SECTION 2

Towing Operations
"UK Standard Conditions for Towage and Other Services (Revised 1986)" are the normal conditions under which UK harbour towage services are provided to customers. Towage services overseas are provided under specific contractual agreements. A copy of the UK Standard Conditions can be found in the Section 7, STP 003, of this manual.

If an owner or master of a vessel refuses to accept UK Conditions or contractual agreement refer to Operations Manager - Marine before supplying services.
Inspection of towing equipment shall include all ropes, wires, shackles, messengers winches, hooks and any other item specifically designed or used, to provide towage services. In date, test certificates shall be held on board for all equipment in use.

Equipment shall be inspected every time before use and on recovery after completing towage services. Damaged or suspect items of equipment are to be immediately withdrawn from service and clearly marked "Not to be Used".

If any item of equipment is damaged during towage operations, the Master / Pilot of the vessel shall be informed and also the Operations Manager - Marine. **Under no circumstances shall a tug crew leave a tug, after completing a job, without replacing damaged equipment or advising Operations Manager - Marine and Engineering Manager – Marine of the situation.**
Towing winch and towing hook release mechanisms are to be frequently tested for correct operation. All methods of "tripping" or "run out" are to be tested (Pneumatic, manual pull, lever or knock out etc).

Release mechanisms are also to be tested at other times, if a fault is suspected or an exceptional shock loading has been experienced.

Under no circumstances must towing equipment be connected to any winch or hook that has a suspect release mechanism. Correct maintenance and operation are essential. **It could save your life.**
Communications with Ship and Harbour Authority

Guidance Note No: T4

At all times whilst a tug is manned and available for towing operations a listening watch shall be maintained on working and harbour VHF frequencies, by the duty tug or the next tug in line if Duty Tug is working.

Where no shipping movements are imminent, or there is sufficient time before the next movement for the tug crews to take a statutory rest period, the duty tug will inform the VTS Operator that they will be going off radio watch and will be contactable by mobile telephone.

When talking, be brief, relevant and professional in the comments you make. Remember, other port users are listening and may be waiting to speak on the frequency. If necessary, repeat back orders received, to ensure that they have been recorded correctly. Always establish communication with the ship or pilot before you arrive.

If an incident occurs during a normal harbour towage job, log any VHF conversation that you think may have a significant effect on the incident or be contentious at a later date (e.g.: from ship to harbour authority, "I am aground and require tugs"). This works both ways, remember, "what you say", is also being recorded.

Further information can be found in Marine Guidance Note MGN 22 (M&F) "Proper use of VHF Channels at Sea".
Maintaining Watertight Integrity on Main and Towing Deck

Guidance Note No: T5

It is essential that a watertight seal is maintained on maindeck and towing deck, at all times whilst towing, to avoid water entering below decks in a girting situation.

This applies to all watertight doors, hatch openings and emergency escapes. Openings that are required to be closed, should be marked with an accordingly with an appropriate sign.

Rubber seals and locking dogs are to be kept in good working condition at all times and properly fitted. Always operate all closing devices and dogs fitted; it is not sufficient to lock two dogs on a watertight door fitted with six.

If entry is required through a hatch or door during towage operations, the Tugmaster should be informed and the hatch or door closed immediately after entry. Do not leave open, even if only inside for a short period of time.

Further information can be found in the publication "Tug Use In Port", Chapter six.
Use of Bridle and Gob Rope | Guidance Note No: T6

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<th>Interaction and Shallow Water Effects</th>
<th>Guidance Note No: T7</th>
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The effects of interaction between vessels and shallow water are well known, and it is not intended to give guidance on all the different kinds that can be experienced.

However, Tugmasters should be aware of the critical manoeuvres when these effects are most likely to be apparent, that is whilst connecting and disconnecting to the ship, in particular, whilst manoeuvring away from the ships side and moving ahead.

It is a requirement that all Tugmasters and Mates read completely chapter six (Interaction and Tug Safety) of the publication "Tug use in Port".

Further information can be found in Marine Guidance Note MGN 199 M&F)
Safety of Crew | Guidance Note No: T8

**Safety of crew is the first responsibility of Tugmasters.** All towage operations and manoeuvres must be conducted in a safe and seamanlike manner. If at any time a Tugmaster is requested to carry out a manoeuvre, which he considers will result in a hazardous situation, he is to decline the order, stating the reasons why.

Whilst engaged in towing operations the minimum number of crew essential to carry out duties, is to be on deck, and never exposed to a rope or wire under tension or load. Wherever possible, a "clear deck" of crew should be in operation whilst towing.

Personal Protective Equipment (PPE) and hazardous duty (Working) lifejackets should be worn at all times whilst engaged in, or in the vicinity of, towing operations on towing deck. It is the Tugmasters responsibility to enforce the wearing and use of safety equipment.
Passing and recovery of towing gear are hazardous operations exposing crew to risk of injury and the tug to the effects of interaction. The following guidelines are to be observed at all times:

- Never allow a crew member to stand in the direct line of throw of a heaving line being passed from the ship.

- Always ensure that towing gear being passed is clear to run and not likely to snag on an obstruction.

- Do not stand in the bight of a rope or wire.

- Pass the towing gear to the ship in a controlled manner.

- Always confirm with the ships crew that the towing equipment has been made fast.

- Beware of ships crews releasing gear in an uncontrolled manner and not using the messenger to lower rope / wire to tug.

- Whenever possible "shorten in" to shortest length possible before giving ships crew the "all clear" to let go. This will avoid the possibility of a rope or wire being caught in tugs propellers or trapped between sections of fendering, if released in an uncontrolled manner.

- Never stand directly under the ships fairlead during letting go.

- Be aware of possible interaction effects. The violent movements caused by two vessels coming into contact could cause a crew member to be injured in a slip or fall.

- When recovering towing gear, clear the ship as soon as possible. It is always easier to recover gear at a slow speed than a higher speed, which may be necessary if running ahead of the ship.

- Always restow gear correctly so that it is ready for use immediately, should an incident arise.

Further information can be found in the publication "Tug Use In Port", Chapters Four, Six and Seven.
Section 2  
Sullom Voe Harbour Authority – Towage Operations  

**Guidance Note No: T10**

**Reporting of Pollution Incident**

All pollution incidents involving a Sullom Voe Harbour Authority vessel, irrespective of amount, are to be reported through line management. This also includes pollution caused by another vessel either working with or being towed by a Sullom Voe Harbour Authority vessel.

Respond to pollution incidents in accordance with the instructions given in your tugs Shipboard Oil Pollution Emergency Plan (SOPEP).
Reporting of Damages

Guidance Note No: T11

All damages to Sullom Voe Harbour Authority tugs and towed vessels must be reported on form STF 01.

Guidelines in the event of damage are as follows:

- Make logbook entry.
- Complete incident report form STF 01.
- Compile master’s statement of events.
- Take statements from witnesses.
- DO NOT ADMIT LIABILITY.
- Only sign letters of protest “For Receipt Only”.
- Keep any evidence for possible survey (parted rope / wire etc).

Damages should be reported by the fastest means possible. Also, at the time of the incident verbally report damage to Pilot or Master of the vessel.

All the above actions are important to avoid future ambiguity when a damage claim is being pursued. Particularly, for tugs operating on overseas contracts where United Kingdom Standard Conditions for Towage and Other Services (Revised 1986) do not apply.
The two modes of escorting duties are:

**Active** - Tug is connected to the stern of ship by towline.
**Passive** - Tug is not connected to ship by towline.

Active Escorting can only be conducted if the following criteria can be met:
- Crews and Pilots are familiar with active escorting procedures and techniques.
- Active Escorting is Port policy

**Active escorting**
- **Direct Towing**
  - Direct Arrest Mode - Used to take the way off a ship. The escort tug applies force to the towline to take the way off the ship.
  - Combination Mode - Used to oppose the turning moment of a disabled ship. From a position broad on the quarter of the disabled ship, the escort tug applies a force on the towline to counter a steering sheer.
- **Indirect Towing**
  - Indirect Arrest Mode - To turn a ship. The escort tug applies the towing force at an angle of about 90 degrees to its towing point, from a position off the ship's quarter, so that a combination of towline force and tug hull interaction is applied to the ship’s stern in order to turn the ship. There is also an element of braking force in this mode.

The decision to put crew on the after deck to handle the towline and messenger in order to connect from the escorted ship will rest solely with the Tugmaster. The criterion for this task will be whether the man can safely carry out the task.

No crew member is to proceed on deck during escorting operations without the following equipment:

- Boilersuit.
- High Visibility Jacket.
- Lifejacket.
- Safety shoes or boots.
- Safety Helmet fitted with chinstrap or approved safety head wear.
- Gloves.

The bridge / foredeck communication system is to have been satisfactorily tested before commencement of escorting operations.

When connecting / disconnecting, the Tugmaster is to manoeuvre the tug as close to the ships stern as is safely practicable.
If the Tugmaster considers that weather / sea conditions or the ships speed is excessive at the normal position for making fast, he will passively escort the ship and delay making fast until satisfied that it is safe to do so and contact the ship explaining why he / she is unable to make fast.

Should the Tugmaster decide that conditions preclude the crew from going on the aft deck for letting go, he will manoeuvre the tug as close to the stern of the ship as is safely practicable. He will then instruct the ships crew to lower the towline and messenger at a controlled speed, so that it can be heaved onto the tugs winch without being dropped into the water during the recovery process.

When connecting / disconnecting, the time spent on the aft deck by the tug crew member is to be kept to the minimum.

**Passive Escorting**

No additional safety procedures are required for Passive Escorting. However, in the event of an emergency onboard the escorted vessel, which requires the escort tug to provide assistance, normal safety procedures will apply.

If in the opinion of the Tugmaster, he and his crew are fatigued to the point that they are unable safely to undertake a Passive Escort, the Master is to inform line management and / or Port Control.

Further guidance can be found in:
Chapter 9 of “Tug Use In Port”.
Code of Safe Working practices for Merchant Seamen – Chapter 4.
Section 6, Guidance Note S3 of the Sullom Voe Harbour Authority – Towage Operations Manual.

**SAFETY POINTS TO REMEMBER**

- Escorting is a risk reducer not a risk eliminator
- Always have 1.5 - 2.0 knots of extra speed in hand
- Do not attempt active escorting unless you have been trained and procedures are in place.
- Conventional (Stanechakker and other non tractor) tugs are only suitable for passive escorting.
Towage Pre-movement Planning Meetings

In circumstances where towage services are provided to a vessel or structure that has unusual handling characteristics due to shape, height or draft etc a pre-movement planning meeting is to be held between all organisations / individuals who are involved.

A pilotage passage plan for the movement is to be agreed and particular consideration given to the effects of wind strength / direction together with tidal flow and strength. Maximum limits for wind and tidal strength are to be agreed before commencement of movement.

Other considerations to be discussed should include: communications (including secondary channels), limitations of tugs in use, depth of water, navigational restrictions, emergency anchorages and response to an unplanned incident.

The Master should record in the Daily Log Sheet or Voyage Log Sheet that a pre-movement planning meeting has taken place.
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