The fatal accident of a deck cadet on board the Hong Kong registered container vessel "OOCL Europe" at Dammam, Saudi Arabia on 12 February 2015 (All times were Local Time, UTC +3)

1. The incident

1.1 At 0400 on 12 February 2015, the Hong Kong registered container vessel "OOCL Europe" (the *vessel*) was preparing for departure from a berth in the port of Dammam, Saudi Arabia. The second officer (2/O) was the person in-charge of the aft mooring station, and was assisted by a senior quarter-master (QM), an ordinary seaman (OS) and a deck cadet (DC).

1.2 In order to depart from the berth and engage in towing operation, the operation team retrieved two stern lines, which was originally made fast to the berth bollards, by a stern mooring winch. One of these two lines was subsequently unreeled from the winch drum that would be used as a towline. The towline was then arranged to pass through the double bollards, and a universal fairlead to hang down over the ship side for towing operation.

1.3 At 0417, after the towline was picked up by the tug boat, she slowly moved away from the *vessel*. At about 0419, the OS and the DC, who were standing close to the towline, continued monitoring the pay out of the towline. The QM was on stand-by at the port side mooring winches remote control station. The 2/O was at a short distance forward to communicate with the tug boat operator by hand signals.

1.4 When the length of the towline lying on deck had almost slipped overboard, the 2/O ordered the QM to operate the mooring winch to unreel extra length of the rope from the drum. At 0420, the tug boat moved quickly away from the *vessel* which caused the towline subjected to a sudden tension. The towline slipped out of the bollard, stretched and straightened and snapped forward. As a result, the towline hit the chest of the DC.

1.5 Following immediate order to stop the towing operation, the 2/O went to check the condition of the DC and found that he was unconscious without breathing and blood coming out from his nose. Later on, medical officers from shore attended on board and the DC was confirmed died.

1.6 The investigation into the accident revealed the main contributory factors as follows:

(a) the officer in charge of the unmooring operation at aft station was not familiar

with the operation using ship's rope as towline. However, risk assessment, plans and safety precautionary measures were not carried out;

(b) the junior officer (the DC) was not closely supervised and monitored while he was engaging in critical shipboard operations on board as he was not warned to stay clear of snap-back zone, particularly after the tug boat had picked up the towline; and

(c) ineffective communication between the *vessel* and the tug boat and the tug boat operator was not aware of the actual mooring arrangement.

2. Lessons learnt

2.1 The masters and officers shall strictly follow the mooring operation procedures. In particular, the concerned parties shall:-

(a) carry out risk assessment to determine the precautionary measures and the officers and crew shall familiar with the peculiar situations;

(b) establish comprehensive action plans and ensure effective communication among all parties involved in the operation; and

(c) brief all members of the team about the potential snap-back zone in the mooring stations and closely monitor all junior seafarers such as ordinary seamen and cadets.