

**ANNEX 16**

**RESOLUTION MEPC.322(74)  
(adopted on 17 May 2019)**

**AMENDMENTS TO THE 2018 GUIDELINES ON THE METHOD OF CALCULATION OF  
THE ATTAINED ENERGY EFFICIENCY DESIGN INDEX (EEDI) FOR NEW SHIPS  
(RESOLUTION MEPC.308(73))**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution from ships,

RECALLING ALSO that, at its sixty-second session, it adopted, by resolution MEPC.203(62), *Amendments to the annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto* (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING that the aforementioned amendments to MARPOL Annex VI entered into force on 1 January 2013,

NOTING ALSO that regulation 20 (Attained Energy Efficiency Design Index (attained EEDI)) of MARPOL Annex VI, as amended, requires that the EEDI shall be calculated taking into account the guidelines developed by the Organization,

NOTING FURTHER the *2012 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*, adopted at its sixty-third session by resolution MEPC.212(63), and the amendments thereto, adopted at its sixty-fourth session by resolution MEPC.224(64),

NOTING FURTHER that, at its sixty-sixth session, it adopted, by resolution MEPC.245(66), *2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*, and, at its sixty-eighth session, by resolution MEPC.263(68), MEPC.281(70), amendments thereto,

NOTING FURTHER that, at its seventy-three, it adopted, by resolution MEPC.308(73), *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*,

RECOGNIZING that the amendments to MARPOL Annex VI require relevant guidelines for the smooth and uniform implementation of the regulations,

HAVING CONSIDERED, at its seventy-fourth session, proposed amendments to the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*, as amended

1 ADOPTS amendments to the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*, as amended, as set out in the annex to the present resolution;

2 INVITES Administrations to take the aforementioned amendments into account when developing and enacting national laws which give force to and implement provisions set forth in regulation 20 of MARPOL Annex VI, as amended;

3 REQUESTS the Parties to MARPOL Annex VI and other Member Governments to bring the amendments to the attention of shipowners, ship operators, shipbuilders, ship designers and any other interested parties;

4 AGREES to keep these Guidelines, as amended, under review, in the light of experience gained with their implementation.

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**AMENDMENTS TO THE 2018 GUIDELINES ON THE METHOD OF CALCULATION OF THE ATTAINED ENERGY EFFICIENCY DESIGN INDEX (EEDI) FOR NEW SHIPS (RESOLUTION MEPC.308(73))**

1 The following text is added after 2.2.18 in the table of "CONTENTS":

"2.2.19  $f_m$  ; Factor for ice-classed ships having IA Super and IA"

2 The EEDI Formula in section 2.1 is replaced with the following:

**"2.1 EEDI Formula**

The attained new ship Energy Efficiency Design Index (EEDI) is a measure of ships' energy efficiency (g/t · nm) and calculated by the following formula:

$$\frac{\left( \prod_{j=1}^n f_j \right) \left( \sum_{i=1}^{nME} P_{ME(i)} \cdot C_{FME(i)} \cdot SFC_{ME(i)} \right) + (P_{AE} \cdot C_{FAE} \cdot SFC_{AE} *) + \left( \left( \prod_{j=1}^n f_j \cdot \sum_{i=1}^{nPTI} P_{PTI(i)} - \sum_{i=1}^{neff} f_{eff(i)} \cdot P_{AE_{eff}(i)} \right) C_{FAE} \cdot SFC_{AE} \right) - \left( \sum_{i=1}^{neff} f_{eff(i)} \cdot P_{eff(i)} \cdot C_{FME} \cdot SFC_{ME} ** \right)}{f_i \cdot f_c \cdot f_i \cdot Capacity \cdot f_w \cdot V_{ref} \cdot f_m}$$

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3 A new section 2.2.19 is added after the existing section 2.2.18 as follows:

**"2.2.19  $f_m$  ; Factor for ice-classed ships having IA Super and IA**

For ice-classed ships having IA Super or IA, the following factor,  $f_m$ , should apply:

$$f_m = 1.05$$

For further information on approximate correspondence between ice classes, see HELCOM Recommendation 25/7\*."

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\* HELCOM Recommendation 25/7 may be found at <http://www.helcom.fi>