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SHIP/PORT INTERFACE

Availability of tug assistance

1 The Facilitation Committee at its thirtieth session (27 to 31 January 2003), the Maritime Safety Committee at its seventy-seventh session (28 May to 6 June 2003) and the Marine Environment Protection Committee at its forty-ninth session (14 to 18 July 2003), recognizing the importance of the provision of adequate tug assistance in ports for ensuring maritime and port safety, the protection of the marine environment and the facilitation of maritime traffic, approved the issuance of this circular to assist port authorities and port operators in assessing the adequacy of the tug services in their ports.

2 The annex to this circular, which contains a detailed list of the contents of the Nautical Institutes publication 'Tug Use in Ports – A Practical Guide'^{*}, provides guidance for conducting such an assessment. The key elements to be considered, when carrying out the assessment, are those highlighted in bold italics. Presently this publication is only available in the English language.

3 Member Governments are invited to bring this circular to the attention of administrations, port authorities, port operators, pilot organizations and tug services.

* **The publication (ISBN 1 870077 39 3) can be obtained from;**

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ANNEX

LIST OF CONTENTS OF THE PUBLICATION “TUG USE IN PORTS – A PRACTICAL GUIDE”

Remark:

The Chapters are shown in bold capital letters, while the section headings are shown in bold letters.

Key elements to be considered when conducting an assessment on the adequacy of tug services are highlighted in bold italics.

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In ports tugs may render one of the following services:

- *Tug assistance during a transit to or from the berth including assistance during mooring and unmooring operations*
- *Tug assistance mainly during mooring and unmooring operations only)*
- *Giving steering assistance and controlling ship's speed*
- *Compensating for wind and current during transit while a ship has speed*
- *Controlling traverse speed towards a berth while compensating for wind and current during mooring/unmooring operations*

3.2 Assisting methods

3.2.1 Assisting methods in use

There are only two markedly different assisting methods

- *Tugs towing on a line*
- *Tugs operating at a ship's side*
- Tugs alongside during approach to the berth and pushing or push while mooring
- Forward tug alongside and aft tug on a line during approach towards a berth and push-pull while mooring
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- High GM and good dynamic stability
- Reducing the transverse resistance of the hull
- Reducing the height of the towing point
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- The phase whereby a ship has reasonable speed
- The intermediate phase

- The phase involving the final part of the arrival manoeuvre

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The following main factors influence tug assistance:

- *Port particulars, including:*
Restrictions in the fairway, port entrance, passage to a berth, turning circle, manoeuvring space at a berth or harbour basin, available stopping distance, locks, bridges moored vessels, water depths, speed restrictions, and so on.
- *Berth construction, including:*
Type of berth: open, e.g. jetty, or solid
- *The ship, including:*
Type, size, draft and underkeel clearance, trim, windage, and factors such as engine power ahead/astern, propeller type, manoeuvring performance and availability of side thrusters and specific rudders
- *Environmental conditions, including:*

Wind, current, waves, visibility, ice

- *Method of tug assistance, including:*

Towing on a line, operating at a ship's side or a combination of methods

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For pilot training:

- *Ship handling*
- *Knowledge of the capabilities and limitations of tugs while rendering assistance*

For tug captain training:

- *Handling of a free sailing tug*

- *Knowledge of the capabilities and limitations of ships and of tugs while rendering assistance*
- *What knowledge of tugs and tug use is required by a pilot?*
- *What is useful for a tug captain to know about ships?*
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