

## DUBLIN PORT ACCIDENT

**On an early autumn evening in 2007, an accident happened which affected families, workers and businesses in three European Union member states.**

### The accident

On the evening of August 7th 2007, the roll-on-roll off passenger ferry Dublin Viking was preparing to leave her usual berth for a scheduled sailing. Wind and tidal conditions were good. The ship was loaded with passengers, trailer units, lorries and car transporters. Cargo documents were brought on board and the deck crew then went to take up their positions at the mooring stations to prepare for unberthing.

As the ship was being unberthed and the stern line let go, an ordinary seaman was operating the stern ramp winch. The operator heaved in the line instead of paying out slack. The stern line parted with a loud crack, snapped back, and whipped across the deck.

Two able seamen nearby heard the line start to make creaking noises and fell to the deck to protect themselves. The stern line hit the ship's second officer who was some distance away. An ordinary seaman saw the officer fall to the deck, immediately halted the mooring winch and went to his aid.

The second officer suffered severe injuries. Both his legs were broken. His left leg was almost severed and he was bleeding profusely. He was evacuated to hospital where his leg was amputated, but his condition remained critical, and he died six days later.

## Causes

The accident happened in Ireland; the worker who was killed was Polish; and the company for which he worked was British. An investigation into the accident was carried out both by the Irish Marine Casualty Investigation Board and the British Marine Accident Investigation Branch. The two authorities issued a joint report in March 2008.<sup>1</sup>

The report found that the accident had a number of causes, including failure to maintain the stern line. The report notes that the stern mooring line was in poor condition and that its minimum breaking load had been reduced to approximately 50% of its original strength. The additional tension inadvertently applied by the mooring winch exceeded the line's minimum breaking load.

All the mooring equipment showed evidence of wear. Rust and scale had developed in other areas, such as the reverse bitts in which a single yarn from the parted stern rope had been caught.

Procedures on board for inspection and replacement of mooring lines were informal and vulnerable to misunderstandings between different crew. Although the vessel's mooring ropes were required to be inspected, the onboard procedures were informal and no records were kept," said the report. Mooring lines were not part of the planned maintenance system.

The investigation also found that routine examination of the mooring line was not based on any objective standard, and a typical service life for the mooring lines could not be estimated since differing environmental conditions are known to have widely varying effects on their condition. It was not possible to link any of the lines to the warranty certificates with confidence. The warranty certificates were not included in the vessel's maintenance management system and there were no other records of when each line entered service or when it had been inspected.

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<sup>1</sup> *Report on the investigation of the parting of a mooring line on board Dublin Viking alongside Berth 52 in the Port of Dublin, Ireland resulting in one fatality.* A joint report by the Irish Marine Casualty Investigation Board and the British Major Accident Investigation Branch (Report No 7/2008) at: [http://www.maib.gov.uk/cms\\_resources/Dublin%20Viking.pdf](http://www.maib.gov.uk/cms_resources/Dublin%20Viking.pdf).

The Marine Investigations Boards' report had identified 18 separate safety issues that had contributed to the accident, including the deterioration of the mooring line.

Separate civil court proceedings were brought by the family of the man killed in the accident and they were awarded €750,000 compensation.

### **Lessons**

There are lessons to be drawn from the Dublin accident. The simple lesson, which applies to all types of sea-going vessels and, indeed, vessels on inland waterways, is that mooring lines have to be regularly inspected and replaced as necessary. Their condition inevitably deteriorates because they are constantly exposed to every kind of weather from frost to intense sunlight. There should be procedures in place for the inspection and maintenance of mooring lines as part of the maintenance management system of the vessel.

In all workplaces employers should ensure that ropes, winches, chains and all types of lifting equipment are checked regularly and are properly maintained and, if they are worn or defective, that they are replaced.

### **SUMMARY**

As the stern line on a ship about to leave Dublin port was being let out, it snapped and whipped across the deck, hitting the ship's second officer. Both his legs were broken. He was taken to hospital where one leg was amputated but he died six days later. An official enquiry into the cause of the accident found that the accident had a number of causes, including failure to maintain the stern line. Analysis of the mooring line after the accident showed that it had deteriorated, largely due to exposure to ultraviolet (UV) radiation from sunlight. Inspection procedures onboard were informal and no records were kept. The maintenance failure cost the second officer his life.

The lesson to be drawn from the Dublin accident which applies to all types of vessels is that mooring lines have to be regularly inspected and replaced as necessary. Their condition inevitably deteriorates because they are constantly exposed to every kind of weather from frost to intense sunlight. There should be procedures in place for the inspection and maintenance of mooring lines as part of the maintenance management system of the vessel.

In all workplaces employers should ensure that ropes, winches, chains and all types of lifting equipment are checked regularly and are properly maintained and, if they are worn or defective they are replaced.