

BRITISH TUG OWNERS ASSOCIATION

Coastal and Offshore Towing Plan Aide Memoire

A Planning

1	Understand nature of tow and anticipated voyage
2	Check correct charts and NPs held onboard for the anticipated voyage, and are up to date
3	Complete passage plan, berth to berth and including identification of safe havens
4	Estimate duration of tow from towed object shape and characteristics
5	Check fuel, lubs, water and engine consumables ROB are sufficient for the tow
6	Suitable quantities of fresh water and victuals, of good quality, onboard
7	Emergency systems checked
8	Emergency release checked, reset and logged
9	Primary, secondary / emergency tow gear onboard sufficient and correct, including up to date certification
10	Nature of towing contract understood, particularly liabilities and warranty of authority
11	Tug Certificates all in order and in date
12	Tug LSA and fire-fighting appliances in date and per the safety plan and certificated
12	Check that planned towed object has P&I insurance and a Loadline / Loadline exemption
13	Voyage instructions issued to the Master by the DPA / chartering department
14	Bridge equipment tested, including radar, ECDIS, compasses, GPS, AIS, LRIT, Navtex, auto-pilot, echo-sounder, log and any ancillary/spare gear
15	Communication equipment checked and tested, including VHF/HF/MF, AIS, LRIT, Sat/mobile comms, internal / talkback systems and alarms
16	Anchors checked
17	Compile Navigational warning information for passage
18	Class and statutory spares checked

B Pre-operation / pre-voyage

1	Tug crew briefed, risk assessments and contingency plans discussed and understood
2	Work Permits issued as required, control of work considered and understood
3	Tow gear rigged - tow connections inspected and agreed by tow insurers warranty surveyor, copy held onboard and caveats/restrictions understood by tug master and crew
4	Consider towing towed object stern first if rudder damaged / stuck over
5	Chafing arrangements considered - chain bridles preferable for longer distance tows
6	Emergency tow and pick up line with buoy rigged
7	Tow shapes and lights rigged and checked on towed object
8	Gog and tow pins rigged, or shark jaws tested and set
9	Lines/visual aid painted on towed object hull at waterline
10	Issue Notice of Readiness
11	Issue On Hire Certificate with ROB's
12	Watertight integrity of towed object checked and verified
12	Emergency pumping arrangement on towed object checked/rigged
13	Method of boarding at sea considered/rigged
14	Wind direction, strength and sea state caveats and operational limits understood and agreed
15	Weather forecast checked
16	Tug AIS/LRIT programmed (and on towed object if power available)
17	Consider if there is a need to lock shafts and rudder on towed object
18	Unless necessary all persons are to be clear of towed object throughout the tow
19	Tug watertight integrity checked and logged
20	Departure method and timings agreed with pilots

21	Agree method of disembarking on sailing (and embarking on arrival) riggers post final sea voyage preparations and checks
22	Assist tugs briefed by the tow / tug master and pilots, agree method of streaming the tow
23	Watchkeeping rota posted, crew per safe manning certificate, adequate to maintain a safe navigational watch and to meet the Maritime Working Time Directive
24	Masters voyage instructions written and signed by deck watchkeepers
25	Chief Engineer voyage instructions written and signed by engine watchkeepers
26	Secure on tug in Masters custody the towed object certificate/ship papers file – a signed receipt may be required

C Towage operation

1	Secure the tug for sea
2	Tug and tow manoeuvred out of port with assist tugs and pilots per the pre agreed plan
3	Emergency tow pick up line streamed
4	Winch brake set
5	Speed adjusted until tow riding steadily – note that higher speeds can lead to shearing
6	Adjust towline to ensure catenary does not ground and navigate to avoid charter obstructions, depth monitored to avoid chafing on seabed
7	Monitor slippage of tow wire / winch creep / inadvertent paying out of line
8	Monitor / maintain position of tow shoe, sleeve or anti chafing device
9	Tow wire monitored, particularly for creep and chafing – freshen as required
10	Course and speed monitored against passage plan
11	Warn other shipping, especially if the tow is sheering
12	Clear exposed deck policy maintained – OOW permission required
12	Towed object freeboard checked regularly
13	Assess the trim and stability of the tug throughout passage
14	Tug and tow nav lights and shapes checked regularly
15	Weather forecast and outlook checked each watch
16	Tow and tow line illuminated at nighttime by tug searchlight(s)
17	Daily reports sent to DPA and/or charterer per voyage instructions
18	Communication systems checked daily
19	Rounds, especially fire and watertight integrity, conducted each watch - OOW permission required when proceeding to exposed decks, and only if it is safe to do so
20	Agents at destination port kept advised and pre arrival paperwork, including garbage, crewlists, customs / immigration / bond declarations and ISPS documentation / current state
21	Monitor ROB's always maintaining a suitable reserve
22	Crew health, welfare and fatigue monitored throughout the tow
23	Contingency plans and emergency preparedness considered throughout tow

D Post towage operation

1	Issue Offhire certificate with ROBs
2	Recover, inspect, clean and stow towage gear – done in a controlled and planned manner due to handling heavy gear
3	Clean tug and gear – fresh water washdown to remove sea water, lubricate wire as required
4	Advise DPA / chartering office
5	Note Protest for any damage caused during tow
6	Handover towed object certificates to Agent, receipt required
7	Arrange clearance outwards
8	Passage plan for next task/port, berth to berth
9	Check ROB's and stores are sufficient for next voyage / demobilisation
10	Issue departure paperwork
11	Issue departure voyage instructions and watchkeeping rota

Emergency Preparedness and Contingency Planning

Consider and plan actions to be taken in the event of:

1	Failure of towing lines or equipment
2	Failure of gog arrangements
3	Failure of engine(s)
4	Failure of UMS system
5	Failure of steering gear
6	Failure of electrical / 24v systems
7	Loss of communications or navigational equipment
8	Mechanical problem on the towed vessel
9	Fouled propulsion system – tug or tow
10	Compromise of watertight integrity of tug or tow
11	Collision with other vessel or tug or tow
12	Grounding of tug and/or tow
12	Man overboard, tug or tow
13	Fire, tug or tow
14	Pollution, tug or tow
15	Possibilities of personnel transfer tug-tow
16	Restricted visibility

Additional references:

1. IMO Guidelines for Safe Ocean Towing
2. Shipowners Club, Tugs and Tows – A Practical Safety and Operational Guide
3. MCA Safety of Towed Ships and Other Floating Objects
4. MCA Safety of Tugs While Towing
5. MCA Dangers of Interaction
6. MCA Code of Safe Working Practices for Merchant Seafarers
7. ICS Bridge Procedure Guide
8. BTA/Chamber of Shipping Pilots' Pocket Guide and Checklist

Disclaimer:

This document has been produced by the British Tugowners Association and is intended as guidance only for use at the reader's own risk. It should be used in conjunction with the company's safety management system and the guidance given in the references where appropriate.

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