

PILOTAGE ADVISORY COMMITTEE

Proposed Amendments to the Berthing Guidelines On Relaxation of Tidal Window for Berths of Kwai Tsing Container Terminals

Purpose

The purpose of this paper is to seek members' comments and endorsement on proposed amendments to the Berthing Guidelines ("BGL") in relaxation of tidal window for some berths ("KC berths") of the Kwai Tsing Container Terminals ("KTCT").

Background

2. Tidal window and use of tugs are the major tools for mitigating the adverse effects of excessive tidal currents.

3. In the past, tug masters and pilots in Hong Kong were not accustomed to tugs approaching the stem of moving ships to make fast at centre lead forward. With the recent changes in practice that tug masters and pilots have gained more experience in making fast tugs at centre leads fore and aft, and in casting off from centre lead and making fast on shoulder and quarter when necessary, all of which has increased pilots' confidence and effectiveness handling larger and heavier ships with the assistance of tugs.

Review

4. With aims to enhance the flexibility and efficiency of KTCT in accommodating mega sized container vessels; and facilitate the compact sailing schedule of container vessels by relaxing the tidal windows set for the vessels of length over 340m and/or with draft over 14.0m, the Hong Kong Pilots

Association (“HKPA”) had reviewed the BGL for KC berths in conjunction with tugs, liners and terminals operators.

5. The review found that, when a tug is made fast at the center lead forward, it achieves approximately 20% greater work efficiency when turning a vessel compared to one fastened at the ship’s shoulders. The propeller thrust generated by a tug pulling at the ship’s shoulder inevitably reduces the pulling efficiency. Furthermore, positioning higher-powered tugs strategically not only improves control but also enhances the ship’s safety and allows for a certain relaxation of tidal restrictions. It is estimated that a lateral wind of 20 knots combined a current of 1 knot could exert approximately 170 tonnes-force on a container ship measuring 370 meters in length and with a draft of 15.5 meters. Accounting for a reasonable margin, this force corresponds to and could be compensated with the combined power of three 5,000-horsepower harbour tugs, such as those commonly used in Hong Kong.

6. HKPA’s pilots had good experience in maneuvering Ultra Large Container Vessels after the Kwai Tsing basin was dredged to 17.5 meters, they have commented that a certain relaxation of the tidal window could be feasible. In this context, HKPA’s technical team considered that, with the mitigation measures in paragraph 5 above, tidal window could be relaxed for some of the berth directions and locations with the use of additional tug power as mitigating measure against the stronger tidal effects when operating outside the existing tidal window. For some berthing/unberthing operations, tugs with higher power, e.g. 5000hp/6000hp, might be specified. A summary of feasible relaxation is at **Annex I**.

Proposed Amendments

7. It was proposed to amend the BGLs for KC berths with location code KC2, KC4, KC5, KC8-9, KC10W, KC12, KC13-14, KC17-18 and KC19 (splitting from KC17-19) as detailed by marking up in red at **Annex II**. These BGLs will be put on trial and be reviewed on regular basis, i.e. once in every 12 months.

Consultation

8. These proposed amendments have been circulated to members of the PAC Working Group (WG) in May 2025. Comments received from members are positive.

Presentation

9. This paper will be presented by Marine Manager/ Pilotage.

Advice Sought

10. Members are invited to comment and endorse the proposed amendments.

Marine Department
June 2025

Summary of Feasible Relaxations

- Anticipated to extend operation window to 24 hours where practicable with a safety net of additional tug power where necessary.
- The proposed changes are for $D > 14.0\text{m}$.
- For $D \leq 14.0\text{m}$, existing 24 hours operation and tug requirement remains applicable.

[Legends for boxes in ensuing figures:

Blue colour: Existing operation windows;

Brown colour: Non-operational windows (existing and future without relaxation); and

Green colour: Proposed relaxation to turn existing Non-operational window into Operational by specifying additional tugs.]

KC2 and KC4**Item 060 – berthing of LOA Max 370m**

- Relax to allow 24 hours operation for $D > 14.0\text{m}$ & starboard side to berth.
- Existing operation window restriction remain applicable to $D > 14.0\text{m}$ & port side to berth.

Item 061 – unberthing of LOA Max 370m

- Relax to allow 24 hours operation for $D > 14.0\text{m}$ & starboard side to berth, i.e. 24 hours operation for all draft and both sides to berth.

KC5**Item 060 – berthing of LOA Max 370m**

- Relax to allow 24 hours operation for $D > 14.0\text{m}$ with additional tug requirement if outside of existing operation window.
- Tug requirement for $D > 14.0\text{m}$ would be 4 incl. $3x \geq 5000\text{HP}$ if outside of existing operation window.

	HW+2	LW+1	LW+3	HW-2	HW+2
Tidal Window	HW+2 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-2	HW-2 to HW+2 (Inclusive of both end times)	
Existing Operation	Non-operational window If $D > 14.0\text{m}$	4 tugs, at least $2x \geq 5000\text{HP}$	Non-operation window if $D > 14.0\text{m}$	4 tugs, at least $2x \geq 5000\text{HP}$	
Proposed Relaxation	If $D > 14.0\text{m}$, 4 tugs incl. $3x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	If $D > 14.0\text{m}$, 4 tugs incl. $3x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	

Item 061 – unberthing of LOA Max 370m

- Relax to allow 24 hours operation including $D > 14.0\text{m}$ without additional tug requirement.

KC8-9

Item 050 – berthing of LOA Max 360m

- Relax to 24 hours operation for D>14.0m on condition that thruster not considered as tug replacement if outside of existing operation window.

Item 060 – berthing of LOA Max 370m

- Relax to allow 24 hours operation for D>14.0m with additional tug requirement if outside of existing operation window.
- Tug requirement for D>14.0m would be 4 incl. 3 x ≥ 5000 HP if outside of existing operation window similar to KC5 above.

Item 061 – unberthing of LOA Max 370m

- Relax to allow 24 hours operation including D>14.0m without additional tug requirement.

Item 071 – unberthing of LOA Max 400m

- Relax to allow 24 hours operation including D>14.0m without additional tug requirement.

KC10W & KC12

Item 061 – unberthing of LOA Max 370m

- Relax to allow 24 hours operation including D>14.0m without additional tug requirement.

KC13-14

- Add new group of LOA Max 360m as 060/061.
- Renumber existing 060/061(LOA Max 370m) and 070/071(LOA Max 400m) to 070/071 and 080/081 respectively.

Item 060 – berthing of LOA Max 360m

- Similar to existing 060 with LOA Max adjusted downward from 370m to 360m and draft adjusted upward from 12.5m to 14.0m, other parameters remain unchanged.

Item 061 – unberthing of LOA Max 360m

- Relax to allow 24 hours operation including D>14.0m without additional tug requirement.

Item 071 – unberthing of LOA Max 370m

- Relax to allow 24 hours operation including D>14.0m without additional tug requirement.

Item 081 – unberthing of LOA Max 400m

- Relax to allow 24 hours operation with additional tug requirement if outside of existing operation window.
- Tug requirement would be 4 incl. 2x ≥ 6000 HP & 1x ≥ 5000 HP (as oppose to “at least one tug ≥ 6000 HP & one tug ≥ 5000 HP” in the existing general remarks) if outside of existing operation window.

KC17-19

Split into KC17-18 and KC19

KC17-18

Item 050 & 060 – berthing of LOA Max 360m & 370m

- Extend existing operation window for $D > 14.0\text{m}$ from “LW+1 to LW+3 & HW-1 to HW+1” to “LW+1 to LW+3 & HW-1 to HW+3”
- Relax to allow 24 hours operation including $D > 14.0\text{m}$ with additional tug requirement if outside of extended operation window.
- Tug requirement would be 4 incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$ for LOA Max 360m and $2x \geq 6000\text{HP}$ for LOA Max 370m if outside of extended operation window.

Item 070 – berthing of LOA Max 400m

- Extend existing operation window for $D > 14.0\text{m}$ from “LW+1 to LW+3 & HW-1 to HW+1” to “LW+1 to LW+3 & HW-1 to HW+3”.

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(060) Existing Operation for LOA Max 370m	Non-Operational Window If $\text{LOA} > 340\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 340\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $2x \geq 5000\text{HP}$	
(070) Existing Operation for LOA Max 400m	Non-Operational Window If $\text{LOA} > 340\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 340\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3 (Inclusive of both end times)	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(050) Proposed Relaxation for LOA Max 360m	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	
(060) Proposed Relaxation for LOA Max 370m	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $2x \geq 6000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $2x \geq 6000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	
(070) Proposed Relaxation for LOA Max 400m	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 370\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 370\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

KC17-18

Item 061 – unberthing of LOA Max 370m

- Extend existing operation window for $D > 14.0\text{m}$ from “LW+1 to LW+3 & HW-1 to HW+1” to “LW+1 to LW+3 & HW-1 to HW+3”.
- Relax to allow 24 hours operation with additional tug requirement if outside of extended operation window.
- Tug requirement would be 4 incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$ if outside of extended operation window.

Item 071 – unberthing of LOA Max 400m

- Relax to allow 24 hours operation including $D > 14.0\text{m}$ with additional tug requirement if outside of existing operation window.
- Tug requirement would be 4 incl. $2x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$ if outside of existing operation window.

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(061) Existing Operation for LOA Max 370m	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $2x \geq 5000\text{HP}$	
(071) Existing Operation for LOA Max 400m	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3 (Inclusive of both end times)	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(061) Proposed Relaxation for LOA Max 370m	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	4 tugs incl. $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 5000\text{HP}$	
(071) Proposed Relaxation for LOA Max 400m	4 tugs, at least $2x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$		4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $2x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

KC19**Item 050, 060 & 070 – berthing of LOA Max 360m, 370m & 400m**

- Extend existing operation window for $D > 14.0\text{m}$ from “LW+1 to LW+3 & HW-1 to HW+1” to “LW+1 to LW+3 & HW-1 to HW+3” without additional tug requirement.

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(060) Existing Operation for LOA Max 370m	Non-Operational Window If LOA > 340m & D > 14.0m		4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $2x \geq 5000\text{HP}$	
(070) Existing Operation for LOA Max 400m	Non-Operational Window If LOA > 340m & D > 14.0m		4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3 (Inclusive of both end times)	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(050) Proposed Relaxation for LOA Max 360m	4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $2x \geq 5000\text{HP}$	
(060) Proposed Relaxation for LOA Max 370m	4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $2x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $2x \geq 5000\text{HP}$	
(070) Proposed Relaxation for LOA Max 400m	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	Non-Operational Window If LOA > 340m & D > 14.0m	4 tugs, at least $1x \geq 6000\text{HP}$ & $1x \geq 5000\text{HP}$	

KC19

Item 061 – unberthing of LOA Max 370m

- Extend existing operation window for $D > 14.0\text{m}$ from “LW+1 to LW+3 & HW-1 to HW+1” to “LW+1 to LW+3 & HW-1 to HW+3” with additional tug requirement if outside of extended operation window.
- Tug requirement would be 4 incl. 1 x $\geq 6000\text{HP}$ & 1 x $\geq 5000\text{HP}$ if outside of extended operation window.

Item 071 – unberthing of LOA Max 400m

- Relax to allow 24 hours operation including $D > 14.0\text{m}$ with additional tug requirement if outside of existing operation window.
- Tug requirement would be 4 incl. 2 x $\geq 6000\text{HP}$ & 1 x $\geq 5000\text{HP}$ if outside of existing operation window.

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(061) Existing Operation for LOA Max 370m	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least 2x $\geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least 2x $\geq 5000\text{HP}$	
(071) Existing Operation for LOA Max 400m	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$		4 tugs, at least 1x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$	Non-Operational Window If $\text{LOA} > 360\text{m}$ & $D > 14.0\text{m}$	4 tugs, at least 1x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$	

	HW+1	HW+3	LW+1	LW+3	HW-1	HW+1
Tidal Windows	HW+1 to HW+3 (Inclusive of both end times)	HW+3 to LW+1	LW+1 to LW+3 (Inclusive of both end times)	LW+3 to HW-1	HW-1 to HW+1 (Inclusive of both end times)	
(061) Proposed Relaxation for LOA Max 370m	4 tugs, at least 2x $\geq 5000\text{HP}$	4 tugs, incl. 1 x $\geq 6000\text{HP}$ & 1 x $\geq 5000\text{HP}$	4 tugs, at least 2x $\geq 5000\text{HP}$	4 tugs, incl. 1 x $\geq 6000\text{HP}$ & 1 x $\geq 5000\text{HP}$	4 tugs, at least 2x $\geq 5000\text{HP}$	
(071) Proposed Relaxation for LOA Max 400m	4 tugs, at least 2x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$		4 tugs, at least 1x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$	4 tugs, at least 2x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$	4 tugs, at least 1x $\geq 6000\text{HP}$ & 1x $\geq 5000\text{HP}$	

On TrialLocation : **KC2****Kwai Chung berth 2***(Declared Depth at berth 15.5m)*

010 **Berthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

011 **Unberthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

020 **Berthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2.
 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2.
 1 if bow & stern thrusters fitted.
Remarks:

050 **Berthing** LOA: Max 360m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no bow thruster.
Remarks: GT >130000, LOA: Max 370m refers.

051 **Unberthing** LOA: Max 360m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2.
 1 if bow & stern thrusters fitted.
 D>13.0m, 3, 2 if bow & stern thrusters fitted.
Remarks: GT >130000, LOA: Max 370m refers.

On Trial*Location : KC2**Kwai Chung berth 2**(Declared Depth at berth 15.5m)*

060 **Berthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m & Port side to, D&N LW+1
 to LW+3 & HW-2 to HW+2
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no
 bow thruster.

Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to HW+2 if~~
 ~~Starboard side to~~
Tugs: 2.
 1 if bow & stern thrusters fitted.
 D>13.0m or Starboard side to, 3, 2
 if bow & stern thrusters fitted.
 D>14.0m, 4

Remarks:**General Remark:**

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. Declared depth of 15.5m is applicable to berth KC2 and 143m northward from the north end of berth KC2 (from Bollard No.549 to Bollard No.1934). The quayside of berth KC1 and KC2 are painted in orange to indicate the berth with depth of less than 15.5m.
3. LOA>350m, at least one tug ≥ 5000 HP.
4. LOA>350m & D>14.0m, at least two tugs ≥ 5000 HP.

On TrialLocation : **KC4****Kwai Chung berth 4***(Declared Depth at berth 14.2m)*

010 **Berthing** LOA: Max 130m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

011 **Unberthing** LOA: Max 130m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

020 **Berthing** LOA: Max 230m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2.
 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 340m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 340m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2.
 1 if bow & stern thrusters fitted.
Remarks:

050 **Berthing** LOA: Max 360m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no bow thruster.
Remarks: GT >130000, LOA: Max 370m refers.

051 **Unberthing** LOA: Max 360m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m, 3, 2 if bow & stern thrusters fitted.
Remarks: GT >130000, LOA: Max 370m refers.

060 **Berthing** LOA: Max 370m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
 D>14.0m & Port side to, D&N LW+1 to LW+3 & HW-2 to HW+2
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no bow thruster.
Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 14.2m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to HW+2 if Starboard side to~~
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m or Starboard side to, 3, 2 if bow & stern thrusters fitted.
 D>14.0m, 4
Remarks:

On Trial

Location : KC4

Kwai Chung berth 4

(Declared Depth at berth 14.2m)

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>350m, at least one tug $\geq 5000\text{HP}$.

On TrialLocation : **KC5****Kwai Chung berth 5***(Declared Depth at berth 15.5m)*

010 **Berthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

011 **Unberthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

020 **Berthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: GT >90000, LOA: Max 340m refers.

041 **Unberthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks: GT >90000, LOA: Max 340m refers.

050 **Berthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

051 **Unberthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks: D&N LW+1 to HW+1, thrusters not considered.

060 **Berthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+2~~
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>12.5m, 4 incl 1 GI escort if no bow thruster.
 ~~D>14.0m, 4 incl 3≥5000HP if out of LW+1 to LW+3 & HW-2 to HW+2~~
Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N HW-1 to LW+2~~
Tugs: 3, 2 if bow & stern thrusters fitted.
 D>14.0m, 4
Remarks:

On Trial*Location : KC5****Kwai Chung berth 5****(Declared Depth at berth 15.5m)*

070 **Berthing** LOA: Max 400m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-2 to HW+2
Tugs: 4 incl 1 GI escort if no bow thruster.
Remarks: All quay cranes at KC1 with distance
 less than 150m from KC5 quayside
 must be boom up. 210m southward
 from KC1 corner is not occupied.
 Port side to.

071 **Unberthing** LOA: Max 400m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N HW-1 to LW+2
Tugs: 4
Remarks: All quay cranes at KC1 with
 distance less than 150m from KC5
 quayside must be boom up. 210m
 southward from KC1 corner is not
 occupied.

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>350m, at least one tug $\geq 5000\text{HP}$.
3. LOA>350m & D>14.0m, at least two tugs $\geq 5000\text{HP}$.
4. LOA>370m & D>14.0m, at least one tug $\geq 6000\text{HP}$ & one tug $\geq 5000\text{HP}$.
5. Max draft is limited to 14.5m if vessel enters into the zone of 30m westward from east end of berth KC5. The quay side is painted in orange to indicate the zone with depth of less than 15m.
6. If berth KC1 is occupied, fore-and-aft clearance from KC5 corner of not less than 25m plus the beam of vessel at berth KC1 is required.

On TrialLocation : **KC8-9****Kwai Chung berth 8-9***(Declared Depth at berth 16.0m)*

010 **Berthing** LOA: Max 130m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

011 **Unberthing** LOA: Max 130m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

020 **Berthing** LOA: Max 230m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 340m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 340m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

050 **Berthing** LOA: Max 360m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+2~~
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no bow thruster.
 ~~D>14.0m, thrusters not considered if out of LW+1 to LW+3 & HW-2 to HW+2~~
Remarks: GT >130000, LOA: Max 370m refers.

051 **Unberthing** LOA: Max 360m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m, 3, 2 if bow & stern thrusters fitted.
Remarks: GT >130000, LOA: Max 370m refers.

On TrialLocation : **KC8-9****Kwai Chung berth 8-9***(Declared Depth at berth 16.0m)*

060 **Berthing** LOA: Max 370m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+2~~
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no bow thruster.
 ~~D>14.0m, 4 incl 3 ≥5000HP if out of LW+1 to LW+3 & HW-2 to HW+2~~

Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to HW+2~~
Tugs: 3, 2 if bow & stern thrusters fitted.

Remarks:

070 **Berthing** LOA: Max 400m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 & HW-2 to HW+1
Tugs: 4 incl 1 GI escort if no bow thruster.
Remarks:

071 **Unberthing** LOA: Max 400m
Draft: Max 16.0m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to HW+2~~
Tugs: 4
Remarks:

General Remark:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>350m, at least one tug ≥5000HP.
3. LOA>350m & D>14.0m, at least two tugs ≥5000HP.
4. LOA>370m & D>14.0m, at least one tug ≥ 6000HP & one tug ≥ 5000HP.

On TrialLocation : **KC10W****Kwai Chung berth 10W***(Declared Depth at berth 15.5m)*

010 **Berthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

011 **Unberthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1. 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

020 **Berthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs

031 **Unberthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs
 GT >90000, LOA: Max 340m refers.

041 **Unberthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks: GT >90000, LOA: Max 340m refers.

050 **Berthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs

051 **Unberthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>12.5m, 3, 1 if bow & stern thrusters fitted.
Remarks:

060 **Berthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-2 to HW+1
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>12.5m, 4 incl 1 GI escort if no bow thruster.
Remarks: Port side to

061 **Unberthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to HW+2~~
Tugs: 3, 2 if bow & stern thrusters fitted.
 D>14.0m, 4
Remarks:

On Trial

Location : KC10W

Kwai Chung berth 10W

(Declared Depth at berth 15.5m)

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min. total 10800 HP. Min. 2 tugs if bow and/or stern thruster(s) are fitted.
3. LOA>350m, at least one tug ≥ 5000 HP.
4. LOA>350m & D>14.0m, at least two tugs ≥ 5000 HP.

On TrialLocation : **KC12****Kwai Chung berth 12***(Declared Depth at berth 15.5m)*

010 **Berthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

011 **Unberthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather.

020 **Berthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs

031 **Unberthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs.
 GT >90000, LOA: Max 340m refers.

041 **Unberthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hr
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks: GT >90000, LOA: Max 340m refers.

050 **Berthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Starboard side to

051 **Unberthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>12.5m, 3, 1 if bow & stern thrusters fitted.
Remarks:

060 **Berthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-2 to HW+1
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>12.5m, 4 incl 1 GI escort if no bow thruster.
Remarks: Starboard side to

061 **Unberthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to HW+2~~
Tugs: 3, 2 if bow & stern thrusters fitted.
 D>14.0m, 4
Remarks:

On Trial

Location : KC12

Kwai Chung berth 12

(Declared Depth at berth 15.5m)

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min. total 10800 HP. Min. 2 tugs if bow and/or stern thruster(s) are fitted.
3. LOA>350m, at least one tug ≥ 5000 HP.
4. LOA>350m & D>14.0m, at least two tugs ≥ 5000 HP.
5. LOA>360m berthing, quay cranes at berth KC10W (150m eastward from berth KC9/10 corner) and berth KC13 are required to be boom up.
6. Subject to actual berthing position, boom up of additional quay cranes may be required if deemed necessary.

On TrialLocation : **KC13-14****Kwai Chung berth 13-14***(Declared Depth at berth 15.5m)*

010 **Berthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if D>8m.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

011 **Unberthing** LOA: Max 130m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if no anchor down.
Remarks: Ro-Ro vessel 2 tugs if adverse weather

020 **Berthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs

031 **Unberthing** LOA: Max 270m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs
 GT >90000, LOA: Max 340m refers.

041 **Unberthing** LOA: Max 300m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks: GT >90000, LOA: Max 340m refers.

050 **Berthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks: Stern in 3 tugs

051 **Unberthing** LOA: Max 340m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>12.5m, 3, 1 if bow & stern thrusters fitted.
Remarks:

060 **Berthing** LOA: Max 360m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to HW+2.
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>14.0m, 4 incl 1 GI escort if no bow thruster.
Remarks: Starboard side to

061 **Unberthing** LOA: Max 360m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3, 2 if bow & stern thrusters fitted.
 D>14.0m, 4
Remarks:

On Trial**Location : KC13-14****Kwai Chung berth 13-14***(Declared Depth at berth 15.5m)*

~~060~~ 070 **Berthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
D>12.5m, D&N LW+1 to HW+2.
Tugs: 3 incl 1 GI escort if no bow thruster.
2 if bow & stern thrusters fitted.
D>12.5m, 4 incl 1 GI escort if no
bow thruster.
Remarks: Starboard side to

~~061~~ 071 **Unberthing** LOA: Max 370m
Draft: Max 15.5m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to HW+2~~
Tugs: 3, 2 if bow & stern thrusters fitted.
D>14.0m, 4

Remarks:

~~070~~ 080 **Berthing** LOA: Max 400m
Draft: Max 15.5m + tide – 10% UKC
Time: D&N LW+1 to HW+2.
Tugs: 4 incl 1 GI escort if no bow thruster.
Remarks: Starboard side to

~~071~~ 081 **Unberthing** LOA: Max 400m
Draft: Max 15.5m + tide – 10% UKC
Time: ~~D&N LW+1 to HW+2~~ 24 hrs.
Tugs: 4 incl 2≥6000HP & 1≥5000HP if
out of LW+1 to HW+2
Remarks:

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. LOA>270m berthing stern in, each tug 3600 HP min. In case 3 tugs are used, min total 10800 HP. Min 2 tugs if bow and/or stern thruster(s) are fitted.
3. LOA>350m, at least one tug ≥5000HP.
4. LOA>350m & D>14.0m, at least two tugs ≥5000HP.
5. LOA>370m & D>14.0m, at least one tug ≥ 6000HP & one tug ≥ 5000HP.
6. LOA>390m berthing KC13, quay cranes at berth KC10W(100m eastward from berth KC9/10 corner) and berth KC14 are required to be boom up.
7. Subject to actual berthing position, boom up of additional quay cranes may be required if deemed necessary.

On TrialLocation: **KC 17- 19 18****Kwai Chung berth 17- 19 18***(Declared Depth at berth 16.5 m)*

010 **Berthing** LOA: Max 130m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if D>8m.
Remarks:

011 **Unberthing** LOA: Max 130m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if no anchor down.
Remarks:

020 **Berthing** LOA: Max 230m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hr.
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 340m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 340m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

050 **Berthing** LOA: Max 360m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1~~
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no
 bow thruster.
 ~~D>14.0m 4 incl 1≥6000HP & 1≥5000HP if out of LW+1 to LW+3 & HW-1 to HW+3~~
Remarks: GT >130000, LOA: Max 370m
 refers.

051 **Unberthing** LOA: Max 360m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m, 3, 2 if bow & stern
 thrusters fitted.
 D>14.0m, 4
Remarks: GT >130000, LOA: Max 370m
 refers.

On TrialLocation: **KC 17- ~~19~~ 18****Kwai Chung berth 17- ~~19~~ 18**

(Declared Depth at berth 16.5 m)

060 **Berthing** LOA: Max 370m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1~~
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no
 bow thruster.
 D>14.0m, 4 incl 2≥6000HP if out of
 LW+1 to LW+3 & HW-1 to HW+3
Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1~~
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m or Port side to, 3, 2 if bow
 & stern thrusters fitted.
 D>14.0m, 4 incl 1≥6000HP &
 1≥5000HP if out of LW+1 to
 LW+3 & HW-1 to HW+3
Remarks:

070 **Berthing** LOA: Max 400m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-1 to HW+1 3
Tugs: 4 incl 1 GI escort if no bow thruster.
Remarks:

071 **Unberthing** LOA: Max 400m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
~~D>14.0m, D&N LW+1 to LW+3 & HW-1 to HW+1~~
Tugs: 4
 D>14.0m, 4 incl 2≥6000HP &
 1≥5000HP if out of LW+1 to
 LW+3 & HW-1 to HW+1
Remarks:

General Remarks:

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. Berthing: LOA >130m swing around &/or Wedge-in minimum 2 tugs.
3. LOA>350m, at least one tug ≥5000HP.
4. LOA>350m & D>14.0m, at least two tugs ≥5000HP.
5. LOA>370m & D>14.0m, at least one tug ≥ 6000HP & one tug ≥ 5000HP.

On TrialLocation: **KC 17-19****Kwai Chung berth 17-19***(Declared Depth at berth 16.5 m)*

010 **Berthing** LOA: Max 130m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if D>8m.
Remarks:

011 **Unberthing** LOA: Max 130m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 1, 2 if no anchor down.
Remarks:

020 **Berthing** LOA: Max 230m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hr.
Tugs: 2
Remarks:

021 **Unberthing** LOA: Max 230m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2
Remarks:

030 **Berthing** LOA: Max 270m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

031 **Unberthing** LOA: Max 270m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

040 **Berthing** LOA: Max 340m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 3 incl 1 GI escort if no bow thruster.
 1 if bow & stern thrusters fitted.
Remarks:

041 **Unberthing** LOA: Max 340m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
Remarks:

050 **Berthing** LOA: Max 360m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-1 to HW+**1 3**
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no
 bow thruster.
Remarks: GT >130000, LOA: Max 370m
 refers.

051 **Unberthing** LOA: Max 360m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m, 3, 2 if bow & stern
 thrusters fitted.
 D>14.0m, 4
Remarks: GT >130000, LOA: Max 370m
 refers.

On TrialLocation: **KC ~~17-19~~****Kwai Chung berth ~~17-19~~**

(Declared Depth at berth 16.5 m)

060 **Berthing** LOA: Max 370m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-1 to HW+~~1~~ **3**
Tugs: 3 incl 1 GI escort if no bow thruster.
 2 if bow & stern thrusters fitted.
 D>13.0m, 4 incl 1 GI escort if no
 bow thruster.

Remarks:

061 **Unberthing** LOA: Max 370m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to LW+3 &~~
 ~~HW-1 to HW+1~~
Tugs: 2, 1 if bow & stern thrusters fitted.
 D>13.0m or Port side to, 3, 2 if bow
 & stern thrusters fitted.
 D>14.0m, 4 ~~incl~~ **1**≥6000HP &
 1≥5000HP if out of LW+1 to
 LW+3 & HW-1 to HW+**3**

Remarks:

070 **Berthing** LOA: Max 400m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 D>14.0m, D&N LW+1 to LW+3 &
 HW-1 to HW+~~1~~ **3**
Tugs: 4 incl 1 GI escort if no bow thruster.

Remarks:

071 **Unberthing** LOA: Max 400m
Draft: Max 16.5m + tide – 10% UKC
Time: 24 hrs
 ~~D>14.0m, D&N LW+1 to LW+3 &~~
 ~~HW-1 to HW+1~~
Tugs: 4
 D>14.0m, 4 ~~incl~~ **2**≥6000HP &
 1≥5000HP if out of LW+1 to
 LW+3 & HW-1 to HW+**1**

Remarks:**General Remarks:**

1. Please see Chapters 2, 3 & 4 on general requirements for Kwai Chung Terminals.
2. Berthing: LOA >130m swing around &/or Wedge-in minimum 2 tugs.
3. LOA>350m, at least one tug ≥5000HP.
4. LOA>350m & D>14.0m, at least two tugs ≥5000HP.
5. LOA>370m & D>14.0m, at least one tug ≥ 6000HP & one tug ≥ 5000HP.