



İstanbul :

24.12.2015

Sayı  
Our Reference: 5005Konu  
Subject : **Malaka ve Singapur Boğazlarında  
Dinamik Omurga Altı Su Derinlik Sörveyi Projesi'ne Katılım Hk.**

Sirküler No: 865 / 2015

İlgi: Uluslararası Deniz Ticaret Odası'nın ( ICS) 22 Aralık 2015 tarihli MC(15)69 sayılı sirküleri.

Uluslararası Deniz Ticaret Odası tarafından gönderilen ilgi yazı ile ,Avustralya Deniz Mühendisliği Şirketi olan OMC International tarafından Malaka ve Singapur Boğazlarında AIS tabanlı Omurga altı Su Derinliği Ölçüm Projesi'nin gerçekleştirileceği bildirilmektedir. Projenin **2016 yılının Şubat ayı içerisinde gerçekleşeceği, pojenin icrasında özellikle Malaka ve Singapur Boğazlarında Doğu istikametinde geçiş yapan derin su çekimli gemiler ile yine aynı bölgede Batı istikamette geçiş yapacak olan bir Konteyner gemisinin katılımının planlandığı belirtilmektedir.**

Proje ayrıntıları EK'te sunulmuş olup, projeye gönüllü katılım sağlamak isteyen firmaların [milly.dewar@ics-shipping.org](mailto:milly.dewar@ics-shipping.org) adresinden iletişime geçmeleri istenmektedir.

Bilgilerinize arz / rica ederiz.

Saygılarımızla,

Murat TUNCER  
Genel Sekreter**EKLER:**

EK-1: İlgi Yazı (5 sayfa)

**DAĞITIM****GEREĞİ**

- Tüm Üyelerimiz (WEB Sayfasında)
- Türk Armatörler Birliği
- S.S. Gemi Armatörleri Mot. Taş. Koop.
- 22,24,25,27,29,30,40 ve 42'nci Meslek Grupları Üyeleri
- Tüm Gemi Sahipleri

**BİLGİ**

- Yönetim Kurulu Bşk. ve Üyeleri

## International Chamber of Shipping

38 St Mary Axe London EC3A 8BH

Tel: +44 (0)207 090 1460

Fax: +44 (0)207 090 1484

[info@ics-shipping.org](mailto:info@ics-shipping.org) [www.ics-shipping.org](http://www.ics-shipping.org) [www.shipping-facts.com](http://www.shipping-facts.com)



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22 December 2015

**MC(15)69**

**To: MARINE COMMITTEE**

**CC: Radio and Nautical Sub-Committee  
All Full and Associate Members for Information**

### **REQUEST FOR PARTICIPATION IN A DYNAMIC UNDER-KEEL CLEARANCE SURVEY PROJECT IN THE SINGAPORE AND MALACCA STRAITS**

***Action required: Members are invited to note a request by, OMC International for volunteer ships to participate in a dynamic under-keel clearance survey and information exchange project in the Singapore and Malacca Straits.***

Members will recall MC(15)61 advising that the Committee had noted a planned dynamic under-keel clearance survey and information exchange project to be conducted by OMC International (OMC) in the Singapore and Malacca Straits (SOMS). It will also be recalled, that the Committee recommended a positive response to future requests for ships to participate in the survey.

Further, details, (**attached at Annex A**) of the survey and project have been received, together with advice that the survey is anticipated to commence in February 2016. Part of this survey is to record AIS data on board vessels and to see what is being received and how it can be portrayed and understood.

On participating ships, a surveyor will board and transit the SOMS with AIS equipment to undertake the recording and tests. OMC will focus on the capabilities of existing equipment, and not new equipment, as they consider the uptake of any outcomes from the survey will only work within the present SOLAS carriage requirements. OMC has however advised that there are existing limitations which may only be overcome with the proposed S100 standards. It is anticipated that 10 ships to be used and those will be selected with the co-operation of the MPA, Singapore, and their marine advisors (SOMS pilots).

**ICS Members are requested to disseminate this request and at the earliest opportunity forward responses to the undersigned, copied to [milly.dewar@ics-shipping.org](mailto:milly.dewar@ics-shipping.org).**

John Murray  
Marine Director



February 2016  
Document No.:  
Contact: Peter O'Brien

**Attention:** \_\_\_\_\_

Dear Sir,

We seek permission for OMC personnel to accompany *marine advisors* on transits through Singapore and Malacca Straits on a number of select vessels over a period of four weeks during February 2016 for the express purpose of undertaking an AIS UKC study and full scale DGPS squat measurements. These measurements will be used to determine the feasibility of using AIS to deliver UKC information to vessels transiting through the area.

I confirm that OMC International agree to indemnify, and keep indemnified, \_\_\_\_\_ from and against all claims, proceedings, expenses, costs, damages, losses and other liabilities of any kind arising directly or indirectly from:

- i. the death of any person employed by OMC International; and
- ii. injury or illness of any person employed by OMC International; and
- iii. any damage or loss to any Plant and Equipment in the care, custody or control of any person employed by OMC International;

in connection with the transit by OMC personnel on any vessels connected with \_\_\_\_\_ through the Singapore and Malacca Straits as detailed above.

I further confirm that OMC maintains current and relevant Workers Compensation and Public Liability Insurance for all persons employed by OMC International undertaking such transits as specified above.

Please call me should you have any questions or concerns.

Yours faithfully,

Peter O'Brien

Managing Director, OMC International

[p.obrien@omcinternational.com](mailto:p.obrien@omcinternational.com)+61 3 9412 6500



18 December 2015

Contact: Jonathon Pearce

Email [j.pearce@omcinternational.com](mailto:j.pearce@omcinternational.com)

**RE: AIS UKC Survey within the Singapore and Malacca Straits. Call for assistance.**

## TO WHOM IT MAY CONCERN:

As part of the ongoing post MEH project within the Singapore and Malacca Straits (SOMS), OMC will be undertaking a survey on the feasibility of using AIS to deliver UKC information to vessels whilst transiting the area.

### Overview

OMC has been awarded the project to assess the feasibility of delivering AIS underkeel clearance data to vessels that are transiting through the SOMS area.

As a result of the MEH project a number of Metocean station were commissioned and these send data via AIS ashore where they are then promulgated via the internet. However, this data can also be read on board vessels and also has the potential use of allowing real time data to be used to ensure accurate tidal windows for vessels.

As part of the project OMC will be assessing the reception of such data on board vessels as well as producing real-time tidal windows for all deep draft vessels that will be promulgated to vessels. The survey will review the existing on board equipment to see if the AIS unit is receiving the data, as well as the integration of AIS with ECDIS and other equipment to see the level of information that is available and can be displayed.

The survey will be assessing SOLAS carriage required equipment only but will investigate what non-SOLAS equipment is also being used by vessels (such as non SOLAS laptops etc). OMC will also be carrying its own AIS installation so that the normal navigational equipment is not compromised.

The primary outcome is to see if the AIS system can deliver UKC information. It is the concept rather than the detail that is important; the results will be used to identify gaps with the information from ashore, the existing systems, the portrayal issues, area coverage, information security etcetera.

The project aims to prove that existing SOLAS infrastructure can be utilised and that the AIS is an effective method to deliver better information with the future implementation of the S100 standards.

OMC International Pty Ltd  
 ABN 77 066 709 724  
 13 Harper Street, Abbotsford  
 Victoria Australia 3067



Ph: +61 3 9412 6500  
 Fax: +61 3 9415 9105  
[admin@omcinternational.com](mailto:admin@omcinternational.com)  
[www.omcinternational.com](http://www.omcinternational.com)



## Methodology

The survey will involve boarding a number of vessels during the month of February 2016. Consider transit times, fatigue issues etc. we envisage about 10 vessels will be needed. We invite deep draft vessels of your members to assist in allowing access to the vessel for the transit through the SOMS.

Most of the survey vessels will be East bound, joining by launch at One Fathom Bank and disembarking at Singapore or Horsburgh Light boarding grounds. OMC also aims to board one Westbound container vessel at Singapore and disembark at Klang.

At this stage, it is likely to involve one surveyor joining a vessel who is a master mariner and former pilot. Training in boarding and disembarkation as well as on board safety has been undertaken. The survey equipment will involve a number of cases which are all under 15kg each. These will need to be transferred between ship and pilot launch.

- Case 1 and 2: For bridge, and includes AIS equipment, laptops and ancillary equipment such as GPS and AIS aerials.
- Case 3 (4?): For squat survey and has 2 x Trimble R7 DGPS units. One will be placed on the bow and one on the stern. It also contains chargers, additional batteries and fixings.
- Case 4 (5?): Personal effects for transit.
- The actual requirements will be forwarded closer to the survey period.

The bridge equipment consists of Class A transceiver with associated aerials, laptop and will need a power supply. It also has a pilot plug output to Wi-Fi unit for sending data to iPad PPU. An additional Wi-Fi unit for the ships equipment will be available and used if ship's officers and the pilot allow.

The bow squat equipment is a Trimble R7 DGPS unit and will be located on the C/L at the bow. It will be secured using cable ties etc. During the transit it will need to be checked to ensure battery sufficient. The battery should last the transit but additional batteries will be carried. The stern unit is the same. Crew may be required to assist/escort unless approval given by Master for surveyor to check units without escort. In order to establish a zero level for the GPS equipment it is preferable to temporarily minimise vessel squat. This can be achieved by having the vessel stationary or near stationary at some location along the transit for a period of approximately 15 minutes. OMC is aware that this may not be possible due to navigational and scheduling requirements. However, where possible, OMC would be greatly appreciative of the vessel's assistance, as by doing so it will increase the accuracy of the measurements.

In addition to OMC survey data collection the surveyor will request ship information such as ship particulars, stability data (for transit) and access to the general arrangement plan.

He will also need sporadic access to on-board ECDIS and AIS equipment to see if the UKC and Meteo data is being received on board. He will also be investigating the usability of the AIS messages and whether the crew notes the receipt and the information within. At the end of the transit the surveyor will request an output from the ECDIS log as this will contain details of the the transit and echo sounder logs. Whilst we don't require VDR information it would be useful but OMC recognises that this may be unavailable.

All data, from all sources, will remain confidential and only used internally for the final report.



## Safety

The surveyors have been trained in boarding and disembarkation procedures as well as on-board ship safety. A risk assessment for the survey period will be undertaken and will be made available to any vessel and or Company as required. A toolbox safety review will be undertaken for each vessel with the Master on joining. The surveyor will have the usual PPE such as boiler suit, hard hat and safety shoes.

Letters of indemnity and any individual company requirements will also be completed where, and when required.

## Secondary Surveys (Volunteer Vessels)

In addition to the physical surveys of the vessels above, it is also requested that any deep draft vessels transiting through the SOMS area during the period February to June, assist OMC in participating in collecting additional AIS UKC data remotely.

For these deep draft vessels, UKC and Meteo data will be sent via AIS messages from ashore. It will be the same tidal windows and Meteo data as above but will require the Ships officers to actively assist in recording these messages during the transit. OMC requests feedback from volunteer vessels on what was received via AIS and ECDIS and feedback forms will be supplied as will an informational letter explaining the types of messages and format that will be sent. The feedback will review what was received, the frequency, whether it could be understood, if it was seen on the AIS MKD and/or the ECDIS. What equipment the vessel has and any additional information. The final ECDIS log would also be appreciated for the transit as OMC is also trying to determine whether "crowd sourced" echo sounder logs can be utilised to determine the motion and variance of sand waves within the area.

## Request for Assistance

OMC requests assistance from shipping companies to offer vessels for survey and also if they would assist in the alternative secondary surveys of vessels. Additional information will be sent on request and participants will be kept up to date closer to the survey period.

If you have any questions regarding this information, please either call or email to discuss.

Regards,

A handwritten signature in black ink, appearing to read "Jonathon Pearce".

Jonathon Pearce

Business Development Manager