

PILOTAGE ADVISORY COMMITTEE

Discussion Paper
on
The Proposed Berthing Guidelines
For
the Hong Kong Offshore Liquefied Natural Gas Terminal

Purpose

The purpose of this paper is to discuss the proposed Berthing Guidelines (BGL) for the Hong Kong Offshore Liquefied Natural Gas (HKOLNG) Terminal as detailed in the *Annex I*.

Background

2. The HKOLNG Terminal, which is under construction at the site about 2.5 nautical miles east of Tai A Chau (Soko Islands), is scheduled to be commissioned in early 2023. It is approximately 500 meters north of the southern boundary of the Hong Kong SAR.
3. The HKOLNG Terminal is constructed as a double-berth jetty with a Floating Storage and Regasification Unit (FSRU) to be moored at the berth on the east side of the jetty, and a LNG Carrier (LNGC) to be moored on the west side of the jetty. The jetty is adjacent to the southeastern portion of the proposed South Lantau Marine Park to its northwest, the South Cheung Chau Dumping Ground to its East, and the Dangan Channel to its South.
4. Navigation and berthing simulations have been conducted in Hong Kong and the United Kingdom by the project team of the terminal operator, i.e. China Light and Power Hong Kong Limited (CLP) and Hong Kong Electric Co., Ltd

(HKE), and Hong Kong Pilots Association (HKPA). HKPA and the project team had made a proposal on a BGL for the HKOLNGT. Selected senior pilots of HKPA would attend appropriate simulation trainings for berthing FSRUs and LNGCs to and from the HKOLNG Terminal.

Proposed Berthing Guidelines

5. The proposed BGL for the new HKOLNG Terminal at *Annex I* is subjected to be discussed at this meeting. The discussion should include all aspects of the operation parameters including the draft and under-keel clearance (UKC), the time and restricting conditions for operation, the numbers and powers of tugs and the number of pilots required.

6. Subject to the final decision of the Pilotage Authority, the BGL for the HKOLNG Terminal would be put into operation before the HKOLNG Terminal comes into operations.

Consequential Amendments

7. In order to include the new BGLs for the HKOLNG Terminal, consequential amendments to Chapter 1 (as illustrated in *Annex II*) and Chapter 12 (as illustrated in *Annex III*) is required. Consequential amendments to Chapter 7 is also need where opportunity is taken to update berth information for some berths in the Kwai Tsing container terminals in this chapter (as illustrated in *Annex IV*).

Advice Sought

8. Members are invited to discuss and give their advices and comments on the proposed BGL for the HKOLNG Terminal.

Pilotage Unit
Marine Department
November 2022

Draft BGL for HKOLPG Terminal Proposed by HKPA

Location: HKOLNG(W)

Hong Kong Offshore LNG Terminal west berth
(Declared Depth: 15.5 m at Turning Basin / Berth)

010	Berthing	LOA: Max 350m	011	Unberthing	LOA: Max 350m
Draft:	Max. 13m (min 10% UKC)		Draft:	Max. 13m (min 10% UKC)	
Time:	Day HW-2 to HW+1		Time:	Day	
Tugs:	4 incl. 1 escort		Tugs:	4 incl. 1 escort	
Remarks:	2 pilots. Port side to.		Remarks:	2 pilots.	

General Remarks:

1. One (1) pilot to remain on board during the vessel's stay at berth for the LNGC.
2. Berthing/unberthing operations shall be postponed when wind force in the area is greater than 20 knots from any direction, and/or strong monsoon signal is hoisted.
3. Berthing/unberthing operations shall be postponed/completed before typhoon signal No.3 hoisted.
4. Berthing/unberthing operations shall be postponed when visibility is less than 1.0 nautical mile.
5. Berthing/unberthing tugs (x 4) employed must be at least 2 x 5,000 HP and 2 x 6,500 HP.
6. All tugs are required to be readily standing by at the Pilot Boarding Area.
7. Guard tug employed by owners agents for emergency situation and traffic control.

Location: HKOLNG(E)

Hong Kong Offshore LNG Jetty east berth
(Declared Depth: 15.5 m at Turning Basin / Berth)

010 **Berthing** LOA: Max 350m
Draft: Max. 13m (min 10% UKC)
Time: Day HW-2 to HW+1
Tugs: 4 incl. 1 escort
Remarks: 2 pilots.
 Starboard side to.

011 **Unberthing** LOA: Max 350m
Draft: Max. 13m (min 10% UKC)
Time: Day
Tugs: 4 incl. 1 escort
Remarks: 2 pilots.

General Remarks:

1. Berthing/unberthing operations shall be postponed when wind force in the area is greater than 20 knots from any direction, and/or strong monsoon signal is hoisted
2. Berthing/unberthing operations shall be postponed/completed before typhoon signal No.3 hoisted.
3. Berthing/unberthing operations shall be postponed when visibility is less than 1.0 nautical mile.
4. Berthing/unberthing tugs (x 4) employed must be at least 2 x 5,000 HP and 2 x 6,500 HP.
5. All tugs are required to be readily standing by at the Pilot Boarding Area.
6. Guard tug employed by owners agent for emergency situation and traffic control.

Preliminary Draft proposed by HKPA For Discussion Only

Chapter 1**CONTENTS****1. Table of Contents**

Chapter	Description	Date of Endorsement
1	Table of Contents	<i>Pending</i>
2	General	Amended-w.e.f. 04 Jan. 2018
3	Berthing Remarks	Amended-w.e.f. 10 Jun. 2022
4	Guidelines on Tug Requirements	Amended-w.e.f. 10 Jun. 2022
5	Tugs information	Amended-w.e.f. 24 Aug. 2021
6	Floating docks information	Edition – 07 Jan. 2016
7	Berth/wharf/terminal information	<i>Pending</i>
8	Government mooring buoys	Amended-w.e.f. 30 Mar. 2020
9	Tropical Cyclone (Typhoon) procedure	Amended-w.e.f. 04 Jan. 2018
10	Miscellaneous	Amended-w.e.f. 30 Mar. 2020
11	List of Useful Contacts	Edition – 07 Jan. 2016
12	Berthing guidelines by Location Code	<i>Pending</i>
13	Amendment log sheet	N/A

2. Index of Berthing Guidelines by Location Code

Code	Location	Date of Endorsement
ASB-JB	ASB Biodiesel Terminal	Edition – 07 Jan. 2016
BUOY	Government mooring buoy	Edition – 07 Jan. 2016
CCEMENT	China Cement Company (TSK)	Edition – 07 Jan. 2016
CFT	China ferry terminal	Edition – 07 Jan. 2016
CHT- PC	Central Harbour Transit – Passenger Ship (Conventional)	Amended-w.e.f. 04 Jan. 2018
CHT-PH	Central Harbour Transit – Passenger Ship (Highly Maneuverable)	Added-w.e.f. 04 Jan. 2018
CLPTSK	China light power station (TSK)	Edition – 07 Jan. 2016
CMKEN-N	China Merchant Kennedy Town north berth	Edition – 07 Jan. 2016
CMKEN-S	China Merchant Kennedy Town south berth	Edition – 07 Jan. 2016
CVX	Chevron T/Y main berth	Amended-w.e.f. 10 Jun. 2022
CVX-5	Chevron T/Y No. 5 berth	Edition – 07 Jan. 2016
CVX-6A	Chevron T/Y No. 6A berth	Edition – 07 Jan. 2016
CVX-LPG	Chevron T/Y LPG berth	Amended-w.e.f. 30 Mar. 2020

Note: Only pages 1 & 2 are affected.

Berthing Guidelines*Pending endorsement*

Code	Location	Date of Endorsement
EMTY-E1	ExxonMobil T/Y east terminal berth 1	Edition – 07 Jan. 2016
EMTY-E4	ExxonMobil T/Y east terminal berth 4	Edition – 07 Jan. 2016
EMTY-W1	ExxonMobil T/Y west terminal berth 1	Edition – 07 Jan. 2016
EMTY-W2	ExxonMobil T/Y west terminal berth 2	Edition – 07 Jan. 2016
EURO-1	Euro-Asia berth 1	Amended-w.e.f. 04 Jan. 2018
EURO-2	Euro-Asia berth 2	Amended-w.e.f. 04 Jan. 2018
EURO-3P	Euro-Asia berth 3P	Amended-w.e.f. 04 Jan. 2018
HKELECT(N)	Lamma power station north wharf	Edition – 07 Jan. 2016
HKELECT(S)	Lamma power station south wharf	Edition – 07 Jan. 2016
HKOLNG(E)	Hong Kong Offshore LNG Terminal East berth	<i>Pending</i>
HKOLNG(W)	Hong Kong Offshore LNG Terminal West berth	<i>Pending</i>
JBDGA	Junk Bay DG anchorage	Edition – 07 Jan. 2016
KC 1	Kwai Chung berth 1	Amended-w.e.f. 10 Jun. 2022
KC 2	Kwai Chung berth 2	Amended-w.e.f. 10 Jun. 2022
KC3	Kwai Chung berth 3	Amended-w.e.f. 10 Jun. 2022
KC4	Kwai Chung berth 4	Amended-w.e.f. 10 Jun. 2022
KC5	Kwai Chung berth 5	Amended-w.e.f. 10 Jun. 2022
KC6	Kwai Chung berth 6	Amended-w.e.f. 10 Jun. 2022
KC6/O-F	Kwai Chung berth 6 outer-foul	Amended-w.e.f. 10 Jun. 2022
KC7	Kwai Chung berth 7	Amended-w.e.f. 10 Jun. 2022
KC7/O-F	Kwai Chung berth 7 outer-foul	Amended-w.e.f. 10 Jun. 2022
KC8, 9	Kwai Chung berth 8 & 9	Amended-w.e.f. 10 Jun. 2022
KC10C, 10E	Kwai Chung berth 10C & 10E	Amended-w.e.f. 10 Jun. 2022
KC10W	Kwai Chung berth 10W	Amended-w.e.f. 10 Jun. 2022
KC11	Kwai Chung berth 11	Amended-w.e.f. 10 Jun. 2022
KC12	Kwai Chung berth 12	Amended-w.e.f. 10 Jun. 2022
KC13-14	Kwai Chung berth 13-14	Amended-w.e.f. 10 Jun. 2022
KC15	Kwai Chung berth 15	Amended-w.e.f. 10 Jun. 2022
KC16	Kwai Chung berth 16	Amended-w.e.f. 10 Jun. 2022
KC17-19	Kwai Chung berth 17-19	Amended-w.e.f. 10 Jun. 2022
KC20	Kwai Chung berth 20	Amended-w.e.f. 10 Jun. 2022
KEL-1	Kellett Anchorage No. 1	Edition – 07 Jan. 2016
KEL-2	Kellett Anchorage No. 2	Edition – 07 Jan. 2016
KEL-3	Kellett Anchorage No. 3	Edition – 07 Jan. 2016
KTCT-1	Kai Tak Cruise Terminal berth 1	Edition – 07 Jan. 2016
KTCT-2	Kai Tak Cruise Terminal berth 2	Edition – 07 Jan. 2016
KTCT-2/O-F	Kai Tak Cruise Terminal berth 2 outer-foul	Edition – 07 Jan. 2016
KYCA	Kau Yi Chau DG anchorage	Edition – 07 Jan. 2016

Note: Only pages 1 & 2 are affected.

** INDEX **

Code	Locations	Code	Locations
ASB-JB	ASB Biodiesel Terminal (Junk Bay)	MWA	Ma Wan anchorage
BUOY	Government mooring buoy	NLA	North Lamma anchorage
CCEMENT	China Cement Company (TSK)	NWLA	North West Lamma anchorage
CFT	China ferry terminal	OTN	Ocean Terminal north berth
CHT-PC	Central Harbour Transit – Passenger Ship (Conventional)	OTN/O-F	Ocean Terminal north berth outer-foul
CHT-PH	Central Harbour Transit – Passenger Ship (Highly Maneuverable)	OTS	Ocean Terminal south berth
CLPTSK	China light power station (TSK)	OTS/O-F	Ocean Terminal south berth outer-foul
CMKEN-N	China Merchant Kennedy Town north berth	PAFF-E	Permanent Aviation Fuel Facility East Berth
CMKEN-S	China Merchant Kennedy Town south berth	PAFF-W	Permanent Aviation Fuel Facility West Berth
CVX	Chevron T/Y main berth	PSSA-E	Pun Shan Shek anchorage east
CVX-5	Chevron T/Y No. 5 berth	PSSA-W	Pun Shan Shek anchorage west
CVX-6A	Chevron T/Y No. 6A berth	RDGA	Reserved dangerous goods anchorage
CVX-LPG	Chevron T/Y LPG berth	RTT-1	River Trade Terminal No.1 berth
EMTY-E1	ExxonMobil T/Y east terminal berth 1	RTT-2	River Trade Terminal No.2 berth
EMTY-E4	ExxonMobil T/Y east terminal berth 4	RTT-4	River Trade Terminal No.4 berth
EMTY-W1	ExxonMobil T/Y west terminal berth 1	RTT-5	River Trade Terminal No.5 berth
EMTY-W2	ExxonMobil T/Y west terminal berth 2	SEATRIAL	Sea trial, compass adjustment & equipment calibration
EURO-1	Euro-Asia berth 1	SHELL	Shell oil terminal main berth
EURO-2	Euro-Asia berth 2	SHACHAU	Sha Chau oil terminal (TSK)
EURO-3P	Euro-Asia berth 3P	SHELL	Shell oil terminal main berth
HKELECT(N)	Lamma power station north wharf	SHELL-1E	Shell No. 1 east & west berth
HKELECT(S)	Lamma power station south wharf	SHELL-2E	Shell No. 2 & 3 east & west berth
HKOLNG(E)	Hong Kong Offshore LNG Terminal east berth	SHELL-LPG	Shell oil terminal LPG berth
HKOLNG(W)	Hong Kong Offshore LNG Terminal west berth	SINO-A	Sinopec T/Y main berth (A)
JBDGA	Junk Bay DG anchorage	SINO-B	Sinopec T/Y west berth (B)
KC1	Kwai Chung berth 1	SINO-C	Sinopec T/Y east berth (C)
KC2	Kwai Chung berth 2	SINO-CW	Sinopec Chai Wan berth
KC3	Kwai Chung berth 3	SINO-3	Sinopec T/Y No. 3 berth
KC4	Kwai Chung berth 4	SLA	Anchorage South of Lamma Island
KC5	Kwai Chung berth 5	SSK-1	Sham Shui Kok Anchorage No. 1
KC6	Kwai Chung berth 6	SSK-2	Sham Shui Kok Anchorage No. 2
KC6/O-F	Kwai Chung berth 6 outer-foul	SSK-TD	Sham Shui Kok Trans-shipment Dock
KC7	Kwai Chung berth 7	SWSTL	Shiu Wing steel wharf (TSK)
KC7/O-F	Kwai Chung berth 7 outer-foul	THA	Tolo harbour anchorage
KC8, 9	Kwai Chung berth 8& 9	TOW	Ship under tow
KC10C, 10E	Kwai Chung berth 10C & 10E	TOW-BERTH	Ship under tow to/from berth
KC10W	Kwai Chung berth 10W	TPGAS	Tolo harbour Town Gas wharf
KC11	Kwai Chung berth 11	TSK-MHB	Tap Shek Kok Material Handling Berth
KC12	Kwai Chung berth 12	TYD	Floating docks west of T/Y Island
KC13-14	Kwai Chung berth 13-14	URMPS / URMA	Transit Mawan – Bulker & Tanker (All vessels other than passenger & container ship)
KC15	Kwai Chung berth 15	URMPS-C	Transit Mawan – Container ship
KC16	Kwai Chung berth 16	/URMA-C	
KC17-19	Kwai Chung berth 17-19	URMPS-PC/	Transit Mawan – Passenger ship
KC20	Kwai Chung berth 20	URMA-PC	(Conventional)
KEL-1	Kellett Anchorage No. 1	URMPS-PH/	Transit Mawan – Passenger ship (Highly
KEL-2	Kellett Anchorage No. 2	URMA-PH	Maneuverable)
KEL-3	Kellett Anchorage No. 3	WA-2	Western anchorage No.2
KTCT-1	Kai Tak Cruise Terminal berth 1	WA-1	Western anchorage No.1
KTCT-2	Kai Tak Cruise Terminal berth 2	WA-2	Western anchorage No.2
KTCT-2/O-F	Kai Tak Cruise Terminal berth 2 outer-foul	WA-3	Western anchorage No.3
KYCA	Kau Yi Chau DG anchorage	WQA	Western quarantine anchorage
LOP	Lok On Pai oil berth	YMTA	Yau Ma Tei anchorage
MFT	Macau ferry terminal	YUENFAT	Yuen Fat wharf No.2 berth

Note: The BGLs for HKOLNG(E) & HKOLNG(W) will be inserted after HKELECT(S)

Berthing Guidelines

Pending endorsement

Chapter 7

BERTH /WHARF/TERMINAL INFORMATION

BERTH	Max. Draft(m)	Max. LOA(m)	Berth Direction	Berth Length	Telephone No.
ASB-JB	6.0	85	030/210	63.5	3183 4300
CCEMENT	14.0	240	112/292	270	2440 5111 2440 5233
CFT	6.5	153	078/258	270	2738 2906
CLPTSK	16.8	280	134/314	545	2404 8402
CMKEN-N	9.5	156	056/236	170	2816 8398 9125 3298
CMKEN-S	7.0	120	056/236	140	2816 8398 9125 3298
CVX	12.6	235	162/342	90	2588 7654
CVX-5	3.2	80	035/215	80	2588 7654
CVX-6A	7.3	110	055/235	50	2588 7654
CVX-LPG	6.5	114	072/252	95	2588 7654
EMTY-E1	14.63	274	082/262	255	2172 8273 2179 8277
EMTY-E4	5.5	107	082/262	30	2172 8273 2172 8277
EMTY-W1	14.6	250	089/269	267	2172 8132 2172 8133
EMTY-W2	7.5	107	089/269	41	2172 8132 2172 8133
EURO-1	9.0	165	020/200	240	2436 8222 9603 9692
EURO-2	9.5	200	020/200	280	2436 8233 9603 9692
EURO-3P	8.6	165	148/328	215	2436 8233 9603 9692
HKELECT(N)	14.6	262	170/350	290	2982 6270 2982 6274 9423 6670
HKELECT(S)	14.6	262	170/350	290	2982 6270 2982 6274 9423 6670
HKOLNG(W)	13.0	350	165/345	392	2678 4522
HKOLNG(E)	13.0	350	165/345	392	9020 2715 9657 0316
HUDSW dist. from f/d 80m as per HUD			008/188	250	2431 2645
KC1-2	14.0	370	163/343	305	2115 3552
KC2	14.0 15.5	370	163/343	305	2115 3552
KC3	14.0	370	163/343	305	2489 4745
KC4	14.2	370	163/343	305	2619 7792
KC5	15.0 15.5	400	073/253	472	2115 3552
KC6	14.2	350	073/253	564	2619 7792
KC7	15.0 15.5	350	073/253	564	2619 7792
KC8-9	15.0 16.0	400	163/343	380 830	2619 7792
KC9	15.0	400	163/343	450	2619 7792
KC10	15.0 15.5	370	073/253	700	2619 7792
KC11	15.0 15.5	340	073/253	338	2991 8022
KC12	15.0 15.5	370	073/253	338	2991 8022
KC13-14	15.0 15.5	370 400	073/253	338 676	2991 8022 2276 8137 2276 8138
KC14	15.0	370	073/253	338	2276 8137 2276 8138
KC15	15.0 15.5	370	163/343	350	2619 3021
KC16	15.0 15.5	400	163/343	350	2619 3021
KC17-1819	15.0 16.5	400	163/343	300 900	2115 2616 2920 2616 2920 2645
KC19	15.0	400	163/343	300	2920 2616 2920 2645
KC20	15.0 15.5	310	042/222	340	2115 2616 2920 2616 2920 2645
KTCT-1	11.0	365	134/314	450	6711 7920
KTCT-2	11.0	365	134/314	400	6711 7920
LOP	8.0	122	089/269	125	2618 0192 9369 2741
MFT	5.0	120	104/284	220	2547 4039
OTN	8.5	270	078/258	340	2118 8951
OTS	10.67	290	078/258	381	2118 8951
PAFF-E	15	230	135/315	264	2212 5720 2212 5721
PAFF-W	15	195	135/315	241	2212 5720 2212 5721
RTT-1	8.5	175	116/296	200	2122 7155 9728 6230
RTT-2	8.5	150	026/206	250	2122 7155 9728 6230
RTT-4	8.5	170	026/206	240	2122 7155 9728 6230
RTT-5	8.5	175	116/296	300	2122 7155 9728 6230
SHACHAU	7.5	120	163/343	152	2613 9127 2988 6161
SHELL	14.5	245	150/330	226	2432 8704
SHELL-1E	6.5	100	008/188	80	2432 8704
SHELL-2E	5.5	90	008/188	75	2432 8704
SHELL-LPG	8.0	135	150/330	118	2432 8704
SINO-A	14.0	250	086/266	280	2431 3090
SINO-B	7.5	120	086/266	129	2431 3090
SINO-C	6.5	90	086/266	115	2431 3090
SINO-CW	5.0	65	172/352	70	2558 8341
SINO-3	7.5	120	124/304	>150	2431 3090
SSK-TD	5.0	70	040/220	50	2984 3200
SWSTL	10.3	200	125/305	215	2618 8761
TPGAS	11.0	228	120/300	300	2666 2106 9092 1684
TSK-MHB	8.0	120	038/218	140	2404 8402
YUENFAT	6.7	153	040/220	171	-