#### **INFRASTRUCTURE PLANNING**

# THE INFRASTRUCTURE PLANNING (EXAMINATIONS PROCEDURE) RULES 2010 THE THANET EXTENSION OFFSHORE WIND FARM ORDER

## Comments on Responses to ExQ1

### Submitted on behalf of the Port of London Authority and Estuary Services Limited

(Rule 8 letter 18 December 2018)

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## **Responses by the Applicant**

Question	Response summary/extract	PLA/ESL comments
1.12.1 (answered in Annex M)	"It is to be noted that the available sea room and width of navigable water is significantly greater in this area than in the designated approach channels to the Port of London e.g. Fishermans Gat and Princes Channel."	ESL and the PLA do not consider it appropriate to compare sea room within a channel and that within a pilot boarding and landing area in which greater sea room will often be required.
points	"With regards to the MGN543 Annex 3, the inshore route is not a defined channel."	The PLA and ESL do not agree. They consider that the inshore route should have been given sea lane status, subject to international routing measures for shipping, because it is a sea route transited by all vessel types.
	"90% of the number of transits are shown and these fall outside of the 0.5nm sea room buffer of the proposed extension in line with MGN543 guidance for the operational phase."	ESL and the PLA consider that the graphic on page 12 of Annex M in fact shows that vessels stay further away from the existing wind farm than the 0.5nm value referred to.
	"Further, the buoyage (Elbow and NE Spit) is conservatively placed relative to the hazards that they are marking with a further circa 0.5nm between the bouys and the hazards that they mark (which is significantly conservative in relation to distances further within the estuary."	The PLA and ESL consider that the buoyage is placed with safety in mind. Safety issues are always site specific and so is buoyage and vessel behaviour so it is unhelpful to compare this area to areas further within the estuary. The Thanet North cardinal buoy has been placed approximately 0.9nm from the wind farm which suggests

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		that 400-500m is not actually an acceptable distance to pass the obstruction.
	Discussion of passing distances	ESL would suggest that the traffic passing close to the NE Spit buoy and the NW corner of the TOW site do not form the majority of traffic in the area. The analysis shown in Gate F would suggest most traffic travels closer to a central point at the NW corner. Furthermore, it is likely that a passage planner would perceive passing close to a buoy as less of a risk than passing an area of wind turbines.
1.12.1 (a) (answered in Annex M)	"In conclusion, the type and reasonable maximum size of vessels currently present (in all meocean conditions) are commercial cargo vessels of length 299m and draught 10.1m."	The PLA and ESL agree that these values are representative of the traffic survey carried out by the Applicant.  However, ESL do serve vessels of a deeper draught at the NE Spit boarding area and have served up to 12m draft containerships east of the NE Spit boarding ground.
		The PLA gave the values of 250m length and 12m draught at Deadline 1. These values were based on AIS

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		data provided by the Navigation Systems department of the PLA. This data was broken down into bands of vessel length with the largest bands being 250m and more length and 12m and more draught. It did not identify the maximum within these top bands.
1.12.1(b) (answered in Annex M)	Data regarding existing use of inshore route.	This answer is based on the traffic survey completed by the Applicant, which they raised concerns about at Deadline 1. The Applicant's use of extrapolation to make an assumption on vessel numbers per year is not sufficiently accurate.
1.12.1 (c) (answered in Annex M)	"an increase in volume of trade does not necessarily correlate to an increase in vessels using the inshore route; and the trend towards larger (deeper draught) container vessels servicing ports such as London Gateway, is likely to, in reality, result in fewer larger vessels using the inshore route and more entering the Thames using the Sunk via Black Deep in accordance with Pilotage Directions and the existing depth limitations of the Princes Channel and Fisherman's Gat."	The PLA and ESL disagree with this statement; the Port of London Authority and ESL service a diverse vessel mix and they are currently seeing an increase in the number of smaller vessels as well as larger ones.
1.12.1 (d)	"The Applicant therefore does not consider the terminology of	The PLA and ESL consider that there is a pinch point

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(answered in Annex M)	'pinch point' as applicable to the NE Spit bank as this is not the narrowest section of water a vessel passes when transiting the inshore areas (which as explained above with regards to depth is the area of Princes Channel/Fishermans Gat).	created by the internationally recognised Cardinal Buoy, particularly for vessels with a draft of 8m or more. Again, It is not appropriate to compare the NE Spit boarding area with the surrounding channels.
	"This is an effective width restriction of less than 7% between E Margate and the RLP for the temporary condition and equates approximately to the minimum passing distance currently seen between commercial vessels and the existing wind farm"	This does not explore the reasons why vessels pass close to the existing wind farm. It is possibly due to other traffic and the restricted space between the NE Spit buoy and the wind farm.
1.12.2 and Annex H	"The Applicant has created an additional Gate Analysis termed F"	ESL and the PLA do not consider that the Traffic Gate F supports the suggestion that a significant amount of traffic passes within 500m of the NW boundary of the existing wind farm. In addition, they would like the Applicant to clarify what time frame and data source have been used to inform Traffic Gate F.
1.12.3 (a) (answered in	"The Applicant considers that the ExA can rely on and place substantial weight on the pilot simulations"	The PLA and ESL have addressed this matter in their Deadline 1 submissions; the pilot simulations were very limited, do not accurately represent real life conditions and cannot be relied on to determine the effects of the

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Annex N)		proposed extension of the wind farm.
	"The simulation study is a qualitative tool in order to support the wider assessment of the overall NRA and followed a methodology which had been accepted and supported by stakeholders during consultation.  The study was undertaken with the backing and support of the Port of London Authority, with agreement to utilise their pilot training simulator and senior marine pilots who were involved in the planning and execution of the simulation."	The PLA and ESL agree that the meetings set out at paragraph 9 of Annex N took place. However, the presence of PLA and ESL representatives at these meetings and on the days of the Simulations themselves cannot be taken to suggest agreement in the conclusions drawn from the Simulations, particularly in the light of the issues that the pilots/coxswains expressed at the time of the study.
		The PLA and ESL did not disagree with the scope and methodology set out at the meeting in August 2017 on the basis of what the simulations were intended to demonstrate. This is because the Applicant's consultants had explained that traffic capacity in the area and collision risk were to be assessed separately.
		The simulation study was only able to demonstrate that looking at a range of vessels in isolation, with average conditions, that for the most part there would be enough sea-room to continue to conduct boarding and landing in this area. However, it must be noted that even without the full range of vessel size, type and metocean and traffic

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		conditions, 1 in 14 runs was still marginal.  The PLA and ESL do not agree with how the results of the survey have then been used by Marico to inform the NRA. They have placed too much weight on the outcome of these simulations and have not considered the limitations of the study. In order to use the simulations to assess collision risk a much more extensive study would be required.
	"the draft pilotage simulation report was issued to ESL and the Port of London Authority who confirmed receipt and onward circulation although no comments on the report were provided to imply disagreement – despite request."	The PLA and ESL agree that they were sent a copy of the draft simulation report. However, this was just a record of the runs that took place on that day and neither PLA nor ESL is aware that comments were requested.
1.12.3 (b) (answered in Annex N)	"It was noted that ESL explained (in the meeting of 14-Aug-2017) usage of a planning diamond tool (enabling information on appropriate ship directions based on metoceean conditions). In the absence of receiving this the metocean conditions were informed by consultation meetings, data analysis and agreed by participants on the set-up day."	ESL do not recall agreeing to provide any planning tools. They do not have set tools for making lees or boarding area decisions.
1.12.3 (d)	"Usage of a tug mode (as the Pilot Launch was required due	ESL consider that speed is not the only difference

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(answered in Annex N)	to the PLA Simulator not possessing a pilot launch model). The fundamental limitations of this mode related to transit speed"	between a tug and pilot launch. The visibility from a tug is different as well as differing handling. Tugs drive differently, have a different rate of acceleration and differ in responsiveness. The ship to 'launch' interaction is also likely to be different.
1.12.4 (answered in Annex O) Introductory points	"the NE Spit pilot station is not seen to have appreciably moved since construction of the existing Thanet Offshore Wind Farm"	The PLA and ESL agree that the NE Spit pilot station has not been moved and consider that there has been some confusion on this point. For clarification, the Tongue deep water diamond was created as a resulted of the Thanet Offshore Wind Farm being built. Prior to construction, deeper traffic could have been served on the existing wind farm site.
1.12.4 (a) (answered in Annex O)	Discussion of safety zones.	The PLA and ESL would like to raise that the Applicant's answers to this question do not take into account a buffer zone. The NE Spit pilot station diamond is treated as a rigid centre point allowing little flexibility.
	"in excess of 90% of through traffic on this inshore route currently navigates further to the west"	ESL and PLA consider that this confirms that the boarding area is very busy and, at times, congested and illustrates the need for flexibility in sea room to the East of

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		the wind farm.
	"The Applicant also notes that analysis and benchmarking was undertaken with other pilot boarding areas which demonstrates the available sea room post construction of the Thanet Extension Offshore Wind Farm is comparable with other pilot transfer areas around the UK"	The PLA and ESL do not agree with this comparison to other pilot stations. The Pilotage Study referred to only assessed two weeks of AIS data for Liverpool and the Humber and did not include much detail about their operation. In addition the Humber and Southampton have the areas split into two or three zones. The Pilotage Study suggested that ESL have 25 square km which already illustrates that ESL require flexibility in their operation.
1.12.4 (c) (answered in Annex O)	"The wind farm to the east, including a nominal 0.5nm buffer"	The PLA and ESL would suggest that a buffer of 1nm is a more appropriate minimum.
1.12.4 (d) (answered in Annex O)	"The Applicant has undertaken extensive consultation with ESL from the outset of the study in order to interrogate the concerns raised prior to and during scoping."	ESL would disagree with this statement. Although meetings have been held, these were treated by the Applicant as an opportunity to present the current status of their plans for the extension rather than to invite discussion and comment. ESL's previous concerns have not been addressed and they were not involved with the

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		collision risk modelling.
	"Following the debrief of the bridge navigation simulation, the report was issued and distributed for comment. No written response/commentary was received on the draft reports and subsequent consultation meetings were held with PLA and ESL (as part of the NRA) at which no specific feedback on the validity of the simulation methodology was provided (minutes of these meetings held on 05 and 06 December 2017 are provided within <i>Annex C Navigation Risk Assessment Application Ref 6.4.10.1</i> )."	After the bridge simulation, the participants did receive draft reports. An email was received from Marico Marine on 12 October 2017 which stated that the bridge simulation "will serve as an important reference as the project proceeds through the navigation risk assessment during which we will be coming back to you for all further consultation on the wider themes". ESL do not consider that this was an invitation for written responses on the report.  A further meeting was held in December 2017 at which
1.12.6	"The collision risk modelling was undertaken by using 1 month of AIS data from December 2016 – which accounts for a worst case MetOcean conditions"	The PLA and ESL do not consider one month of AIS data as being sufficiently representative. At no point during December 2016 did ESL have any restrictions on their service and therefore assuming that this accounts for worst case conditions is not correct. In addition, fog and reduced visibility is more common in early spring and create a particularly high risk working environment which was not assessed in the collision modelling.

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1.12.7	Explanation of additive effects of Wind Farm Service Vessels on collision risk.	The PLA and ESL would raise that the answer to this questions illustrates that the methodology used is complicated and difficult to understand.  The PLA and ESL's main concern us that the Applicant has underestimated the inherent risk.
1.12.9	Explanation on tolerability of societal concerns.	The PLA and ESL would maintain that the area they operate in is in is a busy shipping and pilotage area managed by existing stakeholders and therefore any increase in risk is not tolerable.
1.12.12, Annex I and Annex J	Annex I: Consultation Matrix  Annex J: Consultation Minutes and Correspondence	The PLA and ESL would like to reiterate their point previously made about the lack of stakeholder engagement. The Applicant has only demonstrated limited response to their concerns at the Scoping stage with the limited reduction in the red line boundary. The PLA did notify the Applicant that this did not address their concerns but received no response.
1.12.17	"All Baseline existing traffic routes remain viable – specifically, due sufficient sea room being maintained there is	

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	no requirement for vessels to be displaced or re-route into other locations or seek alternatives to any of the existing traffic routes."	although they will be affected by the extension of the wind farm. However, the area as a location for pilotage boarding and landing will be heavily impacted.
1.12.25	The Applicant identifies that the International Maritime Organisation (IMO) Formal Safety Assessment (FSA) risk assessment, as presented in section 3.2 of Circular MSC-MEPC.2/Circ.12/Rev.2 (REVISED GUIDELINES FOR FORMAL SAFETY ASSESSMENT (FSA) FOR USE IN THE IMO RULE-MAKING PROCESS) notes that:  "The use of expert judgment is considered to be an important element within the FSA methodology. It not only contributes to the proactive nature of the methodology, but is also essential in cases where there is a lack of historical data. Further historical data may be evaluated by the use of expert judgment by which the quality of the historical data may be improved."	ESL has previously raised concerns that a lack of historical incidents has led to certain assumptions being made about the safety of the area and when assessing future risk. The PLA and ESL would suggest that such expert judgment should include the opinions of stakeholders with experience of the study area – to include the PLA, ESL, the Marine Pilots, MCA and Trinity House. All of which have raised concerns about vessel safety.
1.12.26	"Consultation is then undertaken to validate the scores."	The PLA and ESL iare not aware of any consultation regarding the hazard logs, scoring and risk assessment.

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1.12.28	Comments regarding radar impact.	ESL made extensive comments in its Deadline 1 submissions on the adverse impact that wind farms have on radar and the likely impacts of the proposed extension.
1.12.29	"Next steps: inc agreement to share draft NRA prior to submission (done in Mar/Apr)"	Neither the PLA nor ESL received the draft NRA to comment on prior to the application being submitted.
1.12.31	Explanation on the moveable exclusion zone.	ESL would assume that safety zones would be enforced by a guard vessel. In practice, it is likely that the 500m exclusion would be greater due to the safety zones being enforced by a guard vessel presence, which itself would not be able to enter the 500m zone. That would in turn push traffic further away from the exclusion zone and further constrict the channel.

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