

KINSALE AREA DECOMMISSIONING PROJECT KINSALE HEAD PETROLEUM LEASE – OPL 1

APPLICATION TO CONDUCT AN OFFSHORE SURVEY

Kinsale Alpha & Bravo Platforms Shallow Geological Survey

Section 1 – Basic Survey

a.	Name of Operator	PSE Kinsale Energy Ltd
b.	Authorisation (Lease/Licence, PPL Number, Other)	Petroleum Lease OPL 1
C.	Type of Survey and details of work to be undertaken	Geophysical survey, with hull mounted or towed equipment, to determine the sand / chalk boundary around the jacket legs.
d.	Planned date of start of survey and estimated duration	Survey Window – April to September 2020. Estimated duration 1-2 days (excluding possible weather standby).
e.	Location of Survey (latitude and longitude) together with a map on an appropriate scale showing detailed line layout, sampling locations etc as appropriate	Around each platform, four lines, each of approximately 120-160m length, will be surveyed at 30m off each platform face. Refer to Appendix A for Map of Survey Line Plan. The extent of the survey box is defined by the coordinates presented in Appendix B.
f.	Positioning systems to be used for the survey	All records obtained will use the ED50 co-ordinate system for reporting. Positioning systems will include: • Differential Global Positioning System (DGPS) – DGPS Saab R5 or similar • Dynamic Positioning System – Kongsberg cJoy or similar • Ultra-short Baseline (USBL) – Kongsberg HiPAP 502 or similar
g.	Name and Address of contractor performing the survey	TBC

h.	Data and records expected to be obtained from survey	 Navigation— ED50 / WGS84. Bathymetry Survey Outputs — AutoCAD DWG Charts, sub-bottom profile mapping, Geodatabase/ Shapefiles: Seabed Features Sediments / Isopachs 			
i.	i. Type of energy sources to be used;	 Pinger SBP: Knudsen Pinger SBP 3.5kHz/15Hz Chirper SBP: Edgetech 3100 2-16kHz Chirper SBP: Knudsen Chirp 3260 3.5kHz Parametric (non-linear) SBP: Innomar SES2000 Primary: 100kHz Secondary: 2-22kHz (planned = 2kHz-10kHz) 			
	ii. Length and configuration of seismic cables, depth at cables are maintained, speed when towing and what radar reflector supporting tail buoys are to be used;	N/A: No seismic cables will be deployed			
	iii. A risk assessment of the proposed activity in relation to the sensitivities of marine mammals in the area to the proposed operations and outlining specific impact mitigation and monitoring practices that will be applied during the survey in relation to marine mammals.	For risk assessments refer to: Kinsale Alpha and Bravo Platform Shallow Geological Survey - Environmental Impact Assessment Screening/Environmental Risk Report: March 2020 Kinsale Alpha and Bravo Platform Shallow Geological Survey Appropriate Assessment Screening Report: March 2020			
j.	Not Applicable				
k.	Identification of vessel(s) to be used in the survey	Marine vessel proposed will be confirmed later - refer to Appendix C.			
I.	Contact details for those who will supervise survey operations:				
	(1) In the Operator's office	M.V. Murray, PSE Kinsale Energy Limited,			

	Blackrock Cork T12 PW92 Telephone No.: +353 (0) 21 4356 242 Fax No.: +353 (0) 21 4356209 Email Address: MVMurray@kinsale-energy.ie
(2) In the Contractor's office	Mr Piet Vogelzang, Heerema Marine Contractors, Leiden, Netherlands Telephone No. +31 7157 99662 Mobile No. +31 653845521 Email Address: pvogelzang@hmc- heerema.com
(3) On the survey vessel	TBC

Section 2 – Detailed Information on survey to be undertaken

Project Background

PSE Kinsale Energy Limited (Kinsale Energy) is preparing for the decommissioning of the Kinsale Area gas fields and facilities (incorporating the Kinsale Head gas fields and facilities and the Seven Heads gas field and facilities), which are coming to the end of their productive life.

As part of the removal of the Kinsale Alpha and Bravo jackets, some excavation of surficial seabed sediments may be required to access the piles to allow external cutting of the piles below the jacket legs.

The surficial sediments across the Kinsale Head area are shallow, with sub-cropping chalk present near the surface. It is proposed that a survey is undertaken in order to determine the present depth of the surficial sediments at each platform to inform the level of any excavation required. For the purposes of jacket lift, it is only required to determine whether the chalk/seabed sediment contact is within 5m of the seabed.

Site Survey Scope of Work

One of two methods will be employed to conduct the survey, hull mounted or towed equipment. In either case the following preparations will be carried out prior to the survey commencing:

- Mobilization of all equipment and vessel
- Alongside calibration and/or verification of equipment (if this has been conducted on a previous project it may not be required)

Once entering the field, a sound velocity profile will be collected to determine the local speed of sound in water. The survey will then be conducted by sailing lines along each face of the platform. Where towed equipment is utilized the equipment will first be over boarded prior to the sailing of the survey lines.

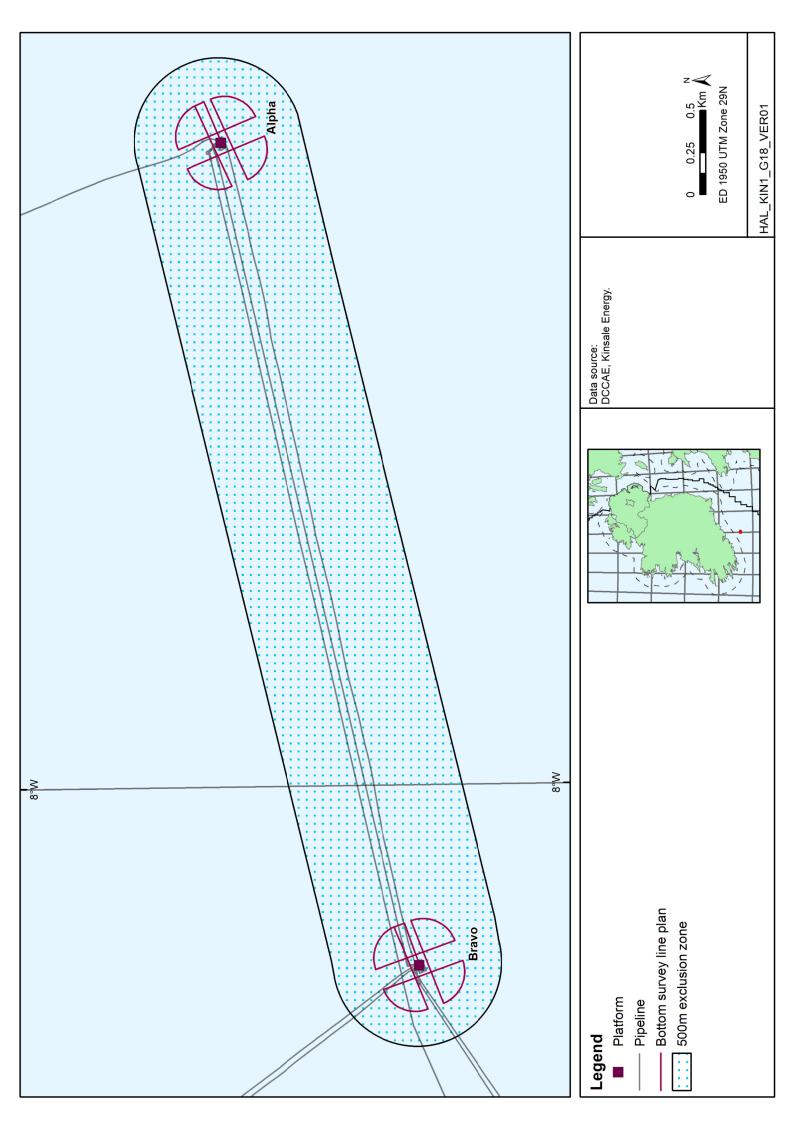
During the survey the data acquisition will be monitored for data quality and coverage, additional lines may be run if required.

Survey Vessel – Details

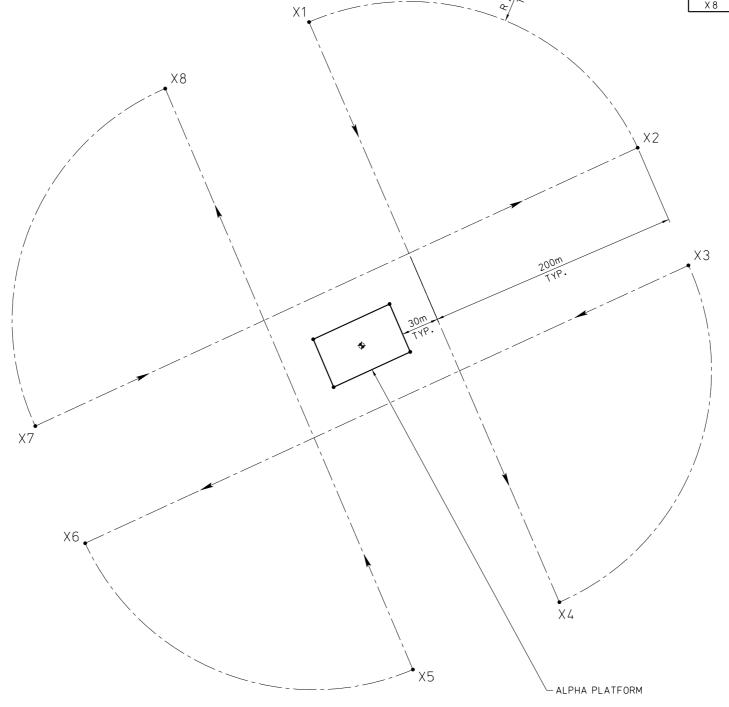
Name	ТВС	
Radio Call Signal	TBC	
Flag, Port of Registry	ТВС	
Classification	TBC	
Built	ТВС	
Maritime Mobile Service Identity (MMSI No.)	TBC	
IMO Ship Identification No.	TBC	
Length (LOA)	ТВС	
Beam	TBC	
Draught	TBC	
Tonnage	TBC	
Owner	Owner: TBC	Operator: TBC
Address	Owner: TBC	Operator: TBC
Contact details (mobile number & e-mail address)	Owner: TBC	Operator: TBC

Appendix A - Survey Location Map

Drawing No.	Drawing Title
HAL_KIN1_G18_VER01	Indicative Survey Lines for KA and KB
CP0528.00000-SK-101-01-01	Alpha Platform Bottom Survey Line Plan
CP0528.00000-SK-201-01-01	Bravo Platform Bottom Survey Line Plan



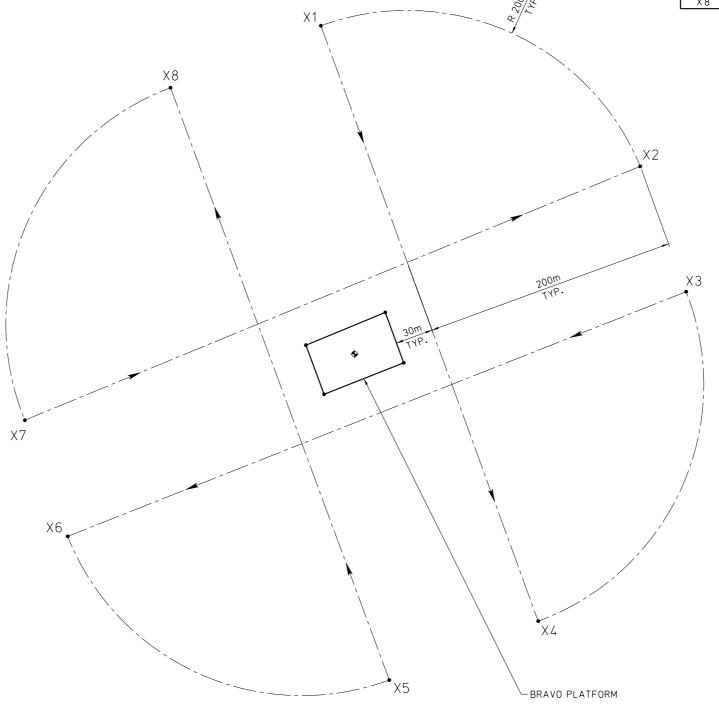
		ED50, UTM 29N							ED50		
POIN	۱T	X (E	ASTIN	G)	ļ ,	Y (NC	RTHIN	G)	LATITUDE	LONGITUDE	
X 1		573	405.5	m	5	691	964.8	m	51°22′23.273″	-07°56′43.588″	
X 2	2	573	666.3	m	5	691	865.0	m	51°22′19.922″	-07°56′30.176″	
Х 3	3	573	706.6	m	5	691	771.7	m	51°22′16.883″	-07°56′28.162″	
X 4	.	573	604.2	m	5	691	504.4	m	51°22′08.280″	-07°56′33.656″	
X 5	5	573	487.9	m	5	691	450.9	m	51°22′06.603″	-07°56′39.709″	
X 6	\exists	573	227.8	m	5	691	551.2	m	51°22′09.970″	-07°56′53.083″	
X 7	7	573	188.2	m	5	691	644.1	m	51°22′12.995″	-07°56′55.062″	
X 8	3 I	573	291 4	m	5	691	912.0	m	51°22′21.617″	-07°56′49.527″	



KINSALE ALPHA & BRAVO EPRD

ALPHA PLATFORM BOTTOM SURVEY LINE PLAN

		ED50	, l	JTN	1 29	N	ED50		
POINT	X (E	ASTIN	G)	Υ	(NO	RTHING	3)	LATITUDE	LONGITUDE
X 1	568	522.9	m	5	690	787.5	m	51°21′47.367″	-08°00′56.883″
X 2	568	776.3	m	5	690	676.0	m	51°21′43.648″	-08°00′43.860″
Х3	568	812.8	m	5	690	576.4	m	51°21′40.408″	-08°00′42.043″
X 4	568	695.4	m	5	690	315.0	m	51°21′31.999″	-08°00′48.294″
X 5	568	577.2	m	5	690	268.2	m	51°21′30.536″	-08°00′54.437″
X 6	568	321.9	m	5	690	382.2	m	51°21′34.336″	-08°01′07.555″
X 7	568	288.0	m	5	690	474.4	m	51°21′37.335″	-08°01′09.244″
Υ 8	568	/ 0 3 6	m	5	600	738 3	m	51021//5 826"	-08001/03 085"



KINSALE ALPHA & BRAVO EPRD

BRAVO PLATFORM BOTTOM SURVEY LINE PLAN

Appendix B - Survey Line Listing

ALPHA PLATFORM							
Point	ED50,	UTM 29N	ED50				
Point	X (EASTING)	Y (NORTHING)	LATITUDE	LONGITUDE			
X1	573 405.5 m	5 691 964.8 m	51°22'23.273"	-07°56'43.588"			
X2	573 666.3 m	5 691 865.0 m	51°22'19.922"	-07°56'30.176"			
Х3	573 706.6 m	5 691 771.7 m	51°22'16.883"	-07°56'28.162"			
X4	573 604.2 m	5 691 504.4 m	51°22'08.280"	-07°56'33.656"			
X5	573 487.9 m	5 691 450.9 m	51°22'06.603"	-07°56'39.709"			
Х6	573 227.8 m	5 691 551.2 m	51°22'09.970"	-07°56'53.083"			
X7	573 188.2 m	5 691 644.1 m	51°22'12.995"	-07°56'55.062"			
X8	573 291.4 m	5 691 912.0 m	51°22'21.617"	-07°56'49.527"			

BRAVO PLATFORM							
Point	ED50,	UTM 29N	ED	50			
Polit	X (EASTING)	Y (NORTHING)	LATITUDE	LONGITUDE			
X1	568 522.9 m	5 690 787.5 m	51°21'47.367"	-08°00'56.883"			
X2	568 776.3 m	5 690 676.0 m	51°21'43.648"	-08°00'43.860"			
Х3	568 812.8 m	5 690 576.4 m	51°21'40.408"	-08°00'42.043"			
X4	568 695.4 m	5 690 315.0 m	51°21'31.999"	-08°00'48.294"			
X5	568 577.2 m	5 690 268.2 m	51°21'30.536"	-08°00'54.437"			
Х6	568 321.9 m	5 690 382.2 m	51°21'34.336"	-08°01'07.555"			
X7	568 288.0 m	5 690 474.4 m	51°21'37.335"	-08°01'09.244"			
X8	568 403.6 m	5 690 738.3 m	51°21'45.826"	-08°01'03.085"			

Appendix C – Vessel Data Sheet

TBC once vessel confirmed