

# TOWAGE OF SMALLER VESSELS AND BARGES IN COASTAL WATERS

## TOWED OBJECT

- **Risk and condition assessment.**
  - Seaworthiness.
  - Manned/Unmanned.
  - Cargo.
  - Route planning and timetable with port or place of refuge. Other traffic. Navigational warnings.
  - Draught, freeboard, bow height, air draught, current, tidal water.
  - Weather. Restrictions on wind and wave height.
  - Speed and length of towing line.
- **Plan for towing arrangements.**
  - Method and connecting arrangements.
  - Chain bridle is recommended.
  - Location of connecting point, strength/ adequacy, calculations/ to be checked
  - Navigation lights and shapes.
  - Emergency tow wire.
  - Boarding arrangements.
  - Bilge pumping arrangements.
- **Contacts with authorities, classification and insurance company.**
- **Condition survey of towed object.**
  - Certificates. Control and update if necessary.
  - Stability.
  - Water integrity.
  - Safety (lifesaving appliances, fire safety etc.)
- **Towage approval. Before departure.**
- **Communication**
  - Contact list and means of contact, including back-up systems.
  - Voyage reporting
- **Contingency plan for emergency situations.**

## TUG

- **Size and capacity.** Calculation of bollard pull.
- **Trading permits and certificates.**
- **Towing equipment.** Suitable chains, wires, ropes etc.
- **Towage agreement.**
- **Bunker and supplies.**
- **Work safety** to be assessed.

## IMPLEMENTATION PRE-TOWING

- **Installation of bridles and check of strength of connecting points.**
- **Stability calculation in actual condition to be carried out both for the tug and the tow.**
- **Secure cargo and all loose equipment.**
- **Water integrity secured/checked.**
- **Securing of propeller shaft if applicable.**
- **Securing of rudder if applicable.**
- **Tank and bilge sounding. Survey of void spaces.**
- **Draught readings.**
- **Marking of actual water line.**
- **Emergency pumps installed/checked.**
- **Navigational lights and shapes rigged/checked.**
- **Emergency towing arrangements installed.**
- **Anchor and winches checked/tested if applicable.**
- **Preparedness for emergency use.**
- **Gangway/pilot ladder or other boarding arrangements made available for use during voyage.**

## CONNECTION OF TUG AND CHECKS AT DEPARTURE

- **Installation of towing bridle.**
- **Connection of towing line.**
- **Check of navigational lights and shapes.**
- **Check of emergency towing arrangements.**
- **Check of emergency anchoring arrangements.**
- **Check Control of tug's certificates and permits.**
- **Check of tug's towing arrangement and certificates.**
- **Confirm weather forecast for next 36 and 72 hours.**
- **Confirm weather, wind and wave height restrictions.**
- **Check route and passage plans.**
- **Check procedure for arrival to destination and port(s) of refuge.**
- **Check contact details and reporting routines.**
- **Approval from classification/authorities regarding towage arrangement.**
- **Review of towage operation with tug master.**