

East Anglia TWO Offshore Windfarm

Appendix 14.1

Shipping and Navigation Consultation Responses

Environmental Statement Volume 3

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Table A14.1.1	Shipping and Navigation Consultation Responses

Glossary of Acronyms

AIS	Automatic Identification System
BMAPA	British Marine Aggregate Producers Association
DCO	Development Consent Order
DML	Deemed Marine Licence
ERCoP	Emergency Response Co-operation Plan
ES	Environmental Statement
ETG	Expert Topic Group
HAML	Hanson Aggregate Marine Ltd.
IALA	International Association of Lighthouse
IHO	International Hydrographic Organization
m	Metre
MCA	Maritime and Coastguard Agency
Met Mast	Meteorological Mast
MGN	Marine Guidance Note
NRA	Navigation Risk Assessment
OREI	Offshore Renewable Energy Installations
PEIR	Preliminary Environmental Information Report
SAR	Search and Rescue
SPR	ScottishPower Renewables
TH	Trinity House
UK	United Kingdom
VHF	Very High Frequency

Glossary of Terminology

Automatic Identification System	Automatic Identification System. A system by which vessels automatically broadcast their identity, key statistics e.g. length, brief navigation details e.g. location, destination, speed and current status e.g. survey. Most commercial vessels and European Union (EU) fishing vessels over 15 m are required to have AIS.
Applicant	East Anglia TWO Limited.
Baseline	The assessment of risk based on current shipping densities and traffic types as well as the marine environment.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one offshore operation and maintenance platform, inter-array cables, platform link cables, up to one construction operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
Inter-array cables	Offshore cables which link the wind turbines to each other and the offshore electrical platforms, these cables will include fibre optic cables.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Marine Guidance Note	A system of guidance notes issued by the Maritime and Coastguard Agency (MCA) which provide significant advice relating to the improvement of the safety of shipping and of life at sea, and to prevent or minimise pollution from shipping.
Offshore cable corridor	This is the area which will contain the offshore export cable between offshore electrical platforms and landfall jointing bay.
Offshore electrical platform	A fixed structure located within the windfarm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which would bring electricity from the offshore electrical platforms to the landfall, these cables will include fibre optic cables.
Radar	Radio Detection And Ranging – an object-detection system which uses radio waves to determine the range, altitude, direction, or speed of objects.
Safety Zone	A marine area declared for the purposes of safety around a renewable energy installation or works / construction area under the Energy Act 2004.

14.7 Consultation Responses

14.7.1 Introduction

1. This appendix covers those statutory consultation responses that have been received as a response to the Scoping Report (2017), the Preliminary Environmental Information Report (PEIR) (2019) and Expert Topic Group (ETG) Meetings.
2. Responses from stakeholders and regard given by the applicant have been captured in **Table A14.1.1**.
3. As Section 42 consultation for the proposed East Anglia TWO project was conducted in parallel with the proposed East Anglia ONE North project, where appropriate, stakeholder comments which were specific to East Anglia ONE North, but may be of relevance East Anglia TWO, have also been included in the consultation responses for East Anglia TWO.

Table A14.1.1 Consultation Responses Related to Chapter 14 Shipping and Navigation

Consultee	Date/Document	Comment	Response / where addressed in ES
The following comments were received prior to consultation on the PEIR and were in response to the Scoping Report or direct consultation with stakeholders. These comments were taken into account in the production of the PEIR			
Maritime and Coastguard Agency (MCA)	07/04/2017 Consultation Meeting	MCA are comfortable with summer only vessel survey.	Noted. Summer survey carried out by a dedicated vessel during May and June 2017 and during August and September 2018 therefore 28 days of survey vessel data collected.
MCA	07/04/2017 Consultation Meeting	MCA currently looking at best orientations for windfarms. It may be preferable for helicopters to have turbines facing downwind rather than with prevailing winds.	Noted; will be considered post consent during layout discussions which will be secured under the Deemed Marine Licence (DML)
MCA	05/12/2017 Scoping Response	The Preliminary Environmental Information (PEI) should supply detail on the possible impact on navigational issues for both commercial and recreational craft.	This ES builds upon the Preliminary Environmental Information Report (PEIR) and assesses the impacts on commercial vessels and recreational craft in section 14.6 , as well as also considering commercial fishing vessels.
MCA	05/12/2017 Scoping Response	A NRA will need to be submitted in accordance with Marine Guidance Note (MGN) 543 (and MGN 372) and the MCA Methodology for Assessing the Marine Navigation Safety & Emergency Response Risks of Offshore Renewable Energy Installations (OREIs). The NRA should be accompanied by an MGN 543 Checklist.	The NRA is available in Appendix 14.2 and has been prepared in accordance with MGN 543. An MGN 543 checklist has been included in Appendix 14.6 .
MCA	05/12/2017 Scoping Response	Attention needs to be paid to routeing; particularly in heavy weather ensuring shipping can continue safe passage without significant large scale deviations. The possible cumulative effects on shipping routes should also be considered.	Analysis of post windfarm routeing is provided within section 16 of the NRA (Appendix 14.2). The cumulative routeing assessment is provided in section 20 . Adverse weather routeing has also been considered in section 12 of the NRA

Consultee	Date/Document	Comment	Response / where addressed in ES
			(Appendix 14.2).
MCA	05/12/2017 Scoping Response	The turbine layout design will require MCA approval prior to construction. As such, MCA will seek to ensure all structures are aligned in straight rows and columns. Any additional navigation safety and/or Search and Rescue (SAR) requirements will be agreed at the approval stage.	The final layout will be agreed with MMO in consultation with the MCA post consent; this process will be secured through the DML.
MCA	05/12/2017 Scoping Response	Particular attention should be paid to cabling routes. A Burial Protection Index study and an anchor penetration study should be undertaken if necessary. The MCA will accept a 5% reduction in depth referenced to Chart Datum.	A Cable Burial Risk Assessment will be developed post consent, (section 14.3.3). This will include an assessment of expected cable burial depths and a plan for other forms of protection where necessary.
MCA	05/12/2017 Scoping Response	Information on potential mooring arrangements of floating wind turbines should be included in the ES.	Floating wind turbines are not being considered for the proposed East Anglia TWO project.
MCA	05/12/2017 Scoping Response	Any application for safety zones will need to be carefully assessed and additionally supported by experience from the development and construction stages.	As discussed in section 14.3.3 , an application for safety zones will be submitted post consent.
MCA	05/12/2017 Scoping Response	Consideration should be given to the implications of the site size and location of SAR resources and Emergency Response Co-operation Plans (ERCoP).	The East Anglia TWO windfarm site will comply with MGN 543 as per embedded mitigations (section 14.3.3).
MCA	05/12/2017 Scoping Response	MGN 543 Annex 2 details the requirements of hydrographic surveys. Failure to report the survey or conduct it may invalidate the NRA.	Noted. Any hydrographic surveys will be undertaken in compliance with MGN 543 Annex 2 and IHO Order 1a and details will be provided to the MCA Hydrographic Manager.
MCA	05/12/2017 Scoping Response	The Radar effects of a windfarm on ships' radars are an important issue and the effects, particularly with respect to adjacent windfarms on either side of a route, will need to be assessed on a site specific basis taking into consideration previous reports on the	A request to scope out the consideration of impacts of turbines on Very High Frequency (VHF), AIS and Radar equipment was submitted at a consultation

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Consultee	Date/Document	Comment	Response / where addressed in ES
		subject available on the MCA website.	meeting with the MCA in April 2017. A subsequent letter was submitted to MCA on the 25 th April, 2017. A formal response to this request was received on the 11 th May, 2017 which approved the scoping out of impacts of VHF, AIS and Radar equipment.
MCA	04/04/2018 Consultation Meeting	Suggested further consultation with MCA once bathymetry data is available for the offshore cable corridor. The MCA request that SPR provide water depths at all cable crossing locations to enable consultation on appropriate conditions to be input to DCO. Assessment of under keel clearance and vessel activity may be required.	Noted. Hydrographic data and water depths will be provided to the MCA.
MCA	13/06/2018 Email Correspondence	An NRA without a current Radar traffic survey cannot be relied upon as AIS has obvious limitations. Although the Radar data may only be just outside the 24 month window, the MCA cannot be sure this will not slip further therefore we would appreciate reconsideration of the traffic surveys in line with MGN 543.	A further marine traffic survey (AIS and Radar) was undertaken in August/September 2018 to validate the summer 2017 survey. The impact assessment and NRA presented in the PEIR has been updated as appropriate in this ES submitted as part of the DCO application.
Trinity House (TH)	05/12/2017 Scoping Response	Expect the NRA to include: <ul style="list-style-type: none"> • Vessel traffic analysis in accordance with MGN 543; • Cumulative and in-combination effects on shipping routes and patterns; • Layouts that conform with MGN 543; and • Additional risk assessment of offshore platforms or Meteorological Masts (Met Masts) that lie out with the wind turbine layout. 	An MGN 543 checklist has been completed as part of the NRA (Appendix 14.6). Up to date marine traffic survey data has been used to assess current shipping levels and patterns within the vicinity of the East Anglia TWO windfarm site. The results of the analysis are summarised in section 14.5.2 . Vessel routeing has been considered on a

Consultee	Date/Document	Comment	Response / where addressed in ES
			<p>cumulative basis in section 20 of the NRA. Associated impacts have been assessed in section 14.6 of this ES.</p> <p>The final layout will be agreed with the MCA post consent; this process will be secured through the DML. This process will include consideration of any offshore platforms and Met Masts.</p>
TH	05/12/2017 Scoping Response	The development will require marking in accordance with International Association of Lighthouse Authorities (IALA) O-139 Recommendations (IALA, 2013). Additional aids to navigation may also be required. All marine navigational marking will need to be agreed with TH.	The proposed East Anglia TWO project will comply with the requirements of IALA guidance O-139 as per embedded mitigations (section 14.3.3). All lighting and marking will be agreed with TH prior to implementation.
TH	05/12/2017 Scoping Response	Monitoring equipment must also be marked as required by TH.	Monitoring equipment will be marked as agreed with TH prior to implementation.
TH	05/12/2017 Scoping Response	A decommissioning plan which includes a scenario where an obstruction is left on site therefore a danger to navigation should be considered.	<p>A decommissioning plan will be created post consent.</p> <p>Impacts associated with the decommissioning of the East Anglia TWO windfarm site are considered in section 14.6.</p>
TH	05/12/2017 Scoping Response	The impact on navigation and requirements for appropriate mitigation should be assessed for the possible requirement of marking export cables and vessels laying them.	As described in section 14.3.3 , a Cable Burial Risk Assessment will be undertaken post consent. This will include identification of any sections of cable requiring protection other than burial. Any associated risks will be assessed within the Cable Burial Risk Assessment.

Consultee	Date/Document	Comment	Response / where addressed in ES
TH	28/04/2018 Consultation Meeting	Highlighted that ferries sometimes transit closer to shore during adverse weather therefore having inshore access reduced during adverse weather may be a concern to operators.	Noted. Adverse weather is considered in section 14.6 .
Norfolk Country Council	05/12/2017 Scoping Response	The PEI should indicate that suitable navigation and shipping mitigation measures can be agreed with the appropriate regulatory bodies to ensure that Norfolk's Ports (King's Lynn and Wells) are not adversely affected by this proposal. The PEI will need to consider the wider cumulative impacts taking into account existing operational windfarm; those under constructions; those consented and those in planning.	As described in section 14.3.3 , embedded mitigation measures will be in place. Vessel routeing has been considered on a cumulative basis in section 20 of the NRA. Associated impacts have been assessed in section 14.6 of this ES.
The Planning Inspectorate	05/12/2017 Scoping Response	In the absence of justification for the proposed approach the Inspectorate does not agree that the matter of impacts to communications, navigations and Radar of commercial vessels can be scoped out.	Justification on this was provided to the MCA on the 25 th April 2017. Agreement from the MCA was received on the 11 th May 2017.
The Planning Inspectorate	05/12/2017 Scoping Response	The marine traffic baseline was established by utilising 14 days of data between May and June 2017 during a yacht race. The Applicant should discuss and agree with relevant consultees whether this is an appropriate level of data to inform the baseline. If necessary, a larger data set which takes into account seasonal effects in order to achieve a more accurate baseline for marine traffic should be used.	No issues relating to summer baseline assessment during consultation. The Cruising Association (CA) highlighted during consultation on 12 th April 2018 that recreational races and regattas in the area are common therefore this should not be seen as out of the ordinary. It is noted that during the winter 2017 and summer 2018 survey, no recreational races were recorded.
The Planning Inspectorate	05/12/2017 Scoping Response	The Applicant should include a clear and concise justification for the chosen study area.	Justification for the study area is presented in section 14.3.1 .
The Planning Inspectorate	05/12/2017 Scoping Response	Highlights to the Applicant the risk of invalidating the NRA if the hydrographic surveys do not fulfil the requirements according to MGN 543 and advises that this guidance should be taken into account. The Applicant is referred to the comments of the MCA in	Noted. Any hydrographic surveys will be undertaken in compliance with MGN 543 Annex 2 and IHO Order 1a and details will be provided to the MCA Hydrographic

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		this regard.	Manager.
The Planning Inspectorate	05/12/2017 Scoping Response	Recommends that the Applicant seeks to agree with the MCA the approach to the cumulative assessment, particularly in respect of commercial traffic.	The approach to cumulative assessment has been considered as part of the NRA and ES consultation process; as well as within the Scoping Opinion.
Royal Yachting Association (RYA)	06/04/2018 Consultation Meeting	Any reduction in water depth is required to be marked and notified where necessary, particularly within the landfall.	Noted.
RYA	06/04/2018 Consultation Meeting	Content with application for statutory safety zones during construction and major operation and maintenance activities.	Noted. No action required.
Chamber of Shipping (CoS)	13/04/2018 Consultation Meeting	Primary concern to avoid choke points in traffic particularly entering/leaving Harwich and Felixstowe. The southern area of East Anglia TWO may be a concern due to potential impact on Eastbound and Westbound traffic.	Vessel routeing has been considered on a cumulative basis in section 20 of the NRA (Appendix 14.2).
CoS	13/04/2018 Consultation Meeting	Agree with safety zone approach for construction and operation and maintenance however disagree with permanent safety zones around fixed assets.	As noted in section 14.3.3 , an application for safety zones will be submitted post consent.
CoS	13/04/2018 Consultation Meeting	There should be consideration of shipping policies within the East Marine Plan.	Ports and shipping policies from the East Marine Plan are considered in section 14.4.2 .
CoS	13/04/2018 Consultation Meeting	It would be useful to have a breakdown of cargo vessel types recorded.	Breakdown of cargo vessels by type is provided in section 12.2.4 and section 12.3.4 of the NRA (Appendix 14.2).
CoS	13/04/2018 Consultation Meeting	Queried methodology for cumulative displacement impact assessment.	The cumulative impact assessment methodology is detailed in section 14.4.7 . Cumulative impacts are then assessed in

Consultee	Date/Document	Comment	Response / where addressed in ES
			section 14.7.
CA	12/04/2018 Consultation Meeting	Concern over AIS only winter survey as it is possible that not all yachts/recreational craft have AIS systems or will turn their AIS on.	Base line data also considers the RYA United Kingdom (UK) Coastal Atlas of Recreational Boating. Additional AIS and Radar marine traffic survey data has been collected in summer 2018.
The following comments were made in response to the PEIR and were taken into account in the production of this ES			
CA	17/03/2019 Section 42 Response	Almost all yachts in the area will be on long-distance passages with very little local or day-sailing. A high proportion will be strangers to the area, many foreign-flagged and unlikely to have on board local charts with full details of wind farm turbine positions. While the distance between the site and the shore is generally adequate for traffic north-south it should be noted that tidal streams in the area can be strong and yachts will cross the cable corridor either close to the shore or close to the wind farms. Coast is not hospitable and in inclement weather yachts will transit closer to the wind farms, possibly increasing encounter risk with commercial vessels also sailing north-south and forced to do so by the project.	Noted. The impact on recreational vessels has been assessed in section 14.6.5 of this chapter. Assessment of encounter risk is presented in section 18.1 of the NRA (Appendix 14.2) and includes recreational vessels.
CA	17/03/2019 Section 42 Response	Yachts on passage east-west may choose to pass between the turbines. Cumulative effects are becoming an issue. Many yacht harbours are tidal so additional time or distance can have important impacts on safety in poor weather.	Minimum spacing and turbine alignments mean that small craft, such as recreational vessels, will be able to navigate through the array during the operational phase.
CA	17/03/2019 Section 42 Response	The minimum air-draught clearance adopted of 22m above Mean High Water Springs (MHWS) meets our present standard. This was determined many years ago to enable 97% of all sailing craft in Europe to clear safely and is now under review with indications that it should be increased to perhaps 24m.	East Anglia TWO complies with the existing guidance on minimum blade clearance.
CA	17/03/2019 Section 42 Response	We advocate minimum spacing of turbine towers to be 900m x 1000m and the pattern to be square or rectangular in regular straight lines. While the proposal of 800m x 1200m is acceptable	East Anglia TWO will comply with requirements on layout design contained within MGN 543 as per section 14.3.3

Consultee	Date/Document	Comment	Response / where addressed in ES
		we would confirm the need for a straight-line layout to have platforms and met-masts in line with the turbines. The wind farm field should have straight edges avoiding outlying structures. Fewer, larger, turbine towers with increased spacing are of course safer for passage between than more, smaller ones, closer together but it is important visually that designs are not mixed.	(embedded mitigation) of this chapter. The impact assessment and modelling consider the worst-case layout of more, closer together structures.
CA	17/03/2019 Section 42 Response	Concern with export cable landfalls is any impact to anchoring of recreational craft. Ask that recognised yacht anchorages are avoided and have no concerns about cables in water depths of > 10m. In lesser depths ask that cables are buried 1.5m including any cable protection and leave a smooth seabed with no humps over. This depth is currently under review but unlikely to be altered. The Thorpeness area is not a recognised anchorage but emergency anchoring in strong weather could take place. The chartered anchorage off Southwold is rarely used if at all by yachts and not a problem to recreational craft.	East Anglia TWO will undertake an assessment of export cable routes, cable burial and protection post consent as per section 14.3.3 (embedded mitigation) of this chapter.
CA	17/03/2019 Section 42 Response	No concerns regarding tower or foundation type but request that there is a 3m clear depth of water around visible parts of the structure and suggest identical structures are used throughout each field.	East Anglia TWO will comply with existing guidance on under keel clearance including that contained within MGN 543 as per section 14.3.3 (embedded mitigation) of this chapter.
CA	17/03/2019 Section 42 Response	Appreciate the embedded mitigations but add the following comments: <ul style="list-style-type: none"> Marking of the gaps by buoyage at corners between neighbouring wind farms could be very helpful. It has been requested by some of our members to suggest that in addition a horizontal black band round corner towers at HAT level would be useful. Agree with the use of 500m safety zones around active RAM construction vessels and with 50m zones around each 	<ul style="list-style-type: none"> Buoyage will be deployed at the request of TH as per section 14.3.3 (embedded mitigation) of this chapter. Lighting and marking will be as per the requirements of TH and MCA as per section 14.3.3 (embedded mitigation) of this chapter. As per embedded mitigations in section 14.3.3 of this chapter, an application for safety zones post

Consultee	Date/Document	Comment	Response / where addressed in ES
		<p>completed tower including whether pre-commissioned or operational.</p> <ul style="list-style-type: none"> Note that up to 74 or so construction and other vessels may be on site. We ask that the Coastguard be warned and a regular 'all ships' warning is promulgated by marine VHF. Request that construction and other vessels regularly visiting the site follow regular publicised routes between base and site. 	<p>consent around structures where construction or major maintenance is being undertaken.</p> <ul style="list-style-type: none"> As per embedded mitigations in section 14.3.3 of this chapter a dedicated Marine Coordination Centre will be established to manage on site vessels.
CA	17/03/2019 Section 42 Response	<p>The baseline estimates for recreational traffic may be somewhat low, but do not have alternative data to offer.</p> <p>Confirm that recreational traffic is gradually increasing but have no figures to offer and accept your estimate of 10%.</p>	Noted, baseline estimates are based on AIS, radar and visual surveys as per the requirements of MGN 543. A total of 42 days data has now been collected including two summer periods (Radar and AIS).
Hanson Aggregate Marine Ltd. (HAML)	19/03/2019 Section 42 Response	<p>Concerned that there is potential for some existing activities, e.g. navigation and fishing, being displaced to areas where marine aggregate operations have traditionally taken place, increasing the operational risks to ourselves and other aggregates operators / licensees (including H&S issues arising from navigational risk).</p> <p>Associated with displacement are the increased issues that will arise from the 'squeeze' and condensing of activities. The nature of these impacts are likely to be disproportionately harder to overcome for dredging operators concerned because of the differences in comparative size/value of the projects.</p>	Marine aggregate dredgers are considered within the baseline assessment and assessment on impact on commercial vessels contained within section 14.6.3 of this chapter. Impacts on transiting fishing vessels are presented in section 14.6.4 of this chapter. Impacts are assessed to be within acceptable parameters. Impacts associated with fishing displacement are presented in Chapter 13 Commercial Fisheries .
HAML	19/03/2019 Section 42	Traditional routes that HAML/others use to transit from licensed	British Marine Aggregate Producers

Consultee	Date/Document	Comment	Response / where addressed in ES
	Response	areas to discharge ports could be impacted. Normally, these are very different to established navigation routes, (short term AIS analysis will not necessarily recognise these) and HAML consider that it may be helpful to examine this issue so the information is available to feed into Crown Estate Conflict checks (through their MARS system / GIS).	Association (BMAPA) transit routes are considered within section 14.6.3 of this chapter and section 8 of the NRA (Appendix 14.2).
MCA	27/03/2019 Section 42 Response	Note the levels of vessel activity observed within and in close proximity of the site, including high levels of recreational activity during the summer survey, and active fishing recorded within the shipping and navigation study area. As the development areas carries a significant amount of through traffic, and attention needs to be paid to routing, particularly in heavy weather ensuring shipping can continue to make safe passage without significant large-scale deviations. We see this has been considered in section 15 of the NRA.	Noted.
MCA	27/03/2019 Section 42 Response	Appreciate the early opportunity to comment on the draft MGN 543 checklist, and we can discuss the elements further as the project progresses.	Noted.
MCA	27/03/2019 Section 42 Response	We are content at this stage with regards to the process you have undertaken in order to comply with MGN 543, and its annexes, and we welcome the work undertaken in order to achieve our requirements.	Noted.
MCA	27/03/2019 Section 42 Response	Note section 4.3 of the NRA "...the worst case layout (from a shipping and navigation perspective) has been chosen from layouts currently under consideration for use as input to the modelling process (as described in section 16). The worst case layout from a shipping and navigation perspective is represented by the maximum number of structures covering the maximum area." The MCA welcomes the indicative worse case layout in a grid formation with a minimum of two lines of orientation, and other	Noted.

Consultee	Date/Document	Comment	Response / where addressed in ES
		structured all in alignment, as seen in figure 4.2.	
MCA	27/03/2019 Section 42 Response	The NRA has assessed worst case which includes just one line of orientation. At this stage, MCA can only agree to a single line of orientation where a detailed safety justification is provided (as per MGN 543) for both surface navigation and SAR capability. The NRA itself would not provide that justification but would be used to inform the safety case as well as any results from surveys and other constraints leading to just one line of orientation in the layout design, and the consideration of the impact on SAR with just one line of orientation.	Noted. The final layout and any required justifications will be discussed post consent as per the DCO / DML conditions.
MCA	27/03/2019 Section 42 Response	The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats, and SAR aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns, including any platforms. Any additional navigation safety and/or SAR requirements, as per MGN 543 Annex 5, will be agreed at the approval stage.	The layout and any additional navigational safety and / or SAR requirements will be agreed with the MMO in consultation with the MCA post consent as per the DCO / DML conditions.
MCA	27/03/2019 Section 42 Response	Note our previous comment that "an NRA without a current Radar traffic survey cannot be relied upon as AIS has obvious limitations. Although the Radar data may only be outside the 24 month window, the MCA cannot be sure this will not slip further therefore we would appreciate reconsideration of the traffic surveys in line with MGN 543" And the following response for East Anglia TWO: "A Marine traffic survey (AIS and Radar) would be undertaken in August/September 2018. the impact Assessment and NRA will then be submitted as part of the ES" Please confirm whether the application will contain current data collected within two years of application submission.	An updated AIS and Radar summer survey was undertaken during August and September 2018. The analysis of this data is presented in section 12.3 of the NRA (Appendix 14.2) and summarised in section 14.5.2 of this chapter.
MCA	27/03/2019 Section 42 Response	The NRA addresses the gaps between projects, and the MCA's requirement for sufficient room within the corridor between wind farms for a vessel to deviate up to 20°. The EA2, EA1N and EA1	Noted.

Consultee	Date/Document	Comment	Response / where addressed in ES
		development areas create a gap, and the MCA welcomes the assessment of the gap against the guidance to ensure compliance. This will also influence the lighting and marking requirements going forward to be discussed further as the project progresses.	
MCA	27/03/2019 Section 42 Response	MGN 543 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. This information will need to be submitted, ideally at the ES stage.	Hydrographic surveys are compliant with IHO Order 1a and MCA requirements as per MGN 543.
MCA	27/03/2019 Section 42 Response	Export cable routes, cable burial protection index and cable protections are issues that are yet to be fully developed. However due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. Where burial depths are not achieved consultation will need to take place with MCA regarding the locations, impact and potential risk mitigation measures.	An assessment of export cable routes, cable burial and protection post consent as per section 14.3.3 (embedded mitigation) of this chapter.
MCA	27/03/2019 Section 42 Response	Safety zones during the construction, maintenance and decommissioning phases are supported, however it should be noted that operational safety zones may have a maximum 50m radius from the individual turbines. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case.	A safety zone application would be produced and agreed with the MMO and MCA post consent, noting that the application for safety zones is assumed as embedded mitigation in section 14.3.3 of this chapter. This may include provision for operational safety zones around manned platforms
MCA	27/03/2019	An approved ERCOP will need to be in place prior to construction.	Noted, an ERCOP will be produced post

Consultee	Date/Document	Comment	Response / where addressed in ES
	Section 42 Response	A SAR checklist will be discussed as the project progresses to track all requirements detailed in MGN 543. The checklist will be adapted to suit EA2.	consent and agreed with the MMO and MCA as per section 14.3.3 of this chapter. The SAR checklist will be discussed and agreed with the MCA post consent.
MCA	27/03/2019 Section 42 Response	MCA would like to see continuous construction which is progressive across the wind farm with no opportunity for two separate areas to be constructed with a gap in the middle.	East Anglia TWO considers that the effects of disparate construction sites are mitigated, notably through the use of aids to navigation during the entire construction phase. Embedded mitigation is listed in section 14.3.3 of this chapter.