



**OFFSHORE CONSTRUCTION SPECIALISTS**

**JACKET LAUNCH MANAGEMENT  
PRE-QUALIFICATION DOCUMENT**



# **JACKET LAUNCH MANAGEMENT PRE-QUALIFICATION DOCUMENT**

**Offshore Construction Specialists Pte Ltd (OCS)**

**36 Kian Teck Road,**

**Singapore 628781**

**Tel: +65 6898-0210**

**Fax: +65 6898-0209**

**Web: <http://www.offshore-ocs.com>**

## **Contact Information**

### **Contact:**




Keith Jackson  
William Wijaya  
Loke Kah Poh  
Rakul Remanan  
Ivan Chai  
Fery Wijaya  
Henry Chuy  
James Santoso

### **Company Position:**

Managing and Technical Director  
Project Manager  
Project Manager  
Engineering Director  
Construction Manager  
Construction Manager  
Subcontracts & Procurement Manager  
Tendering & Proposal Engineer



### **Email Address:**

[keith.jackson@offshore-ocs.com](mailto:keith.jackson@offshore-ocs.com)  
[william.wijaya@offshore-ocs.com](mailto:william.wijaya@offshore-ocs.com)  
[kploke@offshore-ocs.com](mailto:kploke@offshore-ocs.com)  
[rakulr@offshore-ocs.com](mailto:rakulr@offshore-ocs.com)  
[ivan.chai@offshore-ocs.com](mailto:ivan.chai@offshore-ocs.com)  
[fery@offshore-ocs.com](mailto:fery@offshore-ocs.com)  
[chuy.chunfei@offshore-ocs.com](mailto:chuy.chunfei@offshore-ocs.com)  
[james.santoso@offshore-ocs.com](mailto:james.santoso@offshore-ocs.com)

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## 1.0 INTRODUCTION

Offshore Construction Specialists (OCS) was formed in 2007 from a core group of experienced marine construction engineers with an extensive track record working with major contractors.

The company provides construction management, engineering and strategic support equipment services primarily to the offshore oil and gas sector focusing on the installation of pipelines, platforms, tanker moorings and related facilities. In addition to engineering, OCS also provides turnkey services for pipeline burial, pipeline pre-commissioning & drying, flexible flow line installation and umbilical installation on a subcontract basis to marine contractors.

The company has grown steadily since incorporation and now employs 60 personnel of whom over 30 are civil/structural and mechanical engineers along with an equipment group comprising of mechanics and technicians to operate in-house developed equipment. The engineers and technician work hand in hand to ensure all projects are properly engineered and operationally practical

Our personnel are experienced and all came from the same background as the main marine contractor. We help the major marine contractor plan the work such that the jacket launch activity has the least impact on the vessel construction operations. We are proactive in highlighting potential issues and ensuring both parties win. OCS understands the importance of getting the job done safely and efficiently to minimise operational costs for all concerned.



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## 1.1 JACKET LAUNCH EXPERIENCE

OCS personnel have completed the following major jacket Launch projects for different customers;

No.	Client	Operator	Project	Jacket Descrip.	Jacket Weight (mT)	Launch Barge Used	Year Completed
1	Conoco Philips, Australia	Conoco Philips, Australia	Bayu Undan	DPP	9900	Int 650	2003
2	Conoco Philips	Conoco Philips	Bayu Undan	CUP	9400	Int 650	2003
3	Talisman	Talisman	PM3	BR-E	2350	Int403	2005
4	COOEC	CNOOC	Panyu	PY30-1	20,000	Int650	2006
5	Conoco Philips, Indonesia	Conoco Philips, Indonesia	Kerisi	CPP	3700	CBL-102	2006
6	CLJOC	CLJOC	SuTuVang	CPP	4100	CBL102	2008
7	Conoco Philips, Indonesia	Conoco Philips, Indonesia	North Belut	CPP	5700	S45	2008
8	L&T/ Sapura	ONGC	MHN	MNP CPP	13000	S45	2011
9	VSP	PVEP	DaiHung2	DH2	4500	VSP-05	2011
10	L&T	PTTEP	Zawtika (1A)	WP1	7300	SLB1	2012
11	L&T	PTTEP	Zawtika (1A)	WP1	7400	H542	2012
12	L&T	PTTEP	Zawtika (1A)	WP1	7800	LBII	2012
13	VSP	Lamson JOC	ThangLong DongDo	TL WP	1890	VSP-05	2013
14	VSP	Lamson JOC	ThangLong DongDo	DD WP	1900	VSP-05	2013
15	VSP	VSP	Thien Ung	BKTNG	6400	Holmen Atlantic	2015
16	VSP	CLJOC	STT-PiP	STT CPP	2450	VSP-05	2015
17	COOEC	PTTEP	Zawtika (1B)	WP4	6500	HYSY229	2015
18	COOEC	PTTEP	Zawtika (1B)	WP5	5520	HYSY229	2016
19	COOEC	PTTEP	Zawtika (1B)	WP6	6520	HYSY229	2016
20	COOEC	PTTEP	Zawtika (1B)	WP7	7684	HYSY229	2016
21	MEI / PTSC	IGP	SVDN	WHP	6200	Holmen Pacific	2021

OCS is equipped to handle large projects or discrete project elements depending on the specific needs of the customer. During the preparation for jacket launch or any offshore work the safety of personnel, equipment and environment plays a vital role in the success of a project and as such, HAZID's shall be conducted prior to any operations. These meetings are attended by key engineers and supervisors and all potential risks are identified and mitigation measures put in place to ensure they are as low as reasonably practicable.

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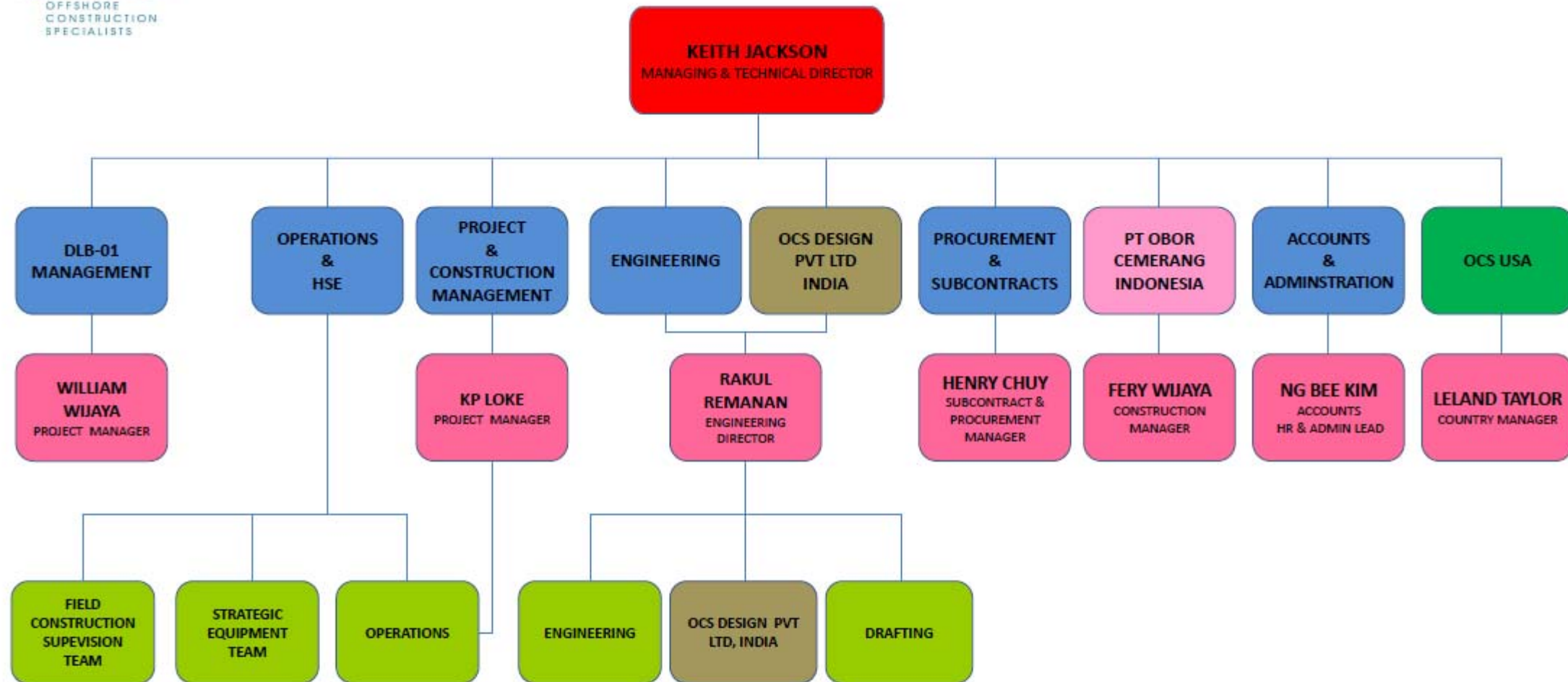
## 2.0 ORGANISATION CHART

### 2.1 KEY PERSONNEL CONTACTS

Keith Jackson	Managing and Technical Director	<a href="mailto:keith.jackson@offshore-ocs.com">keith.jackson@offshore-ocs.com</a>
William Wijaya	Project Manager	<a href="mailto:william.wijaya@offshore-ocs.com">william.wijaya@offshore-ocs.com</a>
Loke Kah Poh	Project Manager	<a href="mailto:kploke@offshore-ocs.com">kploke@offshore-ocs.com</a>
Rakul Remanan	Engineering Director	<a href="mailto:rakulr@offshore-ocs.com">rakulr@offshore-ocs.com</a>
Ivan Chai	Construction Manager	<a href="mailto:ivan.chai@offshore-ocs.com">ivan.chai@offshore-ocs.com</a>
Fery Wijaya	Construction Manager	<a href="mailto:fery@offshore-ocs.com">fery@offshore-ocs.com</a>
Henry Chuy	Subcontracts & Procurement Manager	<a href="mailto:chuy.chunfei@offshore-ocs.com">chuy.chunfei@offshore-ocs.com</a>
James Santoso	Tendering & Proposal Engineer	<a href="mailto:james.santoso@offshore-ocs.com">james.santoso@offshore-ocs.com</a>

Refer to the next page for OCS Organisation Chart

## LIST OF KEY OF PERSONNEL

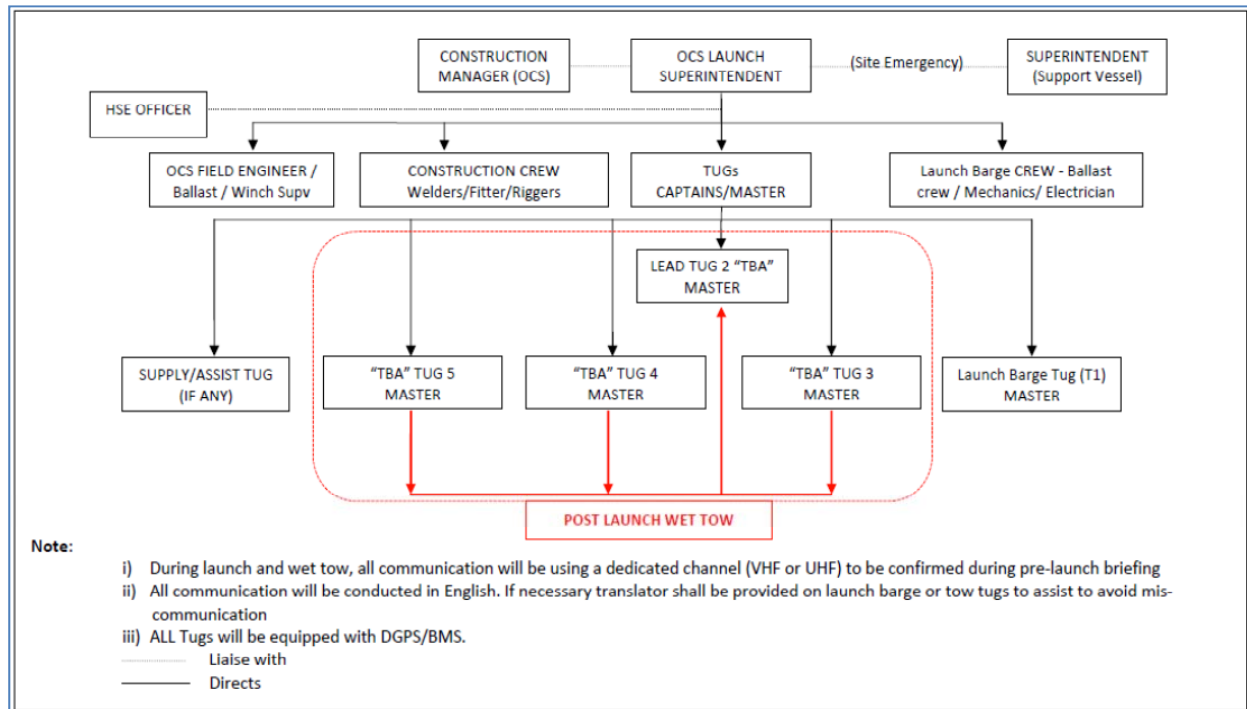


### LEGEND

- Singapore Head Office
- India Office
- Indonesia Office
- USA Office

Updated as of Aug 2021

### 3.0 TYPICAL LAUNCH BARGE ORGANISATION CHART






Typically, OCS personnel requirements for 24 hour operations specifically for launching activity are as follows:

- 1 x Launching Superintendent
- 1 X Construction Manager
- 2 x Field Engineer
- 1 x Winch Supervisor
- 1 x Ballast/Equipment Supervisor

All other support personnel and equipment are normally provided by main contractor. OCS can provide additional personnel as required.

Where specifically required, OCS can provide an option for provision of the entire support/launch spread. Customer requirements for this option can be discussed on a case by case basis.

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## 4.0 PLANNING AND EXECUTION

OCS will cover the following scope areas during planning and execution of jacket launch projects.

### 4.1 Launch Scope

OCS will review the scope of work taking particular note of the following:

- Jacket weight, dimension and physical constraints
- Launch Barge capabilities and constraints
- Launch Engineering review (if launch engineering not performed by OCS)
- Towing requirement review (if tow analysis is not performed by OCS)
- Launch equipment requirement/specification
- Ballasting configurations.
- Launch site verification
- Execution methodology

### 4.2 Equipment Layout, preparation and Rig up

Based on a review of the scope of work and the other critical parameters listed in 4.1 above OCS will prepare a most appropriate launch equipment layout for the work. In most cases these equipment are available and provided by main contractor which OCS will review their suitability and proposes checks and verification to ensure the serviceability of these equipment.

Based on the launch equipment assessment, OCS will provide a layout of the launch equipment on the barge assigned by the client. In certain cases OCS can provide the launch barge/spread on which to base the required equipment for the launch operation.

These layout will then be basis for the launch barge rig up.

### 4.3 Equipment Testing

OCS will ensure that all launching support equipment (Rocker arms, winches including power packs, ballast system, push out jacks, etc) is fully tested before leaving the rig up yard. Client representatives will be invited to witness the testing programme.



### 4.4 Load out

OCS personnel will be present during jacket load out operation to ensure that all aspect of the load out that affects the launch will be monitored and any problem observed can be rectified immediately and escalation of issues impacting the launch will be avoided.

### 4.5 Execution Procedures

OCS will provide project specific execution procedures for every project which address all elements of the jacket launching project. These procedures must be approved by the client prior to offshore operation. OCS will ensure that the procedures address all constraints posed by specific project site conditions.



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#### 4.6 HAZID

Specific HAZID and risk identification sessions will be conducted to identify and propose mitigation measures for site hazards which may be posed by operations. This will be conducted as early as possible; otherwise, the latest to be conducted will be just before launch operation.

#### 4.7 Personnel

OCS will provide a team of qualified personnel to prepare and supervise the work at the rig up yard as well as launch execution as site. Key personnel will be the same for both who supervise the rig up and testing of the equipment on the launch barge and launch activity.

The OCS typical launch management organization chart as shown in section 3.

## 5.0 OCS CLIENT BASE

OCS has built up a significant customer base during fourteen (14) years of operations. OCS past and present clients are listed below. References can be provided on request:

NO	CLIENT NAME
1	Asia Petroleum Developments / Salamander Energy (Indonesia)
2	Bumi Amarda
3	Chevron (Thailand)
4	Clough Sapura JV (Australia)
5	DOF Subsea.
6	EMAS (Singapore)
7	Franklin Offshore (Singapore)
8	Galoc ( Philippines)
9	GFI (Thailand)
10	Global Industries (Malaysia)/Technip
11	Hako Offshore (Singapore)
12	Heerema (Netherlands)
13	HESS (Indonesia)
14	Kangean Energy (Indonesia)
15	Larsen & Toubro (Malaysia/ India)
16	M3 Energy (Malaysia)
17	McConnell Dowell CCC JV (Australia)
18	MRTS Engineering Ltd (Russia)
19	Newfield Peninsula Malaysia (Malaysia)
20	Nippon Steel (Indonesia)
21	NorCE (Singapore)
22	NuCoastal (Thailand)
23	Offshore Marine Contractors
24	Origin Energy (Australia)
25	PT Timas Suplindo (Indonesia)
26	Sapura Acergy (Malaysia)
27	Sarku (Malaysia)
28	Sea Drill (Singapore)
29	Star Petroleum (Indonesia)
30	Swiber (Singapore)
31	TLO Sapura Crest (Malaysia)
32	Vietsovetro (VSP) (Vietnam)
33	PTSC M & C
34	MEINDO Elang Indah

### 6.0 JACKET LAUNCH - TRACK RECORD

#### SUBJECT: JACKET LAUNCH (Bayu Undan Jackets Launch) via J Ray McDermott Project Details:-

Bayu Undan is a gas/condensate field in the Timor Sea located 500km North West of Darwin, Australia and 300km South East of Dili in East Timor. The water depth is approximately 80m. The gas recycle project involves stripping of condensate and LPG liquids from the wellstream for storage and regular offloading and re-injecting dry gas back into the reservoir for possible future export.

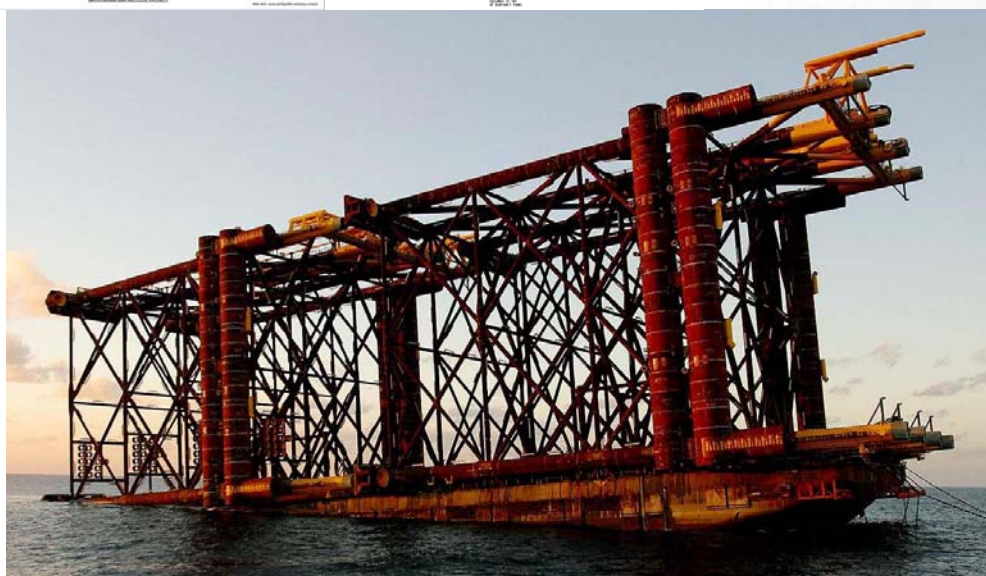
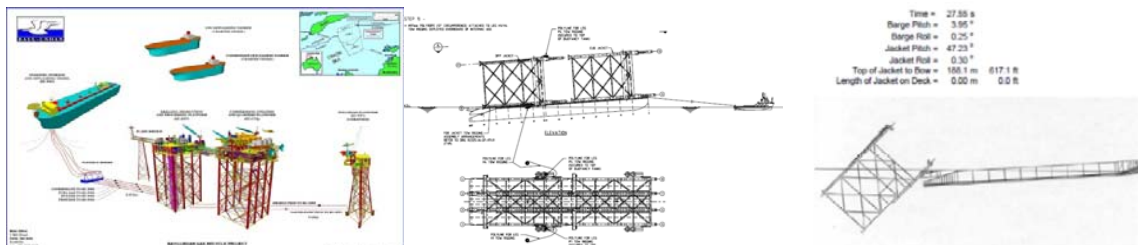
2 jackets were launched for this project; Wellhead Platform 1 (WP1) and

#### Structure Information:-

Description	DPP	CUQ
Jacket Type	8-legged (Drilled and grouted skirt piles)	8-legged (Drilled and grouted skirt piles)
Dimension	54mx48m jacket top 54mx48m jacket bottom Height ~90m	54mx48m jacket top 54mx48m jacket bottom Height ~90m
Jacket Weight	9,870mT (Base weight)	9410mT
Water Depth	79m	79m
Launch barge	Both jackets were loaded out and launch from single Intermac 650	
Jacket installation methodology	Launch, self Upending, towed and lifted set down	Launch, self Upending, towed and lifted set down

#### Project Scope:-

This scope was managed by OCS personnel prior to incorporation of OCS, to illustrate the individuals' experience of our personnel involved. Jacket launch was completed in 2003



### SUBJECT: JACKET LAUNCH (PM3 BR-E Jacket Launch) via J Ray McDermott

#### Project Details:-

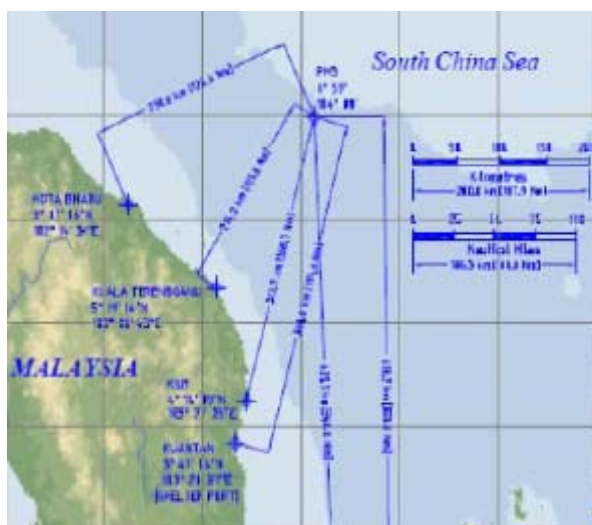
Petroleum Technical Services Company, hereinafter referred to as "PTSC", is developing Block PM3 commercial arrangement area Phase 4 for Talisman Malaysia Ltd. Barmada McDermott Sdn. Bhd, hereinafter referred to as "BMD", have been subcontracted the offshore installation work scope for BRE Launch Jacket and appurtenances; BRE Vent tripod and appurtenances; one (1) BRELaunch Jacket to BRD (Existing platform) interconnecting bridge; BRE to Vent Tripod Interconnecting bridge; BRE Vent Stack and Flare Tower. The work is to be performed in the Malaysia-Vietnam Commercial Arrangement Area (CAA), approximately 170Nm northeast of Kemaman Supply Base (KSB) in Trengganu and 125Nm east of Kota Bharu in Kelantan in their Phase 4.

#### Structure Information:-

Jacket Type: 8-legged jacket pile through legs,  
Dimension 56m x 544m x 32m  
Jacket Weight: 2275 mT (factored weight)  
Water Depth:- 54 m (MSL)  
Launch barge:- Intermac 403 (91.4m x 30.4m x 7.62m)  
Launch and crane assist upending

#### Project Scope:-

This scope was managed by OCS personnel prior to incorporation of OCS, to illustrate the individuals' experience of our personnel involved. Launch completed 2005.





### SUBJECT: JACKET LAUNCH (COOEC PANYU 30-1 Jacket) via J Ray McDermott

#### Project Details:-

CNOOC was developing the Panyu/Huizhou Gas Development Project and the installation of Panyu 30-1 platform. The installation is contracted to COOEC.

#### Structure Information:-

Jacket Type: 8-legged jacket c/w buoyancy tanks, no main piles, 16 vertical skirt piles

Jacket Weight: 20000 mT (factored weight)

Water Depth:- 200 m (MSL) Launch barge:- I-650 (650' x 170' x 40')

#### Project Scope:-

This scope was managed by OCS personnel prior to incorporation of OCS, to illustrate the individuals experience of the personnel involved. The scope was a charter hire of the Intermac 650 to launch the Panyu 30-1 jacket. The scope entails managing the Int 650 during the charter hire from delivery to rig up till launch, recovery and re-delivery with personnel on board during these operations, as well as informally reviewing the launch analysis to ensure the safety and integrity of the launch barge is not compromise. Launch was completed in 2006.



### SUBJECT: JACKET LAUNCH (CuuLong STV Jacket Launch) via J Ray McDermott

#### Project Details:-

CuuLong Joint Operating Company (CLIOC) embarked on the development of the SuTuComplex located in about 53m water depth in Block 15-1 offshore Vietnam. The SuTuVang Field consists of a Central Procession Platform with pipelines and tie-in to the existing WHP-A.

#### Structure Information:-

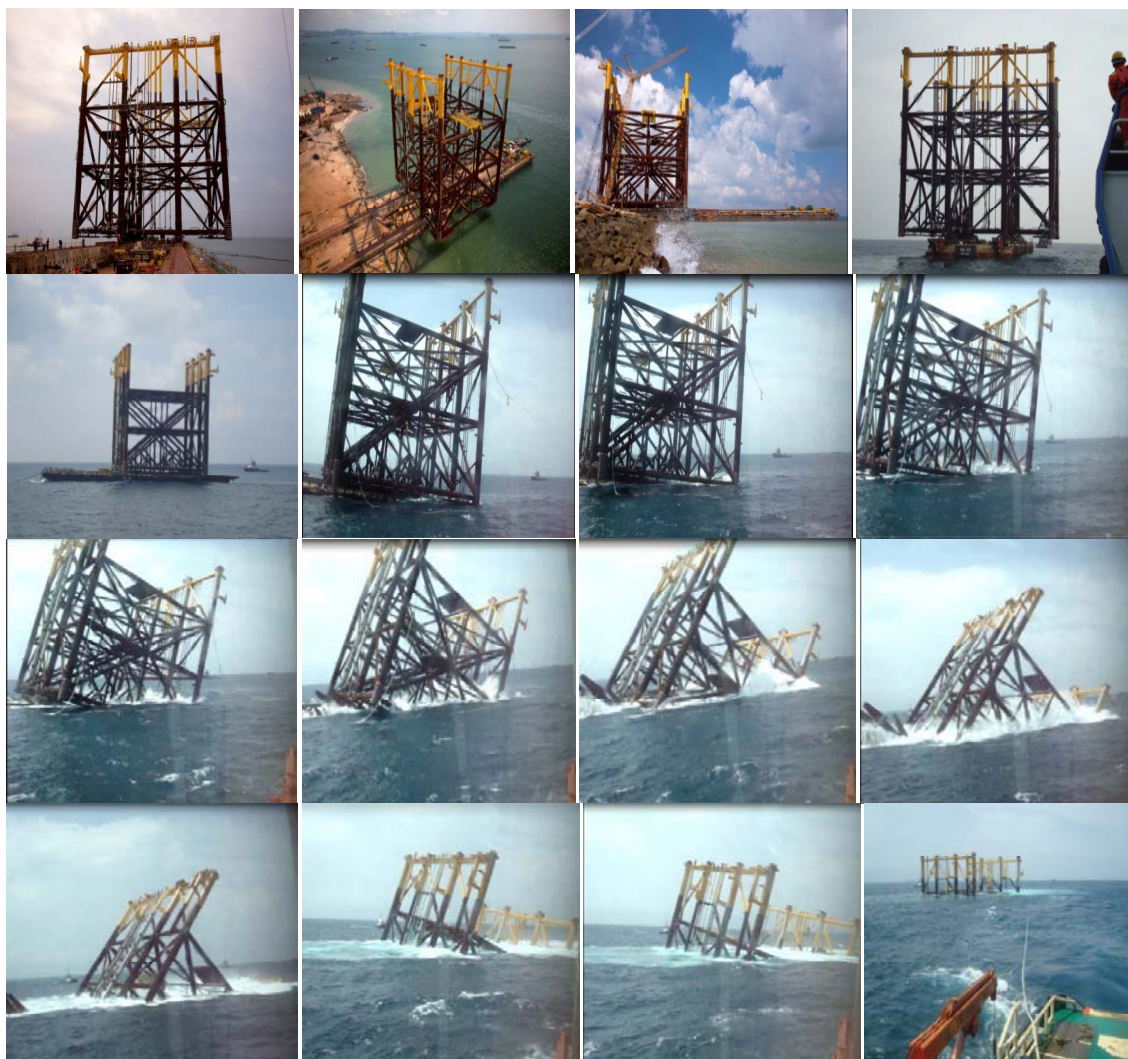
Jacket Type: 8-legged jacket (Vertical launch)

Dimension: 58mx58mx60.1m (LxWxH) Jacket Weight: 4074 mT (factored weight)



Water Depth:- 53 m (MSL) Launch barge:- CB-102 (112.7m x 30.48m x 7.3m)

#### Project Scope:-

This scope was managed by OCS personnel prior to incorporation of OCS, to illustrate the individuals' experience of the personnel involved. The scope was for the installation for STV CPP complex which entails STV platform and associated pipeline using the construction barge DB30. The jacket was launched using CBL102. Jacket launch was completed in July 2008 for subsequent STV Topside floatover installation





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## SUBJECT: JACKET LAUNCH (NORTH BELUT NBCPP Jacket Launch) via COPI

### Project Details:-

Conoco Phillips Indonesia (COP) is undertaking the development of the North Belut Field, located in Block B of the Indonesian sector of the Natuna Sea. The North Belut field is located approximately 60km East North-East of the Belanak FPSO installed on the Belanak Field. The North Belut development comprises of:

- a) 1 Centre Processing Platform (North Belut Central Processing Platform (NBCPP))
- b) 2 Wellhead Jackets and Platforms - Wellhead Platform C (WHP-C) and Wellhead Platform D (WHP-D).

NBCPP will be an 8-legged jacket platform, whilst WHP-C and WHP-D will be four piles 20-slots platforms. WHP-D will be

### Structure Information:-

Jacket Type: 8-legged jacket pile through legs,

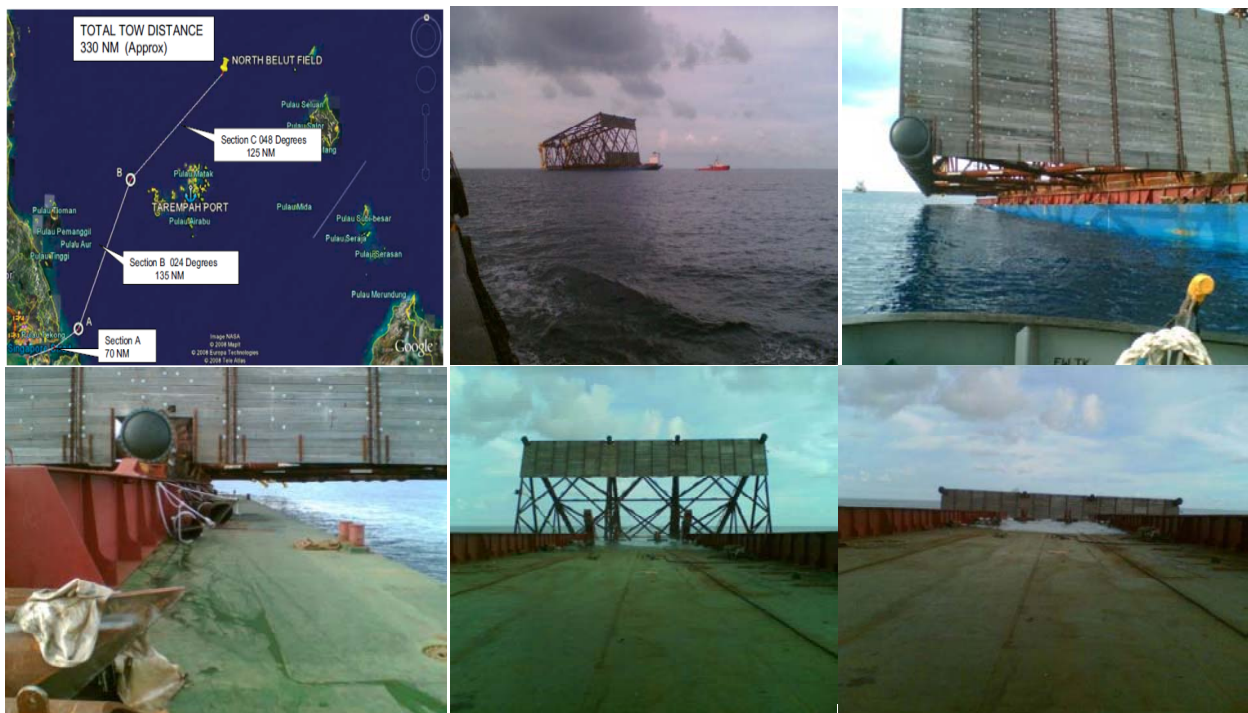
Dimension 84m x 24m x 52m Jacket Weight: 5700 mT (factored weight)

Water Depth:- 51 m (MSL)

Launch barge:- SLB1 (140m x 36.58m x 7.62m) Launch and crane

### Project Scope:-

OCS scope for this project is to second a Client Site Representative to Conoco Phillips Indonesia North Belut project to oversee the installation engineering, rig up, installation procedure preparation, site coordination/supervision for the CPP jacket and CPP Deck Installation. Jacket launch completed in 2008



### SUBJECT: JACKET LAUNCH (ONGC MNP Jacket Launch) via TLO/SAPURA

#### Project Details:-

Mumbai (or Bombay) High field is India's largest offshore oil and gas field and is about 75 km. long and 25 km. wide and is divided into the north and south blocks and has been in operation by the Oil and Natural Gas Corporation Limited (ONGC) since 1974. Due to a major accident in July 2005, the entire production from MHN field had to be stopped. To restore the production from MHN field, a new "MNP Process Complex" consisting of MNP Oil and Gas Process Platform, having oil & gas separation & processing facilities ("MNP"), bridge connected with existing MNW platform & new Living Quarters Platform (MLQ), along with associated pipelines and requisite flare jackets (MNF1 and MNF2).

#### Structure Information:-

Jacket Type: 8-legged jacket c/w preinstalled riser & buoyancy tanks with no main pile through legs, 20 battered skirt piles

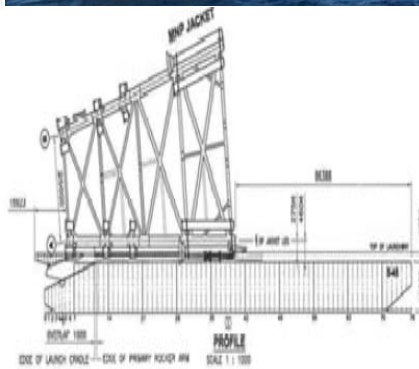
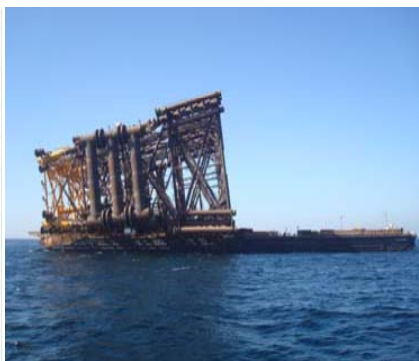
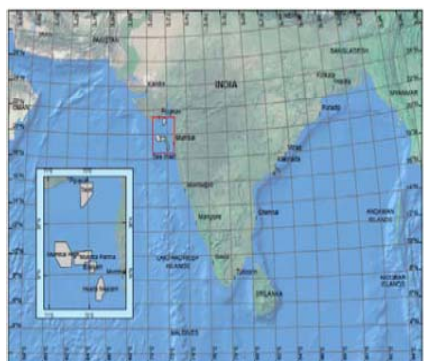
Jacket Weight: 13230 mT (factored weight) Incl. pre-installed risers & buoyancy tanks

Water Depth:- 74.5 m (MSL)

Launch barge:- S-45 (180m x 42m x 11.5m)

#### Project Scope:-

OCS scope for this project is to second an Installation Manager to TLO/Sapura Crest to oversee the installation engineering, rig up, installation procedure preparation, site coordination/supervision for the installation of MNP (13000mT launch jacket using S45), MLQ (2250mT lifted jacket) and 2 tripods (MNF1 and MNF2) for ONGC **Mumbai High North** Process Platform & LQ Development 2010/2011, using LTS3000 – Jacket launch completed in Feb 2011.





### SUBJECT: JACKET LAUNCH MANAGEMENT (VSP DAI HUNG 2 JACKET)

#### Project Details:-

The Dai Hung oil field located in Block 05.1A, approximately 250km from the coastline of the South Vietnam, and is situated in a water depth of 110 m (average). It has been operated by PVEP since 2003. Phase II of the Development of the Dai Hung Oil Field, includes the installation of new fixed wellhead platform (WHP-DH2) with 12 slots for drilling.

#### Structure Information:-

Jacket Type:- 4-legged, 8 vertical skirt pile  
Jacket Weight:- 4126.70mT (factored weight)  
Water Depth:- 111.42m (MSL)  
Launch barge:- VSP-05 (109.8m x 32m x 7m)

#### Project Scope:-

OCS scope for this project is to provide jacket launch management, which included barge rig up preparation and coordination, Review Launch Analysis, jacket Launch procedure preparation and offshore/site launch supervision and management. Jacket launch completed in May 2011



## **SUBJECT : JACKET LAUNCH MANAGEMENT (L&T ZAWTIKA WP1/WP2/WP3 JACKETS)**

### **Project Details:-**

The Zawtika Project is a gas field development project located in the Gulf of Moattama, Myanmar. The development area covers Block M9 and small portion of Block M11, owned by Myanmar Oil & Gas Enterprise (MOGE). The field lies approximately 300 km south of Yangon and 290 km west of Tavoy on the Myanmar coast and the average water depth is approximately 135-160 meters (LAT). Zawtika Development Phase 1A consists of ZPQ (Processing platform integrated with Living Quarter module), a bridged-link wellhead platform WP1 located at Zawtika-5, two remote wellhead platforms WP2 and WP3, associated intra-field sealines, offshore and onshore gas export to connect to the PTT gas pipeline at Ban-I-Tong, Onshore Operating Center (ZOC), Block Valve #1 and #2 (ZBV1 and ZBV2), and Metering Station (ZMS).

### **Structure Information:-**

The 3 WP Wellhead Platforms information are described below:

#### **1. WP1 Jacket**

- Four-legged jacket with 8 skirt piles driven through 8 battered skirt pile sleeves
- Factored Weight of the Jacket: 6685mT.
- Water Depth 137.5m (LAT)
- launch barge – SLB1 (140m x 36.58m x 7.62m) Kruze

#### **2. WP2 Jacket**

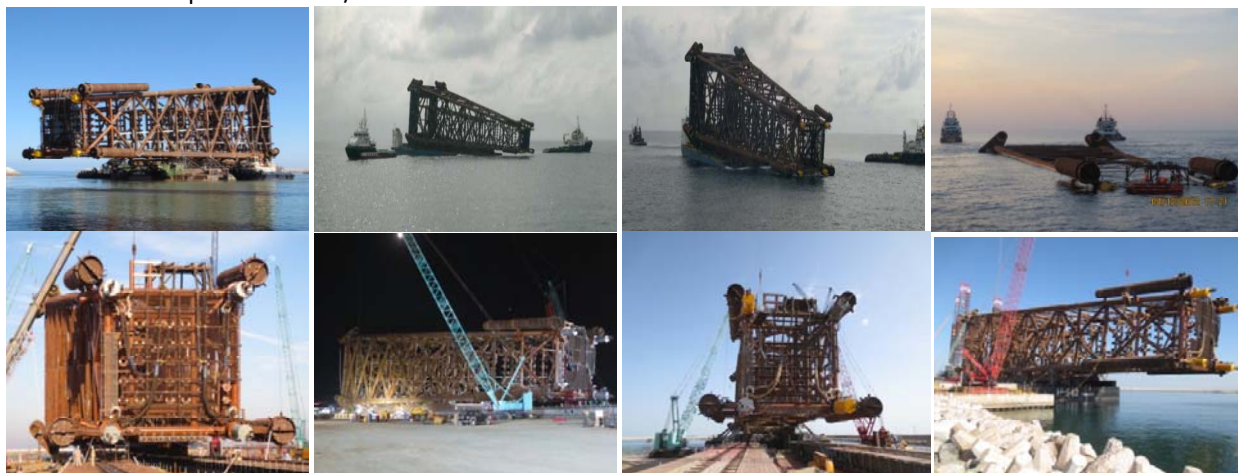
- Four-legged jacket with 8 skirt piles driven through 8 battered skirt pile sleeves
- Factored Weight of the Jacket: 8085mT.
- Water Depth 159.2m (LAT)
- launch barge – H542 (165m x 42.0m x 10.7m) Heerema

#### **3. WP3 Jacket**

- Four-legged jacket with 8 skirt piles driven through 8 battered skirt pile sleeves
- Factored Weight of the Jacket: 6901 mT.
- Water Depth 138.8m (LAT)
- launch barge – LB-II (130m x 40m x 9m) NPCC

### **Project Scope:-**

OCS scope for this project is to provide a project management and construction team for the whole Zawtika Phase 1A project which includes launch management for 3 jackets, which included barge rig up preparation and coordination, review Launch Analysis, jacket Launch procedure preparation and offshore/site launch supervision and management. Jacket Launch completed in 2012/2013





## **SUBJECT: JACKET LAUNCH MANAGEMENT (THANG LONG DONG DO DEVELOPMENT)**

### **Project Details:-**

Thang Long is geographically located in the south – western part of Block 01/97 and 02/97 in the Cuu Long basin, approximately 120km east of Vung Tau, Vietnam, 26 km south of Ruby field and 35km northeast of Su Tu Vang Field . The oil was discovered by 02/97-TL-1X (May,2007) in the Lower Miocene and Lower Oligocene sandstones . Dong Do is approximated located 5km southeast of Thang Long. The oil was discovered by 02/97-DD-1X (May 2007). Water depths across the block range from 60m to 70m. There were total 06 wells drilled in Thang Long-Dong Do field

### **Structure Information:-**

#### **TL Jacket information:**

Jacket Type: 4-legged jacket no skirt pile  
Jacket height: 75.1m height .  
Jacket Weight: 1891.6 MT,  
Piles: four (4) piles with 1524mm O.D. Water depth 68m



#### **DD jacket launch information:**

Jacket Type: 4-legged no skirt pile  
Jacket Weight: 1906.1 MT  
Water Depth: 64.9m (MSL)  
Launch barge: VSP-05 (109.8m x 32m x 7m)

### **Project Scope:**

OCS scope for this project is to provide jacket launch management, which included barge rig up preparation and coordination, Review Launch Analysis, jacket Launch procedure preparation and offshore/site launch supervision and management. Launches completed May 2013.



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## **SUBJECT: JACKET LAUNCH MANAGEMENT (SU TU THANG DEVELOPMENT)**

### **Project Details:-**

The Su Tu Trang (White Lion) field is located at the South end of Module 15-1 (approximately 20km's South of STV) in approximately 56 meters of water. The Module 15-1 contract area is located in the Cuu Long Basin offshore southern Vietnam, 180 kilometers southeast of Ho Chi Minh City.

The development of Su Tu Trang started in September 2012 with the Long term Production Testing Phase (LTPTP). It consists of a remote, unmanned wellhead platform (WHP-C) that produces to and is controlled from the Su Tu Vang CPP. The platform has the capability of handling up to 4 high pressure gas wells. Present production is 6,000 BPD of condensates and 50 MMSCFD of gas and all the STT produced fluids are exported for processing to the Su Tu Vang CPP via a multiphase 12" pipeline.

### **Structure Information:-**

Jacket Type: 4-legged jacket

Jacket height: 64m.

Jacket Weight: 2500 MT,

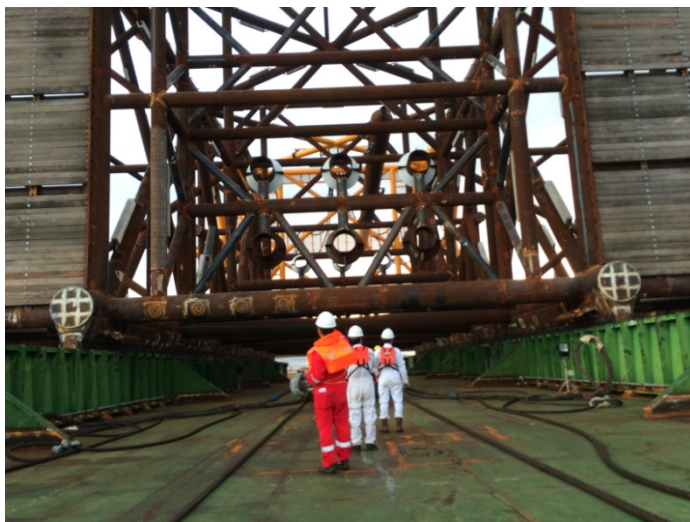
Piles: four (4) piles with 1524mm O.D. through jacket leg

Water depth 56m

Launch barge: VSP-05 (109.8m x 32m x 7m)

### **Project Scope:**

OCS scope for this project is to provide jacket launch management, which included barge rig up preparation and coordination, Review Launch Analysis, jacket Launch procedure preparation and offshore/site launch supervision and management. Launches completed May 2015.





### SUBJECT: JACKET LAUNCH MANAGEMENT (THIEN UNG DEVELOPMENT)

#### Project Details:-

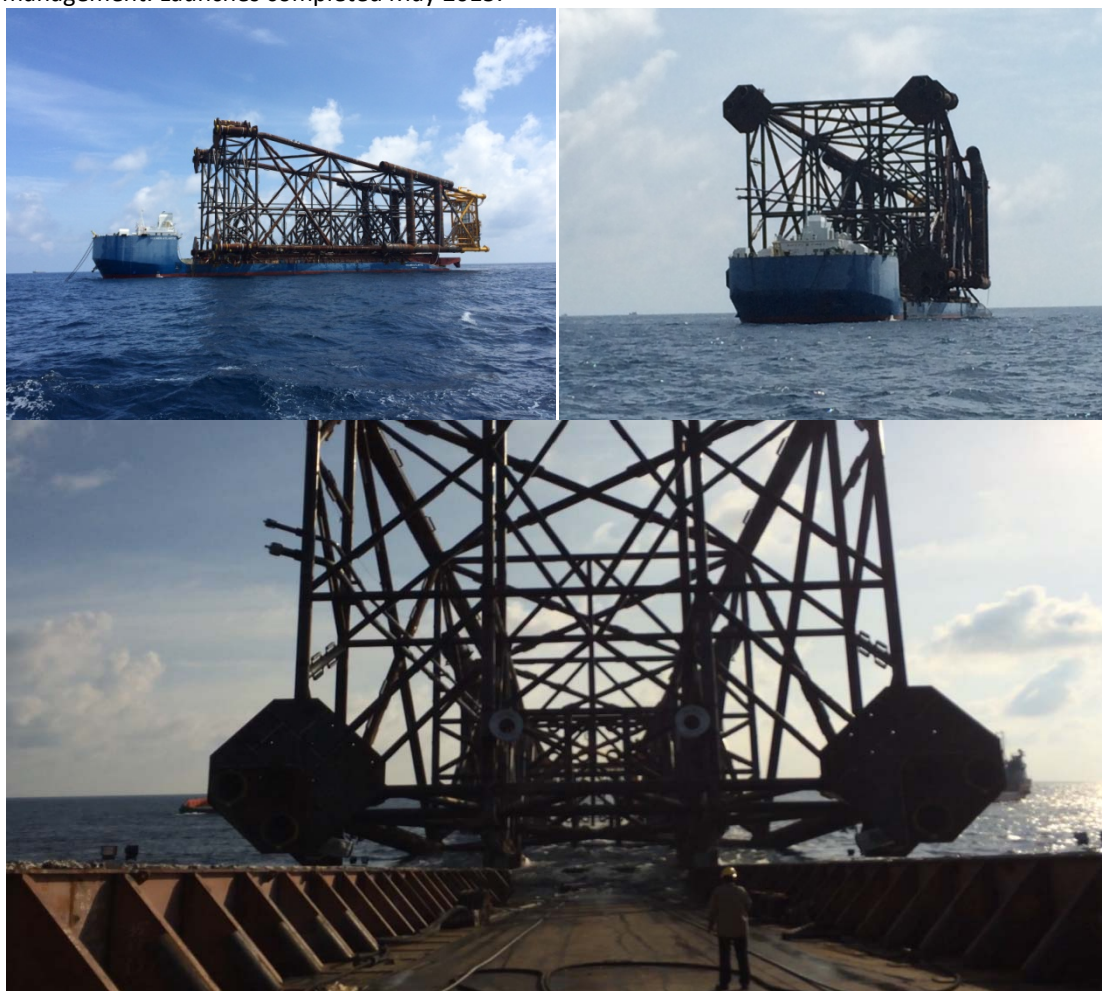
The Thien Ung field is located in the middle part of Block 04.3 in the Nam Con Son Basin, offshore the Socialist Republic of Vietnam, approximately 15 km of Dai Hung field and approximately 270 km southeast of Vung Tau. The block 04.3 covers an area of approximately 2600 km<sup>2</sup>. The Thien Ung field is including its 2 structural part. Thien Ung structure discovery was made in 2004 with the 04.3-TU-1X well. Two subsequent appraisal wells (04.3-TU-2X and 04.3-TU-3X), drilled and tested respectively, delineated the field.

#### Structure Information:-

Jacket Type: 4-legged jacket with 2 skirt pile/leg  
Jacket dimension at top 16x x 25m  
Jacket Dimension at bottom 42m x 44m.  
Jacket height: 128m  
Jacket Weight: 6400 MT,  
Piles: Eight (8) piles with 2134mm O.D. through skirt guide  
Water depth 120.5m  
Launch barge: Holmen Atlantic, Launch and self upending

#### Project Scope:

OCS scope for this project is to provide jacket launch management, which included barge rig up preparation and coordination, Review Launch Analysis, jacket Launch procedure preparation and offshore/site launch supervision and management. Launches completed May 2015.



**SUBJECT: JACKET LAUNCH (Zawtika 1B Jacket Launches) COOEC**

**Project Details:-**

The Zawtika Project is a gas field development project located in the Gulf of Martaban, Myanmar. The field lies approximately 300 km south of Yangon and 290 km west of Tavoy on the Myanmar coast and the average water depth is approximately 140-150 meters. Zawtika Project Phase 1B consisting of:

a) Four new remote wellhead platforms (WP4, WP5, WP6 and WP7). WP4, WP5 and WP7 are 20 well slots, and WP6 is 12 well slots;

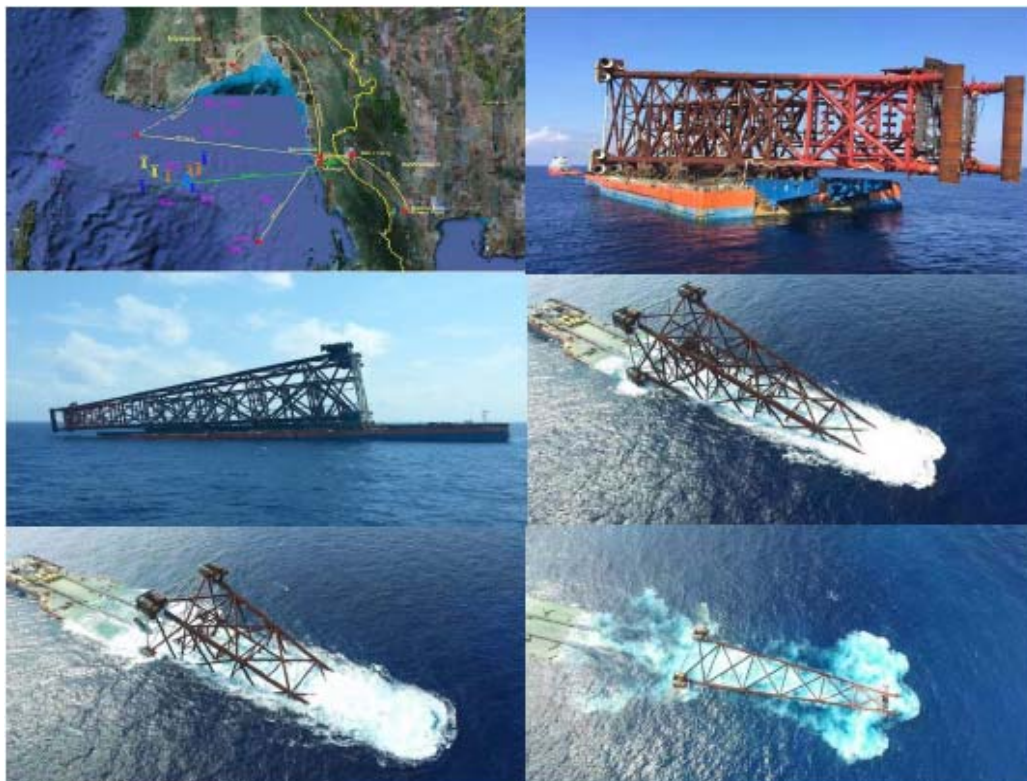
**Structure Information:-**

Jacket Type: 4-legged jackets with 12 skirt sleeve piles,

Item	WP-4	WP-5	WP-6	WP-7
Position	480 838.420 E 1 550 622.730 N	503 667.000 E 1 592 941.000 N	484 552.00 E 1 563 358.000 N	508 633.703 E 1 567 325.205 N
Orientation	Platform north is 45°			
Water depth(m)	143.0	122.8	145.5	148.0
Piles	96", 12nos. , total weight - 3900MT	96", 12nos. , total weight - 3900MT	96", 12nos. , total weight - 3900MT	96", 12nos. , total weight - 3900MT
Jacket weight (MT)	6502	5518	6523	7684

**Project Scope:-**

OCS provided the Installation Manager and Senior Field Engineer to COOEC, the Main EPCI Contractor. The 4 jacket launches were completed in January 2016.



Typical jacket Launch



## **SUBJECT: JACKET LAUNCH MANAGEMENT (SVDN PROJECT DEVELOPMENT) – DN JACKET**

### **Project Details:-**

IGP is developing the SV & DN Project at block 05-1b & 05-1c, Nam Con Son basin, offshore Vietnam. The Project comprises one (01) Central Processing Platform (CPP-SV) and one (01) un-manned Well Head Platform (DN-WHP), and subsea flexible pipeline/cable systems. The DN-WHP substructure is a four (4) legged substructure with 2 skirt piles on the legs. The jacket was a launched installation and supports the WHP topside which shall be installed by lifting into position. Water depth at the location is 116m.

### **Structure Information:-**

Jacket Type: 4-legged jacket with 2 skirt pile/leg (one gripper and one non gripper)

Jacket dimension at top 16x x 20m

Jacket Dimension at bottom 40m x 40m.

Jacket height: 127m

Jacket Weight: 6200 MT,

Piles: Eight (8) piles with 2134mm O.D. through skirt guide. 2 guide per leg

Launch barge: Holmen Pacific, Launch, wet tow and crane assisted upending

### **Project Scope:**

Part of OCS scope for this project is to provide jacket launch management, which included barge rig up preparation and coordination, jacket Launch procedure preparation and offshore/site launch supervision and management. OCS was also involved in the T&I Engineering and installation management for the DN Platform installation and also prepared the DN jacket launch analysis, wet tow, upending as well as the launch and installation procedure. The DN jacket launch was completed in August 2021.



## 7.0 ISO CERTIFICATION



# Certificate of Registration

This certificate has been awarded to

**Offshore Construction Specialists Pte Ltd**

36 Kian Teck Road, Singapore 628781, Singapore

in recognition of the organization's Quality Management System which complies with

**ISO 9001:2015**

The scope of activities covered by this certificate is defined below

**Provision of Project Management and Consultancy Services for Oil and Gas Construction Facilities**

Certificate Number:

41578/B/0001/SA/En

Date of Issue: (Original)

04 November 2016

Date of Issue:

04 November 2019

Issue No:

2

Expiry Date:

03 November 2022

Issued by:

On behalf of the Director



If there is any doubt as to authenticity of this certificate, please do not hesitate to contact the Head Office of the Group at info@urs-certification.com  
URS is a member of United Registrar of Systems (URS) Ltd, United House, 21 Malacca Road, Singapore 10205, SINGAPORE. URS Ltd, Company Registration no. 200500001  
URS Pte Ltd Pte Ltd, 11000 Beach Road #06-02, The Plaza, Singapore 109961

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The scope of activities covered by this certificate is defined below

**Provision of Project Management and Consultancy Services for Oil and  
Gas Construction Facilities**

Certificate Number:

41578/G/0001/UK/En

Date of Issue: (Original)

06 November 2016

Date of Issue:

06 November 2019

Issue No:

3

Expiry Date:

05 November 2022

Issued by:





On behalf of the Schemes Manager



If there is any doubt as to the authenticity of this certificate, please do not hesitate to contact the Head Office of the Group at: info@urscertification.com.  
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	<b>OFFSHORE CONSTRUCTION SPECIALISTS</b>	
	<b>JACKET LAUNCH MANAGEMENT PRE-QUALIFICATION DOCUMENT</b>	

## 8.0 NATA CERTIFICATION



NATA is Australia's government-endorsed accreditor of laboratories, and a leader in accreditation internationally. NATA is a signatory to the international mutual recognition arrangements of the International Laboratory Accreditation Cooperation (ILAC) and the Asia Pacific Accreditation Cooperation (APAC).  
APS-1-9 / Issue 5 / May 2019

	<b>OFFSHORE CONSTRUCTION SPECIALISTS</b>	 
	<b>JACKET LAUNCH MANAGEMENT PRE-QUALIFICATION DOCUMENT</b>	

## 9.0 BCA CERTIFICATION

Serial No : C2108038



**Building and Construction Authority**

**CERTIFICATE OF LICENCE**

This is to certify that

**OFFSHORE CONSTRUCTION SPECIALISTS  
PTE LTD**

(Unique Entity Number / ACRA Registration Number : 200720801G )

is licensed as a

General Builder Class 1  
(24 Aug 2021 to 24 Aug 2024)

under Part VA of the Building Control Act and Building Control  
(Licensing of Builders) Regulations 2008



Commissioner of Building Control  
Singapore

Date: 25 Aug 2021