of up to: Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cables.	Maximum length of cables installed.	N/A as no LSE.	Primary Co3	No LSE (further evidence).	Further evidence to be provided via the Evidence Plan process.	Provision of note on EMF effects on benthic receptors.	No LSE agreed through EPP (BE-D1.01)					
MIC	BE-11-D	All offshore	Decomissioning	Habitat loss due to the removal of colonised hard surface structures.	Removal of: Up to 100 WTGs on jacket foundations; Up to 5 OSSs on jacket foundations; Associated scour protection; and Cable protection.	The MDS identifies the greatest surface area of hard substrate habitat to be removed.	Seabed habiats and sensitive species.	Tertiary Co6	LSE	Assessed in ES.	N/A	No change					
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					

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Impacts Register
11. Marine Mammals

Ørsted

Impact Background									Scoping				Environmental Statement				
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments	Likely Significant Effect identified at Scoping?	Proposed Approach	Further evidence	Updates Since Scoping	Project position at ES	Justification for position at ES	Magnitude at ES	Sensitivity at ES	Likely Significant Effect at ES?
MIC	MM-01-C	All offshore	Construction	Permanent Threshold Shift caused by the generation of underwater noise from construction activities.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	All marine mammal species.	Tertiary Co7 Co16 Co34	LSE	Assessed in ES.	Modelling of piling scenarios to investigate underwater noise impact ranges at defined effect thresholds	No change					
MIC	MM-02-C	All offshore	Construction	Temporary Threshold Shift caused by the generation of underwater noise from construction activities.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	All marine mammal species.	Tertiary Co7 Co16 Co34	LSE	Assessed in ES.	Modelling of piling scenarios to investigate underwater noise impact ranges at defined effect thresholds	No change					
MIC	MM-03-C	All offshore	Construction	Disturbance due to underwater noise generated during construction.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	All marine mammal species.	Tertiary Co16 Co34	LSE	Assessed in ES.	Modelling of piling scenarios to investigate underwater noise impact ranges at defined effect thresholds	No change					
MIC	MM-04-C	All offshore	Construction	Disturbance due to vessel presence associated with construction and decommissioning.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures, maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for disturbance.	All marine mammal species.	Tertiary Co6 Co7	LSE	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change					
	MM-04-D	All offshore	Decomissioning														
MIC	MM-05-O	All offshore	Operation	Disturbance due to operational WTG noise.	Up to 100 WTGs on monopile foundations.	The MDS results in the greatest number of WTGs with the greatest potential for underwater noise propagation.	N/A as no LSE.	Tertiary Co7	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of note on predicted operational noise levels from turbines.	Cannot agree no LSE through EPP. Impact to be assessed in ES (MM-D.1.01)					
MIC	MM-06-C	All offshore	Construction	Vessel collision risk due to vessel activity associated with construction, operation and decommissioning activities.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures, maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for collision.	All marine mammal species.	Tertiary Co6 Co7	LSE	Assessed in ES.	Analysis and presentation of 24 months of Digital Aerial Survey data.	No change					
	MM-06-O	All offshore	Operation														
	MM-06-D	All offshore	Decomissioning														
MIC	MM-07-C	All offshore	Construction	Indirect effects due to changes in water quality as a result of construction, operation and decommissioning activities.	See Impacts Register for Marine Water and Sediment Quality.	The MDS is defined by the identification of pathway for increases in suspended sediments, combined with the identification of contaminant levels from site-specific contaminants analysis.	All marine mammal species.	Tertiary Co4 Co6	LSE	Assessed in ES.	N/A	No change					
	MM-07-O	All offshore	Operation														
	MM-07-D	All offshore	Decomissioning														
MIC	MM-08-C	All offshore	Construction	Indirect effects due to change in prey abundance/ distribution as a result of construction, operation and decommissioning activities.	See Impacts Register for Benthic Subtidal and Intertidal Ecology, and Fish and Shellfish Ecology.	MDS defined by impacts to prey species.	All marine mammal species.	Tertiary Co4 Co6	LSE	Assessed in ES.	N/A	No change					
	MM-08-O	All offshore	Operation														
	MM-08-D	All offshore	Decomissioning														
MIC	MM-09-C	All offshore	Construction	Accidental releases or spills of construction materials or chemicals during construction and decommissioning.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	All marine mammal species.	Tertiary Co4	LSE	Assessed in ES.	N/A	No change					
	MM-09-D	All offshore	Decomissioning														
MIC	MM-10-C	All offshore	Construction	Reduction in foraging ability due to temporary increase in SSC and sediment deposition associated with seabed preparation, cable installation, cable repair/replacement and decommissioning.	See Impacts Register for Marine Water and Sediment Quality.	The MDS is defined by the identification of impacts on water quality.	All marine mammal species.	Tertiary Co4 Co6	LSE	Assessed in ES.	N/A	No change					
	MM-10-O	All offshore	Operation														
	MM-10-D	All offshore	Decomissioning														
MIC	MM-11-O	All offshore	Operation	Disturbance due to Electro-Magnetic Fields generated by subsea cables.	Presence of up to: Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Export Connection Cables	Maximum length of cables installed.	N/A as no LSE.	Primary Co3	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of note on EMF effects on marine mammal receptors.	No LSE agreed through EPP (MM-D.1.02)					
MIC	MM-12-C	Landfall	Construction	Disturbance to seals due to airborne noise from works at landfall.	Landfall infrastructure installed in the intertidal using either open-cut trenching or trenchless techniques.	MDS defined by most intrusive works at landfall.	Seal species.	Tertiary Co16 Co34	LSE	Assessed in ES.	Site-specific data on seal haul-out locations.	No change					
	MM-12-D	Landfall	Decomissioning														
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					

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Impact Background									Scoping				Environmental Statement				
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments	Likely Significant Effect identified at Scoping?	Proposed Approach	Further evidence	Updates Since Scoping	Project position at ES	Justification for position at ES	Magnitude at ES	Sensitivity at ES	Likely Significant Effect at ES?
MIC	FS-01-C	All offshore	Construction	Mortality, injury, behavioural impacts and auditory masking arising from noise and vibration as a result of construction activities.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	Fish and shellfish receptors; Spawning.	Tertiary Co2 Co6 Co34	LSE	Assessed in ES.	Modelling of piling scenarios to investigate underwater noise impact ranges at defined effect thresholds.	No change					
	FS-01-D	All offshore	Decomissioning														
MIC	FS-02-C	All offshore	Construction	Direct damage and disturbance to mobile demersal and pelagic fish and shellfish species due to installation of infrastructure on the seabed.	Seabed preparation for: Up to 100 WTGs on suction caisson jacket foundations ; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS results in the greatest area of seabed disturbed.	Fish and shellfish receptors.	Primary Co3 Tertiary Co2 Co6 Co7	LSE	Assessed in ES.	N/A	No change					
	FS-02-O	All offshore	Operation														
	FS-02-D	All offshore	Decomissioning														
MIC	FS-03-C	All offshore	Construction	Increases in Suspended Sediment Concentration due to seabed preparation, cable installation, cable repair/ replacement and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for increases in suspended sediments.	Fish and shellfish receptors.	Tertiary Co2 Co6 Co7	LSE	Assessed in ES.	Numerical modelling to investigate sediment plume scenarios.	No change					
	FS-03-O	All offshore	Operation														
	FS-03-D	All offshore	Decomissioning														
MIC	FS-04-C	All offshore	Construction	Subsequent deposition of sediments suspended/ re-suspended as a result of seabed preparation, cable installation, cable repair/ replacement and decommissioning.	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the identification of pathway for subsequent deposition of suspended/ re-suspended sediments.	Shellfish; Spawning and nursery habitat.	Tertiary Co2 Co6 Co7	LSE	Assessed in ES.	Numerical modelling to investigate sediment plume scenarios.	No change					
	FS-04-O	All offshore	Operation														
	FS-04-D	All offshore	Decomissioning														
MIC	FS-05-C	All offshore	Construction	Direct and indirect seabed disturbances leading to the release of sediment contaminants suspended/ re-suspended as a result of seabed preparation, cable installation, cable repair/ replacement and decommissioning.	See Impacts Register for Marine Water and Sediment Quality.	The MDS is defined by the identification of pathway for increases in suspended sediments, combined with the identification of contaminant levels from site-specific contaminants analysis.	Fish and shellfish receptors.	Tertiary Co2 Co6 Co7	LSE	Assessed in ES.	Site-specific sediment contaminants analysis.	No change					
	FS-05-O	All offshore	Operation														
	FS-05-D	All offshore	Decomissioning														
MIC	FS-06-C	All offshore	Construction	Accidental releases or spills of construction materials or chemicals from vessels.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for accidental pollution.	Fish and shellfish receptors.	Tertiary Co4	LSE	Assessed in ES.	N/A	No change					
	FS-06-O	All offshore	Operation														
	FS-06-D	All offshore	Decomissioning														
MIC	FS-07-C	Array	Construction	Effects on fish and shellfish receptors as a result of change in fishing pressure.	See Impacts Register for Commercial Fisheries.	the MDS is defined by the changes to fishing activty/intensity.	Commercial fish and shellfish receptors.	N/A	LSE	Assessed in ES.	N/A	No change					
	FS-07-O	Array	Operation														
	FS-07-D	Array	Decomissioning														
MIC	FS-08-C	All offshore	Construction	Temporary seabed habitat loss/ disturbance as a result of seabed preparation, cable installation, cable repair/ replacement and decommissioning.	Seabed preparation for: Up to 100 WTGs on suction caisson jacket foundations ; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using	The MDS results in the greatest area of seabed disturbed.	Fish and shellfish receptors; Spawning and nursery habitat.	Tertiary Co2	LSE	Assessed in ES.	N/A	No change					
	FS-08-O	All offshore	Operation														
	FS-08-D	All offshore	Decomissioning														
MIC	FS-09-O	All offshore	Operation	Effects of underwater noise from operational WTGs.	Up to 100 WTGs on monopile foundations.	The MDS results in the greatest number of WTGs with the greatest potential for underwater noise propagation.	N/A as no LSE.	N/A	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of note on predicted operational noise levels from turbines.	No LSE agreed through EPP (FS-D1.03)					
MIC	FS-10-O	All offshore	Operation	Permanent and/or long-term habitat loss/alteration due to the addition of structures.	Presence of: Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled jacket foundations; Associated scour protection. Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Associated cable protection.	The MDS results in the greatest area of seabed affected by the presence of infrastructure.	Fish and shellfish receptors.	Tertiary Co2	LSE	Assessed in ES.	N/A	No change					

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				Impact Background					Scoping				Environmental Statement				
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**	**Project position at ES**	**Justification for position at ES**	**Magnitude at ES**	**Sensitivity at ES**	**Likely Significant Effect at ES?**
MIC	FS-11-O	All offshore	Operation	Disturbance due to Electro-Magnetic Fields from subsea cables.	Presence of up to: Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cables;	Maximum length of cables installed.	N/A as no LSE.	Primary Co3	No LSE	Further evidence to be provided via the Evidence Plan process.	Proviosn of note on EMF effects on fish and shellfish receptors.	No change					
MIC	CF-01-C	All offshore	Construction	Reduction in access to, or exclusion from established fishing grounds due to the presence of infrastructure.	Up to 100 Wind Turbine Generators (WTGs) on one of various fixed foundation options; Up to five OSSs within the Offshore Array on one of various fixed foundation options with associated seabed preparation and scour protection; Up to 490 km of inter-array cabling and 100 km of interlink cables, both with up to 15% of the route requiring additional protection. Up to 125 km pf export cables and up to 90 km of Offshore Electrical Connection Cable with up to 15% requiring cable protection; The regular maintenance of the infrastructure throughout the Proposed Development's lifespan; and Decommissioning of the site to remove all offshore infrastructure above the seabed.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for reduction in access.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-01-O	All offshore	Operation														
	CF-01-D	All offshore	Decomissioning														
MIC	CF-02-C	All offshore	Construction	Displacement leading to gear conflict and increased fishing pressure on adjacent grounds due to the presence of infrastructure.	Up to 100 Wind Turbine Generators (WTGs) on one of various fixed foundation options; Up to five OSSs within the Offshore Array on one of various fixed foundation options with associated seabed preparation and scour protection; Up to 490 km of inter-array cabling and 100 km of interlink cables, both with up to 15% of the route requiring additional protection. Up to 125 km of export cables and up to 90 km of Offshore Electrical Connection Cable with up to 15% requiring cable protection; The regular maintenance of the infrastructure throughout the Proposed Development's lifespan; and Decommissioning of the site to remove all offshore infrastructure above the seabed.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for displacement.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-02-O	All offshore	Operation														
	CF-02-D	All offshore	Decomissioning														
MIC	CF-03-C	All offshore	Construction	Displacement or disruption of commercially important fish and shellfish resources due to impacts on target species.	See MDS for FS-01 to FS-10.	The MDS is defined by impacts to the fish and shellfish resource, as defined within the Fish and Shellfish Ecology chapter.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-03-O	All offshore	Operation														
	CF-03-D	All offshore	Decomissioning														
MIC	CF-04-C	All offshore	Construction	Physical presence of infrastructure leading to gear snagging.	Presence of: Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled jacket foundations; Associated scour protection. Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Associated cable protection.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for gear snagging.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-04-O	All offshore	Operation														
	CF-04-D	All offshore	Decomissioning														
MIC	CF-05-C	All offshore	Construction	Additional steaming to alternative fishing grounds due to presence of infrastructure.	See Impacts Register for Shipping and Navigation.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for additional steaming.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-05-O	All offshore	Operation														
	CF-05-D	All offshore	Decomissioning														
MIC	CF-06-C	All offshore	Construction	Increased vessel traffic within fishing grounds leading to interference with fishing activity.	Vessel traffic associated with construction, operational and decommissioning activities. See Impacts Register for Shipping and Navigation.	The MDS identifies the maximum number of structures, maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for increased vessel interference.	Scallop dredgers; Potting vessels; Otter trawlers; Beam trawlers; Pelagic trawlers Vessels using handlines.	Tertiary Co5 Co6 Co8 Co29 Co30	LSE	Assessed in ES.	Data requests to Isle of Man Government for commercial fisheries data including landings statistics and VMS data, including iVMS where available.	No change					
	CF-06-O	All offshore	Operation														
	CF-06-D	All offshore	Decomissioning														
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change					

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Impacts Register
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	Impact Background							
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.

Scoping			
Likely Significant Effect identified at Scoping?	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
LSE	Assessed in ES.	As above.	No change

Environmental Statement				
Project position at ES	**Justification for position at ES**	**Magnitude at ES**	**Sensitivity at ES**	**Likely Significant Effect at ES?**

Impact Background									Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Risk identified as ALARP (no LSE) at Scoping stage?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	SN-01-C	All offshore	Construction	Traffic displacement including displacement of 'lifeline' routes due to presence of the offshore array.	Up to 100 Wind Turbine Generators (WTGs) and up to five OSSs with minimum separation distance 820 m centre-to-centre; 500 m safety zones around construction activities; The regular maintenance of the infrastructure throughout the Proposed Development's 35 year lifespan; 50 m advisory safety zones around operational structures; 500 m safety zones around structures undergoing major maintenance; Decommissioning of the site to remove all offshore infrastructure above the seabed; and Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for displacement.	Sea users	<u>Primary</u> Co45 <u>Tertiary</u> Co33 Co37 Co43	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
	SN-01-O	All offshore	Operation									
	SN-01-D	All offshore	Decomissioning									
MIC	SN-02-C	All offshore	Construction	Increased vessel to vessel collision risk between third party vessels resulting from displacement due to presence of the offshore array.	Up to 100 Wind Turbine Generators (WTGs) and up to five OSSs with minimum separation distance 820 m centre-to-centre; 500 m safety zones around construction activities; The regular maintenance of the infrastructure throughout the Proposed Development's 35 year lifespan; 50 m advisory safety zones around operational structures; 500 m safety zones around structures undergoing major maintenance; Decommissioning of the site to remove all offshore infrastructure above the seabed; and Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for displacement and subsequent increase in collision risk.	Sea users	<u>Primary</u> Co45 <u>Tertiary</u> Co33 Co37 Co43	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
	SN-02-O	All offshore	Operation									
	SN-02-D	All offshore	Decomissioning									
MIC	SN-03-C	All offshore	Construction	Increased vessel to vessel collision risk between a third party vessel and a project vessel.	Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the maximum number of structures, maximum lengths of cable to be installed, requiring the greatest number of vessels and therefore the greatest potential for increased vessel-to-vessel collision risk.	Sea users	<u>Tertiary</u> Co8 Co9 Co32 Co42 Co44	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
	SN-03-O	All offshore	Operation									
	SN-03-D	All offshore	Decomissioning									
MIC	SN-04-O	Array (assumes no surface structures with ECC)	Operation (assumes mitigations in place for construction / decomm.)	Vessel to structure allision risk due to the presence of structures.	Up to 100 Wind Turbine Generators (WTGs) and up to five OSSs with minimum separation distance 820 m centre-to-centre; 500 m safety zones around construction activities; The regular maintenance of the infrastructure throughout the Proposed Development's 35 year lifespan; 50 m advisory safety zones around operational structures; 500 m safety zones around structures undergoing major maintenance; Decommissioning of the site to remove all offshore infrastructure above the seabed; and Vessel traffic associated with construction, operational	The MDS identifies the greatest number of structures, and therefore the greatest potential for allision risk.	Sea users	<u>Primary</u> Co45 <u>Tertiary</u> Co33 Co37 Co43	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	SN-05-C	All offshore	Construction	Reduced access to local ports due to increased vessel traffic.	Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the greatest physical footprint of development, and therefore the greatest potential for reduction in access.	Sea users	N/A	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
	SN-05-O	All offshore	Operation									

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Impacts Register
13. Shipping & Navigation

Ørsted

Impact Background									Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Risk identified as ALARP (no LSE) at Scoping stage?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
	SN-05-D	All offshore	Decomissioning									
MIC	SN-06-O	All offshore	Operation (assumes mitigatons in place for construction / decomm.)	Reduction of under keel clearance resulting from cable protection.	Scour protection up to 2.5 m thickness for 100 WTGs and 5 OSS; Up to 490 km of inter-array cabling and 100 km of interlink cables, both with up to 15% of the route requiring cable protection. Up to 125 km of export cables and 90 km of Offshore Electrical Connection Cable with up to 15% requiring cable protection; and Up to 33 cable crossings.	The MDS identifies the maximum potential for reduction in navigable depth due to the placement of cable protection.	Sea users	Primary Co3 Tertiary Co2 Co37	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	SN-07-O	All offshore	Operation (assumes mitigations in place for construction / decomm.)	Anchor interaction with subsea cables.	Scour protection up to 2.5 m thickness for 100 WTGs and 5 OSS; Up to 490 km of inter-array cabling and 100 km of interlink cables, both with up to 15% of the route requiring cable protection. Up to 125 km of export cables and 90 km of Offshore Electrical Connection Cable with up to 15% requiring cable protection; and Up to 33 cable crossings.	The MDS identifies the maximum length of cables to be installed and therefore the greatest potential for interaction with anchors.	Sea users	Primary Co3 Tertiary Co2 Co37	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	SN-08-O	All offshore	Operation (assumes mitigations in place for construction / decomm.)	Interference with communications and position fixing equipment due to the presence of WTGs.	Presence of 100 WTGs over the full extent of the Offshore Array; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of WTGs and therefore the greatest potential for interference.	Sea users	N/A	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	SN-09-O	All offshore	Operation (assumes mitigations in place for construction / decomm.)	Reduction of Search and Rescue (SAR) capability due to increased incident rates and reduced access for surface / air responders.	Presence of 100 WTGs and 5 OSS over the full extent of the Offshore Array; Minimum separation of 820 m centre-to centre; Layout with single line of orientation; Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the greatest number of structures, and therefore the greatest potential for reduction in access and SAR capabilities..	Sea users	Tertiary Co35 Co36	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE as per MGN 654 Requirements	Assessed in NRA.	MGN 654 Compliant Vessel Traffic Survey.	No change

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Impacts Register
14. Seascpae, Landscape & Visual Impact Assessment

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	Impact Background								Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	SLV-01-C	Array	Construction	Daytime effects of the offshore array on seascape character receptors.	Up to 100 WTGs on suction caisson jacket foundations; Maximum rotor diameter of 320 m, Minimum blade tip height of 30 m above LAT, Maximum blade tip height of 389 m above LAT; Construction and presence of up to 5 OSSs on piled jacket foundations with a maximum separation of adjacent legs at LAT of 70 m. OSS topsides 100 m in length by 80 m in width, 45 m thick (from base to top of topside), Maximum height of 75 m above LAT (including ancillary structures such as helipad, crane and lightning protection, however excluding antennae and masts).	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Seascape character	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
	SLV-01-O	Array	Operation									
	SLV-01-D	Array	Decomissioning									
MIC	SLV-02-C	Array	Construction	Daytime effects of the offshore array on landscape character receptors.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Landscape character	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
	SLV-02-O	Array	Operation									
	SLV-02-D	Array	Decomissioning									
MIC	SLV-03-C	Array	Construction	Daytime effects of the offshore array on landscape character or special qualities of designated landscapes.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Designated landscapes	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
	SLV-03-O	Array	Operation									
	SLV-03-D	Array	Decomissioning									
MIC	SLV-04-C	Array	Construction	Daytime effects of the offshore array on visual receptors.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Visual receptors	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
	SLV-04-O	Array	Operation									
	SLV-04-D	Array	Decomissioning									
MIC	SLV-05-O	Array	Operation	Night time effects of the offshore array of the array area lighting on onshore visual receptors.	As MDS for SLV-01, with structures lit with nautical and aviation warning light systems, ID board lighting and low intensity lighting for helicopter winching operations.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Visual receptors	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
MIC	SLV-06-C	ECC	Construction	Temporary effects associated with offshore cable installation.	Installation of up to: Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Uo to 90 km of Offshore Electrical Connection Cables;	Maximum length of cables installed.	N/A as no LSE	N/A	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to temporary nature of effects associatd with this impact.	No LSE agreed through EPP
	SLV-06-O	ECC	Operation									
	SLV-06-D	ECC	Decomissioning									
MIC	SLV-07-O	Array	Operation	Cumulative impacts of the offshore array and other existing, under construction or consented developments of a similar nature on seascape, landscape and visual receptors.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	All SLVIA receptors	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
MIC	SLV-08-O	Array	Operation	Transboundary impacts of the offshore array on seascape receptors when considered together with other existing, under construction or consented stage developments of a similar nature.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Seascape character	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
MIC	SLV-09-O	Array	Operation	Transboundary impacts of the offshore array on landscape receptors when considered together with other existing, under construction or consented stage developments of a similar nature.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Landscape character and designated landscapes	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change
MIC	SLV-10-O	Array	Operation	Transboundary impacts of the offshore array on visual receptors when considered together with other existing, under construction or consented stage developments of a similar nature.	As MDS for SLV-01.	Maximum number of offshore structures representing the greatest potential for change in visual baseline.	Visual receptors	N/A	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	No change

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Impacts Register
15. Offshore Archaeology & Cultural Heritage

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				Impact Background					Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	OA-01-C	All offshore	Construction	Direct damage to known and recorded archaeological receptors (maritime or aviation) and/or anomalies of likely/possible anthropogenic origin on or under the seabed due to seabed preparation and the installation of infrastructure.	Up to 100 WTGs on suction caisson jacket foundations; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS represents the maximum potential for physical interaction with the seabed.	All marine archaeological assets (maritime or aviation) or anomalies (known and recorded)	Tertiary Co38 Co39 Co40 Co41	No LSE	Further evidence to be provided via the Evidence Plan process.	Desk-based assessment (including results of geophysical and geotechnical surveys) and WSI.	No LSE agreed through EPP (OA-D1.01)
	OA-01-O	All offshore	Operation									
	OA-01-D	All offshore	Decomissioning									
MIC	OA-02-C	All offshore	Construction	Direct damage to potential, currently unrecorded archaeological receptors (maritime or aviation) on or under the seabed due to seabed preparation and installation of infrastructure.	Up to 100 WTGs on suction caisson jacket foundations; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS represents the maximum potential for physical interaction with the seabed.	Marine archaeological assets (maritime and aviation).	Tertiary Co38 Co39 Co40 Co41	No LSE	Further evidence to be provided via the Evidence Plan process.	Desk-based assessment (including results of geophysical and geotechnical surveys) and WSI.	No LSE agreed through EPP (OA-D1.02)
	OA-02-O	All offshore	Operation									
	OA-02-D	All offshore	Decomissioning									
MIC	OA-03-C	All offshore	Construction	Direct damage to known and potential palaeogeographic receptors on or under the seabed due to seabed preparation and installation of infrastructure.	Seabed preparation for: Up to 100 WTGs on suction caisson jacket foundations; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS represents the maximum potential for physical interaction with the seabed.	Palaeogeographic assets including sites and finds.	Tertiary Co38 Co39 Co40 Co41	No LSE	Further evidence to be provided via the Evidence Plan process.	Desk-based assessment (including results of geophysical and geotechnical surveys) and WSI.	No LSE agreed through EPP (OA-D1.03)
	OA-03-O	All offshore	Operation									
	OA-03-D	All offshore	Decomissioning									
MIC	OA-04-C	All offshore	Construction	Physical disturbance activities causing indirect changes to hydrodynamic and sedimentary regimes leading to sediment reduction on the seabed, potentially exposing all marine archaeological receptors leading to increased rates of deterioration (adverse).	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the change to hydrodynamic and sedimentary regimes and the location of all archaeological receptors/anomalies of likely/anthropogenic origin.	All marine archaeological assets or anomalies (known and recorded)	N/A	LSE	Assessed in ES.	Desk-based assessment.	No change
	OA-04-O		Operation									
	OA-04-D		Decomissioning									
MIC	OA-05-C	All offshore	Construction	Physical disturbance activities causing indirect changes to hydrodynamic and sedimentary regimes leading to sediment accretion on the seabed, which may cause sediment to cover receptors inhibiting a range of biological, chemical and physical degradation processes (beneficial).	See Impacts Register for Marine Geology, Oceanography and Physical Processes.	The MDS is defined by the change to hydrodynamic and sedimentary regimes and the location of all archaeological receptors/anomalies of known/likely/possible anthropogenic origin.	All marine archaeological assets or anomalies	N/A	LSE (beneficial)	Assessed in ES.	Desk-based assessment.	No change
	OA-05-O		Operation									
	OA-05-D		Decomissioning									
MIC	OA-06-C	All offshore	Construction	Temporary or permanent change to the setting of heritage receptors, due to the presence of infrastructure, which may affect the significance of such assets.	Presence of of: Up to 100 WTGs on suction caisson jacket foundations;; Up to 5 OSSs on piled jacket foundations.	The MDS is defined by the location of all archaeological receptors/anomalies of likely/possible anthropogenic origin.	All marine archaeological assets or anomalies	N/A	LSE	Assessed in ES.	Desk-based assessment.	No change
	OA-06-O		Operation									
	OA-06-D		Decomissioning									
MIC	OA-07-C	All offshore	Construction	Temporary or permanent change to the character of the historic seascape due to the presence of infrastructure.	Presence of of: Up to 100 WTGs on suction caisson jacket foundations;; Up to 5 OSSs on piled jacket foundations.	The MDS is defined by the maximum potential for the HSC to be impacted by the Proposed Development.	Historic Seascape Character	N/A	LSE	Assessed in ES.	Desk-based assessment.	No change
	OA-07-O		Operation									
	OA-07-D		Decomissioning									
MIC	OAH-06-O	Offshore	Operation	In-Direct Effects: Change within the setting of onshore designated heritage assets as a result of WTGs	Presence of up to 100 WTGs on jacket foundations; and Presence of up to 5 OSSs on suction caisson foundations.	Design scenario represents likely design of WTGs.	Designated heritage assets	N/A	LSE	Assessed in ES	Historic Environment Desk-Based Assessment (HEDBA).	No change
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
16. Military & Civil Aviation

Ørsted

	Impact Background								Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	AR-01-C (previously AR-10-C)	All offshore	Construction	Creation of an aviation obstacle environment due to the presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of offshore structures and therefore the greatest potential for creation of obstacles.	Aircraft.	Tertiary Co33 Co37	LSE	Assessed in ES.	Radar Line of Sight analysis.	No change
	AR-01-O (previously AR-10-O)	All offshore	Operation									
	AR-01-D (previously AR-10-D)	All offshore	Decomissioning									
MIC	AR-02-O (previously AR-11-O)	Array	Operation	Impact on military and civil aviation PSR systems due to the presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of turbines and therefore the greatest potential for creation of radar interference.	PSR systems.	Tertiary Co33 Co37	LSE	Assessed in ES.	Radar Line of Sight analysis.	No change
MIC	AR-03-C (previously AR-12-C)	All offshore	Construction	Impact to PEXA due physical overlap.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations.	The MDS identifies the maximum number of offshore structures and therefore the greatest potential for creation of obstacles.	Military training activities.	Tertiary Co33 Co37	LSE	Assessed in ES.	Radar Line of Sight analysis.	No change
	AR-03-O (previously AR-12-O)	All offshore	Operation									
	AR-03-D (previously AR-12-D)	All offshore	Decomissioning									
MIC	AR-04-O (previously AR-13-O)	Array	Operation	Impact to SSR systems due to the presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of turbines and therefore the greatest potential for creation of radar interference.	IoM MLAT system	Tertiary Co33 Co37	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence regarding potential for effects on SSR.	New receptor identified through EPP that means this impacts is LSE. Agreed to assess in ES (AR-D1.01).
MIC	AR-05-O (previously AR-14-O)	Array	Operation	Impact to Ronaldsway Airport PSR due to the presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of turbines and therefore the greatest potential for creation of radar interference.	PSR systems.	Tertiary Co33 Co37	LSE	Assessed in ES.	Radar Line of Sight analysis.	No change
MIC	AR-06-O (previously AR-15-O)	Array	Operation	Impact to meteorological radar due to the presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of turbines and therefore the greatest potential for creation of radar interference.	N/A as no LSE.	Tertiary Co33 Co37	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence regarding potential for effects on meteorological radar.	No LSE agreed through EPP (AR-D1.03)
MIC	AR-07-C (previously AR-16-C)	All offshore	Construction	Increased air traffic associated with, and displaced by, the Proposed Development may affect available airspace for other users.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations. Construction 2 helicopters for WTG installation (200 round trips); 1 helicopter for WTG foundation installation (200 round trips); 2 helicopters for OSS topside installation (10 round trips); 1 helicopter for OSS foundation installation (200 round trips); 2 helicopters for array and interlink cable installation (333 round trips); 2 helicopters for OECC installation (300 round trips); Operation and Maintenance 1,966 helicopter trips per year.	The MDS identifies the maximum number of offshore structures and therefore the greatest potential for creation of obstacles.	Aircraft.	Tertiary Co33 Co37	LSE	Assessed in ES.	Radar Line of Sight analysis.	No change
	AR-07-O (previously AR-16-O)	All offshore	Operation									
	AR-07-D (previously AR-16-D)	All offshore	Decomissioning									
MIC	AR-08-C	Array	Construction	Impacts on Minimum Safe Altitude (MSA) and Instrument Flight Procedures (IFPs) due to presence of WTGs.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Maximum rotor diameter of 320 m; Minimum blade tip height of 30 m above LAT; Maximum blade tip height of 389 m above LAT;	The MDS identifies the maximum number of offshore structures and therefore the greatest potential for creation of impact to MSAs and IFPs.	Aircraft.	Tertiary Co33 Co37	Not identified at Scoping	Not identified at Scoping	Not identified at Scoping	Identified as LSE through consultation with IOMA. To be assessed in ES.
	AR-08-O	Array	Operation									
	AR-08-D	Array	Decomissioning									
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
17. Other Marine Users & Activities

Ørsted

Impact Background									Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significant Effect identified at Scoping?**	**Proposed Approach**	**Further evidence**	**Updates Since Scoping**
MIC	OMU-01-C	All offshore	Construction	Activity or access displacement associated with increased vessel movements associated with the construction, maintainence and decomissioning of WTGs, platforms and export cables.	Vessel traffic associated with construction, operational and decommissioning activities.	The MDS identifies the maximum number vessels and therefore the greatest potential for effects.	Offshore Wind Oil and Gas Cables and Pipelines Marine Disposal Marine Aggregates Military Activity	Tertiary Co5 Co8 Co33 Co37	LSE	Assessed in ES.	N/A	No change
	OMU-01-O	All offshore	Operation									
	OMU-01-D	All offshore	Decomissioning									
MIC	OMU-02-C	All offshore	Construction	Activity or access displacement associated with the establishment of safety zones associated with the construction, maintainence and decomissioning of WTGs, platforms and export cables.	500 m safety zones around up to: Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Rolling safety zones around export cable installation vessels; 50 m advisory safety zones around operational structures; 500 m safety zones around structures undergoing major maintenance;	The MDs is defined by the maximum potential requirement for safety zones.	Offshore Wind Oil and Gas Cables and Pipelines Marine Disposal Marine Aggregates Military Activity	Tertiary Co9	LSE	Assessed in ES.	N/A	No change
	OMU-02-O	All offshore	Operation									
	OMU-02-D	All offshore	Decomissioning									
MIC	OMU-03-C	All offshore	Construction	Temporary increases in subsea noise due to construction.	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	The MDS results in the greatest number of foundations with the greatest potential for underwater noise propagation.	Offshore recreational activities	Tertiary Co8	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of note on following underwater noise modelling.	No LSE paper submitted to operators, awaiting feedback
	OMU-03-D	All offshore	Decomissioning									
MIC	OMU-04-C	All offshore	Construction	Direct disturbance and damage to existing assets and infrastructure due to physical overlap.	Seabed preparation for: Up to 100 WTGs on suction caisson jacket foundations; Up to 2 OSSs (large concept) on suction caisson jacket foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using open-cut trenching or HDD (or other trenchless techniques)	The MDS represents tha maximum potential for physical interaction with the seabed.	Oil and Gas Cables and Pipelines	Tertiary Co37	No LSE	Further evidence to be provided via the Evidence Plan process.	Provision of infromation regarding application of commercial crossing agreements.	No LSE paper submitted to operators, awaiting feedback
	OMU-04-D	All offshore	Decomissioning									
MIC	OMU-05-O	All offshore	Operation	Physical presence of infrastructure during the operational phase.	Presence of: Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled jacket foundations; Associated scour protection. Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable; Associated cable protection.	The MDS identifies the greatest physical footprint of development.	Offshore Wind Oil and Gas Cables and Pipelines Marine Disposal Marine Aggregates Military Activity	Tertiary Co33 Co37	LSE	Assessed in ES.	N/A	No change
MIC	OMU-06-C	All offshore	Construction	Subsequent deposition of suspended/ re-suspended sediments due to seabed preparation and installation of infrastructure.	Up to 100 WTGs on suction caisson jacket foundations; Up to 5 OSSs on piled foundations; Up to 490 km of array cables; Up to 100 km of interlink cables; Up to 125 km of export cables; Up to 90 km of Offshore Electrical Connection Cable Cables installed using Mass Flow Excavation (or similar); and Landfall infrastructure installed in the intertidal using HDD (or other trenchless technique)	The MDS is defined by the identification of pathway for increases in suspended sediments.	Marine Disposal Marine Aggregates	N/A	No LSE	Further evidence to be provided via the Evidence Plan process.	A validated hydrodynamic model will be developed to investigate sediment plume scenarios. Provision of technical note.	No LSE paper submitted to operators, awaiting feedback
	OMU-06-D	All offshore	Decomissioning									
MIC	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
MIC	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
18. Onshore Impacts Assessment

Ørsted

	Impact Background									EIA Scoping				Environmental Statement				
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments at Scoping**	**Commitments at EPP**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates since Scoping**	**Project position at ES**	**Justification for position at ES**	**Magnitude at ES**	**Sensitivity at ES**	**Likely Significant Effect at ES?**
TCPA	ECO-01-C	Onshore	Construction	Noise, lighting and visual disturbances on habitats and species caused by physical works and movement of craft/vehicles and personnel.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	All potential OECC options and landfall locations need to be considered. Design scenario represents the maximum spatial extent of disturbance to ecological receptors in relation to onshore key parameters.	Birds using the intertidal zone, roosting bats, Douglas Bay MNR.	Primary Co46 Tertiary Co17		LSE	Assessed in ES	Douglas Bay-Wintering intertidal bird Surveys - two seasons - September to March inclusive. Two visits per month to encompass tide cycles. Desk study data, i.e WeBS (BTO Wetland Bird Survey) data and Island wide context data. Groudle Bay-Habitat survey, protected speceis walk over, likely to trigger bat roost assessment and	No Change					
TCPA	ECO-02-C	Onshore	Construction	Habitat loss and disturbance during cable installation and landfall.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	All potential OECC options and landfall locations need to be considered. Design scenario represents the maximum spatial extent of disturbance to ecological receptors in relation to onshore key parameters.	Urban nesting birds, urban roosting bats, Groudle registered tree area, Groudle Glen wildlife site.	Tertiary Co1 Co15		LSE	Assessed in ES	Routing studies and Habitat survey of cable corridor. Depending on potential impacts species surveys may be required.	No Change					
TCPA	ECO-03-O	Onshore	O&M	Species disturbance during re-excavation of cable ducts.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS results in the greatest area of habitat affected by the presence of infrastructure to be removed.	Habitats and species.	Tertiary Co1 Co15 Co16 Co17		LSE	Assessed in ES	Further surveys may be required e.g. wintering birds, depending on the specifics. Monitoring of any reinstatement or translocated populations during operational stage as a post construction requirement.	Scoped out - The LSE is no longer relevant to the revised onshore scope					
TCPA	ECO-04-D	Onshore	Decomissioning	Habitat and species disturbance during re-excavation of power cables, OnSS and associated onshore infrastructure during decommissioning.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS results in the greatest area of habitat affected by the presence of infrastructure to be removed.	Habitats and species.	Tertiary Co6 Co15		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on ecological management actions requried to miitage potential impacts of cable removal.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-01-C	All Onshore	Construction	A reduction to the productivity and/or total yield gained from agriculture land within areas under construction.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Class 3 and Class 3/4 agricultural land	Tertiary Co17	Tertiary Co17	LSE	Assessed in ES	Information on the final location of onshore infrastructure, presence of agricultural land will determine simple/detailed assessment. A review of the agricultural land Classes which would be impacted, potentially supported with a site walkover survey, assessed against the refined project details in line with the impact to soils. Mitigation, such as an SMP would be considered and targeted to minimise any	No Change					

TCPA	LUGC-02-C	All Onshore	Construction	Construction activities resulting in the closure, whether temporary or permanent, of community land.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Beaches.	Tertiary Co23	Tertiary Co17 Co23	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	No Change - agreed as No LSE with TAG								
TCPA	LUGC-03-C	All Onshore	Construction	Construction activities resulting in the closure, whether temporary or permanent, of community assests.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Community centres and religious, healthcare and education facilities	Tertiary Co23 Co19	Tertiary Co17 Co23	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	No Change - agreed as No LSE with TAG								
TCPA	LUGC-04-C	All Onshore	Construction	Temporary or permanent closure, severage or disruption of linear recreational routes such as PRoWs, long-distance routes and cycle routes as a result of the installation of the cable route.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Raad ny Foillan, PRoWs, tourist routes and cycle paths.	Tertiary Co23 Co19	Tertiary Co23 Co19	LSE	Assessed in ES	Information on the final location of onshore infrastructure. Desktop review of recreational routes within the construction corridor and chosen substation site, in consultation with stakeholders. Assessing the current baseline levels against the potential impacts provided with project specific data. The in-direct socioeconomic effects related to tourism and recreation would be assessed in the Socio-Economics	Change to No LSE and agreed with TAG								
TCPA	LUGC-05-C	All Onshore	Construction	Construction of the cable route overlapping areas identified within development plans for securing employment or housing, as well temporary or permanent closures to businesses aimed at providing tourism or recreation (caravan and camping sites).	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Tourism and recreational assets.	Tertiary Co17 Co19 Co23		LSE	Assessed in ES	Information on the final location of onshore infrastructure. Desktop review of tourism and recreational assets within the construction corridor and chosen substation site, in consultation with stakeholders. Assessing the current baseline levels against the potential impacts provided with project specific data. The wider socio-economic effects related to tourism and recreation would be assessed in Chapter 15: Socio-Economics,	No Change								

TCPA	LUGC-06-C	All Onshore	Construction	Direct construction impacts to residential properties within villages, towns, or as individual farm holdings.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Private housing.	Tertiary Co17		LSE	Assessed in ES	Information on the final location of onshore infrastructure. Using publicly available data to give an overview of any residential properties within construction area. This data will be assessed against the potential impacts provided with project specific data. Mitigation for any significant impacts would be sought through consultation with the Isle of Man and stakeholders.	No Change					
TCPA	LUGC-07-C	All Onshore	Construction	Construction activities resulting in damage to designated geological ASSIs through any ground breaking activities that directly overlap with them within the onshore cable route	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Designated geological ASSIs	Primary Co20		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of note detailing how construction activities will not result in the direct loss of Peatland or carbon rich soils.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-08-C	All Onshore	Construction	Construction activities resulting in direct loss of Peatland and carbon rich soils	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Peatland and carbon rich soils	Primary Co20		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of note detailing how ASSIs will not be impacted upon during construction.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-09-C	All Onshore	Construction	Construction activities resulting in impact to soil quality.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Agricultural Soils	Primary Co20	Tertiary Co17 Primary Co20	LSE	Further evidence to be provided via the Evidence Plan process.	Baseline data review to include identification of different soil classes, Areas of agricultural importance will be identified and their locations described.	Change to No LSE and agreed with TAG					
TCPA	LUGC-10-C	All Onshore	Construction	Construction vehicle movements and creation of haul routes could cause compaction of soil and degrade soil quality	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Agricultural Soils	Tertiary Co17 Primary Co20	Tertiary Co17 Primary Co20	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	No Change - agreed as No LSE with TAG					
TCPA	LUGC-11-C	All Onshore	Construction	Exposure of workforce to health impacts during construction activities such as trenching, ground collapse, excavations and other earthworks which could disturb contaminants resulting in health risks to construction workers.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Contaminated land	Tertiary Co17 Co19 Primary Co20	Tertiary Co17 Co19 Primary Co20	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	No Change - agreed as No LSE with TAG					

TCPA	LUGC-12-C	All Onshore	Construction	Disturbance / exposure of historic contamination from trenching, excavation and other earthworks, resulting in contamination of non-contaminated areas. Any contamination encountered during the construction phase would be subject to appropriate risk assessment and if necessary, either removed, treated and/ or mitigated as part of the project.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Contaminated land	Tertiary Co17 Primary Co20		LSE	Assessed in ES	A simple assessment approach will be adopted involving site walkover and baseline review of potential sources, pathways and receptors. This will feed into the development of a risk-based approach to managing potential contaminated soils during all aspects of construction.	No Change					
TCPA	LUGC-13-C	All Onshore	Construction	During construction there is potential for accidental spillages and leakages of oils, fuel and other polluting substances which could potentially enter the ground.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Soil	Tertiary Co17	Tertiary Co17	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	No Change - agreed as No LSE with TAG					
TCPA	LUGC-14-C	All Onshore	Construction	Where overlaps occur between the permanent onshore cable route and regional geological sites and/or minerals safeguarding areas this could sterilise future resources.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Regional geological sites and minerals safeguarding areas	Primary Co20		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-15-O	All Onshore	Operation and Maintenance	Permanent loss of agricultural land as a result of the presence of permanent onshore infrastructure.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the Order Limits.	Class 3 and Class 3/4 agricultural land	Tertiary Co17 Co22		LSE	Assessed in ES	Information on the final location of onshore infrastructure. A review of the agricultural land Classes which would be impacted, potentially supported with a site walkover survey, assessed against the refined project details in line with the impact to soils. Mitigations for permanent losses of agricultural land are currently unknown and will be considered	No Change					
TCPA	LUGC-16-O	All Onshore	Operation and Maintenance	Loss of agricultural land or productivity as a result of the operational onshore cables.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Class 3 and Class 3/4 agricultural land	Primary Co21 Co22		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of technical note on Land Use & Ground Conditions	Scoped out - The LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-17-O	All Onshore	Operation and Maintenance	The presence of the onshore substation resulting in the closure, whether temporary or permanent, of community land.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information or location, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS.	Beaches.	Tertiary Co22 Co23		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-18-O	All Onshore	Operation and Maintenance	The presence of the onshore cables resulting in the closure, whether temporary or permanent, of community land.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Beaches.	Primary Co46		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The LSE is no longer relevant to the revised onshore scope.					

TCPA	LUGC-19-O	All Onshore	Operation and Maintenance	The presence of the onshore substation resulting in the closure, whether temporary or permanent, of community assests (community centres and religious, healthcare and education facilities).	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information or location, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS.	Community centres and religious, healthcare and education facilities	Tertiary Co23		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-20-O	All Onshore	Operation and Maintenance	The presence of the onshore cables resulting in the closure, whether temporary or permanent, of community assests (community centres and religious, healthcare and education facilities).	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Community centres and religious, healthcare and education facilities	Primary Co21 Co22		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-21-O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore substation resulting in a temporary or permanent closure, severage or disruption of linear recreational routes such as PRoWs, long-distance routes and cycle routes.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information or location, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS.	Raad ny Foillan, PRoWs, tourist routes and cycle paths.	Tertiary Co23 Co47		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-22-O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore cables resulting in a temporary or permanent closure, severage or disruption of linear recreational routes such as PRoWs, long-distance routes and cycle routes.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Raad ny Foillan, PRoWs, tourist routes and cycle paths.	Primary Co21 Co23 Co47		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-23-O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore substation resulting in a reduced scale of areas identified within development plans for securing employment or housing, as well temporary or permanent closures to businesses aimed at providing tourism or recreation (caravan and camping sites).	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information or location, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS.	Tourism and recreational assets.	Tertiary Co23		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-24-O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore cables resulting in a reduced scale of areas identified within development plans for securing employment or housing, as well temporary or permanent closures to businesses aimed at providing tourism or recreation (caravan and camping sites).	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Tourism and recreational assets.	Primary Co21		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-25O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore substation resulting in a direct impact to residential properties within villages, towns, or as individual farm holdings.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of detailed design information or location, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS.	Private housing.	Tertiary Co17		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					

TCPA	LUGC-26-O	All Onshore	Operation and Maintenance	The operation and maintenance of the onshore cables resulting in a direct impact to residential properties within villages, towns, or as individual farm holdings.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OnSS and cables.	Private housing.	Primary Co21		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-27-O	All Onshore	Operation and Maintenance	During operation there is potential for accidental spillages and leakages of oils, fuel and other polluting substances which could potentially enter the ground.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational TJB(s) and OECC.	Soil	Tertiary Co17	Tertiary Co17	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	No Change - agreed as No LSE with TAG					
TCPA	LUGC-28-O	All Onshore	Operation and Maintenance	Where overlaps occur between the permanent onshore cable route and regional geological sites and/or minerals safeguarding areas this could sterilise future resources.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational cables.	Regional geological sites and minerals safeguarding areas	Primary Co20		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how the operation and maintenance elements will look to reduce impact as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	LUGC-29-O	All Onshore	Operation and Maintenance	Impact on ground conditions from localised heating impacts from the buried infrastructure	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the operational OECC.	Ground conditions	Primary Co20		LSE	Assessed in ES	An assessment will be indertaken involving baseline review of the geological units and their properties.	No Change					
TCPA	LUGC-30-D	All Onshore	Decomissioning	A repetition or increase in magnitude of the impacts related to the construction activities, throughout the decommissioning phase.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	In the absence of further design information, it is assumed that all onshore infrastructure would be removed resulting in the maximum possible impact, rather than any element remaining in-situ.	Class 3 and Class 3/4 agricultural land	Tertiary Co6.		**No LSE**	Further evidence to be provided via the Evidence Plan process.	A note detailing how the decomissioning phase will be undertaken to reduce impacts as far as practicable on land use and ground conditions.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	TT-01-C	Onshore	Construction	Construction traffic movements and location of landfall/construction compounds may result in increases in traffic on the highway network, which may trigger Rules 1 or 2 of the IEMA traffic screening process.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Users of the road network and transportation routes in the isle of Man	Tertiary Co17 Co19 Co28		LSE	Assessed in ES	Traffic Data required. Study area still TBC	No Change					
TCPA	TT-02-O	Onshore	Operation	Operational traffic movements may result in increases in traffic, and risk of traffic accidents, on the highway network, which may trigger Rules 1 or 2 of the IEMA traffic screening process.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Maximum design scenario represents the maximum spatial extent likely to be affected during the operation of the onshore infrastructure.	Users of the road network and transportation routes in the isle of Man	Tertiary Co17 Co19 Co28	Tertiary Co17 Co19 Co28	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Further evidence to be provided via a technical note detailing the operational traffic movements within the defined study area and potential effects. Relevant statutory bodies to be consulted.	No Change					

TCPA	TT-03-C	Onshore	Construction	Construction impacts related to traffic movements required onshore for the Offshore construction.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Maximum design scenario represents the maximum spatial extent likely to be affected during the construction of the offshore infrastructure in relation to traffic and transport.	Users of the road network and transportation routes in the isle of Man	Tertiary Co17 Co28	Tertiary Co17 Co28	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Further evidence to be provided via a technical note detailing the construction traffic movements within the defined study area and potential effects. Relevant statutory bodies to be consulted.	No Change						
TCPA	TT-04-C	Onshore	Construction	Temporary road closures/diversions inc. footways/cycleways may result in increases in traffic on the highway network, which may trigger Rules 1 or 2 of the IEMA traffic screening process.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS would represent the greatest extent of the proposed construction works which would result in the greatest disruption.	Users of the road network, and footways/cycleways in the isle of Man.	Tertiary Co17 Co19 Co23 Co28		LSE	Assessed in ES	Assessment of traffic survey data and construction traffic volumes/routes etc. Detailed Assessment	No Change						
TCPA	TT-05-C	Onshore	Construction	Abnormal loads - The temporary impact of hazardous, dangerous and abnormal loads during construction works.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The largest load required to be transported to site would require the largest vehicle, therefore having the greatest potential impact upon structures, highway condition, and manoeuvrability	Road network and transportation routes in the Isle of Man	Tertiary Co17 Co19 Co28		LSE	Assessed in ES	Assessment of construction traffic volumes/routes etc. Detailed Assessment	No Change						
TCPA	OAH-01-C	Onshore	Construction	**Direct Effects:** Ground disturbance causing the removal / truncation of buried archaeological remains related to onshore cable route	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Design scenario represents the maximum spatial extent of disturbance to potential archaeological remains in relation to onshore cable route and OnSS.	Archaeological remians	Primary Co12 Co46 Tertiary Co13 Co19		LSE	Assessed in ES	Historic Environment Desk-Based Assessment (HEDBA).	No Change						
TCPA	OAH-02-C	Onshore	Construction	**In-Direct Effects:** Short-term change within the setting of designated heritage assets could affect the appreciation of their significance. This could be associated with visual and audible changes associated with construction methodology (heavy plant, movements, etc.) and earthworks associated with cable trenches.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Design scenario represents the maximum spatial extent of disturbance to potential designated heritage assets in relation to onshore cable route.	Designated heritage assets	Primary Co12 Co46 Tertiary Co13 Co19		LSE	Assessed in ES	Historic Environment Desk-Based Assessment (HEDBA).	No Change						
TCPA	OAH-03-O	Onshore	Operation	**In-Direct Effects:** Change within the setting of onshore designated heritage assets as a result of OnSS.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Assumes all heritage assets to be considered within study area of the MDS.	Designated heritage assets	Primary Co12 Tertiary Co13		LSE	Assessed in ES	Historic Environment Desk-Based Assessment (HEDBA).	Scoped out - The LSE is no longer relevant to the revised onshore scope.						
TCPA	OAH-04-O	Onshore	Operation	**Direct Effects:** Potential replacement / repair of cable route; Repair work at OnSS.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Design scenario represents the possible maintenance of onshore cable. Details of OnSS not known.	Archaeological remians	Tertiary Co13 Co19 Primary Co46		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Note detailing how operation and mainteance works to be undertaken to ensure no impact resulting on LSE on heritage assets.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.						

TCPA	OAH-05-O	Onshore	Operation	**In-Direct Effects:** Short-term change within the setting of designated heritage assets as a result of maintenance activities.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	As above.	Designated heritage assets	Tertiary Co13 Co19 Primary Co46	Tertiary Co13 Co19 Primary Co46	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Note detailing how operation and mainteance works to be undertaken to ensure no impact resulting on LSE on heritage assets.	No Change						
TCPA	OAH-06-O	Offshore	Operation	**In-Direct Effects:** Change within the setting of onshore designated heritage assets as a result of WTGs.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Design scenario represents likely design of WTGs.	Designated heritage assets	None		LSE	Assessed in ES	Historic Environment Desk-Based Assessment (HEDBA).	No Change - Impact is now assessed in Chapter 15, Archaeology & Cultural Heritage						
TCPA	OAH-07-D	Onshore	Decomissioning	**Direct Effects:** None. It is anticipated that decommissioning would not necessitate the removal of terrestrial components associated with the buried cable and OnSS.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	MDS assumes likely area to be affected for decomissiongof works	Archaeological remians	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Note detailing how decomissioning works will be undertaken to reduce potential for LSE as far as practicable	Scoped out - The No LSE is no longer relevant to the revised onshore scope.						
TCPA	AQ-01-C	All-Onshore	Construction	Dust generated from onshore construction activities on both human and ecological receptors.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co10 Co17 Co19	Tertiary Co10 Co17 Co19	**No LSE**	Detailed (to inform extent of dust controls to feed into CoCP)	Technical note on Air Quality	No Change - agreed as No LSE with TAG						
TCPA	AQ-02-C	All-Onshore	Construction	Road traffic movements generated by onshore construction activities on human receptors.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co28	Tertiary Co17 Co28	LSE	Assessed in ES	Dependant on availability of air quality data, assessment outcomes and consultation. Established at Scoping	Change to No LSE and agreed with TAG						
TCPA	AQ-03-C	All-Onshore	Construction	Road traffic movements generated by onshore construction activities on ecological receptors.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Ecological receptors.	Tertiary Co17 Co28	Tertiary Co17 Co28	LSE	Assessed in ES	Dependant on availability of air quality data, assessment outcomes and consultation. Established at Scoping	Change to No LSE and agreed with TAG						
TCPA	AQ-04-C	All-Onshore	Construction	Emissions generated from NRMM used during the construction phase.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co11 Co19	Tertiary Co11 Co17 Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Air Quality	No Change - agreed as No LSE with TAG						

TCPA	AQ-05-C	All-Onshore	Construction	Emissions generated from offshore vessel movements during the construction phase on onshore receptors.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co28		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Air Quality	Scoped out - The No LSE is no longer relevant to the revised onshore scope.						
TCPA	AQ-06-O	All-Onshore	Operation	Road traffic movements generated by onshore operational activities on human receptors.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human receptors	Tertiary Co5	Tertiary Co5	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Air Quality	No Change - agreed as No LSE with TAG						
TCPA	AQ-07-O	All-Onshore	Operation	Emissions generated from NRMM used for maintenance activities during the operational phase.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co11	Tertiary Co5 Co11	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Air Quality	No Change - agreed as No LSE with TAG						
TCPA	AQ-08-O	All-Onshore	Operation	Emissions generated from offshore vessel movements generated by operational activities	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co5		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note detailing how emissiongs from offshore vessel movements will be managed.	No Change - agreed as No LSE with TAG						
TCPA	AQ-09-D	All-Onshore	Decomissioning	Decommissioning activities	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDSidentifieds	Human and ecological receptors.	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Air Quality	Scoped out - The No LSE is no longer relevant to the revised onshore scope.						
TCPA	HFR-01C	Onshore	Construction	Generation of turbid runoff which could enter the water environment	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co17 Co19	Tertiary Co17 Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG						
TCPA	HFR-02-C	Onshore	Construction	Changes to surface water runoff patterns which could affect flood risk	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co17	Tertiary Co17	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG						

TCPA	HFR-03-C	Onshore	Construction	Potential damage to flood defence or surface water drainage infrastructure	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Flood defences or surface water drainage infrastructure.	Tertiary Co17 Co19		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	HFR-04-C	Onshore	Construction	Pollution or disruption of flow to groundwater through ground excavations or piling.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Primary Co20 Tertiary Co17 Co19	Primary Co20 Tertiary Co17 Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG					
TCPA	HFR-05-C	Onshore	Construction	Accidental spillages and leakages of oils, fuel and other polluting substances which could potentially enter the water environment.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co17 Co19	Tertiary Co17 Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG					
TCPA	HFR-06-O	Onshore	Operation	Any impact on WFD status (or equivalent) for assessed surface water or groundwater bodies.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co19	Tertiary Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG					
TCPA	HFR-07-O	Onshore	Operation	Accidental spillages and leakages of oils, fuel and other polluting substances which could potentially enter the water environment	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co5	Tertiary Co5	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	No Change - agreed as No LSE with TAG					
TCPA	HFR-08-D	Onshore	Decomissioning	Generation of turbid runoff which could enter the water environment	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC:	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Primary Co46 Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	HFR-09-D	Onshore	Decomissioning	Accidental spillages and leakages of oils, fuel and other polluting substances which could potentially enter the water environment during the decommissioing phase.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Primary Co46 Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					
TCPA	HFR-10-D	Onshore	Decomissioning	Potential for damage to flood defence or surface water drainage infrastructure	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Flood defences or surface water drainage infrastructure.	Tertiary Co19		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.					

TCPA	HFR-11-D	Onshore	Decomissioning	Pollution or disruption of flow to groundwater through ground excavations or piling.	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC:	The MDS will include the maximum number of cables anticipated to be removed and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance. Inclused area of OnSS	Watercourses	Tertiary Co19		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Technical note on Hydrology and Flood Risk.	Scoped out - The No LSE is no longer relevant to the revised onshore scope.	
TCPA	HH-01-C	Onshore	Construction	The generation of dust and particulates (e.g. from excavation or movement of dry materials) could have an adverse impact on human health.	See impacts register for Air Quality	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co17 Co19 Co21	Tertiary Co17 Co19 Co21	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See air quality chapter	No Change - agreed as No LSE with TAG	
TCPA	HH-02-C	Onshore	Construction	Exhaust emissions from construction traffic have the potential to contribute to local ambient concentrations of nitrogen oxide (NO_2) and particulate matter (PM10 and PM2.5), resulting in potential effects on human health.	See impacts register for Air Quality	N/A	Human and ecological receptors.	Tertiary Co17 Co19 Co28		LSE	Assessed in ES	See air quality chapter	No Change	
TCPA	HH-03-C	Onshore	Construction	Construction activities such as clearance of surface vegetation, could result in run-off materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co17 Co19	Tertiary Co17 Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrolgy impacts register	No Change - agreed as No LSE with TAG	
TCPA	HH-04-C	Onshore	Construction	Ground disturbance or the removal of hardstanding could increase the potential for leaching and the mobilisation of soluble contaminants.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co19	Tertiary Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	No Change - agreed as No LSE with TAG	
TCPA	HH-05-C	Onshore	Construction	Leaks and/or spills of contaminants, such as fuels and oils, used and stored during the construction phase could occur.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co19	Tertiary Co19	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrolgy impacts register	No Change - agreed as No LSE with TAG	
TCPA	HH-06-C	Onshore	Construction	The impact of noise and vibration from construction activities due to the onshore landfall, cable route installation and substation construction could result in disturbance of local residence and commercial	See impacts register for Noise and Vibration.	The exact location of the OnSS, cable and HDD drilling zones not yet defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19		LSE	Assessed in ES	See noise and vibration chapter	No Change	
TCPA	HH-07-C	Onshore	Construction	The potential delays to existing routes and the potential severance of routes which could reduce the access to services (such as GPs and hospitals) and amenities (as recreational activities).	See impacts register for Traffic and Transport.	Ensure all potential interactions are assessed	Users of local road network requiring access to local services.	Tertiary Co28		LSE	Assessed in ES	See Traffic and transport register	No Change	
TCPA	HH-08-C	Onshore	Construction	Potential for temporary loss of access to community spaces due to construction of the onshore infrastructure. This could impact community and tourism receptors due to severance of access routes	See impacts register for Land Use and Ground Conditions.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the ESIA Scoping Boundary	Beaches.	Tertiary Co23	Tertiary Co23	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See Land Use and Ground Conditions Chapter	No Change - agreed as No LSE with TAG	
TCPA	HH-09-O	Onshore	Operation	Residential and commercial properties could be affected by the operational noise associated with the onshore substation (and associated infrastructure)	See impacts register for Noise and Vibration.	The exact location of the OnSS not yet defined. Positioning OnSS plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co24		LSE	Assessed in ES	Baseline survey to be undertaken at the receptor locations located close to the OnSS.	No Change	
TCPA	HH-11-D	Onshore	Decomissioning	Decommissioning activities such as clearance of surface vegetation, could result in run-off of materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The No LSE is no longer relevant to the revised onshore scope.	
TCPA	HH-12-D	Onshore	Decomissioning	The generation of dust and particulates (e.g. from excavation or movement of dry materials) potentially having an adverse impact on human health.	See impacts register for Air Quality	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors and ecologically sensitive sites.	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See air quality chapter	Scoped out - The No LSE is no longer relevant to the revised onshore scope.	

TCPA	HH-13-D	Onshore	Decomissioning	Exhaust emissions from traffic associated with decommissioning could have the potential to contribute to local ambient concentrations of nitrogen dioxide (NO2), and particulate matter (PM10 and	See impacts register for Air Quality	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors and ecologically sensitive sites.	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See air quality chapter and traffic and transport chapter	Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	HH-14-D	Onshore	Decomissioning	Decommissioning activities such as clearance of surface vegetation, could result in run-off of materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	HH-15-D	Onshore	Decomissioning	The potential ground disturbance or the removal of hardstanding could increase the potential for leaching and the mobilisation of soluble contaminants.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co19		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	HH-16-D	Onshore	Decomissioning	Leaks and/or spills of contaminants, such as fuels and oils, used and stored during the decommissioning phase could occur.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	HH-17-D	Onshore	Decomissioning	The impact of noise and vibration from the decommissioning activities of onshore infrastructure could result in disturbance of local residence and commercial properties.	See impacts register for Noise and Vibration.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors	Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	See noise and vibration chapter	Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	MA&D-04-C-O-D	All onshore and offshore project infrastructure	Construction, operation and Decomissioning	Ground collapse during construction	All onshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Onshore population in close proximity to construction area.	Tertiary Co19 Co36	Tertiary Co19 Co36	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See LUGC No LSE Position Paper	No Change - agreed as No LSE with TAG
TCPA	MA&D-05-C-O-D	All onshore project infrastructure	Construction, operation and Decomissioning	Major road traffic accident, specifically, working over or adjacent to existing highways. Movement of construction vehicles along public roads and adjacent to public rights of way.	All onshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Works including road crossing and sections along carriageway.	Works along carriageway and crossing likely to present greatest risk	User of highway network.	Tertiary Co23 Co36	Tertiary Co23 Co36	**No LSE**	Further evidence to be provided via the Evidence Plan process.	See traffic and transport No LSE Position Paper	No Change
TCPA	LV-01-C	All onshore project infrastructure	Construction	Temporary change to landscape character as a result of construction, maintenance and decommissioning activities.	Installation, operation and maintenance, and decommissioning works associated with: Landfall: including up to 3 TJBs (one per circuit); Up to 3 onshore cable circuits installed in a permanent corridor up to 45 m wide, with a temporary construction corridor width of up to 60 m; and A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for onshore infrastructure and therefore the greatest potential for change to landscape and visual amenity.	Landscape character	Primary Co21 Co47 Tertiary Co15	Primary Co21 Co47 Tertiary Co15	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to temporary nature of effects associatd with this effect.	No Change
	LV-01-O	All onshore project infrastructure	Operation										No Change
	LV-01-D	All onshore project infrastructure	Decomissioning										Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	LV-02-C	All onshore project infrastructure	Construction	Temporary effects on visual receptors as a result of construction, maintenance and decommissioning activities.	Installation, operation and maintenance, and decommissioning works associated with: Landfall: including up to 3 TJBs (one per circuit); Up to 3 onshore cable circuits installed in a permanent corridor up to 45 m wide, with a temporary construction corridor width of up to 60 m; and A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for onshore infrastructure and therefore the greatest potential for change to landscape and visual amenity.	Visual receptors; Visual amenity.	Primary Co21 Co47 Tertiary Co15	Primary Co21 Co47 Tertiary Co15	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to temporary nature of effects associatd with this effect.	No Change
	LV-02-O	All onshore project infrastructure	Operation										No Change
	LV-02-D	All onshore project infrastructure	Decomissioning										Scoped out - The No LSE is no longer relevant to the revised onshore scope.

TCPA	LV-03-C	All onshore project infrastructure	Construction	Temporary changes to landscape character or special qualities of designated landscapes as a result of construction, maintenance and decommissioning activities.	Installation, operation and maintenance, and decommissioning works associated with: Landfall: including up to 3 TJBs (one per circuit); Up to 3 onshore cable circuits installed in a permanent corridor up to 45 m wide, with a temporary construction corridor width of up to 60 m; and A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for onshore infrastructure and therefore the greatest potential for change to landscape and visual amenity.	Designated landscapes	Primary Co21 Co47 Tertiary Co15	Primary Co21 Co47 Tertiary Co15	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to temporary nature of effects associatd with this effect.	No Change
	LV-03-O	All onshore project infrastructure	Operation											No Change
	LV-03-D	All onshore project infrastructure	Decomissioning											Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	LV-04-C	All onshore project infrastructure	Construction	Temporary changes to physical landscape features as a result of construction, maintenance and decommissioning activities.	Installation, operation and maintenance, and decommissioning works associated with: Landfall: including up to 3 TJBs (one per circuit); Up to 3 onshore cable circuits installed in a permanent corridor up to 45 m wide, with a temporary construction corridor width of up to 60 m; and A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for onshore infrastructure and therefore the greatest potential for change to landscape and visual amenity.	Physical landscape	Primary Co21 Co47 Tertiary Co15	Primary Co21 Co47 Tertiary Co15	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to temporary nature of effects associatd with this effect.	No Change
	LV-04-O	All onshore project infrastructure	Operation											No Change
	LV-04-D	All onshore project infrastructure	Decomissioning											Scoped out - The No LSE is no longer relevant to the revised onshore scope.
TCPA	LV-05-O	Onshore Substation	Operation	Long-term changes to landscape character due to the presence of permanent onshore infrastructure	A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for the OnSS and therefore the greatest potential for change to landscape and visual amenity.	Landscape character	Tertiary Co15	Tertiary Co15	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	Change to No LSE and agreed with TAG
TCPA	LV-06-O	Onshore Substation	Operation	Long-term effects on visual receptors due to the presence of permanent onshore infrastructure.	A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for the OnSS and therefore the greatest potential for change to landscape and visual amenity.	Visual receptors; Visual amenity.	Tertiary Co15	Tertiary Co15	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	Change to No LSE and agreed with TAG
TCPA	LV-07-O	Onshore Substation	Operation	Long term changes to landscape character or special qualities of designated landscapes due to the presence of permanent inshore infrastructure.	A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for the OnSS and therefore the greatest potential for change to landscape and visual amenity.	Designated landscapes	Tertiary Co15	Tertiary Co15	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	Change to No LSE and agreed with TAG
TCPA	LV-08-O	Onshore Substation	Operation	Long term changes to physical landscape features due to the presence of permanent inshore infrastructure.	A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for the OnSS and therefore the greatest potential for change to landscape and visual amenity.	Physical landscape	Tertiary Co15	Tertiary Co15	LSE	Assessed in ES.	Site photography, wirelines and visualisations; ZTV analysis.	Change to No LSE and agreed with TAG
TCPA	LV-09-C	All onshore project infrastructure	Construction	Night-time effects on landscape and visual receptors	Installation, operation and maintenance, and decommissioning works associated with: Landfall: including up to 3 TJBs (one per circuit); Up to 3 onshore cable circuits installed in a permanent corridor up to 45 m wide, with a temporary construction corridor width of up to 60 m; and A single OnSS with a permanent footprint of 45x80m and a maximum building height of 25 m.	The maximum envelope for onshore infrastructure and therefore the greatest potential for change to landscape and visual amenity.	Visual receptors; Visual amenity.	Tertiary Co15	Tertiary Co15	**No LSE**	Further evidence to be provided via the Evidence Plan process.	Provision of further evidence with regard to lighting requirements.	No Change
	LV-09-O	All onshore project infrastructure	Operation											No Change
	LV-09-D	All onshore project infrastructure	Decomissioning											No Change
TCPA	TBC	All offshore	Cumulative Effects	As above.	As above.	As above	As above.	As above.	As above.	LSE	Assessed in ES.	As above.	No Change
TCPA	TBC	All offshore	Transboundary Effects	As above.	As above.	As above	As above.	As above.	As above.	**No LSE**	See Transboundary Screening Annex 5.D	N/A	No Change
TCPA	TBC	All offshore	Inter-related Effects	N/A	As above.	As above	As above.	As above.	As above.	LSE	Assessed in ES.	As above.	No Change

Mooir Vannin **Impacts Register**

Impact Background										EIA Scoping			
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments at Scoping	Commitments at EPP	Likely Significance of Effect at Scoping Stage and Justification	Proposed Approach	Further Evidence	Updates Since Scoping
TCPA	NV-01-C	Onshore ECC	Construction	**Noise: Construction Phase.** Temporary noise from onshore cable route installation (excluding HDD works)	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the ECC has yet to be defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co11 Co17		LSE	Assessed in ES	Baseline survey has been undertaken	No change
TCPA	NV-02-C	Onshore ECC	Construction	**Noise: Construction Phase.** Temporary noise from onshore Horizontal Drilling Works (HDD)	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the HDD drilling zones not yet defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	Baseline survey has been undertaken	No change
TCPA	NV-03-C	Onshore ECC	Construction	**Vibration: Construction Phase** Temporary vibration from onshore Horizontal Drilling Works (HDD)	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the HDD drilling zones not yet defined. Positioning plant at the extents of the RLB would lead to worst-case predicted vibration levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	No further baseline data required.	No change

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Impacts Register

Impact Background										Ex-Scoping			
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments at Scoping	Commitments at EPP	Likely Significance of Effect at Scoping Stage and Justification	Proposed Approach	Further Evidence	Updates Since Scoping
TCPA	NV-04-C	Landfall	Construction	**Noise: Construction Phase.** Temporary noise from landfall construction and cable installation (excluding HDD)	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the landfall has yet to be defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	Baseline survey has been undertaken	No change
TCPA	NV-05-C	Landfall	Construction	**Vibration: Construction Phase** Temporary vibration from onshore Horizontal Drilling Works (HDD) and Cofferdam	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the HDD drilling zones to the landfall not yet defined. Positioning plant at the extents of the RLB or at closest approach would lead to worst-case predicted vibration levels at the nearest Vibration-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	Baseline survey has been undertaken	No change
TCPA	NV-06-C	OnSS	Construction	**Noise: Construction Phase.** Temporary noise from OnSS construction	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the OnSS has yet to be defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	No further baseline data required.	Scoped out - The LSE is no longer relevant to the revised onshore scope.

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Impacts Register

Impact Background										EIA Scoping			
Consent	ID	Project Element	Original Project Phase	Project Activity and Impact	Maximum Design Scenario (MDS)	Justification for MDS	Receptor(s)	Commitments at Scoping	Commitments at EPP	Likely Significance of Effect at Scoping Stage and Justification	Proposed Approach	Further Evidence	Updates Since Scoping
TCPA	NV-07-C	OnSS	Construction	**Vibration: Construction Phase** Temporary vibration from piling operstion assoicated with OnSS foundations	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the OnSS not yet defined. Positioning percussive piling rig at the extents of the RLB would lead to worst-case predicted vibration levels at the nearest Vibration-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	No further baseline data required.	Scoped out - The LSE is no longer relevant to the revised onshore scope.
TCPA	NV-08-O	OnSS	Operation	**Noise: Operational Phase** Permanent noise from the operation of the OnSS	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The exact location of the OnSS not yet defined. Positioning OnSS plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors	Human receptors and ecologically sensitive sites.			LSE	Assessed in ES	No further baseline data required.	Scoped out - The LSE is no longer relevant to the revised onshore scope.
TCPA	NV-09-C	All onshore	Construction	**Noise: Construction Phase** Temporary noise from all construction traffic	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The assessment will consider the worst-case traffic movements along the most affected links, leading to an MDS at the receptors	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	No further baseline data required. Inputs from Traffic assessment.	No change

Mooir Vannin **Impacts Register**

Impact Background										EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments at Scoping**	**Commitments at EPP**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
TCPA	NV-10-O	Onshore ECC	Operation	**Noise and Vibration: Operational Phase** Noise and vibration from the buried cables	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS identifies the greatest physical footprint of the buried cables and therefore the greatest impact for impact.		N/A		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Note detailing how the buried cable during oepration phase will not result in signifcant effects on sensitve receptors.	No Change - agreed as No LSE with TAG
TCPA	NV-11-D	Onshore ECC	Decomissioning	**Noise and Vibration: Decommissioning Phase** Temporary noise and vibration from decommissioning	Landfall: There are 2 landfall options, either one or both options will be used. Constructed using open cut trenching. TJB: 3 TJBS with an allowance for 2 failures. Depth of 6m. OECC: OECC will connect into the TJB approximately 250m inland of Mean High Water (MHW). There will be 3 OECCs with a diameter of 250mm.	The MDS identifies the greatest physical footprint of the Proposed Development and therefore the greatest impact for impact.		Tertiary Co6		**No LSE**	Further evidence to be provided via the Evidence Plan process.	Note detailing how onshore infrastructure will not result in signifcant effects on sensitve receptors during decomissioning.	Change from No LSE - to be assessed in ES
TCPA	NV-13-O	Offshore Array	Operation	**Noise: Operational Phase** Permanent noise from the operation of the Array	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.	Realistic scenario	Human receptors and ecologically sensitive sites.			LSE	Assessed in ES	No further baseline data required, assessment based on absolute noise limits.	No change
TCPA	NV-14-C	Offshore Array	Construction	**Noise: Construction Phase** Temporary Construction Noise from Offshore Array	Up to 100 WTGs on monopile foundations; Up to 5 OSSs on piled foundations; Installation using percussive piling; Clearance of UXO by low and/or high order detonation.		Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co48		LSE	Assessed in ES	Baseline survey has been undertaken	No change

Mooir Vannin

Impacts Register
20. Climate Change

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Impact Background									EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
Both	CC-01-C	All onshore and offshore project	Construction	GHG emissions arising from land-use change during the construction, operation and maintenance and decommissioning phase	Onshore cables installed by direct-lay in trenches, or pulled through pre-installed ducting; there will be up to 9 cables (3 x 3 single core cables); there will be 3 trenches (1 per circuit); permanent corridor up to 45m; temporary construction corridor up to 60m. Offshore the MDS would comprise a maximum number of WTGs = 100 up to 389m in height	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co19	No LSE	Further evidence to be provided via the Evidence Plan Process	Provision of evidence via technical note detailing how infrastructure is resliant to changes in the climate.	No LSE agreed through EPP (CC-D1-01)
	CC-01-O	All onshore and offshore project	Operation									
	CC-01-D	All onshore and offshore project	Decomissioning									
Both	CC-02-C	All onshore and offshore project	Construction	The vulnerability and climate resilience of the Project infrastructure during the construction and decommissioning phase.	Onshore cables installed by direct-lay in trenches, or pulled through pre-installed ducting; there will be up to 9 cables (3 x 3 single core cables); there will be 3 trenches (1 per circuit); permanent corridor up to 45m; temporary construction corridor up to 60m. Offshore the MDS would comprise a maximum number of WTGs = 100 up to 389m in height	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co51	No LSE	Further evidence to be provided via the Evidence Plan Process	Provision of evidence via technical note detailing how GHG enission on land use will not result in LSE.	No LSE agreed through EPP (CC-D1-02)
	CC-02-O	All onshore and offshore project	Operation									
	CC-02-D	All onshore and offshore project	Decomissioning									
Both	CC-03-C	All onshore and offshore project infrastructure	Construction	The impact of GHG emissions arising from the manufacturing and installation of the Project.	Onshore cables installed by direct-lay in trenches, or pulled through pre-installed ducting; there will be up to 9 cables (3 x 3 single core cables); there will be 3 trenches (1 per circuit); permanent corridor up to 45m; temporary construction corridor up to 60m. Offshore the MDS would comprise a maximum number of WTGs = 100 up to 389m in height.	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co14	LSE	Assessed in ES	Use of published EPD's concerning Life Cycle Assessment research into embodied carbon associated with the construction of wind turbines and wind farm developments.	No change
Both	CC-02-O	All onshore and offshore project infrastructure	Operation	The vulnerability and climate resilience of the Project infrastructure during the operation and maintenance phase.	All onshore and offshore project infrastructure	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co51	LSE	Assessed in ES	Details of Project infrastructure	No change
Both	CC-04-O	All onshore and offshore project infrastructure	Operation	The impact of GHG emissions arising from the consumption of materials and activities required to facilitate the operation and maintenance phase	All onshore and offshore project infrastructure	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co50	LSE	Assessed in ES	Use of published EPD's concerning Life Cycle Assessment research into embodied carbon associated with the operation and maintenance of wind turbines and wind farm developments.	No change
Both	CC-05-O	All onshore and offshore project infrastructure	Operation	Net contribution to the Isle of Man's climate targets	The maximum MW hours produced by the operational windfarm	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co50	LSE	Assessed in ES	Future baseline environment will be based on Manx projections for grid average marginal carbon intensity of electricity generation.	No change
Both	CC-06-D	All onshore and offshore project infrastructure	Decomissioning	The impact of GHG emissions arising from decommissioning works (e.g. plant, fuel and vessel use) and the recovery (or disposal) of materials.	All onshore and offshore project infrastructure	The maximum adverse scenario is defined by the infrastructure that may affect or be affected by climate change i.e. all onshore and offshore project infrastructure	All marine mammal species and onshore habitats and species.	Tertiary Co6	LSE	Assessed in ES	Use of published EPD's concerning Life Cycle Assessment research into embodied carbon associated with decommissioning (recycling and recovery) of wind turbines and wind farm developments.	No change
Both	TBC	All onshore and offshore project infrastructure	Cumulative Effects	As Above	As Above	As Above	As Above	As Above	LSE	As above	N/A	No change
Both	TBC	All onshore and offshore project infrastructure	Transboundary Effects	As Above	As Above	As Above	As Above	As Above	No LSE	Assessed in ES	N/A	No change
Both	TBC	All onshore and offshore project infrastructure	Inter-related Effects	N/A	As Above	As Above	As Above	As Above	LSE	As Above	N/A	No change

Mooir Vannin

Impacts Register
21. Socio-economics & Tourism

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Impact Background									EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Baseline Data Requirements**	**Updates Since Scoping**
TCPA	SE-01-C	All	Construction	Effects on employment within the Isle of Man.	Minimum job creation as a result of the Proposed Development.	The lowest level of job creation anticipated and therefore the lowest potential for beneficial effect.	Employment figures.	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Employment data	No change
	SE-01-O	All	Operation									
	SE-01-D	All	Decomissioning									
TCPA	SE-02-C	All	Construction	Effects on GVA within the Isle of Man.	Minimum GVA as a result of the Proposed Development.	The lowest level of increase to GVA and therefore the lowest potential for beneficial effect.	GVA	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	GVA figures	No change
	SE-02-O	All	Operation									
	SE-02-D	All	Decomissioning									
TCPA	SE-03-C	All	Construction	Effects on the demographics of the Isle of Man.	Maximum capacity of the Proposed Development and the highest number of migrant workers required.	The highest number of migrant workers required and therefore the greatest potential for demographic changes.	Demographics	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Population data and trends	No LSE agreed through EPP (SE-D1.01)
	SE-03-O	All	Operation									
	SE-03-D	All	Decomissioning									
TCPA	SE-04-C	All	Construction	Socioeconomic effects due to disruption to tourism and recreation receptors within the local onshore study	Maximum extent of terrestrial infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Tourism and recreational facilities/ receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Desk based search of onshore recreation and tourism receptors	No change
	SE-04-O	All	Operation									
TCPA	SE-05-C	All	Construction	Socioeconomic effects due to disruption to social community infrastructure receptors within the local onshore study area.	Maximum extent of terrestrial infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Social community infrastructure/ receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Desk based search of SCI receptors within the local onshore study area	No change
	SE-05-O	All	Operation									
TCPA	SE-06-C	All	Construction	Socioeconomic effects as a result of disruption to offshore recreational receptors.	Maximum extent of terrestrial infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Tourism and recreational facilities/ receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Desk based search of offshore recreation receptors within the	No change
	SE-06-O	All	Operation									
	SE-06-D	All	Decomissioning									
TCPA	SE-07-C	All	Construction	Effects on the volume and value of tourism as a result of displacement of tourism visitors within the Isle of Man.	Maximum capacity of the Proposed Development and the highest number of migrant workers required.	The highest number of migrant workers required and therefore the greatest potential for demographic changes.	Tourism and recreational facilities/ receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Accommodation (no. of rooms, type, beds, vacancy)	No change
	SE-07-O	All	Operation									
	SE-07-D	All	Decomissioning									
TCPA	SE-08-C	All	Construction	Increased demand for healthcare services.	Maximum capacity of the Proposed Development and the highest number of migrant workers required.	The highest number of migrant workers required and therefore the greatest potential for demographic changes.	Healthcare services	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Desk based search of healthcare services within the local onshore study area	No LSE agreed through EPP (SE-D1.02)
	SE-08-O	All	Operation									
	SE-08-D	All	Decomissioning									
TCPA	SE-09-C	All	Construction	Increased demand for emergency services (the Police, Fire and Emergency Medical Services).	Maximum capacity of the Proposed Development and the highest number of migrant workers required.	The highest number of migrant workers required and therefore the greatest potential for demographic changes.	Emergency services	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Desk based search of emergency services within the local onshore	No LSE agreed through EPP (SE-D1.03)
	SE-09-O	All	Operation									
	SE-09-D	All	Decomissioning									
TCPA	SE-10-C	All	Construction	Effects on the volume and value of tourism within the Isle of Man.	See Impacts Register for SLVIA.	The highest potential for visual change and therefore the greatest potential for knock-on effects on tourists.	Tourism and recreational facilities/ receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Economic impact of tourism reports, tourism	No change
	SE-10-O	All	Operation									
	SE-10-D	All	Decomissioning									
TCPA	SE-11-C	All	Construction	Effects on visitors access to sites and the shoreline due to construction, operation and decommissioning of the Proposed Development.	Maximum extent of terrestrial infrastructure.	Largest potential impact on access to sites and the shoreline.	Visitor numbers/ tourism receptors	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Visitor sites and coastline baseline assessment.	No LSE agreed through EPP (SE-D1.04)
	SE-11-O	All	Operation									
	SE-11-D	All	Decomissioning									

TCPA	SE-12-C	All	Construction	Effects on visitors safety and collision risks with offshore infrastructure.	Maximum extent of offshore infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Visitor numbers/ tourism receptors	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Baseline data assessment of shipping and navigation.	No LSE agreed through EPP (SE-D1.05)
	SE-12-O	All	Operation									
	SE-12-D	All	Decomissioning									
TCPA	SE-13-C	All	Construction	Effect on the enjoyment of offshore recreational activities (including effects on enjoyment of marine wildlife and scuba diving).	Maximum extent of offshore infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Tourists/ tourism receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Desk based search of offshore recreation activities and organisations.	No change
	SE-13-O	All	Operation									
	SE-13-D	All	Decomissioning					Co23				
TCPA	SE-14-C	All	Construction	Effects on local beaches (energy effects).	Maximum extent of offshore infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Visitor numbers/ tourism receptors	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Literature review of evidence of impact of offshore wind on wave energy received by local beaches.	No LSE agreed through EPP (SE-D1.06)
	SE-14-O	All	Operation									
	SE-14-D	All	Decomissioning									
TCPA	SE-15-C	All	Construction	Creation of tourism and leisure activities (e.g. sight seeing).	Maximum extent of offshore infrastructure.	The largest extent of infrastructure and therefore the greatest potential for impact.	Visitor numbers/ tourism receptors	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Economic impact of tourism reports, tourism sector employment, key visitor attractions, visitor surveys	No change
	SE-15-O	All	Operation									
	SE-15-D	All	Decomissioning									
TCPA	SE-16-C	All	Construction	Increased on demand for housing and school places due to influx of project workers.	Maximum capacity of the Proposed Development and the highest number of migrant workers required.	The highest number of migrant workers required and therefore the greatest potential for demographic changes.	Social community infrastructure/ receptors	Tertiary Co18, Co32, Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	Housing stock data and schools pupil capacity.	No LSE agreed through EPP (SE-D1.07)
	SE-16-O	All	Operation									
	SE-16-D	All	Decomissioning									
TCPA	SE-17-O	All	Operation	Increase in IoM GDP as a result of increased exports.	Minimum capacity of the Proposed Development.	The lowest level of increase to GVA and therefore the lowest potential for beneficial effect.	GDP	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Exports	No change
TCPA	SE-18-C	All	Construction	Economic impact due to disruptions to shipping lanes.	See Impacts Register for Shipping and Navigation.	Highest potential for impacts on shipping and therefore greatest potential for knock-on effects on economy.	The local economy	Tertiary Co18, Co32, Co23	LSE	Assessed in ES.	Cross reference to scoping info provided in shipping and chapter.	No change
	SE-18-O		Operation									
	SE-18-D		Decomissioning									
TCPA	TBC	All	Cumulative Effects	As above.	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change
TCPA	TBC	All	Transboundary Effects	As above.	As above.	As above	As above.	As above.	No LSE	See Transboundary Screening Annex 5.A	N/A	No change
TCPA	TBC	All	Inter-related Effects	N/A	As above.	As above	As above.	As above.	LSE	Assessed in ES.	As above.	No change

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Impacts Register
22. Major Accidents & Disasters

Ørsted

	Impact Background								EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
Both	MA&D-01	All onshore and offshore project infrastructure	Construction, operation and Decomissioning	Extreme weather conditions during the construction, operation and maintenance and decommissioning phase	All onshore and offshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Construction works to include areas of open trenching, excavations, HDD and exposed areas.	All project infrastructure may be affected by this - no design scenario likely to be more suseptible to this impact	Sea users and onshore population in close proximity to construction, operation and maintenance area.	Tertiary Co24 Co36	No LSE	Assessed in ES.	Weather data	No Change
Both	MA&D-02	All onshore and offshore project infrastructure	Construction	Buried cables during the construction, operation and maintenance and decommissioning phase. This to include the potential for ships snagging offshore cables during construction.	All onshore and offshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Sea users and onshore population in close proximity to construction, operation and maintenance area.	Tertiary Co19 Co24 Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	See Shipping and Navigation chapter	No Change
Both	MA&D-03	All onshore and offshore project infrastructure	Construction, operation and Decomissioning	Potential aircraft or shipping strike with offshore infastructure	All design scenarios offshore likely to present similar level of risk - cross reference to be made with other relevant chapters in the ES - shipping & navigation and aviation.	details provided in Shipping & Navigation and Aviation.	Air users and sea uers.	Tertiary Co36	No LSE	Assessed in ES.	Refer to Shipping & Navigation and Aviation chapters.	No Change
Both	MA&D-04	All onshore and offshore project infrastructure	Construction, operation and Decomissioning	Ground collapse during construction	All onshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Design options onshore which involve more open excavation likely to present greatest risk to this impact arising.	Onshore population in close proximity to construction area.	Tertiary Co19 Co36	No LSE	Further evidence to be provided via the Evidence Plan process.	See Ground Conditions Chapter	No Change - agreed as No LSE with TAG
Both	MA&D-05	All onshore project infrastructure	Construction, operation and Decomissioning	Major road traffic accident, specifically, working over or adjacent to existing highways. Movement of construction vehicles along public roads and adjacent to public rights of way.	All onshore project infrastructure. Onshore construction works to take place within a temporary construction corridor up to 60m in width. Works including road crossing and sections along carriageway.	Works along carriageway and crossing likely to present greatest risk	User of highway network.	Tertiary Co23 Co36	No LSE	Further evidence to be provided via the Evidence Plan process.	See traffic and transport chapter	No Change
Both	MA&D-06	All onshore project infrastructure	Construction, operation and Decomissioning	Manual Handling, Falls of persons from heights, Contact with live electrical conductors, Slips trips and falls. Injuries to plant, cable twisting and jamming.	All onshore and offshore project infrastructure	The maximum adverse scenario is defined by the infrastructure that may be affected by major accidents and disasters i.e. all onshore project infrastructure	Construction workers.	Tertiary Co19 Co24	No LSE	Further evidence to be provided via the Evidence Plan process.	Note to be provided on relevant health and safety requirements of the Proposed Development/	No Change
Both	MA&D-07	All onshore project infrastructure	Construction, operation and Decomissioning	Increased likelihood of small earthquakes (magnitudes smaller than 1) through the steam removal and water return caused by drilling. This in turn can produce new instability along fault or fracture lines.	All onshore and offshore project infrastructure	The maximum adverse scenario is defined by the infrastructure that may be affected by major accidents and disasters i.e. all onshore project infrastructure	Sea users and onshore population in close proximity to construction, operation and maintenance area.	Teritary Co36	No LSE	Further evidence to be provided via the Evidence Plan process.	See Marine Geology and Processes	No Change
Both	TBC	All onshore project infrastructure	Cumulative Effects	As Above	As Above	As Above	As Above	As Above	LSE	As above	N/A	N/A
Both	TBC	All onshore project infrastructure	Transboundary Effects	As Above	As Above	As Above	As Above	As Above	No LSE	see Transboundary Screening Annex 5.D	N/A	N/A
Both	TBC	All onshore project infrastructure	Inter-related Effects	N/A	As Above	As Above	As Above	As Above	LSE	As Above	N/A	N/A

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Impacts Register
23. Human Health & Wellbeing

Ørsted

Impact Background									EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
Both	HH-01	Onshore	Construction	The generation of dust and particulates (e.g. from excavation or movement of dry materials) could have an adverse impact on human health.	See impacts register for Air Quality	Ensure all potential interactions are assessed	Human and ecological receptors.	Tertiary Co17 Co19 Co21	No LSE	Further evidence to be provided via the Evidence Plan process.	See air quality impacts register	No Change - agreed as No LSE with TAG
Both	HH-02	Onshore	Construction	Exhaust emissions from construction traffic have the potential to contribute to local ambient concentrations of nitrogen oxide (NO_2) and particulate matter (PM10 and PM2.5), resulting in potential effects on human health.	See impacts register for Air Quality	N/A	Human and ecological receptors.	Tertiary Co17 Co19 Co28	LSE	Assessed in ES	See air quality impacts register	No Change
Both	HH-03	Onshore	Construction	Construction activities such as clearance of surface vegetation, could result in run-off materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co17 Co19	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrolgy impacts register	No Change - agreed as No LSE with TAG
Both	HH-04	Onshore	Construction	Ground disturbance or the removal of hardstanding could increase the potential for leaching and the mobilisation of soluble contaminants.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co19	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	No Change - agreed as No LSE with TAG
Both	HH-05	Onshore	Construction	Leaks and/or spills of contaminants, such as fuels and oils, used and stored during the construction phase could occur.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables anticipated to be installed within and assumes disturbance throughout the onshore ECC area therefore, the greatest area of land disturbance.	Watercourses	Tertiary Co19	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrolgy impacts register	No Change - agreed as No LSE with TAG
Both	HH-06	Onshore	Construction	The impact of noise and vibration from construction activities due to the onshore landfall, cable route installation and substation construction could result in disturbance of local residence and commercial properties.	See impacts register for Noise and Vibration.	The exact location of the OnSS, cable and HDD drilling zones not yet defined. Positioning plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors.	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19	LSE	Assessed in ES	See noise and vibration impact register	No Change
Both	HH-07	Onshore	Construction	The potential delays to existing routes and the potential severance of routes which could reduce the access to services (such as GPs and hospitals) and amenities (as recreational activities).	See impacts register for Traffic and Transport.	Ensure all potential interactions are assessed	Users of local road network requiring access to local services.	Tertiary Co28	LSE	Assessed in ES	See Traffic and transport register	No Change
Both	HH-08	Onshore	Construction	Potential for temporary loss of access to community spaces due to construction of the onshore infrastructure. This could impact community and tourism receptors due to severance of access routes.	See impacts register for Land Use and Ground Conditions.	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of Land Use and Ground Conditions impacts that could occur as a result of the Proposed Development within the ESIA Scoping Boundary.	Beaches.	Tertiary Co23	No LSE	Further evidence to be provided via the Evidence Plan process.	See Land Use and Ground Conditions impact register	No Change - agreed as No LSE with TAG
Both	HH-09	Onshore	Operation	Residential and commercial properties could be affected by the operational noise associated with the onshore substation (and associated infrastructure)	See impacts register for Noise and Vibration.	The exact location of the OnSS not yet defined. Positioning OnSS plant at the extents of the RLB would lead to worst-case predicted noise levels at the nearest Noise-sensitive Receptors	Human receptors and ecologically sensitive sites.	Tertiary Co17 Co19 Co24	LSE	N/A	N/A	Scoped out - The LSE is no longer relevant to the revised onshore scope.

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Impacts Register
23. Human Health & Wellbeing

Ørsted

	Impact Background								EIA Scoping			
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**	**Updates Since Scoping**
Both	HH-11	Onshore	Decomissioning	Decommissioning activities such as clearance of surface vegetation, could result in run-off of materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-12	Onshore	Decomissioning	The generation of dust and particulates (e.g. from excavation or movement of dry materials) potentially having an adverse impact on human health.	See impacts register for Air Quality	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors and ecologically sensitive sites.	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See air quality chapter	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-13	Onshore	Decomissioning	Exhaust emissions from traffic associated with decommissioning could have the potential to contribute to local ambient concentrations of nitrogen dioxide (NO2), and particulate matter (PM10 and PM2.5), resulting in potential effects on human health	See impacts register for Air Quality	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors and ecologically sensitive sites.	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See air quality chapter and traffic and transport chapter	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-14	Onshore	Decomissioning	Decommissioning activities such as clearance of surface vegetation, could result in run-off of materials into the local water sources.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-15	Onshore	Decomissioning	The potential ground disturbance or the removal of hardstanding could increase the potential for leaching and the mobilisation of soluble contaminants.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co19	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-16	Onshore	Decomissioning	Leaks and/or spills of contaminants, such as fuels and oils, used and stored during the decommissioning phase could occur.	See impacts register for Hydrology, Hydrogeology and Flood Risk.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Watercourses	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See hydrology impacts register	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-17	Onshore	Decomissioning	The impact of noise and vibration from the decommissioning activities of onshore infrastructure could result in disturbance of local residence and commercial properties.	See impacts register for Noise and Vibration.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors	Tertiary Co6	No LSE	Further evidence to be provided via the Evidence Plan process.	See noise and vibration chapter	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-18	Onshore	Decommissioning	Impacts due decommissioning of the onshore infrastructure on community and tourism receptors may occur due to severance of access routes, noise and vibration, and/or visual impact.	See impacts register for Socio-economics.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Human receptors	Tertiary Co6	See Socio-economics	Further evidence to be provided via the Evidence Plan process.	See noise and vibration chapter	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	HH-19	Onshore	Decomissioning	The potential delays to existing routes and the potential severance of routes which could reduce the access to services (such as GPs and hospitals) and amenities (as recreational activities).	See impacts register for Socio-economics.	The MDS will include the maximum number of cables and infrastructure anticipated to be removed.	Users of local road network requiring access to local services.	Tertiary Co6	See Socio-economics	Further evidence to be provided via the Evidence Plan process.	See Socio-economics	Scoped out - The LSE is no longer relevant to the revised onshore scope.
Both	TBC	All onshore project infrastructure	Cumulative Effects	As Above	As Above	As Above	As Above	As Above	LSE	As above	N/A	No Change
Both	TBC	All onshore project infrastructure	Transboundary Effects	As Above	As Above	As Above	As Above	As Above	No LSE	see Transboundary Screening Annex 5.D	N/A	No Change
Both	TBC	All onshore project infrastructure	Inter-related Effects	N/A	As Above	As Above	As Above	As Above	LSE	As Above	N/A	No Change

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Impacts Register
24. Materials & Waste

Impact Background										EIA Scoping		
Consent	**ID**	**Project Element**	**Original Project Phase**	**Project Activity and Impact**	**Maximum Design Scenario (MDS)**	**Justification for MDS**	**Receptor(s)**	**Commitments at Scoping**	**Commitments at EPP**	**Likely Significance of Effect at Scoping Stage and Justification**	**Proposed Approach**	**Further Evidence**
TCPA	MW-01-C-O	Both	Construction, operation and maintenance	Consumption of materials for the construction, operational and maintenance phases of the propsoed development	All project infrastructure	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of materials requirements that	Material resource	Tertiary Co25 Co26 Co27	Tertiary Co25 Co26 Co27	LSE	Assessed in ES	Quantification of materials, origin of materais and material type required for detailed assessment in the ES
TCPA	MW-02-C	Both	Construction Waste	Waste and generated during the construction of the Proposed Development	All project infrastructure	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of	Waste infrastructure	Tertiary Co25 Co26 Co27	Tertiary Co25 Co26 Co27	No LSE	Further evidence to be provided via the Evidence Plan process.	Site Waste Management Plan to be produced and incorpated into Co17 and Co19
TCPA	MW-03-D	Both	Decomissioning	Waste generated during decommissioning of the Proposed Development	All project infrastructure	In the absence of detailed design information, routes or locations, the MDS represents the maximum level of materials and waste that could	Waste infrastructure	Tertiary Co25 Co26 Co6 Co27	Tertiary Co25 Co26 Co6 Co27	LSE	Assessed in ES	Quantification of waste produced during the decommissioing phase of the Proposed Development
Both	TBC	Both	Cumulative Effects	As Above	As Above	As Above	As Above	As Above	As Above	LSE	As above	N/A
Both	TBC	Both	Transboundary Effects	As Above	As Above	As Above	As Above	As Above	As Above	No LSE	see Transboundary Screening Annex 5.D	N/A
Both	TBC	Both	Inter-related Effects	N/A	As Above	As Above	As Above	As Above	As Above	LSE	As Above	N/A