```
0
00:00:03.275 --> 00:00:06.085
It's now, it's now two o'clock,
00:00:06.665 --> 00:00:10.965
and we'll now resume ISH five
00:00:11.155 --> 00:00:12.445
with item two D.
3
00:00:13.385 --> 00:00:17.805
Um, could we start please by having on screen the, uh,
00:00:20.625 --> 00:00:23.605
Run one from the simulations that were carried out,
00:00:23.785 --> 00:00:25.125
uh, a couple of weeks ago?
00:00:26.025 --> 00:00:29.805
Um, I should just reassure you that we're not going to go
00:00:29.805 --> 00:00:31.445
through each of the runs.
00:00:32.565 --> 00:00:33.605
I want to look at this one first.
00:00:34.465 --> 00:00:37.125
Uh, and I'm going to be asking Mr.
10
00:00:37.305 --> 00:00:41.005
Par, if he may, to, to describe
11
00:00:41.035 --> 00:00:43.365
what this is really setting, setting the scene.
12
00:00:43.905 --> 00:00:47.045
Be helpful, I think, to all of us to, uh,
```

```
13
00:00:47.425 --> 00:00:51.245
get a common understanding of what the, uh,
14
00:00:52.265 --> 00:00:55.605
run one was, um, what happened on the run
00:00:55.865 --> 00:00:57.245
and what was learned from it.
16
00:00:58.065 --> 00:01:02.965
Um, if you could start by just, um, setting out,
17
00:01:03.325 --> 00:01:04.725
although we can read it for ourselves, of course,
18
00:01:05.075 --> 00:01:06.125
what the conditions were
19
00:01:06.195 --> 00:01:08.405
that were simulated in this particular one.
20
00:01:13.855 --> 00:01:17.085
Thank you, sir. Mike Par from HR Wallingford representing
00:01:17.485 --> 00:01:17.925
ABP
22
00:01:22.625 --> 00:01:23.245
uh, run.
23
00:01:23.305 --> 00:01:24.405
One, which was, uh,
24
00:01:25.035 --> 00:01:28.045
simulated HR Wallingford on the 7th of November,
00:01:28.935 --> 00:01:31.845
shows a entner transit glass vessel approaching
26
00:01:32.545 --> 00:01:33.565
```

```
eye at birth three.
27
00:01:34.945 --> 00:01:37.685
Uh, the conditions were for a
28
00:01:39.365 --> 00:01:41.175
peak spring ide
00:01:42.075 --> 00:01:44.495
and for the wind to be setting,
30
00:01:47.415 --> 00:01:49.095
I, I apologize, I can't see the,
31
00:01:49.095 --> 00:01:50.175
um, the arrow very well there.
32
00:01:50.175 --> 00:01:53.215
I think it's a northeasterly wind.
33
00:01:54.235 --> 00:01:57.535
Uh, it's a south southwesterly wind, uh,
34
00:01:59.595 --> 00:02:03.935
uh, and the wind was, uh, set between 15
00:02:03.935 --> 00:02:07.135
and 20 knots, so a mean wind of 17 and a half knots.
36
00:02:09.035 --> 00:02:11.415
The, uh, vessel set up, um,
37
00:02:13.755 --> 00:02:15.255
within the main part of the river.
38
00:02:16.515 --> 00:02:20.415
The flows on this run,
39
00:02:21.675 --> 00:02:26.655
uh, were vectored in order to, um,
```

```
40
00:02:26.675 --> 00:02:30.655
be setting, uh, down towards the IOT
41
00:02:31.355 --> 00:02:35.135
in the manner, um, that has been previously described by,
42
00:02:35.835 --> 00:02:40.655
um, particularly, um, DFDS as the vessel,
43
00:02:41.475 --> 00:02:44.015
um, left the main part of the river
44
00:02:45.075 --> 00:02:49.455
and tracked across towards the Eastern Jetty Yeti,
45
00:02:50.705 --> 00:02:54.135
using effectively the power of the tide on its stub
46
00:02:54.135 --> 00:02:58.695
or bow to controllably, get to a, a, a balanced position.
47
00:03:00.355 --> 00:03:04.125
Once the vessel was clear of a line level with
48
00:03:04.745 --> 00:03:07.805
the IOT birthing line,
49
00:03:08.785 --> 00:03:11.045
the vector tide was removed,
50
00:03:11.665 --> 00:03:15.045
and the vessel then made a stern board approach to
51
00:03:15.605 --> 00:03:18.885
IOT three berth using the
52
00:03:19.945 --> 00:03:23.765
HR Wallingford peak spring ebb model tide.
53
00:03:23.865 --> 00:03:26.685
```

```
So the tides that you'd expect once
54
00:03:26.905 --> 00:03:29.205
or twice every 28 days in the Humber.
00:03:33.085 --> 00:03:35.745
In terms of what we learned from that, uh, maneuver,
56
00:03:36.565 --> 00:03:41.425
we learned that in the strongest ebb flows
57
00:03:41.535 --> 00:03:44.345
that can be expected on the Humber with the kind
58
00:03:44.345 --> 00:03:47.385
of wind conditions that could be expected on the Humber
00:03:49.095 --> 00:03:52.105
once a month during the, the summer period and maybe once
60
00:03:52.105 --> 00:03:54.465
or twice a month during the winter period,
61
00:03:55.085 --> 00:03:58.945
the Stenner transit class can approach I at BER three
62
00:03:59.895 --> 00:04:04.825
with four tugs on the, uh, the tug pontoon,
63
00:04:04.835 --> 00:04:07.065
which is just at the end of the eastern jetty there.
64
00:04:07.725 --> 00:04:11.185
And it could perform that maneuver safely without recourse
65
00:04:11.445 --> 00:04:12.985
to any tug support.
66
00:04:17.135 --> 00:04:18.165
Thank you, Mr. Fares.
```

```
67
00:04:18.635 --> 00:04:22.565
Admirably, um, succinct, uh, the
68
00:04:23.705 --> 00:04:24.805
follow up question is
00:04:26.115 --> 00:04:28.565
what if there had been a vessel on birth two?
70
00:04:28.995 --> 00:04:31.525
What would've been learned from this simulation?
71
00:04:34.435 --> 00:04:36.005
Okay, there was meant to be a vessel
72
00:04:36.065 --> 00:04:37.245
on berth two for this run.
73
00:04:38.105 --> 00:04:42.765
Uh, however, uh, during the setup phase, we admitted to
74
00:04:43.775 --> 00:04:46.965
place that vessel there on completion of this run.
00:04:47.025 --> 00:04:49.605
We discussed amongst the simulation team whether we required
76
00:04:49.605 --> 00:04:52.805
to rerun it, and it was decided that as long as we
77
00:04:53.385 --> 00:04:55.925
ran subsequent runs with the vessel on BER two,
78
00:04:56.905 --> 00:04:58.925
we could understand whether we needed
00:04:58.945 --> 00:05:00.685
to rerun this in due course.
80
00:05:01.295 --> 00:05:04.085
```

```
There was no suggestion that we did need to rerun this.
81
00:05:04.625 --> 00:05:07.445
We subsequently did rerun exactly this maneuver,
82
00:05:08.385 --> 00:05:10.445
the difference being that we'd increase the wind
83
00:05:10.545 --> 00:05:12.725
to 25 to 30 knots.
84
00:05:13.265 --> 00:05:15.805
So the sort of wind strength that you could expect to get
85
00:05:16.435 --> 00:05:18.805
once or twice a year, or perhaps five
86
00:05:18.805 --> 00:05:20.965
or six times a year on the Humber at the most.
87
00:05:22.225 --> 00:05:25.565
And, uh, with a vessel on BER two, the vessel was able to
88
00:05:26.365 --> 00:05:30.885
maneuver to BER three with, and,
00:05:30.905 --> 00:05:33.045
and I, without referring to my notes, I wouldn't be able
90
00:05:33.045 --> 00:05:35.125
to tell you whether there was significant tug assistance
91
00:05:35.125 --> 00:05:36.485
or not, but a tug was
92
00:05:36.725 --> 00:05:38.565
provided to assist if required in those conditions.
93
00:05:40.305 --> 00:05:41.405
That's my recollection.
```

```
94
00:05:41.405 --> 00:05:43.765
This, I mean, the, the only thing that's worth mentioning
00:05:43.765 --> 00:05:46.685
for the record is that this particular run one was without
00:05:46.845 --> 00:05:49.485
towage, is that That's correct.
97
00:05:50.745 --> 00:05:51.745
Uh, can you say again, please?
98
00:05:52.385 --> 00:05:55.005
My understanding is that the, the, the, from what I see is
99
00:05:55.005 --> 00:05:58.125
that this particular run, run one was without towage
100
00:05:59.515 --> 00:06:01.765
From recollection, runs one to eight,
101
00:06:01.765 --> 00:06:05.725
were all without towage assistance, which were all in the 15
102
00:06:05.725 --> 00:06:07.045
to 20 knot wind conditions.
103
00:06:07.065 --> 00:06:09.565
So the once or twice a month wind condition.
104
00:06:12.185 --> 00:06:13.725
So the next question is,
105
00:06:14.195 --> 00:06:16.405
this is the standard transporter class.
106
00:06:18.235 --> 00:06:19.645
What if this had been, uh,
107
00:06:19.915 --> 00:06:21.605
```

```
firstly I'm gonna ask the question.
108
00:06:21.705 --> 00:06:25.765
If this had been the ginlink, uh, as used in
109
00:06:26.345 --> 00:06:28.965
at least some of the simulations carried out a year
110
00:06:29.245 --> 00:06:31.925
previously, what would
111
00:06:33.315 --> 00:06:36.045
have been in these conditions have been the need
112
00:06:36.045 --> 00:06:39.125
for towage, if at all?
113
00:06:39.565 --> 00:06:43.005
I mean, I'm, what's the comparison between this run
114
00:06:43.005 --> 00:06:44.165
with the standard transporter
115
00:06:44.265 --> 00:06:47.725
and what you would imagine needing to be simulated, uh,
00:06:48.345 --> 00:06:51.485
for the same result with the ginlink?
117
00:06:52.665 --> 00:06:54.245
So, I hesitate to answer that question
118
00:06:54.245 --> 00:06:56.405
because without referring to my notes,
119
00:06:56.485 --> 00:06:58.925
I can't tell you whether we did run the jingling.
120
00:06:58.925 --> 00:07:03.665
These conditions. The jingling was consistently run in much
```

```
121
00:07:03.865 --> 00:07:06.545
stronger conditions as is appropriate
122
00:07:06.565 --> 00:07:08.025
for the feasibility study we were doing.
123
00:07:08.245 --> 00:07:12.785
So we were using a proxy design vessel in order to establish
124
00:07:12.815 --> 00:07:16.505
that the navigational geometry in relation to the
125
00:07:17.375 --> 00:07:20.025
environmental conditions, which can be expected in that part
126
00:07:20.025 --> 00:07:24.425
of the Humber, to assess whether a vessel of around
127
00:07:24.495 --> 00:07:27.745
that size can be operated in due course
128
00:07:28.335 --> 00:07:31.625
with all the appropriate controls in place
129
00:07:32.415 --> 00:07:36.725
from the ber as designed from memory
130
00:07:38.635 --> 00:07:40.005
with the winds between 20
131
00:07:40.105 --> 00:07:44.325
and 25 knots, the jingling class was able
132
00:07:44.325 --> 00:07:45.725
to maneuver two, birth two
133
00:07:45.725 --> 00:07:49.285
and three without tug support on most occasions.
134
00:07:51.825 --> 00:07:53.125
```

```
So the next question is,
135
00:07:55.745 --> 00:08:00.365
if I understand it, the gling is not likely to be, uh,
00:08:00.525 --> 00:08:01.845
a vessel used at this?
137
00:08:01.985 --> 00:08:03.245
Uh, well, let me ask the question.
138
00:08:03.425 --> 00:08:06.885
Is the gling a vessel class that is likely to be
139
00:08:07.405 --> 00:08:09.005
operated at this development?
140
00:08:11.595 --> 00:08:14.685
From my knowledge, I would wouldn't expect the jingling
141
00:08:14.685 --> 00:08:16.005
to operate from this development.
142
00:08:16.175 --> 00:08:20.965
Thank you. And the design vessel
00:08:21.665 --> 00:08:25.605
in inverted commas that's referred to substantially both.
144
00:08:26.425 --> 00:08:30.445
In fact, from, from all, um, submissions I've seen, uh,
145
00:08:30.445 --> 00:08:34.365
through the course of the examination is substantially
146
00:08:34.365 --> 00:08:36.285
bigger than the standard transporter.
147
00:08:37.925 --> 00:08:40.525
W So the question is,
```

```
148
00:08:40.545 --> 00:08:43.365
and we'll be pursuing it this, this afternoon,
149
00:08:44.825 --> 00:08:47.685
why have we not modeled the, the, the design vessel
00:08:47.785 --> 00:08:51.445
to see whether this, uh, layout is,
151
00:08:51.705 --> 00:08:53.565
and in particular on birth three
152
00:08:53.565 --> 00:08:55.285
and birth two, is capable
153
00:08:55.545 --> 00:08:57.685
of being birthed safely with a larger vessel?
154
00:08:59.665 --> 00:09:01.445
Sir, in simulation, what we're trying
155
00:09:01.445 --> 00:09:03.285
to do all the time is to reduce the number
156
00:09:03.285 --> 00:09:04.685
of assumptions which we're making.
00:09:06.025 --> 00:09:07.445
The, you are, you're quite correct
158
00:09:07.515 --> 00:09:09.965
that the design vessel is substantially bigger than
159
00:09:09.965 --> 00:09:11.805
the NER transit class.
160
00:09:12.435 --> 00:09:17.045
However, the design vessel is of a similar size in terms of
161
00:09:17.825 --> 00:09:19.885
```

```
its length and beam to the jingling class.
162
00:09:21.745 --> 00:09:24.405
The vessel, which may be operated
00:09:24.545 --> 00:09:27.365
by standard in due course from these berths, to the best
164
00:09:27.365 --> 00:09:29.165
of my knowledge, does not exist.
165
00:09:31.275 --> 00:09:33.205
When we create a model
166
00:09:33.545 --> 00:09:37.205
or we recommend a model to be used for simulation,
167
00:09:38.385 --> 00:09:40.725
we prefer to have a model which exists,
168
00:09:41.145 --> 00:09:44.845
and we're able to test against trials data.
169
00:09:45.625 --> 00:09:49.925
And ultimately, it's always best if we can test our model
170
00:09:50.755 --> 00:09:52.645
with experience from masters
171
00:09:53.025 --> 00:09:56.805
or pilots who've maneuvered that vessel, so we can be sure
172
00:09:57.755 --> 00:10:00.005
that the lessons being learned from simulation
173
00:10:00.545 --> 00:10:01.845
are reasonable.
174
00:10:02.665 --> 00:10:05.765
So you're quite right, it would be possible to build a
```

```
175
00:10:07.945 --> 00:10:11.245
vessel which meets the criteria laid out
176
00:10:11.245 --> 00:10:14.605
for a design vessel, but there would be no basis
177
00:10:14.705 --> 00:10:15.725
for that vessel in reality.
178
00:10:16.585 --> 00:10:19.125
So we could be criticized for either making that vessel
179
00:10:19.715 --> 00:10:21.645
more powerful and more maneuverable
180
00:10:22.025 --> 00:10:24.245
or less powerful and less maneuverable.
181
00:10:24.465 --> 00:10:26.885
Mm-Hmm. So we've minimized the number of assumptions
182
00:10:27.715 --> 00:10:29.565
regarding the vessel using a vessel,
183
00:10:29.565 --> 00:10:31.085
which we have confidence in,
00:10:32.745 --> 00:10:35.205
And we've enabled the client could,
185
00:10:35.785 --> 00:10:38.525
Can I just clarify, using a vessel model
186
00:10:38.985 --> 00:10:40.165
in which you have confidence?
187
00:10:40.485 --> 00:10:42.725
I apologize if that, if that, if that wasn't clear. Yes.
188
00:10:43.595 --> 00:10:46.925
```

```
Okay. And, uh, we're able to give the client confidence
189
00:10:47.465 --> 00:10:51.245
in their engineering design by applying
00:10:51.885 --> 00:10:53.365
conservatism in other ways.
191
00:10:54.345 --> 00:10:57.605
So a lot of the maneuvers done with the jingling class
192
00:10:58.315 --> 00:11:01.845
were done in wind conditions, which you'd rarely expect
193
00:11:01.845 --> 00:11:05.205
to see on the Humber, and in conditions where normally
194
00:11:05.985 --> 00:11:07.765
the vessel wouldn't be maneuvering to the ber.
195
00:11:08.865 --> 00:11:11.405
So the pilots
196
00:11:11.585 --> 00:11:14.245
and the masters who were operating the jingling said, well,
197
00:11:14.245 --> 00:11:16.365
okay, we can, we can do that with two tugs,
198
00:11:17.025 --> 00:11:21.045
but in reality, with 30 odd knots of wind over the deck
199
00:11:21.705 --> 00:11:25.045
and the peak spring flow, we'd be waiting half an hour
200
00:11:25.065 --> 00:11:27.285
or two hours in order to do this in safer limits.
201
00:11:27.915 --> 00:11:30.765
However, the simulation was valuable
```

```
202
00:11:31.035 --> 00:11:35.365
because it gives the client confidence that overall,
203
00:11:36.305 --> 00:11:38.085
the birth in relation to the flows there
204
00:11:38.705 --> 00:11:41.805
and the width of the birth is broadly appropriate
205
00:11:42.545 --> 00:11:44.485
for a design vessel in due course
206
00:11:44.905 --> 00:11:48.565
of approximately 240 meters by 35 meters in width
207
00:11:49.915 --> 00:11:54.130
when appropriate Simulation might be a good way to assist
208
00:11:54.985 --> 00:11:59.085
the operator or ABP to decide what vessel to charter
209
00:11:59.905 --> 00:12:02.165
or the specifications which they might wish
210
00:12:02.165 --> 00:12:04.005
to give a manufacturer in order
211
00:12:04.625 --> 00:12:06.365
to support the down selection process
212
00:12:07.345 --> 00:12:09.645
for a larger design vessel to operator.
213
00:12:09.885 --> 00:12:14.725
I, as far as I'm aware, the only intention for a vessel
214
00:12:14.785 --> 00:12:16.565
to operate at IAT is the Stenner transit,
215
00:12:17.095 --> 00:12:19.965
```

```
which we've done much more detailed simulations now
216
00:12:20.625 --> 00:12:21.725
to demonstrate the kind
217
00:12:21.725 --> 00:12:24.325
of controls which would be appropriate for the vessel,
218
00:12:24.325 --> 00:12:28.245
which we know is gonna operate at IAT in the immediate
219
00:12:28.435 --> 00:12:30.045
aftermath of its construction.
220
00:12:33.005 --> 00:12:34.715
Thank you, Mr. Par. Now,
221
00:12:35.655 --> 00:12:39.915
before asking the IPS to comment, uh, I'd just like
222
00:12:39.915 --> 00:12:43.435
to have another, um, discussion with you, Mr.
223
00:12:43.535 --> 00:12:45.795
Par, on, on run 10, if we could see that one.
00:13:29.035 --> 00:13:32.365
Okay. Um, so Mr. Barr, uh, could you,
225
00:13:32.455 --> 00:13:33.725
let's do the same thing again.
226
00:13:33.745 --> 00:13:35.685
If you could, um, talk us through the conditions
227
00:13:35.685 --> 00:13:39.285
and parameters and what you expected to learn from this run
228
00:13:39.825 --> 00:13:43.725
and what in fact the debrief, uh,
```

```
229
00:13:45.775 --> 00:13:48.565
added to your expectations of the, uh,
230
00:13:48.565 --> 00:13:49.685
of the simulation here.
00:13:53.945 --> 00:13:56.485
So I think it would be useful to explain the, the process
232
00:13:56.945 --> 00:13:58.645
by which we ran these simulations.
233
00:13:58.905 --> 00:14:02.245
So, uh, I briefed the setup for this run,
234
00:14:02.465 --> 00:14:03.925
and the harbor master was present,
235
00:14:04.025 --> 00:14:07.565
and the harbor master subsequently briefed the, uh,
236
00:14:07.675 --> 00:14:09.245
what he considered would be the,
237
00:14:09.265 --> 00:14:11.525
the optimum maneuvering, uh, strategy.
238
00:14:11.705 --> 00:14:15.005
Mm-Hmm. And, uh, we then executed the run.
239
00:14:15.345 --> 00:14:17.965
We then debriefed the run with points from all
240
00:14:17.965 --> 00:14:20.045
of the members of the simulation team, so ourselves,
241
00:14:20.105 --> 00:14:23.685
the harbor master, uh, DFDS and APT.
242
00:14:24.945 --> 00:14:27.925
```

```
Uh, this was part of a series of runs
243
00:14:28.055 --> 00:14:32.885
where we had increased the wind to, uh,
00:14:34.145 --> 00:14:37.885
25 to 30 knots, so mean wind of 27
245
00:14:37.885 --> 00:14:40.725
and a half knots, uh, varying between
246
00:14:41.585 --> 00:14:43.205
25 and 30 knots.
247
00:14:43.665 --> 00:14:47.965
And again, we were running with the peak spring eeb.
00:14:48.985 --> 00:14:49.985
Uh,
249
00:14:50.265 --> 00:14:52.245
And this is a, this is an onshore wind. It
250
00:14:52.245 --> 00:14:53.245
Was an onshore wind. So,
00:14:53.245 --> 00:14:56.205
and, and what we were seeking to establish here was
252
00:14:56.205 --> 00:14:57.925
that the lessons that were
253
00:14:59.085 --> 00:15:02.085
identified in the normal operating conditions could be
254
00:15:02.085 --> 00:15:04.165
broadly applied to stronger wind conditions.
255
00:15:04.745 --> 00:15:07.285
And we were also looking to see, uh,
```

```
256
00:15:07.385 --> 00:15:09.565
in those stronger wind conditions, how much
257
00:15:10.175 --> 00:15:12.965
power the vessel required to operate
00:15:13.305 --> 00:15:16.245
and how much tug power is required to support it.
259
00:15:16.245 --> 00:15:18.285
And, and I admit, I, off the top of my head,
260
00:15:18.325 --> 00:15:19.845
I can't remember the, the details
261
00:15:19.865 --> 00:15:21.285
or the outcome for this, this run,
262
00:15:21.285 --> 00:15:23.445
but I, I could provide some more detail if you require.
263
00:15:25.345 --> 00:15:28.845
Uh, What, what I would like
264
00:15:28.845 --> 00:15:32.765
to know about this run is, is what was learned about, um,
265
00:15:33.425 --> 00:15:36.965
my understanding is that this run involved a simulation
266
00:15:36.965 --> 00:15:38.045
of wind sheltering.
267
00:15:39.025 --> 00:15:43.085
And, uh, if you wouldn't mind, if, uh, if we, if you want
268
00:15:43.085 --> 00:15:46.765
to come back to this in a moment, what I'm gonna be passing
269
00:15:47.465 --> 00:15:51.605
```

```
to, to, um, Harbor Master Humbert to ask for commentary on,
270
00:15:51.825 --> 00:15:54.165
on this run as well, in particular,
00:15:54.305 --> 00:15:55.765
and then we'll come back to you, Mr.
272
00:15:55.865 --> 00:15:58.645
Par, if you'd like to talk about the wind sheltering.
273
00:15:58.985 --> 00:16:02.325
Um, but, um, Harbor Master Humbert, um,
274
00:16:03.425 --> 00:16:08.285
the second tug, uh, is it too close to birth two
275
00:16:10.665 --> 00:16:12.885
to be considered safe?
276
00:16:16.315 --> 00:16:17.445
Good afternoon, sir. Uh,
277
00:16:17.445 --> 00:16:20.125
Andrew Furman Harbor Master Humber, uh, just from my notes,
278
00:16:20.675 --> 00:16:22.805
I've run 10, you are correct that this was,
279
00:16:22.885 --> 00:16:25.485
I think this was the first sheltering, uh, run
280
00:16:25.485 --> 00:16:28.725
that we'd done, um, in response to requests from,
281
00:16:28.915 --> 00:16:30.365
from the stakeholders in the room.
282
00:16:31.425 --> 00:16:34.405
Um, first observation was that the swing was done
```

```
283
00:16:35.125 --> 00:16:37.405
possibly further west than we originally said, if we were,
284
00:16:37.405 --> 00:16:39.285
if we were looking, and we, we moved forward on that.
285
00:16:39.905 --> 00:16:43.365
And then as we came in towards birth two, um,
286
00:16:43.625 --> 00:16:47.525
the second tug, which is driven by the simulator, uh,
287
00:16:48.025 --> 00:16:51.685
not the, um, sorry, the simulated tug the distance
288
00:16:51.685 --> 00:16:55.445
to birth two was, um, discussed afterwards, um,
289
00:16:55.745 --> 00:16:59.125
and agreed that a tug that was looking
290
00:16:59.125 --> 00:17:02.965
after itself would've not let itself get into that decision.
291
00:17:03.025 --> 00:17:05.325
But that was run 10 was one where they took,
292
00:17:05.425 --> 00:17:08.245
and the proximate birth two was discussed in the debrief.
293
00:17:09.615 --> 00:17:10.365
Thank you, captain.
294
00:17:15.345 --> 00:17:18.885
So the question to you again is
295
00:17:21.225 --> 00:17:25.565
to ask your observation on the learning value outta this
296
00:17:25.695 --> 00:17:27.205
```

```
particular run
297
00:17:27.545 --> 00:17:30.605
and how that feeds into a safety management system.
00:17:34.105 --> 00:17:36.405
Um, the, the learning value is really in,
299
00:17:36.705 --> 00:17:39.125
in the total sum of all the runs.
300
00:17:39.395 --> 00:17:41.685
It's very, rather than look at one run and,
301
00:17:41.685 --> 00:17:44.405
and pick out a piece, it's an evolution.
302
00:17:44.505 --> 00:17:46.925
It was a very positive couple of days, um,
303
00:17:46.925 --> 00:17:47.925
with all the stakeholders.
304
00:17:48.665 --> 00:17:51.445
Um, some runs always go better than others within
305
00:17:51.465 --> 00:17:52.685
the limits of simulation.
306
00:17:53.585 --> 00:17:57.645
Um, and this showed that there is room, um, between the two,
307
00:17:58.415 --> 00:18:00.565
sheltering does have a different effect.
308
00:18:00.825 --> 00:18:02.845
So we talked about the benefits of
309
00:18:02.845 --> 00:18:04.165
with sheltering and without.
```

```
310
00:18:04.905 --> 00:18:07.565
Um, and the two operators in the room also were happy
311
00:18:07.565 --> 00:18:10.245
that there was space between the two for them to,
312
00:18:10.265 --> 00:18:11.325
to operate normally.
313
00:18:12.025 --> 00:18:16.485
So in isolation, um, the learning was, was clear.
314
00:18:16.585 --> 00:18:18.845
It reinforced where the challenges were,
315
00:18:18.985 --> 00:18:21.685
but over, over the evolution of the two days, then,
316
00:18:21.685 --> 00:18:23.805
then we were, we were out solutions to that.
317
00:18:25.875 --> 00:18:28.445
Just for my understanding, uh,
318
00:18:29.585 --> 00:18:33.885
and clarification, you had SMS present, I believe.
319
00:18:33.945 --> 00:18:35.725
Is that right? But not Svitzer?
320
00:18:37.705 --> 00:18:39.245
Uh, that's correct, sir. We were, we were asked
321
00:18:39.245 --> 00:18:40.245
to bring a towage representative.
322
00:18:40.265 --> 00:18:41.605
We always ask both. Um,
323
00:18:41.665 --> 00:18:45.405
```

```
but generally on availability, um, one, one or the other
324
00:18:45.465 --> 00:18:46.765
or both, will, will attend.
325
00:18:50.595 --> 00:18:51.645
Does it make a difference?
326
00:18:51.785 --> 00:18:54.205
Uh, is it, for instance, um,
327
00:18:55.345 --> 00:18:57.285
is fitzer operating tugs,
328
00:18:57.285 --> 00:18:59.485
which would be required in certain circumstances,
329
00:18:59.535 --> 00:19:01.885
which may not have been simulated in these runs?
330
00:19:02.545 --> 00:19:05.685
Um, uh, it, it's just a peace of mind type
331
00:19:05.685 --> 00:19:07.805
of question is does it matter that only one
00:19:07.805 --> 00:19:10.165
of the two tug operators was, was involved?
333
00:19:11.665 --> 00:19:13.205
Uh, it does not.
334
00:19:13.205 --> 00:19:15.085
It's the expertise that we're looking for.
335
00:19:15.225 --> 00:19:17.805
The, the tug that we used on the simulation, there was a lot
336
00:19:17.805 --> 00:19:20.765
of, just to expand on how the simulations were done,
```

```
337
00:19:20.775 --> 00:19:22.925
there was a setting of the scene
338
00:19:22.925 --> 00:19:25.245
before the runs were started that everybody was in agreement
339
00:19:25.315 --> 00:19:28.885
with, which took was used, how the model was set up,
340
00:19:29.065 --> 00:19:32.485
et cetera, to try and really get a clear result rather than
341
00:19:32.485 --> 00:19:33.685
coming back around, um,
342
00:19:33.685 --> 00:19:35.445
with criticisms, again, a second time round.
343
00:19:35.505 --> 00:19:38.285
So not from that point of view. The fleets are different.
344
00:19:38.545 --> 00:19:40.845
The SMS fleet is possibly slightly shorter,
345
00:19:41.145 --> 00:19:43.485
but I would expect either fleet to be able to, uh,
346
00:19:43.715 --> 00:19:45.005
operate in these conditions.
347
00:19:46.855 --> 00:19:50.325
Thank you, Mr. Par.
348
00:19:50.505 --> 00:19:53.405
Um, wind sheltering, um,
349
00:19:56.775 --> 00:19:59.285
again, this, the question arises.
350
00:20:00.115 --> 00:20:03.485
```

```
This is a successful run
351
00:20:04.275 --> 00:20:07.005
with the qualifications we've just heard, um,
00:20:07.345 --> 00:20:10.245
as reported in the, in the, in in the paper.
353
00:20:10.905 --> 00:20:13.005
Uh, for the standard t,
354
00:20:14.545 --> 00:20:16.005
if this had been a gin link
355
00:20:16.955 --> 00:20:19.445
with the wind sheltering effects in, in other words,
356
00:20:19.585 --> 00:20:24.325
the bigger vessel, um, what could we expect to have, uh,
357
00:20:24.475 --> 00:20:29.325
have seen, uh, would for instance, there have been likely
358
00:20:29.385 --> 00:20:30.965
to be a greater need for tug?
00:20:31.265 --> 00:20:33.525
If I understand it, there's a single tug here rather than
360
00:20:33.525 --> 00:20:34.765
a double tug.
361
00:20:34.765 --> 00:20:35.765
Is that correct?
362
00:20:40.085 --> 00:20:41.485
I, I think we had two tugs.
363
00:20:41.485 --> 00:20:43.325
So we had one centrally controlled tug
```

```
364
00:20:43.325 --> 00:20:44.725
and one man tug uhhuh.
365
00:20:45.105 --> 00:20:48.125
And so just, just to reiterate the point that, uh,
366
00:20:48.125 --> 00:20:50.645
the harbor master was making the centrally controlled tug
367
00:20:50.955 --> 00:20:52.965
doesn't have a qualified tug master in it.
368
00:20:52.965 --> 00:20:55.885
So where, where you see it was a little bit closer there,
369
00:20:55.885 --> 00:20:58.365
it was being operated by one of my operators
370
00:20:58.365 --> 00:21:00.205
who doesn't have the same visual references.
371
00:21:00.665 --> 00:21:02.965
So we made some allowance for the, in the discussions
372
00:21:02.965 --> 00:21:04.165
for the work he he was doing,
373
00:21:04.185 --> 00:21:05.405
but I think there were two tugs
374
00:21:05.405 --> 00:21:06.805
for this, for this run. Okay.
375
00:21:07.385 --> 00:21:08.885
So if you, if you had a larger vessel
376
00:21:09.315 --> 00:21:12.645
with great significantly greater windage, um,
377
00:21:13.495 --> 00:21:17.525
```

```
would you expect to be, uh, needing a,
378
00:21:17.725 --> 00:21:19.045
a different towage requirement?
379
00:21:20.225 --> 00:21:21.365
And I'm gonna pass that question
380
00:21:21.365 --> 00:21:22.965
to uh, Huber number in a moment.
381
00:21:24.985 --> 00:21:26.125
Can I cover a couple
382
00:21:26.125 --> 00:21:27.645
of points which you, you've been raising?
383
00:21:28.145 --> 00:21:31.925
Uh, so the first one would be with regards to sheltering
384
00:21:32.665 --> 00:21:36.685
and it's HR Wallingford position that in general
385
00:21:37.105 --> 00:21:40.005
for these kind of simulations, it's better
00:21:40.005 --> 00:21:42.605
to demonstrate the ability to, for the vessels
387
00:21:42.605 --> 00:21:44.405
to operate without sheltering.
388
00:21:45.225 --> 00:21:48.365
Not because we think that there is no effect of sheltering,
389
00:21:48.705 --> 00:21:51.045
but because it gives the client, uh,
390
00:21:51.195 --> 00:21:55.765
more conservative assessment of how much lift
```

```
391
00:21:55.785 --> 00:21:58.405
and power is required in order to safely operate his vessel.
392
00:21:59.395 --> 00:22:00.965
What it also means is we don't,
00:22:01.185 --> 00:22:03.125
we can be more efficient in the way
394
00:22:03.125 --> 00:22:04.485
that we run the simulator for the client.
395
00:22:04.645 --> 00:22:06.165
'cause we don't have to repeat the run
396
00:22:06.635 --> 00:22:07.765
without sheltering on.
397
00:22:07.765 --> 00:22:10.725
So if we'd, it's, so if we'd run all our runs
398
00:22:10.725 --> 00:22:12.565
with sheltering on, with an adjacent vessel,
399
00:22:13.025 --> 00:22:14.125
it would then be appropriate
400
00:22:14.125 --> 00:22:16.365
to be challenged whether we needed to run them with it off.
401
00:22:16.545 --> 00:22:19.005
And we definitely would because there's the
402
00:22:19.005 --> 00:22:20.765
forces involved would be much larger.
403
00:22:21.865 --> 00:22:25.005
And so where we do think that sheltering is useful
404
00:22:25.025 --> 00:22:27.845
```

```
to be applied in the simulator is when we're using the
405
00:22:27.845 --> 00:22:29.165
simulator to train pilots,
00:22:29.165 --> 00:22:32.205
because they need to get used
407
00:22:32.205 --> 00:22:36.525
to anticipating the effect that the variation in wind has
408
00:22:37.105 --> 00:22:41.125
as they maneuver into the lee of a, of a large vessel
409
00:22:42.105 --> 00:22:43.285
during these runs.
410
00:22:43.385 --> 00:22:46.205
And in previous runs, we have applied sheltering
411
00:22:46.665 --> 00:22:49.485
and indeed, um, updated our sheltering algorithm a little
412
00:22:49.485 --> 00:22:52.565
bit in order to support, um, some
413
00:22:52.565 --> 00:22:54.525
of the assessment which was requested by
414
00:22:55.655 --> 00:22:56.965
IOT's maritime advisors.
415
00:22:57.225 --> 00:22:58.445
So, and,
416
00:22:58.465 --> 00:23:00.245
and in this run in particular,
417
00:23:01.975 --> 00:23:04.325
there was no significant detriment
```

```
418
00:23:04.325 --> 00:23:05.805
to the vessel's operability
419
00:23:06.435 --> 00:23:08.925
when we applied sheltering compared to similar runs
420
00:23:08.925 --> 00:23:10.125
where sheltering wasn't implied.
421
00:23:12.505 --> 00:23:13.805
Am I right in understanding this?
422
00:23:13.955 --> 00:23:16.565
This is a departure, so the, uh,
423
00:23:16.565 --> 00:23:18.965
sheltering effect would be diminishing
424
00:23:19.185 --> 00:23:21.085
as the vessel leaves its birth,
425
00:23:21.665 --> 00:23:25.245
and it would be basically getting the, uh, the, the, the,
426
00:23:25.345 --> 00:23:29.725
the, uh, progressively getting more wind as it's, uh,
427
00:23:29.945 --> 00:23:33.765
as it moves, uh, in, in a, uh, a north,
428
00:23:33.945 --> 00:23:35.405
uh, Wesley direction.
429
00:23:36.305 --> 00:23:37.405
Is that, is that correct?
430
00:23:37.945 --> 00:23:41.125
Uh, yes, sir. Mike path, uh, ABP, that's, that's correct.
431
00:23:41.185 --> 00:23:44.325
```

```
So the danger here would be if the pilot hadn't correctly
432
00:23:44.325 --> 00:23:47.565
anticipated the effect of the increasing wind
433
00:23:47.565 --> 00:23:49.965
as he came clear out of the lea of the adjacent vessel,
434
00:23:50.505 --> 00:23:51.845
his bow might be tended
435
00:23:51.845 --> 00:23:54.285
to be set down towards the Tucker Pontoon
436
00:23:54.345 --> 00:23:55.845
or to the Eastern jetty.
437
00:23:55.955 --> 00:23:56.955
Yeah.
438
00:23:58.105 --> 00:24:01.005
Um, hub Master Humber, um, again,
439
00:24:03.035 --> 00:24:07.885
it's essentially, um,
440
00:24:08.965 --> 00:24:10.885
I, I realize a hypothetical question,
441
00:24:11.225 --> 00:24:15.645
but, um, do you, what do you feel that, um, you would need
442
00:24:15.645 --> 00:24:20.205
to know in future about, uh, the size of vessel that, um,
443
00:24:20.295 --> 00:24:22.045
could cope with these conditions
444
00:24:22.825 --> 00:24:25.285
and the towage requirements would,
```

```
445
00:24:25.705 --> 00:24:29.205
and when do you think that you would be calling for
446
00:24:29.205 --> 00:24:32.725
that kind of simulation to take place?
447
00:24:34.225 --> 00:24:38.045
So hypothetically, if a consent were, were, were made, uh,
448
00:24:38.045 --> 00:24:42.605
were granted, you would need to at some point identify
449
00:24:43.435 --> 00:24:46.725
what conditions a larger vessel could
450
00:24:48.265 --> 00:24:50.925
safely, um, uh, maneuver to
451
00:24:51.025 --> 00:24:53.445
and from these inner births.
452
00:24:55.505 --> 00:24:58.525
How do you think that, um, is likely
453
00:24:58.585 --> 00:25:00.925
to play out over the next two or three years?
454
00:25:03.865 --> 00:25:06.765
Um, yeah, Andrew Furman Harbor Master Humber,
455
00:25:08.035 --> 00:25:09.335
the assessment
456
00:25:09.405 --> 00:25:12.255
that assessment's done today are very much on the T class,
457
00:25:12.355 --> 00:25:15.895
and the Jing has said, so with regards to a design vessel,
458
00:25:16.515 --> 00:25:19.375
```

```
any vessel that came that was significantly different
459
00:25:19.375 --> 00:25:23.495
to those already tested would need to be assessed as, as,
00:25:23.555 --> 00:25:24.935
uh, Mr.
461
00:25:25.115 --> 00:25:28.175
Par said simulation is usually the way to do that.
462
00:25:28.515 --> 00:25:31.135
An example would've been the introduction
463
00:25:31.135 --> 00:25:34.135
of journaling ing Mount Harbor, so everybody's as prepared
464
00:25:34.135 --> 00:25:36.935
as possible where the difference becomes
465
00:25:36.935 --> 00:25:39.495
with a larger vessel or the potential with tugs,
466
00:25:40.595 --> 00:25:42.135
it could be taking tugs more often,
00:25:42.595 --> 00:25:44.655
or there could be a certain set of conditions
468
00:25:44.865 --> 00:25:46.895
where the vessel cannot birth, so
469
00:25:47.515 --> 00:25:49.375
it would have an impact on the operating window.
470
00:25:50.015 --> 00:25:53.455
I don't see the berth being built to a capacity
471
00:25:53.455 --> 00:25:55.055
of 240 meters
```

```
472
00:25:55.155 --> 00:25:58.135
or whichever size vessel that doesn't agree
473
00:25:58.135 --> 00:26:01.895
to unfettered 100% access in all, in all conditions so
474
00:26:01.895 --> 00:26:03.975
that there's a set of control measures
475
00:26:04.075 --> 00:26:05.775
and operating windows to be applied
476
00:26:05.875 --> 00:26:08.135
to any vessel following the the right assessment.
477
00:26:11.515 --> 00:26:16.455
Is it right to understand that if, um,
478
00:26:16.955 --> 00:26:21.735
the operator putatively stenner here, uh, is,
479
00:26:21.995 --> 00:26:25.375
um, looking to introduce a larger vessel,
480
00:26:25.765 --> 00:26:30.615
that they would then have to apply essentially to you
481
00:26:31.075 --> 00:26:34.135
as Harbor Master Humber for, uh,
482
00:26:37.055 --> 00:26:38.815
a set of controls to be examined?
483
00:26:39.915 --> 00:26:41.175
Um, or, and,
484
00:26:41.195 --> 00:26:44.365
and at that point, um, you would then be in a position
485
00:26:44.365 --> 00:26:47.725
```

```
to impose conditions on the kind of either simulation
486
00:26:47.865 --> 00:26:51.605
or real world testing that, uh, would be needed
487
00:26:51.665 --> 00:26:56.205
to satisfy yourself of, uh, the, the range of,
488
00:26:56.305 --> 00:26:57.325
of safe conditions?
489
00:26:57.425 --> 00:26:59.205
Is that, is that the right way of understanding it?
490
00:27:00.945 --> 00:27:02.285
Andrew Furman Harbor Master?
491
00:27:02.785 --> 00:27:04.285
Uh, yes, that, that is correct.
492
00:27:04.545 --> 00:27:08.365
So in, if you said, well, as you, as you asked,
493
00:27:08.545 --> 00:27:09.965
how would I see that playing out?
00:27:10.585 --> 00:27:12.605
If Stenner said they wanted to bring a larger vessel,
495
00:27:13.555 --> 00:27:16.125
they would bring that to us almost at a design stage
496
00:27:16.385 --> 00:27:19.325
and say, okay, how much maneuverability does that need?
497
00:27:19.745 --> 00:27:23.205
And I would expect them to design a vessel that's capable
498
00:27:23.305 --> 00:27:27.045
of move maneuvering in most conditions at this jetty.
```

```
499
00:27:27.705 --> 00:27:30.565
If some of the extreme environmental conditions were outside
500
00:27:30.565 --> 00:27:32.725
of that, that that would be for them to decide.
501
00:27:32.745 --> 00:27:36.245
But we would always apply control measures
502
00:27:36.385 --> 00:27:39.365
to whichever vessel, and it's a combination of both sides
503
00:27:39.385 --> 00:27:41.885
and maneuverability, which is what makes the
504
00:27:43.245 --> 00:27:46.165
hypothetical testing of a design vessel difficult at,
505
00:27:46.185 --> 00:27:47.605
at this stage of the proceedings.
506
00:27:50.345 --> 00:27:51.525
Uh, yeah, sorry, sorry, Sarah.
507
00:27:51.625 --> 00:27:55.165
Uh, as, as an example, uh, Greenport Hull, um,
508
00:27:56.495 --> 00:28:00.005
where we, um, load out the wind turbine blades,
509
00:28:00.065 --> 00:28:01.765
so the vessels are, well,
510
00:28:01.765 --> 00:28:03.765
they started off at 75 meters wide.
511
00:28:04.425 --> 00:28:07.445
The next vessel is potentially 170 meters long
512
00:28:07.505 --> 00:28:09.285
```

```
and 115 meters wide.
513
00:28:10.195 --> 00:28:13.125
That vessel isn't built yet, but they have the design,
00:28:13.665 --> 00:28:16.485
and in the next month, we'll be going with the operators
515
00:28:16.485 --> 00:28:19.445
of those vessels to South Townside College to ensure that
516
00:28:19.445 --> 00:28:21.485
that vessel is, is fit for navigating
517
00:28:21.485 --> 00:28:22.725
to greenport hole and back.
518
00:28:22.985 --> 00:28:27.525
So that is pretty typical of a expanding, um, facility.
519
00:28:30.935 --> 00:28:32.125
Thank you very much. That's helpful.
520
00:28:32.505 --> 00:28:36.365
Uh, I'm now going to turn first to DFDS
521
00:28:36.365 --> 00:28:38.325
and then to I ot.
522
00:28:38.665 --> 00:28:43.435
Uh, is there a particular
523
00:28:43.755 --> 00:28:45.675
question or a couple of questions
524
00:28:45.745 --> 00:28:47.235
that I should have asked there?
525
00:28:49.935 --> 00:28:53.675
Um, Isabella,
```

```
526
00:28:54.855 --> 00:28:59.395
for DFDS, uh, so I think that the questions
527
00:28:59.585 --> 00:29:01.595
that you have asked, um,
528
00:29:01.855 --> 00:29:04.995
on the design vessel reflect concerns that we have raised.
529
00:29:05.775 --> 00:29:08.475
We still have concerns about the title direction,
530
00:29:08.475 --> 00:29:10.675
which we don't think has been adequately addressed
531
00:29:10.675 --> 00:29:12.395
through the application of this vector.
532
00:29:13.575 --> 00:29:18.195
Um, and plainly the
533
00:29:18.755 --> 00:29:20.155
jingling simulations
534
00:29:20.155 --> 00:29:22.675
that have previously taken place included
535
00:29:23.305 --> 00:29:25.395
very limited simulation of birth three
536
00:29:25.975 --> 00:29:27.435
and a number of simulations,
537
00:29:27.435 --> 00:29:30.435
which we consider should have been deemed as failures
538
00:29:30.435 --> 00:29:32.675
because of the excessive use of bowel,
539
00:29:32.675 --> 00:29:34.555
```

```
thrusters, tugs, et cetera.
540
00:29:34.855 --> 00:29:37.635
And we've covered those points already. Yeah, yeah.
00:29:37.815 --> 00:29:41.230
Um, we still have some points that we'd like, like
542
00:29:41.230 --> 00:29:43.485
to make on the matters that you've raised with the, uh,
543
00:29:43.485 --> 00:29:45.925
with the applicant, but I think in terms of the questions
544
00:29:47.475 --> 00:29:50.205
that broadly covers our areas of concern,
545
00:29:51.495 --> 00:29:52.495
Thank you. I mean,
546
00:29:52.495 --> 00:29:56.325
the, the understanding I have from the reports
547
00:29:56.505 --> 00:30:00.125
and the submissions that deadline six, uh, are that
00:30:01.525 --> 00:30:05.365
d ft s as attendees at the simulations
549
00:30:06.425 --> 00:30:10.805
did agree the, the, the to the success of, of these runs.
550
00:30:11.705 --> 00:30:16.245
Um, I think if I could
551
00:30:16.555 --> 00:30:18.805
pass directly to Captain Nielsen, uh,
552
00:30:19.105 --> 00:30:21.885
are there any observations that you'd like to make
```

```
553
00:30:24.135 --> 00:30:27.205
inevitably the set of simulations was
554
00:30:27.985 --> 00:30:30.005
and had to be limited in scope,
555
00:30:30.745 --> 00:30:35.365
and if you like, it was optimized for a standard t
556
00:30:36.385 --> 00:30:38.525
uh, proof of evidence.
557
00:30:39.105 --> 00:30:42.965
Now, what's your sense of, um,
558
00:30:43.745 --> 00:30:47.605
the value of this set of simulations to start to allay some
559
00:30:47.605 --> 00:30:49.245
of the concerns that you had
560
00:30:49.545 --> 00:30:54.045
before the last, um, the last set of hearings?
00:30:54.985 --> 00:30:59.805
Has this moved us closer to an understanding of the,
00:31:01.025 --> 00:31:05.565
if you like, uh, limited acceptance of, of, um,
563
00:31:06.105 --> 00:31:09.125
uh, the potential safe operation of this
564
00:31:09.685 --> 00:31:13.245
proposed development than are we better off than we
00:31:13.365 --> 00:31:14.405
were back in September?
566
00:31:15.665 --> 00:31:16.665
```

```
That's the question.
567
00:31:19.945 --> 00:31:23.405
Yes. On, uh, behalf of, uh, d ft s uh, thank you, sir.
00:31:24.665 --> 00:31:28.205
Uh, to start with the last point, I think that in
569
00:31:29.125 --> 00:31:32.135
some terms, or at least in one we have, uh, come closer
570
00:31:32.235 --> 00:31:34.535
and that it, uh, is that we were happy to see
571
00:31:34.535 --> 00:31:37.455
that the chalk bar were now included with tox on the side.
572
00:31:38.475 --> 00:31:40.855
Um, can also say that if, if
573
00:31:41.125 --> 00:31:43.695
that had been included on the previous simulations,
574
00:31:44.205 --> 00:31:45.855
then at least, uh, run 10
575
00:31:45.995 --> 00:31:48.935
and run 55 would've meant that the chalk used
576
00:31:48.955 --> 00:31:51.135
by the jingling vessels would have collided
577
00:31:51.175 --> 00:31:52.975
with the tox on the birth there.
578
00:31:53.475 --> 00:31:56.015
So, so that's of course one of the concerns that, uh,
579
00:31:56.015 --> 00:31:57.975
that we are happy to see that, that that has been, uh,
```

```
580
00:31:58.215 --> 00:31:59.895
improved on the current.
581
00:32:00.875 --> 00:32:03.455
We did agree. We also raised that, uh,
582
00:32:03.455 --> 00:32:05.015
we still have concerns that this is not the
583
00:32:05.015 --> 00:32:06.135
right way to offset it.
584
00:32:06.515 --> 00:32:08.735
We be believe that there should have been more measurements
585
00:32:08.735 --> 00:32:11.855
conducted, but in given the con the constraint we had on
586
00:32:11.855 --> 00:32:15.095
time, then of course we agreed to that this is the best
587
00:32:15.095 --> 00:32:16.855
that was available, uh,
588
00:32:17.045 --> 00:32:19.135
when we had a meeting on 31st of December.
589
00:32:19.515 --> 00:32:23.295
So, uh, so on that, uh, that, that's, uh, October, October,
590
00:32:23.295 --> 00:32:27.455
October, yeah, sorry, on 31st of, uh, October, um,
591
00:32:29.435 --> 00:32:32.015
in regards to, uh, to the design vessel as, uh,
592
00:32:32.015 --> 00:32:35.255
MR four have have raised, we, um, I don't think we have
593
00:32:36.125 --> 00:32:37.255
```

```
come a lot closer there.
594
00:32:37.555 --> 00:32:38.895
We have raised our concerns.
00:32:39.060 --> 00:32:40.405
Uh, we believe that, uh,
596
00:32:40.985 --> 00:32:43.205
the development should be safe both from a start,
597
00:32:43.385 --> 00:32:44.845
but definitely also in the future.
598
00:32:44.905 --> 00:32:47.605
And that's why we are here. And, uh, we do not believe
599
00:32:47.605 --> 00:32:50.245
that the simulations conducted so far shows that
600
00:32:50.245 --> 00:32:53.405
that is the case for, uh, for the IERT development.
601
00:32:54.575 --> 00:32:56.525
Thank you. Thank you.
00:32:56.745 --> 00:33:01.405
But, um, we've heard from the album master that,
603
00:33:01.785 --> 00:33:06.125
uh, until, um, until, um,
604
00:33:06.705 --> 00:33:10.165
the SCNA is, is satisfied that
605
00:33:11.125 --> 00:33:15.165
a larger vessel, which apparently may not
606
00:33:15.265 --> 00:33:19.525
yet have been designed until such time as
```

```
607
00:33:19.555 --> 00:33:21.485
that has been proven to be safe,
608
00:33:21.595 --> 00:33:24.605
then it will not be operating at this development anyway.
609
00:33:25.435 --> 00:33:27.845
Does that satisfy your concerns,
610
00:33:28.485 --> 00:33:29.485
Isabella? Four four
611
00:33:29.485 --> 00:33:30.165
DFDS?
612
00:33:30.265 --> 00:33:34.925
So this, um, infrastructure is built to, um,
613
00:33:35.455 --> 00:33:37.405
facilitate a certain design vessel,
614
00:33:37.415 --> 00:33:39.165
which has been set out in the NRA.
615
00:33:39.665 --> 00:33:42.725
Our position is that you need to be satisfied
616
00:33:42.745 --> 00:33:45.205
before allowing it to be built, um,
617
00:33:45.205 --> 00:33:47.805
that it can safely accommodate vessels
618
00:33:47.805 --> 00:33:48.965
of that design capacity.
619
00:33:49.465 --> 00:33:51.925
Now, we suggested, um,
620
00:33:52.075 --> 00:33:54.645
```

```
that the simulation should use a different glass
621
00:33:54.645 --> 00:33:55.925
of vessel that does exist.
622
00:33:55.925 --> 00:33:58.405
That's the Delphine class, which is more representative
623
00:33:58.505 --> 00:34:02.125
of the design vessel that was rejected by the applicant.
624
00:34:02.675 --> 00:34:05.445
It's also perfectly possible to develop a model
625
00:34:05.545 --> 00:34:08.405
or modify an existing model to reflect the characteristics
626
00:34:08.405 --> 00:34:09.405
of the design vessel.
627
00:34:09.405 --> 00:34:11.365
That's, um, Mr.
628
00:34:12.225 --> 00:34:14.445
Priest can confirm to you that
629
00:34:14.445 --> 00:34:18.085
that is not an unduly onerous process to go through.
630
00:34:18.625 --> 00:34:22.685
Um, so our position is that the characteristics
631
00:34:22.685 --> 00:34:26.725
of the vessel that was, um, simulated are
632
00:34:28.825 --> 00:34:33.245
so different, so much smaller than the, um, vessel
633
00:34:33.305 --> 00:34:35.805
for which this development is designed as
```

```
634
00:34:35.805 --> 00:34:39.325
to be unrepresentative reduced windage.
635
00:34:40.065 --> 00:34:42.605
Um, the underwater cross section is reduced
00:34:42.605 --> 00:34:45.125
with the lesser draft, so the reflective, the tides flow,
637
00:34:45.305 --> 00:34:48.845
it is less, um, the,
638
00:34:49.625 --> 00:34:53.125
having a high beam to length ratio means that the, um, model
639
00:34:53.125 --> 00:34:55.845
that was used is easy to turn and to stop turning.
640
00:34:56.065 --> 00:34:58.565
So more has greater directional stability.
641
00:34:59.265 --> 00:35:03.325
So yes, this is helpful in terms of, well,
642
00:35:03.325 --> 00:35:05.965
that which is initially proposed, um,
643
00:35:05.985 --> 00:35:08.325
it doesn't overcome our concerns
644
00:35:08.325 --> 00:35:12.005
because, um, we do still have concerns about, uh,
645
00:35:12.105 --> 00:35:15.085
the title direction, um, which haven't been allayed.
646
00:35:15.625 --> 00:35:20.605
Um, and our overarching concern
647
00:35:20.795 --> 00:35:24.285
```

```
remains, um, that by authorizing this development,
648
00:35:24.285 --> 00:35:28.325
without seeing even any simulations of a design vessel
00:35:28.345 --> 00:35:30.845
or closer to the design vessel, you would be authorizing,
650
00:35:31.305 --> 00:35:34.965
um, something for which there's a risk, um, that,
651
00:35:34.965 --> 00:35:37.925
that hasn't adequately been considered
652
00:35:38.105 --> 00:35:40.285
and demonstrated to be satisfactory.
653
00:35:43.105 --> 00:35:46.045
Uh, help us out here if, um,
654
00:35:47.905 --> 00:35:51.645
it is capable spatially of taking a 204 40
655
00:35:51.825 --> 00:35:55.085
by 35 37, uh, meter vessel.
00:35:56.905 --> 00:35:59.285
That's one thing. Uh,
657
00:36:01.545 --> 00:36:05.285
if the Harbor Masa Humber doesn't permit the operation
658
00:36:05.625 --> 00:36:10.565
of a two 40 by 37 with relatively deep draft, high windage,
659
00:36:11.465 --> 00:36:15.605
um, is that any concern of the DCO,
660
00:36:16.985 --> 00:36:19.165
Uh, Isabella four for DFDS?
```

```
661
00:36:19.395 --> 00:36:20.805
Well, sir, if you were willing
662
00:36:20.805 --> 00:36:24.365
to impose a restriction on the DCO, which prevented its use
663
00:36:24.705 --> 00:36:27.685
by larger vessels than those which have been simulated,
664
00:36:27.955 --> 00:36:29.245
that would allay our concern.
665
00:36:29.825 --> 00:36:32.965
Um, but you understand that we, um,
666
00:36:33.115 --> 00:36:37.245
have some concerns about the, um, organizational
667
00:36:37.845 --> 00:36:39.525
independence, um,
668
00:36:39.705 --> 00:36:43.245
and oversight, uh, given the various roles which
669
00:36:43.825 --> 00:36:47.165
are occupied by ABP personnel, which we say means
670
00:36:47.165 --> 00:36:49.765
that careful scrutiny is required at this stage.
671
00:36:50.665 --> 00:36:53.565
Um, if, if on the other hand you were willing
672
00:36:53.565 --> 00:36:57.045
to impose a restriction which said they can't, um, use
673
00:36:57.615 --> 00:37:00.685
those larger vessels, then in the event
674
00:37:00.685 --> 00:37:02.325
```

```
that in the future they wish to do so,
675
00:37:02.595 --> 00:37:04.525
that would require an amendment to the DCO,
00:37:04.525 --> 00:37:06.285
which would have independent oversight.
677
00:37:06.285 --> 00:37:08.645
And at that stage, any decision maker could satisfy
678
00:37:08.775 --> 00:37:10.405
themselves of whether
679
00:37:10.405 --> 00:37:12.165
that could be safely done at that stage.
680
00:37:12.745 --> 00:37:16.045
So that we say would be the only, um,
681
00:37:17.175 --> 00:37:18.565
acceptable workaround.
682
00:37:21.185 --> 00:37:24.245
My understanding of, of the evidence submitted
00:37:24.245 --> 00:37:28.125
by the applicant so far is that that
684
00:37:29.435 --> 00:37:33.085
control, uh, not in the sense of a a, a risk control,
685
00:37:33.145 --> 00:37:36.205
but a, an operational control does exist,
686
00:37:37.065 --> 00:37:40.685
and it's in the, uh, it's in the purview
687
00:37:40.685 --> 00:37:42.165
of the SCNA.
```

```
688
00:37:43.145 --> 00:37:46.685
Um, if I understand your position correctly,
689
00:37:47.625 --> 00:37:50.965
you don't believe that that SCNA control will be
00:37:51.165 --> 00:37:52.645
independently applied,
691
00:37:53.195 --> 00:37:57.365
however, we heard pretty clearly this morning, um, evidence
692
00:37:57.435 --> 00:38:02.365
that, uh, it had, if you like, uh, an overarching,
693
00:38:02.585 --> 00:38:07.525
um, statutory duty to the public to exercise that role,
694
00:38:09.805 --> 00:38:12.005
Isabella to four four DFDS?
695
00:38:12.475 --> 00:38:16.485
Well, sir, we think that there have been a number
696
00:38:16.585 --> 00:38:20.285
of failings in the process to date, including an absence
697
00:38:20.285 --> 00:38:22.085
of transparency and an absence properly
698
00:38:22.085 --> 00:38:25.165
to consider concerns, legitimate concerns raised by others
699
00:38:25.625 --> 00:38:29.325
as evidenced in the has, has board minutes, for example.
700
00:38:29.945 --> 00:38:33.925
Uh, and so those that may have statutory duties, um,
701
00:38:34.105 --> 00:38:37.685
```

```
we have concerns given the process to date, um,
702
00:38:37.715 --> 00:38:39.125
with pure reliance on those.
703
00:38:39.505 --> 00:38:43.165
And ultimately, if the, if ABP is seeking permission
704
00:38:43.185 --> 00:38:45.085
to build this structure, um,
705
00:38:45.085 --> 00:38:48.125
without any limitations on the vessels that can use it,
706
00:38:48.585 --> 00:38:50.565
we set it's incumbent on them at this stage
707
00:38:50.565 --> 00:38:52.165
before it's authorized to show that
708
00:38:52.165 --> 00:38:54.245
that can safely be managed.
709
00:38:54.865 --> 00:38:58.405
Um, and our concern is that that hasn't yet happened,
710
00:38:59.305 --> 00:39:00.325
and we don't understand why.
711
00:39:00.385 --> 00:39:02.245
So we've been raising this for such a long time.
712
00:39:02.245 --> 00:39:05.045
There is a vessel with more comparable characteristics,
713
00:39:05.165 --> 00:39:07.925
a DELPHINE class, and it is perfectly possible to
714
00:39:09.205 --> 00:39:11.845
construct a model of a more characteristic vessel.
```

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715
00:39:13.065 --> 00:39:15.885
So, can I Thank you. Uh, I'm going
716
00:39:15.885 --> 00:39:17.085
to actually ask, uh, Mr.
717
00:39:17.265 --> 00:39:19.965
Parter response specifically to that point about the,
718
00:39:20.105 --> 00:39:21.365
the Delphine, um,
719
00:39:22.505 --> 00:39:25.005
Mr. Strong will on the, on the broader point.
720
00:39:25.225 --> 00:39:28.245
Um, we'll see if we, we need to come back to that point,
721
00:39:28.245 --> 00:39:31.245
but I do want have, uh, an opportunity for IOT to chip in,
722
00:39:31.305 --> 00:39:33.165
and then maybe you can respond to both of them.
723
00:39:34.145 --> 00:39:37.325
So, but firstly, before we lose track of that, that train
724
00:39:37.325 --> 00:39:40.965
of thought, um, your comments Mr.
725
00:39:41.065 --> 00:39:44.845
Par on, on the use of delfin as a, as a model to, uh, uh,
726
00:39:45.065 --> 00:39:47.485
as a proxy for, for the design vessel,
727
00:39:49.065 --> 00:39:52.485
Sir, my par HR Wallingford, uh, representing ABP.
728
00:39:53.345 --> 00:39:57.125
```

```
So I, I think, um, it's being suggested that it's easy to,
729
00:39:57.905 --> 00:40:01.765
uh, manage or modify ship models that isn't the case at all.
730
00:40:02.585 --> 00:40:04.725
Uh, to create a effective
731
00:40:04.985 --> 00:40:09.725
and realistic ship model, you need accurate, uh,
732
00:40:09.725 --> 00:40:11.725
general drawings of the vessel or general arrangements.
733
00:40:11.745 --> 00:40:13.685
You need to understand what the propulsion plant is,
734
00:40:14.065 --> 00:40:15.645
you need to understand what the rudder is,
735
00:40:15.705 --> 00:40:17.485
and you need to understand the bound thrusters,
736
00:40:17.485 --> 00:40:19.885
and you need to understand the shape of the ship.
00:40:20.505 --> 00:40:23.365
And then in, in larger detail, you need to understand
738
00:40:23.365 --> 00:40:25.045
where the moorings are, uh,
739
00:40:25.045 --> 00:40:26.685
or the mooring points are on the ship
740
00:40:26.685 --> 00:40:27.725
so you under can understand
741
00:40:27.725 --> 00:40:29.405
where you can attach tugs, et cetera, et cetera.
```

```
742
00:40:29.505 --> 00:40:32.885
And during the simulations we've run recently,
743
00:40:32.885 --> 00:40:36.245
there's been a lot of input from the master ships operating
00:40:36.245 --> 00:40:38.765
those vessels, specifically about
745
00:40:38.765 --> 00:40:40.725
where you can put a tug to persh, et cetera.
746
00:40:40.725 --> 00:40:43.205
So it would be, it isn't as straightforward
747
00:40:43.545 --> 00:40:45.205
as just doing the maths
748
00:40:45.205 --> 00:40:47.885
and creating a model as is suggested.
749
00:40:48.365 --> 00:40:50.245
I appreciate that. The first principle, physics
750
00:40:51.225 --> 00:40:53.765
is complicated, but can be done in theory,
00:40:54.185 --> 00:40:58.405
but actually a appropriate ship model to inform a client
752
00:40:58.505 --> 00:40:59.605
of the viability
753
00:40:59.605 --> 00:41:01.325
of their infrastructure is not necessarily
754
00:41:01.605 --> 00:41:02.925
straightforward as being suggested.
755
00:41:03.545 --> 00:41:07.805
```

```
For example, the, uh, C-L-D-N-G nine class, um,
756
00:41:07.805 --> 00:41:11.365
which we do have a model of, has a single engine
00:41:11.555 --> 00:41:14.405
with a single propeller CPP propeller.
758
00:41:14.835 --> 00:41:19.725
That engine delivers 20 1060 kilowatt
759
00:41:19.825 --> 00:41:24.045
output, the smaller, uh,
760
00:41:24.365 --> 00:41:28.045
jingling class that has a twin,
761
00:41:29.265 --> 00:41:33.845
Um, propellers, and it delivers 23 600.
762
00:41:34.745 --> 00:41:37.245
So it is quite feasible
763
00:41:37.515 --> 00:41:41.685
that you can in due course have a larger vessel
00:41:41.915 --> 00:41:44.405
with twin propellers, which is delivering more power
765
00:41:45.155 --> 00:41:49.085
than we would be demonstrating to the client if we ran the
766
00:41:49.925 --> 00:41:53.165
G nine equally, there are other design options.
767
00:41:53.345 --> 00:41:55.045
The G nine has a bow thruster
768
00:41:55.045 --> 00:41:58.405
and a stern thruster both delivering in excessive 60 tons,
```

```
769
00:41:58.995 --> 00:42:02.285
whereas the jingling only has 65 tons as a stern thruster.
770
00:42:02.745 --> 00:42:04.925
And they both have different restrictions in terms of
771
00:42:05.135 --> 00:42:06.325
where you can apply tux.
772
00:42:07.145 --> 00:42:09.845
So when we're asked to support a client
773
00:42:09.885 --> 00:42:12.885
with a design problem, we provide them advice on
774
00:42:12.885 --> 00:42:15.805
what is an appropriate design vessel for that problem.
775
00:42:16.665 --> 00:42:19.365
We have done that for ABP in this, in this case,
776
00:42:19.945 --> 00:42:22.245
and we are confident that the jingling class
777
00:42:22.755 --> 00:42:25.685
that we used is the appropriate design vessel to demonstrate
778
00:42:26.235 --> 00:42:30.485
that the space available is appropriate for safe navigation
779
00:42:31.105 --> 00:42:32.285
in and out of the infrastructure.
780
00:42:32.945 --> 00:42:36.885
And as we've described in due course, when the details of a,
781
00:42:36.885 --> 00:42:38.725
of a larger vessel may or may not be
782
00:42:39.005 --> 00:42:42.405
```

```
provided, more discreet advice can be
783
00:42:42.565 --> 00:42:43.685
provided with the support of
784
00:42:43.915 --> 00:42:46.005
simulations if that was required.
785
00:42:46.585 --> 00:42:48.685
But it definitely isn't a straightforward process
786
00:42:49.425 --> 00:42:51.765
to just pull out a design vessel
787
00:42:51.985 --> 00:42:55.365
and its characteristics from thin air or adopt
788
00:42:56.065 --> 00:43:00.125
or adapt the characteristics of a different vessel in order
789
00:43:00.225 --> 00:43:04.685
to fulfill a a, a design spec,
790
00:43:04.685 --> 00:43:07.285
which is just based on length, beam, and depth.
00:43:10.355 --> 00:43:12.025
Thank you for the comprehensive answer.
792
00:43:12.445 --> 00:43:13.625
Um, I think I'll,
793
00:43:13.965 --> 00:43:17.025
before turning to IO ot, I'll turn back to DFDS.
794
00:43:17.485 --> 00:43:19.825
Um, do you buy that
795
00:43:20.145 --> 00:43:21.905
Isabella four four DFDS?
```

```
796
00:43:22.105 --> 00:43:24.905
I think your question, so is about the Delphine class,
797
00:43:24.925 --> 00:43:28.025
and the answer was about developing a different model
798
00:43:28.125 --> 00:43:30.585
of a not currently existing vessel.
799
00:43:31.045 --> 00:43:33.265
So I'm not sure we've had the response,
800
00:43:33.265 --> 00:43:36.105
and I may have missed it on why not the Delphine model,
801
00:43:36.105 --> 00:43:37.825
which we suggest suggested.
802
00:43:37.995 --> 00:43:39.065
Could I just ask Mr.
803
00:43:39.065 --> 00:43:41.385
Priest to respond on the design of a new model?
804
00:43:44.325 --> 00:43:48.305
Yes, Brock Priests, uh, for DFTS, um, in essence
805
00:43:48.305 --> 00:43:50.625
what we're considering here is the feasibility
806
00:43:50.645 --> 00:43:53.705
for the terminal to operate, um, the design vessel
807
00:43:54.165 --> 00:43:55.225
as it has been designed.
808
00:43:56.485 --> 00:44:00.505
Um, when there is a template model
809
00:44:00.505 --> 00:44:03.825
```

```
that could be used, it could at least be adapted to
810
00:44:04.765 --> 00:44:08.225
the physical parameters, uh, to show how the
00:44:09.435 --> 00:44:13.625
swept path may be affected by those physical parameters.
812
00:44:14.405 --> 00:44:18.065
Um, there is a large number of assumptions
813
00:44:18.565 --> 00:44:23.225
and potentially unvalidated assumptions to go from
814
00:44:24.445 --> 00:44:27.225
the assessment of the standard T class
815
00:44:27.845 --> 00:44:30.065
at 212 meters length
816
00:44:31.425 --> 00:44:34.445
and 6.3 meters draft to
817
00:44:35.475 --> 00:44:38.125
then be in a position to consider the use of a
00:44:38.745 --> 00:44:42.685
future 240 meter long vessel with an eight meter draft
819
00:44:44.265 --> 00:44:45.725
as adequate or safe.
820
00:44:47.215 --> 00:44:50.885
There is, from a, a feasibility standpoint
821
00:44:51.385 --> 00:44:53.205
and an early stage design standpoint,
822
00:44:53.745 --> 00:44:57.325
and the assessment of the ability for a larger vessel
```

```
823
00:44:57.625 --> 00:44:58.805
to safely navigate to
824
00:44:58.805 --> 00:45:01.805
and from the terminal at the early stages of design,
825
00:45:02.415 --> 00:45:07.005
there is no reason why a vessel of similar dimensions
826
00:45:07.005 --> 00:45:10.045
to the design vessel could not be built or, or created.
827
00:45:10.945 --> 00:45:13.445
And there's certainly no reason why that vessel could not be
828
00:45:13.985 --> 00:45:17.725
scaled up or, or modified from an existing template such
829
00:45:17.725 --> 00:45:22.165
as the delphine to know what the operations of
830
00:45:22.165 --> 00:45:23.485
that vessel may look like in the future
831
00:45:24.105 --> 00:45:27.645
and to provide an informed judgment on the level
832
00:45:27.665 --> 00:45:29.205
of requirements or safety that
833
00:45:29.205 --> 00:45:30.965
that vessel might need for the future.
834
00:45:35.615 --> 00:45:40.455
I may also just briefly touch on some of the
835
00:45:41.255 --> 00:45:45.135
difficulties in comparing the smaller vessel.
836
00:45:47.465 --> 00:45:51.695
```

```
Given that the smaller vessel has a much shallower draft
837
00:45:53.475 --> 00:45:56.815
and has much smaller windage area than a larger vessel,
00:45:56.905 --> 00:45:59.535
would the forces applied on
839
00:45:59.535 --> 00:46:01.735
that smaller vessel are substantially less than
840
00:46:01.735 --> 00:46:04.415
what would be observed on a much larger vessel?
841
00:46:06.995 --> 00:46:10.375
In terms of the draft in particular, it goes
842
00:46:11.005 --> 00:46:13.575
further than just the force.
843
00:46:14.305 --> 00:46:17.575
There is the effect of under Kell clearance
844
00:46:20.765 --> 00:46:23.735
becomes an issue when there is a reduction under,
845
00:46:23.735 --> 00:46:26.295
under Kell clearance would cause
846
00:46:26.895 --> 00:46:28.495
a reduction in the capability
847
00:46:28.555 --> 00:46:32.805
or ability of the vessel to maneuver compared to
848
00:46:34.765 --> 00:46:36.045
A greater under Kell clearance.
849
00:46:37.105 --> 00:46:40.685
So quite simply, a smaller vessel with shallower draft
```

```
850
00:46:40.685 --> 00:46:44.125
and a larger under Kell clearance with smaller windage area
851
00:46:44.385 --> 00:46:49.165
and smaller current drag area would be far, easily easier
852
00:46:49.225 --> 00:46:52.485
to maneuver than a larger vessel with larger windage,
853
00:46:52.905 --> 00:46:56.725
larger draft and larger current drag area
854
00:46:57.545 --> 00:46:59.005
and less under Kell clearance.
855
00:47:00.455 --> 00:47:02.205
Those under Q clearance parameters
856
00:47:02.225 --> 00:47:05.805
and the drag parameters, the windage drag parameters
857
00:47:05.805 --> 00:47:09.005
and coefficients do exist for the larger vessels
858
00:47:09.985 --> 00:47:11.845
and is why it would be more appropriate
00:47:13.425 --> 00:47:15.125
at an early stage design to consider
860
00:47:16.165 --> 00:47:18.045
a design vessel scaled up
861
00:47:18.045 --> 00:47:19.765
or modified from an existing vessel,
862
00:47:20.305 --> 00:47:23.405
if indeed it couldn't be created from scratch.
863
00:47:27.045 --> 00:47:28.725
```

```
Isabella, four four DFTs.
864
00:47:28.725 --> 00:47:33.525
And just to, just to round off you, um, sir,
00:47:33.545 --> 00:47:38.445
and your colleagues are being asked to consider, um, as part
866
00:47:38.445 --> 00:47:41.565
of the, um, initial application
867
00:47:41.705 --> 00:47:44.485
and potentially the proposed change request, um,
868
00:47:45.105 --> 00:47:49.605
impact protection measures, um, that vary between those,
869
00:47:49.735 --> 00:47:53.845
those two proposed by the, um, applicant.
870
00:47:54.025 --> 00:47:56.525
Now you need to appraise yourselves
871
00:47:56.585 --> 00:47:59.685
of whether those impact protection measures are adequate,
872
00:48:00.125 --> 00:48:01.445
suitable, necessary.
873
00:48:02.185 --> 00:48:05.565
And and that rather begs the question then for what, for
874
00:48:05.755 --> 00:48:08.485
what force do those impact protection measures
875
00:48:08.485 --> 00:48:09.725
need to be able to withstand?
876
00:48:10.425 --> 00:48:12.205
Is it just the STENNER T class
```

```
877
00:48:12.345 --> 00:48:14.445
or is it, uh, the design vessel?
878
00:48:15.025 --> 00:48:18.565
Um, what, what is it that,
879
00:48:19.385 --> 00:48:21.925
is it more likely that impact protection will be required
880
00:48:22.075 --> 00:48:25.325
with the design vessel that's so significantly larger than
881
00:48:25.325 --> 00:48:27.925
that which has been, um, simulated to date?
882
00:48:28.625 --> 00:48:29.725
So it's,
883
00:48:30.705 --> 00:48:33.965
you can only answer those questions if you have a greater
884
00:48:33.965 --> 00:48:37.725
understanding about the likely maneuverability, um,
885
00:48:38.005 --> 00:48:40.085
approach departures and impacts on others
886
00:48:40.585 --> 00:48:41.725
of the design vessel.
887
00:48:41.785 --> 00:48:43.165
And that's something that you need
888
00:48:43.165 --> 00:48:45.245
to determine at DCO stage.
889
00:48:46.775 --> 00:48:47.775
Thank you.
890
00:48:50.155 --> 00:48:54.895
```

```
So from that useful set of, of, of,
891
00:48:54.995 --> 00:48:59.375
of, um, evidence, your position is
00:48:59.645 --> 00:49:03.335
that there's a big question mark over the feasibility
893
00:49:03.755 --> 00:49:07.615
of birthing and unring safely of a vessel
894
00:49:08.715 --> 00:49:12.655
for which this development has been spatially designed.
895
00:49:14.115 --> 00:49:15.335
That's the summary, isn't it?
896
00:49:16.475 --> 00:49:20.375
Harbor Master Humber, what do you, how do you,
897
00:49:20.475 --> 00:49:21.855
how do you react to that?
898
00:49:22.155 --> 00:49:26.975
Um, on, on the basis that, uh, fairly vehement, um,
899
00:49:27.295 --> 00:49:29.535
position from DFDS that
900
00:49:32.885 --> 00:49:34.935
they question the ability of this development
901
00:49:34.935 --> 00:49:35.975
to handle the design vessel,
902
00:49:38.595 --> 00:49:40.455
Andrew Furman, master Humber?
903
00:49:41.075 --> 00:49:45.855
Um, I go back to the assessment, um, the size of vessel.
```

```
904
00:49:46.195 --> 00:49:48.735
The problem we all face, or,
905
00:49:48.735 --> 00:49:51.775
or the possibly makes this conversation more difficult is
00:49:51.775 --> 00:49:53.175
that that vessel is not yet designed.
907
00:49:54.075 --> 00:49:56.695
We, I would expect the vessel to be designed
908
00:49:57.275 --> 00:49:59.055
to the size it needs to be.
909
00:49:59.435 --> 00:50:02.615
If that be the design vessel, it would then need to be
910
00:50:03.595 --> 00:50:05.455
fitted with the correct propulsion systems
911
00:50:05.875 --> 00:50:08.375
and be capable of maneuvering in
912
00:50:08.375 --> 00:50:11.415
and out of, um, the ber if it was to be approved for
913
00:50:11.415 --> 00:50:13.585
that berth in this situation.
914
00:50:13.585 --> 00:50:16.665
If that vessel does not yet exist, then I would expect it
915
00:50:16.665 --> 00:50:20.265
to be designed with all the challenges that that DFDS, um,
916
00:50:20.665 --> 00:50:21.705
outlined in mind.
917
00:50:22.445 --> 00:50:24.425
```

```
So if we could go to the simulator
918
00:50:24.485 --> 00:50:26.825
and put huge amounts of power on a model,
00:50:27.035 --> 00:50:29.325
make it happen, it could look too easy.
920
00:50:30.385 --> 00:50:33.285
We could have a smaller vessel that's hugely underpowered,
921
00:50:33.315 --> 00:50:37.085
that would be equally as as, um, risky or dangerous.
922
00:50:37.465 --> 00:50:40.405
So it, it basically needs to be fit for purpose
923
00:50:40.465 --> 00:50:42.325
and that we will always check on every vessel
924
00:50:42.425 --> 00:50:43.685
for existing infrastructure
925
00:50:43.785 --> 00:50:45.645
or any new infrastructure that's built.
00:50:49.425 --> 00:50:54.245
Um, Mr. Par, um, the point about the Delphine model, uh,
927
00:50:54.385 --> 00:50:57.125
um, would you like to just answer that
928
00:50:57.125 --> 00:50:59.125
because I think it's, it's it's unfinished business.
929
00:51:00.435 --> 00:51:03.365
Well, I, I apologize if I've misled you,
930
00:51:03.365 --> 00:51:07.325
but I understand that the C-L-D-N-G nine class is the same
```

```
931
00:51:07.325 --> 00:51:10.445
as the Delphine, which is the model I was referring to.
932
00:51:10.665 --> 00:51:12.365
So that's the model we have,
933
00:51:12.505 --> 00:51:14.325
and to the best of my knowledge, that's the equivalent.
934
00:51:14.425 --> 00:51:16.845
So you, you've already answered copiously then the, the,
935
00:51:16.845 --> 00:51:20.605
the, the, the reasons why you felt it inappropriate
936
00:51:20.625 --> 00:51:24.925
to use that, uh, as a proxy for the, the the stenner
937
00:51:26.885 --> 00:51:28.565
putative future vessel.
938
00:51:29.265 --> 00:51:30.565
Yes, and I agree with
939
00:51:31.305 --> 00:51:33.365
The question I'm gonna follow up with is,
940
00:51:34.135 --> 00:51:36.445
could you have learned anything valuable from the,
941
00:51:36.785 --> 00:51:40.645
the G nine that would've started to allay some
942
00:51:40.645 --> 00:51:43.285
of the concerns of the stakeholders?
943
00:51:44.515 --> 00:51:46.565
Well, well, sir, to, to be frank,
944
00:51:46.625 --> 00:51:48.725
```

```
we did do a sensitivity test with the G nine
945
00:51:49.315 --> 00:51:51.725
when we were down selecting the vessels.
00:51:51.985 --> 00:51:56.285
And our master mariner found that the, it was more
947
00:51:57.205 --> 00:51:59.485
sensitive to use the jingling class.
948
00:52:00.825 --> 00:52:04.485
So we provided the client with a more
949
00:52:05.645 --> 00:52:08.245
conservative model than we think we might have
950
00:52:08.245 --> 00:52:09.405
if we would've used the G nine.
951
00:52:10.485 --> 00:52:11.925
I also agree with Mr.
952
00:52:11.925 --> 00:52:14.485
Priest that we need to keep the number of assumptions down
00:52:14.485 --> 00:52:15.845
to a minimum and,
954
00:52:15.845 --> 00:52:19.005
and one of the design constraints we were given
955
00:52:19.005 --> 00:52:21.445
that it should be a modern RO vessel
956
00:52:21.755 --> 00:52:24.885
with twin shaft propulsion and two rudders.
957
00:52:25.225 --> 00:52:28.485
So it's appropriate to select a design vessel,
```

```
958
00:52:28.485 --> 00:52:29.965
which is clo is as close to that.
959
00:52:30.535 --> 00:52:32.525
Where I differ from Mr.
960
00:52:32.785 --> 00:52:36.485
Um, priest is that it is not always appropriate just
961
00:52:36.505 --> 00:52:39.405
to change the size and the dimensions of a vessel
962
00:52:39.465 --> 00:52:41.605
and assume that the handling characteristics are gonna be
963
00:52:41.605 --> 00:52:44.645
the same, particularly if you haven't got trials
964
00:52:44.715 --> 00:52:45.765
data to support that.
965
00:52:46.225 --> 00:52:49.365
So it remains the case that we think that the
966
00:52:50.165 --> 00:52:52.405
jingling vessel, which we used as the design vessel
967
00:52:52.585 --> 00:52:56.285
for feasibility exactly as he suggests,
968
00:52:56.835 --> 00:53:01.725
enables you to make a judgment that the space available
969
00:53:02.345 --> 00:53:07.005
and the location of I relative to the flows in
970
00:53:07.005 --> 00:53:10.565
that location is appropriate for safe navigation in
971
00:53:10.565 --> 00:53:13.525
```

```
and out of the design shape and the navigational geometry
972
00:53:13.805 --> 00:53:16.525
provided by the pontoons and their peers.
00:53:18.615 --> 00:53:22.925
Thank you, Mr. Par. Uh, on the question of current
974
00:53:23.265 --> 00:53:26.565
and direction, um, Humber
975
00:53:29.845 --> 00:53:34.125
attempts were made in this recent, um, set of simulations to
976
00:53:34.715 --> 00:53:36.725
address the concerns that have been raised
977
00:53:36.825 --> 00:53:39.285
by the ip, the by the stakeholders.
978
00:53:41.035 --> 00:53:43.725
Your current position, your, sorry, your,
979
00:53:44.715 --> 00:53:48.685
your position at present on the current direction.
00:53:49.385 --> 00:53:52.205
Uh, what I'm seeking is, uh,
981
00:53:53.305 --> 00:53:56.925
expert guidance from around the room on
982
00:54:00.895 --> 00:54:03.755
the, the fact that, um, there is
983
00:54:05.325 --> 00:54:08.755
still dispute over the, uh, current direction.
984
00:54:09.335 --> 00:54:12.395
Um, but I'm not clear at which point
```

```
985
00:54:13.105 --> 00:54:15.675
that differential becomes important,
986
00:54:16.495 --> 00:54:19.755
and it's clear that there is a difference in direction
00:54:20.135 --> 00:54:22.355
as one gets out to the tidal diamond.
988
00:54:24.975 --> 00:54:28.155
But what's really important is the current direction within
989
00:54:28.215 --> 00:54:31.475
the maneuvering space, which varies, of course, depending on
990
00:54:31.475 --> 00:54:32.475
what the maneuver is,
991
00:54:32.535 --> 00:54:33.595
but broadly speaking,
992
00:54:33.985 --> 00:54:37.835
it's in a zone which is well in sure of the titled diamond.
993
00:54:38.455 --> 00:54:42.555
So the question here is, are you satisfied
994
00:54:42.785 --> 00:54:46.475
that enough modeling has been done to feel confident
995
00:54:46.475 --> 00:54:47.555
that these maneuvers
996
00:54:48.055 --> 00:54:51.715
as simulated are representative
997
00:54:54.855 --> 00:54:58.795
Andrew Furman Harbor Master Humber Might be?
998
00:54:59.235 --> 00:55:01.955
```

```
I, I'll try and go through the process where I've been on
999
00:55:02.485 --> 00:55:04.115
tides, um, throughout the process.
1000
00:55:04.895 --> 00:55:07.995
So the original runs, uh, the original large set of runs
1001
00:55:07.995 --> 00:55:11.075
that were done, I was not present at, um, which,
1002
00:55:11.085 --> 00:55:15.235
which is well documented, however, the results, um, showed
1003
00:55:15.495 --> 00:55:18.475
and the jetty layout showed, um, an orientation
1004
00:55:18.505 --> 00:55:21.875
that surprised me based on group experience
1005
00:55:21.875 --> 00:55:23.155
of navigating on the Humber.
1006
00:55:24.625 --> 00:55:26.355
That was then remeasured
1007
00:55:26.355 --> 00:55:27.675
because it was on a single thing,
1008
00:55:27.675 --> 00:55:29.075
there was more measurements done,
1009
00:55:29.335 --> 00:55:32.995
and over time, the model, the two sets of measurements
1010
00:55:33.655 --> 00:55:36.475
and everything else pointed to the title
1011
00:55:37.425 --> 00:55:40.835
data in the model at the area of the i, a development
```

```
1012
00:55:41.405 --> 00:55:45.315
being correct, albeit slightly surprising to, to those
1013
00:55:45.315 --> 00:55:47.235
of us in the room that have navigated to the north
1014
00:55:47.235 --> 00:55:49.955
of the area to the north of the area.
1015
00:55:52.055 --> 00:55:55.475
The simulator did not seem to, um,
1016
00:55:56.685 --> 00:55:58.275
there seemed to be some discrepancy there
1017
00:55:58.275 --> 00:56:00.035
between real life experience
1018
00:56:00.415 --> 00:56:02.275
and what the simulator was showing.
1019
00:56:04.935 --> 00:56:06.225
That concerns me less
1020
00:56:06.225 --> 00:56:08.665
because the simulations were about the spatial
1021
00:56:08.665 --> 00:56:09.785
area down in the area.
1022
00:56:10.335 --> 00:56:14.705
However, I share dfd s's, um, observations
1023
00:56:14.705 --> 00:56:16.265
that I would expect it to be further around
1024
00:56:16.405 --> 00:56:19.025
and possibly slightly, uh, slightly stronger.
1025
00:56:20.375 --> 00:56:22.865
```

```
That was dealt with at the recent stakeholder simulations
1026
00:56:22.885 --> 00:56:25.365
too, where I think now every every
1027
00:56:25.365 --> 00:56:27.045
party is in the same place.
1028
00:56:28.245 --> 00:56:31.285
I don't think that discredits the previous runs
1029
00:56:31.555 --> 00:56:32.885
that were done correctly.
1030
00:56:33.065 --> 00:56:36.565
So whether that clarifies where I am
1031
00:56:37.465 --> 00:56:41.445
and that I am in agreement with the FDA's observations,
1032
00:56:41.635 --> 00:56:44.365
however, my view on how
1033
00:56:44.365 --> 00:56:45.565
that impacts on the whole process
1034
00:56:45.655 --> 00:56:46.685
might be slightly different.
1035
00:56:47.145 --> 00:56:49.565
But technically, you know, the tide on the Humber is
1036
00:56:49.565 --> 00:56:51.045
where the, the tide on the Humber is.
1037
00:56:51.405 --> 00:56:52.685
Nobody's trying to change that.
1038
00:56:55.305 --> 00:56:56.725
It, well, the, the, um,
```

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1039
00:56:59.025 --> 00:57:01.485
it does lead me onto the question I was going to ask,
1040
00:57:01.485 --> 00:57:05.325
which is, uh, have there been any other, um,
1041
00:57:05.395 --> 00:57:08.925
significant factors, um, dredging for instance, which has,
1042
00:57:09.385 --> 00:57:12.245
uh, have been the reason why
1043
00:57:13.065 --> 00:57:15.445
the current direction changes as it close?
1044
00:57:15.905 --> 00:57:17.485
Uh, uh, closer inshore?
1045
00:57:19.745 --> 00:57:21.645
Uh, not, not that I would be aware of.
1046
00:57:21.645 --> 00:57:24.005
So I mean, the, the app, the Ingham Mount Harbor is the,
1047
00:57:24.105 --> 00:57:25.885
the largest change in that area,
1048
00:57:26.065 --> 00:57:28.285
but that's well established of, of 15 years.
1049
00:57:28.985 --> 00:57:30.365
Um, so it lit.
1050
00:57:30.385 --> 00:57:32.605
We are literally navigating in an area
1051
00:57:32.655 --> 00:57:34.125
where we've never really been
1052
00:57:34.125 --> 00:57:36.925
```

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before, certainly not on a ship of any size, um,
1053
00:57:37.225 --> 00:57:38.405
or certainly of this size.
00:57:38.905 --> 00:57:41.765
So I think that's just as, as learning about the new area,
1055
00:57:42.255 --> 00:57:44.765
everything that goes before, 'cause I mentioned it
1056
00:57:44.765 --> 00:57:46.085
because it, I know there's been a lot
1057
00:57:46.085 --> 00:57:48.365
of talk about what's in the guidance, nothing
1058
00:57:48.365 --> 00:57:51.445
that we've seen through this process to date changes any
1059
00:57:51.445 --> 00:57:53.045
of our current or past guidance
1060
00:57:53.225 --> 00:57:54.605
or understanding of the area.
1061
00:57:55.195 --> 00:57:58.125
What it does is inform our future guidance
1062
00:57:58.625 --> 00:58:00.405
for potentially navigating in this area.
1063
00:58:00.405 --> 00:58:01.645
Should the development Go ahead.
1064
00:58:02.695 --> 00:58:06.885
Thank you. There was a criticism at deadline six
1065
00:58:07.145 --> 00:58:10.325
of the, uh, model of the
```

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1066
00:58:10.925 --> 00:58:15.445
proposed I infrastructure in the, a differential in the,
1067
00:58:15.705 --> 00:58:17.965
um, twin pontoon array.
1068
00:58:19.025 --> 00:58:23.485
Um, does it, I think we could ask that to Hama Humber again.
1069
00:58:24.025 --> 00:58:28.845
Uh, the, i I think the reason for that, um,
1070
00:58:28.915 --> 00:58:33.125
criticism was that it, uh, might discredit some
1071
00:58:33.165 --> 00:58:35.605
of the modeling of the current flow in the,
1072
00:58:36.185 --> 00:58:38.445
on the immediate footprint of the development.
1073
00:58:39.785 --> 00:58:42.845
What's your view? Does that, uh, is it, is it significant
1074
00:58:42.865 --> 00:58:44.445
and is it, is it relevant?
1075
00:58:46.885 --> 00:58:50.685
I I would certainly expect it to, it clearly is different,
1076
00:58:50.745 --> 00:58:51.885
so it would have an effect.
1077
00:58:52.045 --> 00:58:55.205
I wouldn't expect that effect to be material in regards
1078
00:58:55.225 --> 00:58:57.285
to the overall flows in the area
1079
00:58:57.305 --> 00:59:00.525
```

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or the overall effect over the entire, uh, vessel.
1080
00:59:00.705 --> 00:59:03.685
And no doubt, there's some, you, I can't back
00:59:03.685 --> 00:59:06.765
that up scientifically, but, um, some piles
1082
00:59:06.765 --> 00:59:09.645
of the dimensions we're looking at across that broad area,
1083
00:59:10.005 --> 00:59:11.645
I would not expect to be significant,
1084
00:59:11.825 --> 00:59:14.405
but obviously once built, we would need to understand that.
1085
00:59:14.625 --> 00:59:15.625
Mm-Hmm.
1086
00:59:16.105 --> 00:59:20.845
And Mr. Par on that same point, sir, we are undertaking
1087
00:59:21.035 --> 00:59:23.525
Some, uh, remodeling of the flows.
00:59:23.745 --> 00:59:26.725
Um, based on that, the initial indications are
1089
00:59:26.725 --> 00:59:30.285
that there is a, a variation compared with the, the,
1090
00:59:30.285 --> 00:59:31.765
the flows we used previously.
1091
00:59:32.235 --> 00:59:35.285
It's a small variation, so it's of the order of 0.2
1092
00:59:35.285 --> 00:59:36.325
of a knot and three
```

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1093
00:59:36.325 --> 00:59:40.965
or four degrees at, uh, uh,
1094
00:59:41.345 --> 00:59:42.725
low water flood.
1095
00:59:43.025 --> 00:59:45.285
So about 30 minutes to 45 minutes
1096
00:59:45.285 --> 00:59:47.405
after low water flood for a very short period of time.
1097
00:59:48.185 --> 00:59:51.525
And on the peak spring, the analysis of
1098
00:59:51.525 --> 00:59:52.525
that's still ongoing.
1099
00:59:52.585 --> 00:59:54.485
The team are, are redoing some, some modeling.
1100
00:59:54.585 --> 00:59:56.605
So we will be able to provide, um,
1101
00:59:56.835 --> 00:59:58.405
more detail on that in due course.
1102
00:59:59.295 --> 01:00:03.805
Thank you. I'm going turn to I OT next, um,
1103
01:00:03.865 --> 01:00:05.925
to see if there's anything additional.
1104
01:00:06.945 --> 01:00:09.885
Um, and then back to the applicant to respond.
1105
01:00:11.515 --> 01:00:13.885
Well, a lot of, a lot of what, uh, sorry, David Alvin
1106
01:00:13.885 --> 01:00:16.525
```

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for iot, I'm gonna ask Captain Bassett in a
1107
01:00:16.525 --> 01:00:17.725
minute just to give you his view.
01:00:18.265 --> 01:00:23.045
Um, a lot, uh, of the issues raised
1109
01:00:23.065 --> 01:00:25.685
by DFDS, we agree with, we
1110
01:00:26.225 --> 01:00:28.525
are significantly concerned
1111
01:00:28.995 --> 01:00:31.645
because you're looking at impact protection measures
1112
01:00:32.385 --> 01:00:36.765
and ABP purported in its environmental statement
1113
01:00:36.825 --> 01:00:40.685
to ACCE to assess the maximum parameters of the proposals.
1114
01:00:41.505 --> 01:00:43.725
You'll see that in chapter two of the ES.
01:00:44.345 --> 01:00:46.205
And indeed that is legally required
1116
01:00:46.205 --> 01:00:47.885
because of the rochdale position.
1117
01:00:48.165 --> 01:00:50.365
IE you've got to assess the maximum parameters of
1118
01:00:50.475 --> 01:00:52.285
what you're seeking consent for.
1119
01:00:53.065 --> 01:00:55.325
And it is, is played as a pike star from
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1120
01:00:55.325 --> 01:00:56.405
what you've heard this afternoon,
1121
01:00:56.435 --> 01:00:57.605
that that hasn't been done.
1122
01:00:58.905 --> 01:01:01.965
And not only are you dealing with a design vessel,
1123
01:01:02.055 --> 01:01:05.765
which has, uh, a greater draft
1124
01:01:06.355 --> 01:01:07.645
than either the Gin ling
1125
01:01:07.645 --> 01:01:12.565
or the Stainer T class, uh, has a wider beam
1126
01:01:14.425 --> 01:01:17.045
but is significantly heavier.
1127
01:01:17.475 --> 01:01:18.565
It's, it's dr.
1128
01:01:18.625 --> 01:01:22.365
Um, it's, uh, the, um,
1129
01:01:25.355 --> 01:01:28.885
figures which we now have for the design vessel.
1130
01:01:29.025 --> 01:01:32.445
And, uh, and you'll get those from, uh,
1131
01:01:33.785 --> 01:01:35.925
rep 5 0 3 6
1132
01:01:38.515 --> 01:01:43.125
Page 10, where we reproduce one
1133
01:01:43.125 --> 01:01:44.885
```

```
of the ABP tables showing the
1134
01:01:45.565 --> 01:01:47.205
expected parameters of the design vessel.
01:01:47.635 --> 01:01:52.085
It's got a displacement of 48,431 tons.
1136
01:01:54.745 --> 01:01:58.245
The nearest for the jilin is only 35,000
1137
01:01:58.665 --> 01:02:01.645
and for the class T 22,000.
1138
01:02:02.225 --> 01:02:07.005
Now that obviously has a significant effect on the energy
1139
01:02:07.615 --> 01:02:10.485
which is being, uh, having to be dealt with.
1140
01:02:11.265 --> 01:02:14.205
And it has an effect on the capability of tugs
1141
01:02:15.065 --> 01:02:16.765
to provide effective towage.
1142
01:02:17.225 --> 01:02:19.085
If you've got a kinetic energy, which is,
1143
01:02:19.150 --> 01:02:21.605
is significantly greater than
1144
01:02:21.605 --> 01:02:24.085
that which has been used in the modeled vessels,
1145
01:02:24.505 --> 01:02:28.605
you've got something like 30% more than the ginlink
1146
01:02:28.665 --> 01:02:32.965
and you've got six, uh, 55% more, uh,
```

```
1147
01:02:33.035 --> 01:02:36.125
than in the case of, uh, the class T
1148
01:02:37.545 --> 01:02:42.365
and ABP have set out to do what the law requires, which is
1149
01:02:42.365 --> 01:02:44.085
to assess the maximum parameters.
1150
01:02:44.595 --> 01:02:47.685
That includes the operational impacts,
1151
01:02:47.685 --> 01:02:50.445
which are in chapter 10 following construction impacts.
1152
01:02:52.115 --> 01:02:56.125
It's said to provide a worst case scenario,
1153
01:02:56.585 --> 01:03:01.005
2.3 0.7 of thees, and it doesn't, uh,
1154
01:03:01.065 --> 01:03:02.645
and it is the DCO process
1155
01:03:02.755 --> 01:03:07.165
because ABP has set itself a task, which it is right to do,
1156
01:03:07.905 --> 01:03:09.685
uh, in terms of assessing impact,
1157
01:03:10.105 --> 01:03:12.605
but it has just said, well, we'll deal
1158
01:03:12.605 --> 01:03:14.245
with the rest at a later stage.
1159
01:03:14.305 --> 01:03:18.725
You can't do that. Um, uh, and what impact it may
1160
01:03:18.725 --> 01:03:20.845
```

```
or may not have in terms of additional,
1161
01:03:21.055 --> 01:03:23.685
additional impacts on ecology, I just don't know.
01:03:23.905 --> 01:03:25.525
But I'm going to, I'm just gonna pass over
1163
01:03:25.545 --> 01:03:28.765
to Captain Bassett to give his view since he attended the
1164
01:03:28.885 --> 01:03:30.525
sessions and he has concerns.
1165
01:03:32.675 --> 01:03:33.925
Good afternoon. So it's,
1166
01:03:33.925 --> 01:03:36.365
it's Nigel Bassett on behalf of IOT.
1167
01:03:36.755 --> 01:03:38.805
Just to pick up on a couple of more minor points
1168
01:03:38.825 --> 01:03:40.205
to start with if I can please.
1169
01:03:40.705 --> 01:03:45.005
Um, you asked a question on run one, um, with the first run
1170
01:03:45.055 --> 01:03:48.485
where, uh, the ship went into birth three with a peak abide
1171
01:03:48.585 --> 01:03:52.885
and a Southwest dly wind without a ship on berth two.
1172
01:03:53.385 --> 01:03:55.805
And my understanding is that that was just a warmup run
1173
01:03:55.805 --> 01:03:58.205
and there was never intended to be a ship on berth two,
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1174
01:03:58.205 --> 01:03:59.845
but that's maybe a, a minor point.
1175
01:04:00.225 --> 01:04:04.925
Second to that, um, the, the one run wasn't repeated in,
1176
01:04:04.945 --> 01:04:07.485
in a stronger win with the same title per that parameters
1177
01:04:07.485 --> 01:04:11.085
because the run that, that would've been run 13 became the
1178
01:04:11.085 --> 01:04:13.445
single birthing that was done on birth
1179
01:04:13.505 --> 01:04:14.605
two rather than three.
1180
01:04:15.225 --> 01:04:17.045
So again, whether it needed to be repeated,
1181
01:04:17.225 --> 01:04:18.325
I'm not giving an opinion,
1182
01:04:18.465 --> 01:04:23.365
but just to say that it wasn't so carrying on, um,
1183
01:04:24.795 --> 01:04:26.845
many of my observations have already been covered.
1184
01:04:26.945 --> 01:04:28.445
I'm not going to repeat those.
1185
01:04:29.265 --> 01:04:31.085
Um, just to pick up on towage
1186
01:04:31.085 --> 01:04:35.565
and the effect of tugs, um, on a, on a vessel with
1187
01:04:36.075 --> 01:04:39.245
```

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significantly more kinetic energy in terms
1188
01:04:39.265 --> 01:04:43.325
of a design vessel versus a Stella T class, um,
01:04:45.445 --> 01:04:50.405
I think David Elvin mentioned just now 55% extra,
1190
01:04:50.705 --> 01:04:55.085
um, kinetic energy on,
1191
01:04:55.225 --> 01:04:58.645
on the design vessel compared to the extended T class.
1192
01:04:58.745 --> 01:05:02.285
But actually, uh, the mass dictate that it's, uh,
1193
01:05:02.285 --> 01:05:03.645
more than a hundred percent more.
1194
01:05:05.635 --> 01:05:08.005
Yeah, no, you, you were halving the bigger figure rather
1195
01:05:08.005 --> 01:05:09.045
than doubling the smaller one.
01:05:09.165 --> 01:05:10.925
Absolutely, but that's minor point. Um,
1197
01:05:12.305 --> 01:05:15.405
and where, for example, you may have a tug, um,
1198
01:05:15.955 --> 01:05:20.765
that was delivering 70% capacity with that smallest model,
1199
01:05:21.795 --> 01:05:25.045
then it's not difficult to imagine whether that
1200
01:05:25.045 --> 01:05:28.085
to would be capable when it required
```

```
1201
01:05:28.105 --> 01:05:30.525
to arrest twice the kinetic energy.
1202
01:05:32.165 --> 01:05:37.045
I, uh, picking up on a couple of other points, um,
01:05:40.275 --> 01:05:43.015
one of the purposes of simulations is to be able to
1204
01:05:43.935 --> 01:05:48.615
demonstrate the likely occurrences, um, on port developments
1205
01:05:50.045 --> 01:05:51.455
both before they're built and
1206
01:05:51.455 --> 01:05:52.775
before the design vessels are built.
1207
01:05:54.755 --> 01:05:57.895
So it's not, in my experience, unusual
1208
01:05:58.115 --> 01:06:00.895
to simulate vessels which don't exist.
1209
01:06:02.995 --> 01:06:05.895
Um, and I can give you examples of, of work
01:06:05.895 --> 01:06:08.375
that I've done over the years where that's exactly the case
1211
01:06:08.395 --> 01:06:10.935
and where the models at Wallingford were
1212
01:06:11.805 --> 01:06:14.615
very represented actually of the real ships.
1213
01:06:16.435 --> 01:06:20.295
Um, but if that wasn't preferred, then I would agree
1214
01:06:20.295 --> 01:06:23.655
```

```
that perhaps adapting an existing model
1215
01:06:25.065 --> 01:06:27.575
would be an, a simpler way of doing it, much,
01:06:27.575 --> 01:06:28.935
much quicker, less expense.
1217
01:06:29.995 --> 01:06:33.815
Um, and picking up, particularly on the G nine, um,
1218
01:06:34.795 --> 01:06:37.575
the hydrodynamics are known, the thrust is known,
1219
01:06:37.675 --> 01:06:39.695
the position where the tugs can make fast
1220
01:06:39.715 --> 01:06:41.535
and push it known, um,
1221
01:06:42.155 --> 01:06:44.495
and all that would need to be remodeled would be
1222
01:06:44.495 --> 01:06:47.735
to remove one propeller, put two on and two rudders in.
1223
01:06:47.835 --> 01:06:50.455
In my submission, that's not difficult to do.
1224
01:06:51.235 --> 01:06:54.495
And in fact, if you, if there was any doubt as to what
1225
01:06:54.495 --> 01:06:55.895
that propulsion should be,
1226
01:06:56.725 --> 01:06:58.655
then there are vessels in existence.
1227
01:06:58.935 --> 01:07:01.615
Actually the next class up from the Ginlink, um,
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1228
01:07:01.665 --> 01:07:04.615
which are operated by a competitor, um,
1229
01:07:04.615 --> 01:07:06.375
which are the same lane meters
1230
01:07:06.395 --> 01:07:08.815
as the G nine 8,000 roughly rather than
1231
01:07:08.915 --> 01:07:10.975
6,700 is the gin link.
1232
01:07:11.675 --> 01:07:13.855
Um, and those propulsion characteristics are
1233
01:07:13.855 --> 01:07:14.975
quite readily available.
1234
01:07:15.475 --> 01:07:17.495
Um, therefore they could have been adapted
1235
01:07:17.495 --> 01:07:18.655
and put onto the G nine.
1236
01:07:19.875 --> 01:07:22.415
Is, is that vessel that you've just referred to?
1237
01:07:22.795 --> 01:07:27.295
Uh, again in the same, um, broad, um,
1238
01:07:27.725 --> 01:07:29.015
dimensional parameters
1239
01:07:29.155 --> 01:07:31.415
as the design vessel? It's in the two 40
1240
01:07:31.445 --> 01:07:33.135
Precisely with The eight meter with
1241
01:07:33.135 --> 01:07:34.135
```

```
The deeper draft, yeah.
1242
01:07:34.355 --> 01:07:35.415
And if you need a reference,
1243
01:07:35.525 --> 01:07:37.855
it's the TI group fifth generation.
1244
01:07:37.955 --> 01:07:40.655
So the, the class is GG five G.
1245
01:07:42.195 --> 01:07:44.335
Um, if you wouldn't mind, let's wait
1246
01:07:44.335 --> 01:07:46.215
for the written follow up with that.
1247
01:07:47.025 --> 01:07:51.455
Thank you. Okay. Um, in, if moving on in respect
1248
01:07:51.455 --> 01:07:55.655
of the, um, title modeling title effects, um,
1249
01:07:57.185 --> 01:08:00.695
where the DCO indicates
01:08:00.885 --> 01:08:04.375
that both pontoons are the same size rather than one half
1251
01:08:04.395 --> 01:08:07.975
the sizes, which is indicated on the current graphic, um,
1252
01:08:08.165 --> 01:08:11.495
clearly the amount of blockage on a flood tide would be
1253
01:08:11.495 --> 01:08:14.215
significantly more with the design parameters.
1254
01:08:15.345 --> 01:08:17.245
Um, especially given the draft
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1255
01:08:17.265 --> 01:08:19.045
of the pontoons being somewhere
1256
01:08:19.045 --> 01:08:20.325
between four and five meters.
1257
01:08:20.465 --> 01:08:21.845
The figures escaping at the moment.
1258
01:08:22.945 --> 01:08:25.925
Um, and whereas given the fact
1259
01:08:25.925 --> 01:08:27.325
that it's quite close in shore,
1260
01:08:27.405 --> 01:08:30.485
I wouldn't expect the title float to be massively different.
1261
01:08:30.545 --> 01:08:33.405
And in fact, I think Mr. Par said 0.2 knots,
1262
01:08:33.605 --> 01:08:35.645
which I would think would be broadly correct,
1263
01:08:36.665 --> 01:08:41.005
but more of more interest to iot would be the, the blockage
1264
01:08:41.065 --> 01:08:42.485
and therefore the deflection
1265
01:08:43.185 --> 01:08:45.445
and the in increase in flow rate,
1266
01:08:45.935 --> 01:08:49.165
which would be experienced on particularly, uh,
1267
01:08:49.165 --> 01:08:50.405
the finger peer birth eight.
1268
01:08:52.625 --> 01:08:57.325
```

```
Um, and given the
1269
01:08:57.525 --> 01:09:02.485
increase in in blockage, uh, I think we need a demonstration
01:09:02.545 --> 01:09:04.325
as to what that effect would be,
1271
01:09:04.945 --> 01:09:07.205
and I would, I would think it would be considerably more
1272
01:09:07.585 --> 01:09:11.765
effect than the 0.2 knots variance between the,
1273
01:09:12.185 --> 01:09:15.045
the jetties and also a significant variance in,
1274
01:09:15.145 --> 01:09:16.365
um, in direction.
1275
01:09:20.465 --> 01:09:23.725
Um, the other point is on wind gusting.
1276
01:09:24.935 --> 01:09:27.525
Again, this has been explained in writing, um,
1277
01:09:31.515 --> 01:09:36.045
wind effect ships in relation to the speed squared, speed
1278
01:09:36.045 --> 01:09:39.445
of the wind squared, that is not the speed of the ship and
1279
01:09:39.445 --> 01:09:40.965
therefore the amount of gusting
1280
01:09:40.985 --> 01:09:42.965
or variance, if you wish to call it that
1281
01:09:43.305 --> 01:09:48.285
around the mean wind is significantly relevant.
```

```
1282
01:09:49.435 --> 01:09:52.845
Most of the simulations to date, in fact all
1283
01:09:52.845 --> 01:09:54.525
of 'em except two that I'm aware of,
1284
01:09:55.475 --> 01:09:59.125
have been mean wind plus or minus two and a half knots.
1285
01:10:00.465 --> 01:10:03.645
And whereas that would be a representative variance at low
1286
01:10:03.645 --> 01:10:08.365
wind speeds, I don't think it's a representative variance
1287
01:10:08.505 --> 01:10:09.885
at higher wind speeds.
1288
01:10:11.185 --> 01:10:14.045
For example, if there was a mean wind of 27
1289
01:10:14.045 --> 01:10:15.925
and a half knots, which has been simulated,
1290
01:10:16.955 --> 01:10:20.765
then I would expect the variance to be instead of plus
01:10:20.785 --> 01:10:23.045
or minus two and a half knots, probably plus
1292
01:10:23.145 --> 01:10:24.965
or minus five, 10 or 15.
1293
01:10:27.545 --> 01:10:30.805
And the variance has to be downward as well as upward.
1294
01:10:30.805 --> 01:10:33.525
Otherwise, the mean speed would increase if it
1295
01:10:33.525 --> 01:10:34.605
```

```
was only upward gusting.
1296
01:10:36.305 --> 01:10:39.485
So, um, two runs were done
1297
01:10:39.595 --> 01:10:41.485
with a slightly increased variance.
1298
01:10:41.505 --> 01:10:44.645
So, uh, instead of plus or minus two and a half knots, plus
1299
01:10:44.645 --> 01:10:49.565
or minus five, and, uh, standard masters agreed
1300
01:10:49.565 --> 01:10:52.605
that that was far more representative of what they would,
1301
01:10:53.385 --> 01:10:56.805
um, normally expect in the Humber, Which, uh,
1302
01:10:56.805 --> 01:10:58.525
supported my, my case on that.
1303
01:10:58.845 --> 01:11:00.605
I, I would've liked the wind variance
01:11:00.605 --> 01:11:01.925
to have been a bit more actually.
1305
01:11:02.385 --> 01:11:06.845
Um, if there's any other of the points, sir,
1306
01:11:06.915 --> 01:11:09.045
that you would like me to expand on
1307
01:11:09.045 --> 01:11:10.165
that you've already been covered
1308
01:11:10.305 --> 01:11:12.685
or anything else that I've said, I'd be happy to do so.
```

```
1309
01:11:14.315 --> 01:11:16.365
Captain Va very helpful. Thank you.
1310
01:11:16.905 --> 01:11:18.245
Uh, nothing at this time.
1311
01:11:18.945 --> 01:11:22.925
Um, let's see whether there's an, uh, a need to come back
1312
01:11:23.225 --> 01:11:24.445
to you later on.
1313
01:11:24.785 --> 01:11:28.645
Um, just very quickly, um, I want to pass to Mr. Hann.
1314
01:11:33.875 --> 01:11:34.165
Miss,
1315
01:11:41.615 --> 01:11:43.605
let's ask a question out of outta turn,
1316
01:11:43.605 --> 01:11:45.365
and, sorry, it's slightly, um, uh, uh, I don't want
1317
01:11:45.365 --> 01:11:48.605
to disadvantage, uh, Commodore Bristow too much,
1318
01:11:48.785 --> 01:11:52.885
but, uh, the, the other question, um, I have in the
1319
01:11:53.645 --> 01:11:58.485
pipeline here is, uh, to Captain McCartan
1320
01:11:58.785 --> 01:12:02.365
as technical authority, Marine, uh,
1321
01:12:02.945 --> 01:12:04.685
and currently designated person.
1322
01:12:05.145 --> 01:12:10.085
```

```
Um, had you had the opportunity to review these,
1323
01:12:10.585 --> 01:12:14.085
uh, recent simulations
1324
01:12:14.225 --> 01:12:15.925
and the conclusions drawn from them
1325
01:12:16.025 --> 01:12:17.565
before coming here today?
1326
01:12:19.985 --> 01:12:22.565
Yes. Captain McCarten, ABP, yes, I have had
1327
01:12:22.565 --> 01:12:23.925
that opportunity to have a look through them.
1328
01:12:24.575 --> 01:12:28.885
Thank you. Thank you. Um, to Mr.
1329
01:12:29.145 --> 01:12:34.005
Hannon, the likelihood
1330
01:12:34.005 --> 01:12:37.525
of a lesion at Eastern Jetty was a point which was raised
1331
01:12:37.625 --> 01:12:41.365
by ips as a matter of concern in earlier representations.
1332
01:12:41.625 --> 01:12:46.005
And one of the real purposes of this set
1333
01:12:46.125 --> 01:12:48.885
of additional simulations recently has been
1334
01:12:48.985 --> 01:12:51.685
to look at the eastern jetty risk.
1335
01:12:53.265 --> 01:12:55.365
Now, is the likelihood
```

```
1336
01:12:55.365 --> 01:12:58.045
of a lesion at Eastern Jetty now considered
1337
01:12:58.365 --> 01:13:00.005
possible or unlikely?
1338
01:13:00.505 --> 01:13:02.085
You may or may not have an answer to
1339
01:13:02.085 --> 01:13:03.605
that question at this moment,
1340
01:13:03.745 --> 01:13:05.485
but it's one that I'd like
1341
01:13:05.485 --> 01:13:08.765
to get from you, if not now.
1342
01:13:09.105 --> 01:13:11.045
Um, by the end of the afternoon,
1343
01:13:14.625 --> 01:13:16.925
Uh, James Hannan, uh, ABP Mer.
1344
01:13:17.305 --> 01:13:19.565
Uh, yes, sir. We can certainly get that to you by the,
01:13:19.585 --> 01:13:20.585
The end of the afternoon.
1346
01:13:21.665 --> 01:13:26.245
The reason I ask it, I suspect you may be thinking ahead
1347
01:13:26.245 --> 01:13:30.125
of me already, is it comes again
1348
01:13:30.905 --> 01:13:32.165
to the question tolerability
1349
01:13:33.785 --> 01:13:38.165
```

```
and the rating of likelihood
1350
01:13:38.305 --> 01:13:42.525
of religion at the Eastern jetty, um, was one which
01:13:43.105 --> 01:13:47.525
was entirely conditional
1352
01:13:47.905 --> 01:13:50.085
on, um, applied risk controls,
1353
01:13:50.385 --> 01:13:53.285
in particular birth specific parameters, I believe.
1354
01:13:53.785 --> 01:13:56.645
But I'm trying to grasp quite a lot
1355
01:13:56.645 --> 01:13:57.765
of different information here.
1356
01:13:58.585 --> 01:14:02.805
Can you give me a, a, a sense, uh, again,
1357
01:14:03.115 --> 01:14:04.245
come back later on
1358
01:14:04.245 --> 01:14:09.045
after the break with, um, a, a,
1359
01:14:09.845 --> 01:14:13.885
a new rating, um, which may confirm the previous rating
1360
01:14:13.905 --> 01:14:17.805
or may not based on the additional work that's been done.
1361
01:14:20.345 --> 01:14:21.725
Uh, James Han, ABP. Uh,
1362
01:14:21.985 --> 01:14:22.985
Yes, sir. Thank you.
```

```
1363
01:14:22.985 --> 01:14:23.965
1364
01:14:27.875 --> 01:14:29.325
back to Captain McCartan
1365
01:14:34.145 --> 01:14:37.205
at what we're hearing at the moment is, um,
1366
01:14:38.915 --> 01:14:41.645
real uncertainty about the capability
1367
01:14:41.905 --> 01:14:44.965
of the proposed development to handle the design vessel
1368
01:14:44.965 --> 01:14:48.005
because the design vessel hasn't yet been designed.
1369
01:14:48.905 --> 01:14:53.165
Um, and it seems that
1370
01:14:54.775 --> 01:14:58.165
there is a very satisfactory answer from the album Master
1371
01:14:58.725 --> 01:15:03.205
Humber, uh, in the sense of operating restrictions that
1372
01:15:03.535 --> 01:15:07.485
until the design vessel has been brought forward
1373
01:15:08.105 --> 01:15:10.685
and its characteristics have been indeed designed
1374
01:15:10.825 --> 01:15:14.485
and then tested, um, it's not gonna operate at this,
1375
01:15:14.785 --> 01:15:15.605
uh, at this
1376
01:15:15.605 --> 01:15:20.605
```

```
development. Does
1377
01:15:22.095 --> 01:15:24.315
Uh, captain McCarton, ABP I'll just say
1378
01:15:24.335 --> 01:15:26.555
by example if this is helpful.
1379
01:15:26.935 --> 01:15:30.795
Um, in our other ports we often face, um, similar issues
1380
01:15:31.455 --> 01:15:34.595
and, uh, one can just see, I'm sure around here the size
1381
01:15:34.595 --> 01:15:37.475
of cruise ships over the last 15 to 20 years,
1382
01:15:37.475 --> 01:15:40.235
particularly the last five years, the considerable size
1383
01:15:40.255 --> 01:15:42.075
and changes that have come with those.
1384
01:15:42.775 --> 01:15:46.075
And they pose the same challenges in terms of
01:15:46.865 --> 01:15:50.035
size under Kell, clearance power, et cetera,
1386
01:15:50.335 --> 01:15:51.395
and effect two wind.
1387
01:15:52.015 --> 01:15:54.995
And whenever these vessels are coming to our port, uh,
1388
01:15:55.095 --> 01:15:57.875
in Southampton in particular, we go through a number
1389
01:15:57.875 --> 01:15:59.355
of processes to simulate
```

```
1390
01:15:59.355 --> 01:16:02.195
and understand any operational constraints that we may have
1391
01:16:02.815 --> 01:16:06.355
and how do we adjust, et cetera, so that in order we can,
1392
01:16:06.375 --> 01:16:10.395
uh, conduct our pilotage navigation safely, uh,
1393
01:16:10.395 --> 01:16:12.355
with our pilots and tugs, et cetera.
1394
01:16:12.695 --> 01:16:15.195
And that would be no different on this case, on this case,
1395
01:16:15.195 --> 01:16:18.635
either on a case by case basis, you have to go through that.
1396
01:16:18.635 --> 01:16:19.715
But then what you're able to do,
1397
01:16:20.655 --> 01:16:24.115
and if I just come back to with the Humber, we got some,
1398
01:16:24.135 --> 01:16:26.595
you know, only one time about a thousand years worth
1399
01:16:26.595 --> 01:16:30.555
of experience on the river and insight from Captain Furman
1400
01:16:30.555 --> 01:16:34.555
and his team, and they apply that with the known parameters
1401
01:16:34.575 --> 01:16:38.715
and what's in the simulator to make operational decisions,
1402
01:16:38.825 --> 01:16:41.875
constraints controls around the parameters that they see.
1403
01:16:42.335 --> 01:16:44.595
```

```
So it's not uncommon, um, for this
1404
01:16:44.815 --> 01:16:47.475
to happen when you're introducing, um,
01:16:47.695 --> 01:16:50.595
new shipping exactly the same way with new aircraft,
1406
01:16:50.595 --> 01:16:52.275
bigger aircraft coming to airports.
1407
01:16:52.925 --> 01:16:56.235
Thank you. So could I just intervene on that
1408
01:16:58.095 --> 01:16:59.315
in, I'm sorry.
1409
01:16:59.315 --> 01:17:01.275
Sorry, I was just gonna raise a point which may,
1410
01:17:01.935 --> 01:17:03.315
uh, address yours.
1411
01:17:03.335 --> 01:17:05.275
It may not, but I'd like to ask mine while,
01:17:05.275 --> 01:17:09.845
while it's still fluid, um, captain McCartan, you,
1413
01:17:09.845 --> 01:17:13.885
you've just indicated that at other ports, um,
1414
01:17:14.195 --> 01:17:17.405
different vessels, um, have, have been accommodated.
1415
01:17:17.825 --> 01:17:19.485
But is that under a scenario
1416
01:17:20.255 --> 01:17:22.685
where the port infrastructure is also
```

```
1417
01:17:23.585 --> 01:17:24.805
in effect being designed
1418
01:17:24.985 --> 01:17:27.925
and built to accommodate the new vessel?
1419
01:17:28.305 --> 01:17:29.445
Or was that a scenario
1420
01:17:29.575 --> 01:17:32.245
where the port infrastructure already existed
1421
01:17:32.825 --> 01:17:34.965
and new ships, uh, were coming to port?
1422
01:17:36.945 --> 01:17:39.845
So, uh, captain McCarten, ABP, um,
1423
01:17:40.665 --> 01:17:43.045
and those examples there, we've had to adjust some
1424
01:17:43.045 --> 01:17:46.285
of our infrastructure, particularly, uh, with regard
1425
01:17:46.305 --> 01:17:47.965
to our cruise terminals
1426
01:17:47.965 --> 01:17:52.045
and where we place some of our, uh, air bridges, et cetera,
1427
01:17:52.045 --> 01:17:53.445
to accommodate these new ships
1428
01:17:53.585 --> 01:17:56.085
and also what we do with the new bonard arrangements.
1429
01:18:00.755 --> 01:18:03.215
But if I understand correctly, that was
1430
01:18:04.635 --> 01:18:07.375
```

```
what's happened in those other, in instances,
1431
01:18:07.625 --> 01:18:09.495
there has been some adaptation
01:18:09.675 --> 01:18:13.575
of existing port infrastructure rather than brand new port
1433
01:18:13.575 --> 01:18:15.455
infrastructure being designed and built,
1434
01:18:15.995 --> 01:18:19.735
and then a new vessel coming to, uh, make use of
1435
01:18:19.735 --> 01:18:21.215
that infrastructure.
1436
01:18:24.005 --> 01:18:26.145
Yes, sir. Mike McCarton, um, ABP.
1437
01:18:26.145 --> 01:18:30.305
That would be correct, but also I'm using that as an example
1438
01:18:30.445 --> 01:18:32.225
to indicate to you that it's not uncommon
1439
01:18:32.845 --> 01:18:36.865
for new vessels which are not designed coming into two ports
1440
01:18:36.865 --> 01:18:39.385
that become larger and more powerful for us to have
1441
01:18:39.385 --> 01:18:42.385
to review them and the controls that we need
1442
01:18:42.505 --> 01:18:44.465
to put into place or understanding in order
1443
01:18:44.485 --> 01:18:45.785
for them to operate.
```

```
1444
01:18:50.045 --> 01:18:53.465
So, can I, when you, sorry, watching your pen,
1445
01:18:53.845 --> 01:18:56.625
can I just come in on the sort of legal issue about that
1446
01:18:56.645 --> 01:19:00.225
as well, James Strom for the applicant?
1447
01:19:00.525 --> 01:19:04.705
Um, the, um, just a, if it's an appropriate moment, just,
1448
01:19:04.735 --> 01:19:07.065
just to deal with that.
1449
01:19:07.285 --> 01:19:09.945
Uh, first of all, there,
1450
01:19:09.945 --> 01:19:13.065
there's a point made about the Rochdale envelope,
1451
01:19:13.325 --> 01:19:15.585
an assessment of what's being proposed.
1452
01:19:16.125 --> 01:19:17.825
And of course, the rochdale envelope,
1453
01:19:18.045 --> 01:19:22.425
as you'll be well aware, is about assessing limits, um,
1454
01:19:22.615 --> 01:19:26.865
subject to the principle of further restrictions
1455
01:19:26.925 --> 01:19:28.345
or consents being required.
1456
01:19:29.085 --> 01:19:33.465
And as you've already heard, in order to operate
1457
01:19:34.345 --> 01:19:39.025
```

```
a larger ship than that which is currently being assessed,
1458
01:19:40.325 --> 01:19:44.065
the regulatory controls you've already heard described
01:19:44.125 --> 01:19:48.945
by the harbor master would apply as you've heard.
1460
01:19:49.185 --> 01:19:52.745
I mean, and of course you would assess whatever's being
1461
01:19:53.065 --> 01:19:56.225
proposed in terms of design, ship
1462
01:19:57.115 --> 01:19:58.705
propulsion, et cetera.
1463
01:19:59.525 --> 01:20:01.545
Uh, and so the point, the suggestion
1464
01:20:01.575 --> 01:20:04.585
that there hasn't been a a compliance with assessment
1465
01:20:04.605 --> 01:20:06.105
for those purposes is wrong.
01:20:06.645 --> 01:20:11.525
By contrast, the spatial ability to construct
1467
01:20:12.485 --> 01:20:17.045
a ber that's capable of accommodating a vessel
1468
01:20:17.145 --> 01:20:19.165
of a certain length has been assessed
1469
01:20:19.165 --> 01:20:22.525
because that then has an immediate effect on dredging
1470
01:20:22.945 --> 01:20:24.525
for length of the pontoon.
```

```
1471
01:20:24.985 --> 01:20:28.005
The actual operation of the future ship is controlled by
1472
01:20:28.635 --> 01:20:31.125
that simulation process and approvals process.
1473
01:20:32.465 --> 01:20:37.125
And to help you with a, I think I'll told if I'm wrong,
1474
01:20:37.555 --> 01:20:38.565
some examples.
1475
01:20:38.585 --> 01:20:41.445
The Harbor Master himself gave you an example at Greenport
1476
01:20:41.715 --> 01:20:45.325
Hull, where that's precisely the situation.
1477
01:20:45.625 --> 01:20:49.765
The, the berth is there not currently designed for the
1478
01:20:50.365 --> 01:20:54.085
increase in the blade length that is now being proposed.
1479
01:20:55.385 --> 01:20:59.565
The operator wants to come in with a wider, um, ber
1480
01:20:59.565 --> 01:21:01.005
because the demand
1481
01:21:01.065 --> 01:21:04.685
for larger blade has arisen, it has to be assessed.
1482
01:21:05.685 --> 01:21:06.965
I can do slightly better than that,
1483
01:21:07.045 --> 01:21:10.605
I think the Jing Ling class at the outer harbor.
1484
01:21:11.545 --> 01:21:14.885
```

```
And just to put that in context, the outer harbor
1485
01:21:16.425 --> 01:21:19.485
at Immingham was promoted by the applicant,
01:21:22.205 --> 01:21:25.165
challenged by CLDN, even a legal challenge,
1487
01:21:25.185 --> 01:21:26.405
but ultimately upheld,
1488
01:21:26.665 --> 01:21:29.245
but promoted by the applicant as the port operator
1489
01:21:31.965 --> 01:21:35.685
operated now by DFDS under a tenancy arrangement,
1490
01:21:37.035 --> 01:21:39.845
they then wish to bring in larger vessels.
1491
01:21:41.055 --> 01:21:43.605
Those vessels had to be simulated
1492
01:21:43.745 --> 01:21:47.125
and accepted by the Harbor master amongst others.
1493
01:21:49.305 --> 01:21:52.285
The very arrangements were now criticized
1494
01:21:52.305 --> 01:21:55.445
as being lacking independence or exactly the same.
1495
01:21:56.145 --> 01:21:59.805
The applicant is promoting a piece of infrastructure
1496
01:22:00.185 --> 01:22:02.765
to its harbor as it did for the outer harbor.
1497
01:22:03.625 --> 01:22:06.405
The intention is for stenner to operate it.
```

```
1498
01:22:07.185 --> 01:22:11.165
If Stenner comes forward as DF Ds DS did in the past,
1499
01:22:11.935 --> 01:22:16.885
seeks to run a larger ship, um, as circumstances change,
1500
01:22:17.625 --> 01:22:21.325
uh, of course all of those regulatory controls will apply
1501
01:22:21.425 --> 01:22:25.525
as they did in the past without any proper basis
1502
01:22:25.705 --> 01:22:27.965
for criticizing the independence,
1503
01:22:28.025 --> 01:22:31.685
the structural independence or the, um, care
1504
01:22:31.825 --> 01:22:34.085
and diligence with which those who are entrusted
1505
01:22:34.555 --> 01:22:36.685
with safety take their task.
1506
01:22:37.225 --> 01:22:39.125
And of course, the Harbor master.
01:22:39.305 --> 01:22:43.125
And indeed, the applicant wouldn't want a larger ship
1508
01:22:43.705 --> 01:22:45.365
to operate in the outer harbor.
1509
01:22:46.075 --> 01:22:48.765
They block the Iert
1510
01:22:49.105 --> 01:22:51.205
or indeed any of its facilities if they couldn't
1511
01:22:51.205 --> 01:22:52.245
```

```
be operated safely.
1512
01:22:52.865 --> 01:22:55.685
That's the applicant's position as the duty holder.
01:22:55.825 --> 01:22:58.685
It will be undoubtedly the case as for the Dock Master
1514
01:22:58.865 --> 01:23:00.485
and of course the Harbor Master
1515
01:23:00.715 --> 01:23:04.325
because they're operating under their own statutory duties.
1516
01:23:05.065 --> 01:23:07.405
So I think that whether, whether
1517
01:23:07.405 --> 01:23:09.045
or not you take a cruise ship example
1518
01:23:09.705 --> 01:23:12.925
or indeed the the closest example,
1519
01:23:13.265 --> 01:23:14.525
the principles are the same.
01:23:15.745 --> 01:23:18.885
And of course, it doesn't stop there for, for ports.
1521
01:23:18.925 --> 01:23:21.125
I mean, it's similar for many pieces of infrastructure.
1522
01:23:21.555 --> 01:23:23.485
They can have a, I think even the length
1523
01:23:23.485 --> 01:23:27.045
of a runway in principle could take a, a takeoff
1524
01:23:27.585 --> 01:23:31.205
or departure type of aircraft, which may be
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1525
01:23:31.725 --> 01:23:34.685
actually not permitted under a noise control regime.
1526
01:23:34.945 --> 01:23:36.445
And therefore, in order
1527
01:23:36.635 --> 01:23:40.245
that it can physically be accommodated, it can't be operated
1528
01:23:40.245 --> 01:23:42.005
because of a noise control regime,
1529
01:23:42.265 --> 01:23:46.125
or it might be a safety regime depending on the numbers of,
1530
01:23:46.625 --> 01:23:49.885
uh, propellers and the thrust, um, and the takeoff weight.
1531
01:23:50.385 --> 01:23:53.485
Uh, there's a separate control often by the airport,
1532
01:23:53.505 --> 01:23:54.925
in fact, but it may also be
1533
01:23:54.925 --> 01:23:56.125
another re it doesn't really matter.
01:23:56.745 --> 01:23:59.445
And in order there for those two controls to operate,
1535
01:23:59.445 --> 01:24:02.325
which they do, the infrastructure's capable
1536
01:24:02.465 --> 01:24:05.405
of accommodating it physically, but it doesn't mean it will
1537
01:24:05.585 --> 01:24:08.725
or can happen without the necessarily reg
1538
01:24:10.045 --> 01:24:13.165
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regulatory regimes assessing and then approving
1539
01:24:13.165 --> 01:24:14.925
or not approving, uh, that.
01:24:15.505 --> 01:24:16.565
And so that's why I just wanted
1541
01:24:16.565 --> 01:24:17.925
to give you some legal context.
1542
01:24:19.025 --> 01:24:23.165
You've heard from Mr. Par on a number of things about, um,
1543
01:24:23.465 --> 01:24:24.725
the actual simulations.
1544
01:24:24.775 --> 01:24:26.365
There were a few other points raised.
1545
01:24:26.605 --> 01:24:30.165
I, and I just wanted to, he may or may not have any. I I
1546
01:24:30.165 --> 01:24:32.525
Had actually asked to interview myself earlier, Mr.
1547
01:24:32.575 --> 01:24:33.575
Straw, but I'll wait.
1548
01:24:35.605 --> 01:24:37.405
I, I'll, We haven't forgotten you Mr.
1549
01:24:40.465 --> 01:24:45.045
Uh, apologies if I've overlooked Mr.
1550
01:24:45.305 --> 01:24:48.765
Vin. Um, Mr. I, I was just perhaps we'll hear from Mr.
1551
01:24:48.765 --> 01:24:50.085
Elman first and then Mr. Mr.
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1552
01:24:50.265 --> 01:24:51.765
Par if he, if had,
1553
01:24:51.975 --> 01:24:55.925
there was some further observations about the simulations,
1554
01:24:56.145 --> 01:24:58.045
if he, he may or may not have anything to say,
1555
01:24:58.065 --> 01:24:59.485
but if that assists,
1556
01:25:01.795 --> 01:25:02.915
I think that's the right way around.
1557
01:25:03.045 --> 01:25:04.515
Let's, uh, give Mr.
1558
01:25:04.725 --> 01:25:05.875
Elvin his opportunity
1559
01:25:05.895 --> 01:25:08.435
and then, uh, uh, last word on this particular part
1560
01:25:08.435 --> 01:25:10.435
of the agenda, uh, and then we'll take a break.
01:25:11.925 --> 01:25:13.235
Thank you. Other than teasing Mr.
1562
01:25:13.325 --> 01:25:17.635
Straw, uh, David Alvin, IOT, um,
1563
01:25:17.815 --> 01:25:21.755
coming back to the reason I intervened the difficulty,
1564
01:25:21.855 --> 01:25:23.595
and this is highlighted by Mr.
1565
01:25:23.755 --> 01:25:25.435
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Strand's submissions to you, is
1566
01:25:25.435 --> 01:25:29.195
that the legal analysis is not in my respectful suggestion
01:25:29.255 --> 01:25:30.475
as he has described it.
1568
01:25:30.855 --> 01:25:35.195
The Rochdale approach says you can have the scope
1569
01:25:36.135 --> 01:25:39.835
to go up to your maximum parameters if you have assessed
1570
01:25:40.375 --> 01:25:43.835
and know that the implications are acceptable.
1571
01:25:44.575 --> 01:25:47.995
And that is then tied by conditions to take his example,
1572
01:25:48.925 --> 01:25:52.115
noise conditions, for example, night flying at airports
1573
01:25:53.215 --> 01:25:54.555
or safety conditions.
1574
01:25:55.615 --> 01:25:59.955
But the bottom line is they have to be assessed
1575
01:26:00.095 --> 01:26:03.325
as being acceptable at the stage when the
1576
01:26:03.955 --> 01:26:05.405
root consent is granted.
1577
01:26:06.705 --> 01:26:09.245
The Cornwall and Hardy case demonstrates
1578
01:26:09.245 --> 01:26:11.285
what happens if you leave it until later
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1579
01:26:11.905 --> 01:26:13.805
is you have an unlawful proposal.
1580
01:26:14.065 --> 01:26:18.685
That's where they didn't assess, uh, the impact on the, uh,
1581
01:26:18.755 --> 01:26:20.765
protected species, uh,
1582
01:26:21.065 --> 01:26:24.085
at the outline permission stage, and it was quashed.
1583
01:26:25.105 --> 01:26:27.925
You cannot leave over the assessment of acceptability
1584
01:26:28.065 --> 01:26:29.325
to a future stage.
1585
01:26:29.345 --> 01:26:31.085
You've got to fix it at this stage.
1586
01:26:31.465 --> 01:26:33.325
And you've got a number of things that, you know,
1587
01:26:33.705 --> 01:26:35.245
as the Harbor master has said,
1588
01:26:35.905 --> 01:26:38.845
no one has navigated in this part of the port
1589
01:26:39.275 --> 01:26:40.845
with vessels this large.
1590
01:26:41.745 --> 01:26:45.445
So you are dealing with a complete unknown in, in that term,
1591
01:26:45.745 --> 01:26:47.445
and you've got our points about that,
1592
01:26:48.505 --> 01:26:52.245
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nor despite what the captain said, is there any
1593
01:26:53.135 --> 01:26:57.365
comparable example of oil terminal infrastructure
01:26:57.745 --> 01:27:02.405
so close to a proposed passenger terminal or cargo terminal.
1595
01:27:03.985 --> 01:27:08.605
So the risks here are considerably different from those
1596
01:27:08.605 --> 01:27:10.245
that have been given in the examples.
1597
01:27:13.225 --> 01:27:17.485
The potential approach is to restrict the DCO
1598
01:27:18.465 --> 01:27:21.165
to the vessel types that have been tested, if
1599
01:27:21.165 --> 01:27:23.445
that is regarded as satisfactory as Mr.
1600
01:27:23.475 --> 01:27:25.205
Full suggested for DFDS,
01:27:25.625 --> 01:27:29.125
and then leave it to, um, uh, stainer
1602
01:27:29.125 --> 01:27:32.125
or ABP in the future if a future vessel does come along
1603
01:27:32.385 --> 01:27:35.045
to apply for a variation of the DCO it.
1604
01:27:37.145 --> 01:27:38.325
But the, the problem is,
1605
01:27:38.325 --> 01:27:41.245
and it's not solved by what ABP have suggested,
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1606
01:27:41.265 --> 01:27:45.325
is you've got to be satisfied up to the maximum parameters
1607
01:27:45.325 --> 01:27:48.125
that what is being permitted is suitable
1608
01:27:48.465 --> 01:27:50.925
and its impacts are acceptable.
1609
01:27:51.505 --> 01:27:55.285
As ABP says itself in, its, in its chapter two,
1610
01:27:55.385 --> 01:27:56.765
its environmental statement,
1611
01:27:57.385 --> 01:27:59.045
by adopting the Rochdale envelope,
1612
01:27:59.065 --> 01:28:01.365
the potential impacts have been assessed on the basis
1613
01:28:01.465 --> 01:28:04.045
of the maximum parameters of the scheme as a whole.
1614
01:28:04.345 --> 01:28:08.645
And its individual components there pro providing certainty
1615
01:28:08.985 --> 01:28:11.325
as to potential worst case impacts.
1616
01:28:12.075 --> 01:28:13.965
Well, that simply hasn't been done.
1617
01:28:14.165 --> 01:28:18.655
ABP has not done what it's set out to do. Thank you.
1618
01:28:22.245 --> 01:28:25.265
So that was 2.3 0.7 of the environmental statement.
1619
01:28:32.645 --> 01:28:35.795
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Thank you, Mr. Rowan. Um, Mr.
1620
01:28:38.055 --> 01:28:39.395
I'm gonna ask the question first.
01:28:39.595 --> 01:28:42.675
I think to rather, let's set aside
1622
01:28:42.695 --> 01:28:45.395
for just a moment the legal point
1623
01:28:45.395 --> 01:28:47.875
that's been made on the Rochdale burg, which I,
1624
01:28:48.075 --> 01:28:51.715
I think would make most unfair to ask, uh, captain McCartan
1625
01:28:51.735 --> 01:28:53.155
to, to, to respond on.
1626
01:28:55.455 --> 01:28:58.915
But if the, um,
1627
01:29:01.195 --> 01:29:04.645
uncertainty over the ability to, uh, safely
01:29:06.185 --> 01:29:10.765
handle or manage, um, the
1629
01:29:11.485 --> 01:29:15.765
birthing and unring of a vessel of the 240
1630
01:29:16.415 --> 01:29:20.995
meter length, eight meter depth, et cetera, uh, is
1631
01:29:22.315 --> 01:29:25.835
restrict were to be restricted at this stage
1632
01:29:26.055 --> 01:29:30.995
and not left, um, as, as a, if you like, a a, a matter
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1633
01:29:31.015 --> 01:29:34.595
of, of, um, SHA discretion at a later date,
1634
01:29:37.185 --> 01:29:39.595
what does that mean to ABP corporately?
01:29:43.415 --> 01:29:44.415
In other words,
1636
01:29:45.095 --> 01:29:47.915
I'm gonna interrupt the, I'm not, I don't think
1637
01:29:47.915 --> 01:29:49.155
that's fair for Mr.
1638
01:29:49.295 --> 01:29:51.155
Car McCarton to answer that question.
1639
01:29:51.685 --> 01:29:55.195
Given his role, he's explained, um,
1640
01:29:56.065 --> 01:29:58.235
that in terms of the way the company operates,
1641
01:29:58.265 --> 01:30:01.875
he's got a very particular set of, um, functions to fulfill.
01:30:03.075 --> 01:30:06.435
I don't think it would be reasonable for us to ask
1643
01:30:06.435 --> 01:30:08.435
that question of this witness.
1644
01:30:09.555 --> 01:30:11.555
I think the pertinent question,
1645
01:30:11.735 --> 01:30:14.115
and it's one possibly that the applicants can have
1646
01:30:14.115 --> 01:30:15.195
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to take away
1647
01:30:15.495 --> 01:30:20.115
and respond post-hearing, is what implications
01:30:21.045 --> 01:30:25.475
might there be for the development if a view was taken
1649
01:30:25.775 --> 01:30:27.435
and ultimately would be for the Secretary of State
1650
01:30:27.435 --> 01:30:29.715
to decide whether or not, uh, it would be appropriate to do.
1651
01:30:29.715 --> 01:30:32.195
It would be to set an operating limit
1652
01:30:32.735 --> 01:30:34.395
on based on vessel size.
1653
01:30:35.295 --> 01:30:39.035
And in that regard, we, we've been told
1654
01:30:39.105 --> 01:30:40.555
that stenner are operating,
01:30:40.775 --> 01:30:43.395
are they generally operating the T class at the
1656
01:30:43.395 --> 01:30:44.755
moment in and out of Ingham?
1657
01:30:45.135 --> 01:30:47.755
Do they operate anything larger than T class
1658
01:30:50.255 --> 01:30:51.395
and or killing home?
1659
01:30:52.095 --> 01:30:54.395
Are they operating similar vessels at Killing Hall?
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1660
01:31:02.875 --> 01:31:07.235
I, I, I think we need some assistance
1661
01:31:08.175 --> 01:31:12.275
in terms of how many units in effect
1662
01:31:12.895 --> 01:31:15.855
the T class can accommodate.
1663
01:31:16.715 --> 01:31:18.575
And if we, if we are looking at, um,
1664
01:31:19.385 --> 01:31:23.255
three shipping arrivals per day, three out per day,
1665
01:31:24.245 --> 01:31:28.455
what that means in terms of AT class, how many units per day
1666
01:31:29.075 --> 01:31:31.375
versus what a design vessel
1667
01:31:31.475 --> 01:31:34.935
of 240 meters would actually be able to accommodate.
1668
01:31:35.095 --> 01:31:38.775
'cause that does start to possibly affect, um,
01:31:40.795 --> 01:31:43.055
The capacity of this development
1670
01:31:43.075 --> 01:31:44.855
and what it would actually achieve against
1671
01:31:44.855 --> 01:31:47.255
what the applicant has sought to argue
1672
01:31:47.395 --> 01:31:48.575
as part of its needs case.
1673
01:31:54.025 --> 01:31:55.375
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James, towards the applicant. Yes.
1674
01:31:55.465 --> 01:31:59.445
Sorry, just very quickly, um, firstly, uh, I
01:32:00.475 --> 01:32:02.805
very happy to be, um, um,
1676
01:32:05.345 --> 01:32:07.445
cut in by Mr. Gould on that.
1677
01:32:07.625 --> 01:32:12.285
Uh, I was going on to explain by my meaning of corporate,
1678
01:32:12.705 --> 01:32:15.005
uh, what I was going to be focusing
1679
01:32:15.005 --> 01:32:18.725
that question on was the has be response rather than if you
1680
01:32:18.725 --> 01:32:21.125
like abs BP's commercial views.
1681
01:32:21.185 --> 01:32:23.445
So, but forgive me for the ambiguity there.
01:32:23.625 --> 01:32:26.525
Um, let's set that question aside for the, for now.
1683
01:32:26.945 --> 01:32:30.165
Um, and, uh, Mr. Str, your,
1684
01:32:30.315 --> 01:32:31.315
Your point Yes. So James
1685
01:32:31.315 --> 01:32:32.805
TRO for the applicant, sir. Yeah.
1686
01:32:32.945 --> 01:32:36.325
Um, in principle, the information you're requesting yes,
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1687
01:32:36.545 --> 01:32:37.645
can readily be provided.
1688
01:32:38.275 --> 01:32:40.925
It's, it's set on a series of assumptions.
1689
01:32:41.565 --> 01:32:46.045
I, the, the first, the first question is, is it
1690
01:32:46.865 --> 01:32:48.005
either necessary
1691
01:32:48.585 --> 01:32:53.165
or appropriate for a restriction on this size
1692
01:32:53.165 --> 01:32:57.645
of the vessel to be imposed on ADCO
1693
01:32:58.425 --> 01:33:03.405
in circumstances where there is already a regulatory regime,
1694
01:33:04.505 --> 01:33:06.205
um, which you've heard described,
1695
01:33:06.305 --> 01:33:10.045
and which applies to other ports, uh, in the,
1696
01:33:10.235 --> 01:33:12.725
including the one I mentioned a moment ago?
1697
01:33:12.945 --> 01:33:16.405
So that's a question, maybe a mixed question of,
1698
01:33:17.325 --> 01:33:19.045
I suspect it's mainly a question of law,
1699
01:33:19.265 --> 01:33:21.045
but that that's the, the first question.
1700
01:33:21.325 --> 01:33:23.565
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W why, why would the Secretary of State
1701
01:33:24.465 --> 01:33:26.605
be imposing a restriction?
01:33:27.035 --> 01:33:31.285
Even indeed the regulatory regime means
1703
01:33:31.285 --> 01:33:33.765
that one can't operate a vessel
1704
01:33:34.105 --> 01:33:36.445
unless the harbor must amongst others.
1705
01:33:36.505 --> 01:33:38.645
And indeed, the statutory Harbor authority sat
1706
01:33:39.165 --> 01:33:40.205
satisfied the operator safely.
1707
01:33:40.385 --> 01:33:43.285
So that was the first proposition.
1708
01:33:43.745 --> 01:33:47.725
If it, if the Secretary State were to impose such condition
1709
01:33:47.725 --> 01:33:52.445
and it were, were lawful then in procedural terms,
1710
01:33:52.555 --> 01:33:56.365
what it means is that in order, when a vessel comes along,
1711
01:33:56.365 --> 01:33:58.325
which is concluded,
1712
01:33:59.225 --> 01:34:01.285
assume it's concluded it can operate safely
1713
01:34:01.425 --> 01:34:04.965
or with restrictions, then the procedural mechanism that has
```

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1714
01:34:04.965 --> 01:34:08.645
to be gone through is a change to the requirement
1715
01:34:09.545 --> 01:34:12.645
rather than the statutory Harbor authority
1716
01:34:12.665 --> 01:34:15.925
and the Harbor Master approving a safe
1717
01:34:15.925 --> 01:34:17.245
operation based on modeling.
1718
01:34:17.345 --> 01:34:21.365
So that's the PR principle distinction between the two
1719
01:34:21.365 --> 01:34:23.085
and whether or not that's necessary, similar,
1720
01:34:23.555 --> 01:34:24.885
similar points arise.
1721
01:34:26.025 --> 01:34:29.805
And the the third point, I think was about
1722
01:34:31.085 --> 01:34:34.245
restrictions, um, just to make the observation
01:34:35.195 --> 01:34:39.805
that whilst there's Mr Ps already explained about
1724
01:34:39.985 --> 01:34:42.965
the principle, look at a larger vessel, the,
1725
01:34:43.025 --> 01:34:45.725
the Gin Ling class in relation to the
1726
01:34:46.445 --> 01:34:47.725
original, uh, modeling.
1727
01:34:48.745 --> 01:34:52.885
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And, um, in addition, the restrictions
1728
01:34:52.915 --> 01:34:54.405
that we are talking about
01:34:54.545 --> 01:34:58.045
and Mr. Park can explain more, are relating
1730
01:34:58.065 --> 01:35:02.885
to particular conditions at which operations
1731
01:35:03.425 --> 01:35:06.805
may or may not be subject to, for example, extra tugs or,
1732
01:35:06.945 --> 01:35:11.925
or even potential timing restrictions is not, um, being
1733
01:35:12.965 --> 01:35:17.005
a, a general, um, the modeling,
1734
01:35:17.105 --> 01:35:19.765
the simulation is not showing some general proposition
1735
01:35:19.795 --> 01:35:23.245
that one can't operate, uh, uh, a vessel
01:35:23.305 --> 01:35:27.725
of a certain type like the jingling, um, e even
1737
01:35:28.755 --> 01:35:31.125
with tugs, if you see what I mean, if I can put it
1738
01:35:31.125 --> 01:35:32.245
that way, just put it in context.
1739
01:35:32.745 --> 01:35:36.165
But the, the first two questions from are important ones
1740
01:35:36.165 --> 01:35:38.325
and ultimately matters of law.
```

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1741
01:35:39.025 --> 01:35:43.245
And I don't want to get too drawn down into the rabbit hole
1742
01:35:43.265 --> 01:35:45.685
of EIA law, but Mr.
1743
01:35:46.015 --> 01:35:49.805
Elvin unfortunately is wrong in relation to EIA law.
1744
01:35:50.225 --> 01:35:53.685
And the Hardy case, which you'll shall be very familiar
1745
01:35:53.685 --> 01:35:56.245
with, which is dealing with the question of
1746
01:35:57.035 --> 01:36:00.445
outline planning permission, where the,
1747
01:36:00.645 --> 01:36:03.525
I inability at reserve matters stage
1748
01:36:03.785 --> 01:36:08.485
to depart from the principle of the consent, uh,
1749
01:36:08.485 --> 01:36:12.645
means that the local planning authorities' hands are tied
1750
01:36:13.665 --> 01:36:15.365
in having to grant consent
1751
01:36:15.365 --> 01:36:18.125
or reserve matters for the principle where in that case,
1752
01:36:18.345 --> 01:36:20.325
the principle established there was going
1753
01:36:20.325 --> 01:36:23.445
to be an impact on a protected species of bats.
1754
01:36:24.105 --> 01:36:28.125
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And in those circumstances, the principle
1755
01:36:28.125 --> 01:36:30.725
of the development established the principle of harm,
01:36:31.215 --> 01:36:34.285
which could only not, couldn't be regulated at a lay stage.
1757
01:36:35.515 --> 01:36:38.045
It's not even directly applicable to the scenario in here,
1758
01:36:38.385 --> 01:36:41.045
the different regime that operates to control
1759
01:36:41.885 --> 01:36:43.925
entirely the size of the vessel.
1760
01:36:44.345 --> 01:36:48.765
So granting ADCO where
1761
01:36:49.335 --> 01:36:52.805
we've assessed the spatial requirements
1762
01:36:53.025 --> 01:36:54.525
and the effects of the spatial
1763
01:36:55.265 --> 01:36:58.525
infrastructure in all environmental aspects,
1764
01:36:58.575 --> 01:37:01.125
we've taken reasonable worst case scenario for
1765
01:37:01.125 --> 01:37:04.245
that IE the maximum extent of dredging, et cetera.
1766
01:37:04.865 --> 01:37:06.525
But where the safe,
1767
01:37:06.625 --> 01:37:10.685
the navigational risk assessment simulations model
```

```
1768
01:37:10.835 --> 01:37:15.765
what is known now rather than some hypothetical
1769
01:37:16.525 --> 01:37:21.325
ship for which is not known the details
1770
01:37:21.385 --> 01:37:24.605
of and is entirely the right approach,
1771
01:37:25.585 --> 01:37:28.125
and it's controlled by the regime you've applied.
1772
01:37:28.585 --> 01:37:31.485
And I can pretty much guarantee
1773
01:37:32.595 --> 01:37:35.085
that if we had modeled the Delphine
1774
01:37:36.665 --> 01:37:39.205
or a variation of the Delphine, we'd be back in front
1775
01:37:39.205 --> 01:37:42.085
of you now, and they'd be saying, well, you're not proposing
1776
01:37:42.085 --> 01:37:43.285
to run the Delphine.
1777
01:37:43.425 --> 01:37:45.565
Why is that the design ship you are proposing,
1778
01:37:45.865 --> 01:37:47.085
or you are not proposing,
1779
01:37:47.105 --> 01:37:49.525
or you've added in an extra propeller,
1780
01:37:50.065 --> 01:37:51.645
but that ship doesn't exist
1781
01:37:52.265 --> 01:37:55.510
```

```
or it's not reflective of your design ship.
1782
01:37:55.510 --> 01:37:57.010
The precisely the points that Mr.
01:37:57.305 --> 01:37:59.285
PAs identified, um,
1784
01:37:59.695 --> 01:38:02.485
would apply except we would've wasted more time in
1785
01:38:02.805 --> 01:38:05.805
demonstrating another ship, which people then said
1786
01:38:06.465 --> 01:38:07.765
we weren't intending to operate.
1787
01:38:07.785 --> 01:38:09.685
Of course, that was one
1788
01:38:09.685 --> 01:38:13.045
of the objections taken when we modeled the Gin Ling class.
1789
01:38:15.185 --> 01:38:17.685
So all of that strongly points,
01:38:17.945 --> 01:38:20.605
and indeed I say is legally correct to the approach
1791
01:38:20.605 --> 01:38:22.085
that has been adopted here.
1792
01:38:22.945 --> 01:38:27.525
It is prudent, it's safe, it's recognizes the art
1793
01:38:27.525 --> 01:38:29.765
of the known, which of course is one of the principles
1794
01:38:29.765 --> 01:38:31.085
of environmental assessment,
```

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1795
01:38:31.375 --> 01:38:33.165
reasonable scientific knowledge.
1796
01:38:33.745 --> 01:38:35.565
And it doesn't involve speculation.
1797
01:38:35.905 --> 01:38:38.685
But as we've all now established,
1798
01:38:38.845 --> 01:38:40.045
I don't think there's any difference.
1799
01:38:40.825 --> 01:38:43.325
The, the Harbor master, um,
1800
01:38:43.825 --> 01:38:45.565
and the statutory Harbor authority would have
1801
01:38:45.565 --> 01:38:49.565
to be satisfied of a, of a larger vessel is proposed,
1802
01:38:50.585 --> 01:38:52.765
um, as to its safety in due course.
1803
01:38:52.985 --> 01:38:55.445
So, uh, that's my response.
1804
01:38:57.765 --> 01:39:01.795
Thank you. Uh, I think you, so, uh, uh,
1805
01:39:02.315 --> 01:39:02.995
I haven't quite finished
1806
01:39:03.265 --> 01:39:04.395
Yeah. On that particular point.
1807
01:39:04.425 --> 01:39:09.395
Yeah. Um, I still, uh, feel that the information that,
1808
01:39:09.655 --> 01:39:13.875
```

```
uh, I requested I the comparison between t class
1809
01:39:14.215 --> 01:39:18.315
and design is needed, um, not least
01:39:18.315 --> 01:39:20.515
because, uh, as we sit here today,
1811
01:39:20.755 --> 01:39:23.675
'cause we dunno what we're gonna do recommendation wise, uh,
1812
01:39:23.675 --> 01:39:26.115
and we need to be able to cover off as many bases
1813
01:39:26.135 --> 01:39:29.715
as possible in whatever recommendation recommendations we
1814
01:39:29.715 --> 01:39:30.795
make to the Secretary of State.
1815
01:39:31.495 --> 01:39:33.515
Uh, we are increasingly being encouraged
1816
01:39:33.515 --> 01:39:35.715
to make sure we don't leave too many loose ends
1817
01:39:36.095 --> 01:39:37.275
for the decision phase.
1818
01:39:37.975 --> 01:39:41.155
Um, there's been some criticism of, of that, uh, recently.
1819
01:39:41.975 --> 01:39:46.195
Um, but on on the point we,
1820
01:39:46.375 --> 01:39:49.395
we are talking about a possible vessel doesn't yet exist.
1821
01:39:50.215 --> 01:39:53.635
Uh, can anybody assist in terms of how long it might take
```

```
1822
01:39:53.735 --> 01:39:58.155
to design the vessel, then build the vessel, um,
1823
01:39:58.975 --> 01:40:01.435
uh, uh, and then it reach the point
01:40:01.435 --> 01:40:04.795
where it might be operational at this site,
1825
01:40:06.345 --> 01:40:08.195
because I, I would imagine you can't
1826
01:40:08.195 --> 01:40:09.635
Just Locker a ship design
1827
01:40:09.635 --> 01:40:11.635
overnight and then build the thing
1828
01:40:14.365 --> 01:40:15.515
James tro the applicant.
1829
01:40:15.575 --> 01:40:19.115
Sir, that does sound like something which we can provide you
1830
01:40:19.115 --> 01:40:22.235
some information on in writing, um, as, as to,
01:40:22.305 --> 01:40:23.875
because of examples.
1832
01:40:23.935 --> 01:40:27.315
And no doubt Stenner will, will be able
1833
01:40:27.315 --> 01:40:28.795
to assist in that respect as well.
1834
01:40:29.015 --> 01:40:32.155
But yes, and so as to your performer question, yes,
1835
01:40:32.175 --> 01:40:34.235
```

```
of course we can provide that information.
1836
01:40:34.395 --> 01:40:36.915
I, I did say that at the outset,
01:40:36.975 --> 01:40:38.355
but I was just then drawing some
1838
01:40:38.355 --> 01:40:41.155
of the other points together.
1839
01:40:43.315 --> 01:40:45.235
I just wanted to make sure there wasn't a, a loose end.
1840
01:40:45.315 --> 01:40:46.515
I think you indicated that Mr.
1841
01:40:46.705 --> 01:40:49.835
Parr would like to, uh, make a couple
1842
01:40:49.835 --> 01:40:52.195
of comments about the simulations. Is that right?
1843
01:40:53.045 --> 01:40:56.325
I, I ju I'm just gonna, um, offer if, if you were happy,
01:40:56.335 --> 01:40:57.525
offer him that opportunity
1845
01:40:57.525 --> 01:41:01.125
because we then had some additional points raised by IO ot.
1846
01:41:01.495 --> 01:41:03.045
Maybe he hasn't got anything to say, but
1847
01:41:04.275 --> 01:41:05.445
Just a couple of quick ones.
1848
01:41:05.445 --> 01:41:07.845
Um, please, uh, uh, fir firstly, uh, thank you
```

```
1849
01:41:07.845 --> 01:41:09.525
for Captain Bassett for correcting me.
1850
01:41:09.585 --> 01:41:13.085
If while I'm missing or misinformed you earlier on when,
1851
01:41:13.085 --> 01:41:16.565
when I was talking about run one 13, um, his, his input
1852
01:41:16.565 --> 01:41:19.045
during the simulations was also very useful
1853
01:41:19.145 --> 01:41:21.285
and we acknowledge the points he raised, particularly
1854
01:41:21.315 --> 01:41:23.085
regarding the, um, the gusting.
1855
01:41:23.625 --> 01:41:27.285
Um, I do disagree with him in and, uh, Mr.
1856
01:41:27.285 --> 01:41:29.685
Priest and I think we just need to be careful.
1857
01:41:29.865 --> 01:41:32.645
We are not left with the impression that it's easy
1858
01:41:32.665 --> 01:41:35.685
to build a ship model for a row row vessel.
1859
01:41:35.985 --> 01:41:38.965
So we have worked, um, together
1860
01:41:39.105 --> 01:41:43.165
and we might produce a model sketch model
1861
01:41:43.165 --> 01:41:45.205
where we change the parameters of a, of a previous model,
1862
01:41:45.545 --> 01:41:46.725
```

```
but I think we tend to do that
1863
01:41:46.725 --> 01:41:48.125
for a tank or container vessel.
1864
01:41:48.355 --> 01:41:51.365
When you're looking at a a row row ferry, this is a,
1865
01:41:51.485 --> 01:41:54.765
a high spec vessel where the propulsion system,
1866
01:41:55.505 --> 01:41:57.925
the computers which control the propulsion system,
1867
01:41:58.505 --> 01:42:01.365
the bound thrusters, the rudder, the types
1868
01:42:01.365 --> 01:42:05.205
of propellers which are used, are optimized in order
1869
01:42:05.305 --> 01:42:08.925
for the vessel to be highly maneuverable with the eye for
1870
01:42:08.925 --> 01:42:10.965
that vessel to be able to operate independently.
01:42:11.595 --> 01:42:15.765
That kind of vessel is not straightforward to, uh,
1872
01:42:15.875 --> 01:42:19.525
develop from a vessel of a similar size
1873
01:42:20.265 --> 01:42:23.285
or indeed even to interpret what the vessel of a, of, of a,
1874
01:42:23.505 --> 01:42:27.605
the propulsion system a vessel might have in 18 months
1875
01:42:27.605 --> 01:42:29.725
or two years time due to the,
```

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1876
01:42:29.785 --> 01:42:31.285
the changes which are being imposed
1877
01:42:31.345 --> 01:42:32.445
due to emissions, et cetera.
1878
01:42:32.755 --> 01:42:35.965
It's not as straightforward as, uh, as some of the, um,
1879
01:42:35.975 --> 01:42:37.645
interested parties are making out
1880
01:42:39.305 --> 01:42:43.045
By, uh, you used the word independent, I think you meant
1881
01:42:43.045 --> 01:42:45.765
by that, uh, to operate without towage.
1882
01:42:45.765 --> 01:42:46.765
Is that correct?
1883
01:42:47.425 --> 01:42:50.085
Uh, that's, that's why they implement those strategies.
1884
01:42:50.085 --> 01:42:51.085
Yes.
1885
01:42:55.225 --> 01:42:58.385
I think that this is an appropriate time to take a break
1886
01:42:58.485 --> 01:43:00.345
before we move on to another topic.
1887
01:43:00.885 --> 01:43:04.865
Uh, could we, should we say, uh, back at four o'clock?
1888
01:43:05.845 --> 01:43:10.345
Uh, we'll start again at four o'clock. Thank you.
```