

# International Convention for the Prevention of Pollution from Ships, 1973

## Introduction

- 3.1 This chapter considers amendments to the Annex of the *Protocol of 1997* relating to the *International Convention for the Prevention of Pollution from Ships 1973* as modified by the *Protocol of 1978*.
- 3.2 The *International Convention for the Prevention of Pollution from Ships 1973* as modified by the *Protocol of 1978* [1988] ATS 29 (which incorporates the terms of the Convention although the Convention itself has not entered into force) and the *Protocol of 1997* [2007] ATS 37 (together referred to as MARPOL) are the key international instruments addressing the problem of marine pollution from ships.<sup>1</sup>
- 3.3 MARPOL contains six technical Annexes dealing with Regulations for the prevention of pollution by respectively: oil (**Annex I**); noxious liquid substances in bulk (**Annex II**); harmful substances in packaged form (**Annex III**); sewage (**Annex IV**); garbage (**Annex V**); and air (**Annex VI**).<sup>2</sup>

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1 National Interest Analysis [2015] ATNIA 3 with attachment on consultation Amendments to the Annex of the Protocol of 1997 relating to the *International Convention for the Prevention of Pollution from Ships, 1973*, as modified by the Protocol of 1978 relating thereto, done at London on 4 April 2004 [2014] ATNIF 34 (hereafter referred to as 'NIA'), para1.

2 NIA, para 2.

- 3.4 The International Maritime Organization (IMO) is responsible for administering MARPOL through the Marine Environment Protection Committee (MEPC).<sup>3</sup>
- 3.5 MEPC adopted the following resolutions (together, the Amendments) in London on 4 April 2014:
- Resolution MEC.246 (66), containing the text of amendments to MARPOL Annexes I, II, III, IV and V (First Resolution);
  - Resolution MEPC.247 (66), containing the text of amendments to MARPOL Annex VI (Second Resolution);
  - Resolution MEPC.248 (66), containing the text of amendments to MARPOL Annex I (Third Resolution); and
  - Resolution MEPC.251 (66), containing the text of amendment to MARPOL Annex VI and the Nitrogen Oxides (NO<sub>x</sub>) Technical Code 2008 (Fourth Resolution).<sup>4</sup>

## Overview and national interest summary

### First and Second Resolutions

- 3.6 The First and Second Resolutions revise international regulations for the prevention of pollution from ships making it mandatory for Parties to MARPOL to be subject to, and facilitate, periodic audits by the IMO to ensure compliance with MARPOL obligations.<sup>5</sup>
- 3.7 The NIA states that the amendments will increase compliance with MARPOL and reduce risks of marine pollution from vessels in Australian waters and beyond.<sup>6</sup>

### Third Resolution

- 3.8 The Third Resolution requires all oil tankers to be fitted with stability instruments capable of verifying vessel stability under intact and damage conditions, from January 2016. Oil tankers constructed before 1 January 2016 must comply with this requirement at the first scheduled renewal survey of the ship after 1 January 2016, but not later than 1 January 2021. The amendments also waive the requirement for some oil tankers to be fitted with a stability instrument under certain circumstances.<sup>7</sup>

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3 NIA, para 3.

4 NIA, para 4.

5 NIA, para 8.

6 NIA, para 9.

7 NIA, para 10.

- 3.9 According to the NIA, mandatory stability instruments for oil tankers will increase vessel and personnel safety, and reduce risks to the environment in Australian and other waters.<sup>8</sup>

## Fourth Resolution

- 3.10 The Fourth Resolution clarifies interpretations and application of regulations, including emissions calculations related to the application of the Energy Efficiency Design Index (EEDI), and provides for the necessary requirements, such as fuel gas composition, fuel and engine parameters and calculation factors, in order to calculate the NO<sub>x</sub> emission of dual fuel engines and to certify such engines.<sup>9</sup>
- 3.11 The NIA states that the amendments will allow the shipping sector to play its part in meeting agreed global goals and the Australian Government's international commitments to address climate change and reduce greenhouse gas emissions.<sup>10</sup>

## Reasons for Australia to take the proposed treaty action

### First and Second Resolutions

- 3.12 The NIA explains that the mandatory audit scheme is a key tool for assessing Member States' performance in meeting their obligations and responsibilities as a flag, port and coastal State under the relevant IMO treaties.<sup>11</sup> The NIA indicates that when the IMO Instruments Implementation Code (III Code)<sup>12</sup> was originally introduced, it was agreed by the IMO that the audit scheme would eventually be mandatory.<sup>13</sup>
- 3.13 Further, the NIA points out that the intention of making the III Code mandatory is not only to ensure Member States are adhering to the requirements, but also to identify capacity building needs and offer technical assistance to Member States as required.<sup>14</sup>

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8 NIA, para 11.

9 NIA, para 12.

10 NIA, para 14.

11 NIA, para 15.

12 The III Code assists Parties to implement the IMO instruments by providing a global standard to enable States to meet their obligations as flag, port and/or coastal States. (International Maritime Organization, 'IMO Assembly adopts mandatory audit scheme', <<http://www.imo.org/MediaCentre/PressBriefings/Pages/A-28-ends-.aspx#.VS2lu6N-9IU>> accessed 14 April 2015.)

13 NIA, para 16.

14 NIA, para 17.

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## Third Resolution

- 3.14 The NIA states that the stability instrument will provide oil tankers with the ability to respond in real time to changing circumstances, such as a damaged cargo hold, and reduce the risk of a maritime incident such as capsizing.<sup>15</sup>
- 3.15 The Committee sought assurance that adequate training would be provided to crews to ensure that the new equipment would be used effectively. The Australian Maritime Safety Authority (AMSA) said that training requirements are covered in separate IMO conventions.<sup>16</sup> These conventions include:
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW Convention) and STCW Code; and
  - International Safety Management Code (ISM Code) for ships regulated by the International Convention for the Safety of Life at Sea (SOLAS).<sup>17</sup>
- 3.16 AMSA explained that STCW Convention requirements are included in the Maritime Training Package, the standard for vocational education and training in Australia. AMSA ensures that the industry is aware of all IMO requirements and compliance with training requirements will be assessed as part of the IMO periodic audit process.<sup>18</sup>

## Fourth Resolution

- 3.17 According to the NIA, the amendments will build on the existing mandatory emission standards, further contributing to the reduction of air pollutants that have been linked to negative environmental and health effects.<sup>19</sup>
- 3.18 The NIA claims that the energy efficiency regulations will help Australia to meet its greenhouse gas emissions target.<sup>20</sup> The NIA also warns that, if the amendments are not implemented, there is a risk that Australian international ships built after 1 January 2013 will be less energy efficient than foreign-flagged ships that adhere to the new IMO regulations. Consequently, these Australian ships will be unable to trade internationally if the amendments are implemented by other nations or they sought to operate in a designated emission control area (ECA).<sup>21</sup>

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15 NIA, para 18.

16 Mr Matthew Johnston, Acting General Manager, Marine Environment Division, Australian Maritime Safety Authority (AMSA), *Committee Hansard*, 16 March 2015, p. 15.

17 Australian Maritime Safety Authority (AMSA), *Submission 3*.

18 AMSA, *Submission 3*.

19 NIA, para 24.

20 NIA, para 25.

21 NIA, para 26.

## Obligations

### First and Second Resolutions

3.19 The First and Second Resolutions amend **Annexes I, II, III, IV, V and VI** to include a new Chapter with regulations that provide that Parties shall use the provisions of III Code in the execution of their obligations and responsibilities contained in each Annex. It will be mandatory for every Party to be subject to periodic audits by the IMO to verify compliance with and implementation of each Annex. Each Party will be responsible for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on guidelines developed by IMO.<sup>22</sup>

### Third Resolution

3.20 The Third Resolution amends **Regulation 28 of Annex I** to include a new paragraph 6, which requires that from 1 January 2016, all oil tankers must be fitted with a stability instrument capable of verifying compliance with intact and damage stability requirements. Oil tankers constructed before 1 January 2016 must comply with this regulation at the first scheduled renewal survey of the ship after 1 January 2016, but not later than 1 January 2021.<sup>23</sup>

3.21 In Australia, the stability instrument must be approved by AMSA having regard to the performance standards recommended by IMO.<sup>24</sup>

3.22 **Appendix II of Annex I** provides the Form of International Oil Pollution Prevention (IOPP) Certificate and Supplements. Form B of **Appendix II** contains the Record of Construction and Equipment for Oil Tankers. The Third Resolution amends Form B to reflect the amendment to **Regulation 28**.<sup>25</sup>

3.23 **Regulation 3 of Annex I** gives a Party the option to waive the requirement for some oil tankers to be fitted with a stability instrument under certain circumstances.<sup>26</sup>

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22 NIA, para 28.

23 NIA, para 29.

24 NIA, para 30.

25 NIA, para 31.

26 NIA, para 32.

## Fourth Resolution

- 3.24 The Fourth Resolution amends **Regulation 2** of **Annex VI** to clarify interpretations of hybrid propulsion and to provide definitions for a number of vessels.<sup>27</sup> **Regulation 5** of **Annex VI** is amended to define a 'new ship'.<sup>28</sup>
- 3.25 The amendments to **Regulation 13** of **Annex VI** mean the NO<sub>x</sub> emission limits under Tier III standards in any newly adopted ECA only apply to ships with marine diesel engines constructed on or after the date of adoption of a new ECA, or a later date as specified in the amendment designating a new ECA, whichever is later.<sup>29</sup>
- 3.26 **Regulation 13** specifies that NO<sub>x</sub> Tier III standards do not apply to a marine diesel engine installed on a ship constructed prior to 1 January 2021 of less than 500GT<sup>30</sup> that is greater than 24m in length when it has been specifically designed, and is used solely, for recreational purposes.<sup>31</sup>
- 3.27 The NO<sub>x</sub> Technical Code 2008 controls emissions of nitrogen oxides from marine diesel engines. The amendments to the Code provide a definition of a marine diesel engine and clarify the application of **Regulation 13**, including measurement procedures, for engines operating in gas and fuel modes. The amendments set out procedures for NO<sub>x</sub> emission measurements on a test bed, and for demonstrating compliance with NO<sub>x</sub> emission limits on board, including identifying relevant ISO standards and updating technical data in calculation and parameter tables.<sup>32</sup>
- 3.28 **Appendix I** of **Annex VI** provide the Form of International Air Pollution Prevention (IAPP) Certificate. The length (L) metres requirement within the Supplement to the IAPP Certificate has been expanded to include the amendment to **Regulation 13**.<sup>33</sup>
- 3.29 **Regulation 19** of **Annex VI** provides the application of regulations on energy efficiency for ships. **Regulation 19** is amended to exclude ships not propelled by mechanical means, and platforms including Floating Production, Storage and Offloading Facilities (FPSOs) and Floating Storage Units (FSUs) and drilling rigs, regardless of their propulsion. **Regulation 19** will also specify that Attained Energy Efficiency Design targets do not apply to ships which have non-conventional propulsion, except in the case of cruise passenger ships and LNG carriers delivered on

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27 NIA, para 33.

28 NIA, para 34.

29 NIA, para 35.

30 Gross tonnage (GT) is a measurement of the overall internal volume of a ship.

31 NIA, para 36.

32 NIA, para 37.

33 NIA, para 38.

or after 1 September 2019. **Regulation 19** clarifies that **Regulations 20** and **21** shall not apply to cargo ships having ice-breaker capability.<sup>34</sup>

3.30 **Regulation 20** of **Annex VI** provides regulations for calculating the Attained Energy Efficiency Design Index (Attained EEDI) of ships. **Regulation 20** is amended to expand vessel categories for the Attained EEDI calculation to include the addition of LNG carriers and Cruise passenger ships.<sup>35</sup>

3.31 **Regulation 21** of **Annex VI** provides the Required EEDI provisions for ships. The EEDI is a non-prescriptive design-based measure which aims to improve the energy efficiency of ships and reduce greenhouse gas emissions from international shipping.<sup>36</sup> **Regulation 21** is amended to expand the vessel categories for Required EEDI.<sup>37</sup>

## Implementation

3.32 According to the NIA no legislative amendments are required to implement the Resolutions.<sup>38</sup>

3.33 The NIA points out that Australia, as a Party to MARPOL, will be responsible for facilitating the conduct of the mandatory audit required under the amendments and to address the findings of such an audit.<sup>39</sup>

## Costs

### First and Second Resolutions

3.34 The NIA states that the implementation of the First and Second Resolutions is expected to have negligible administrative impact and compliance costs are likely to remain unchanged.<sup>40</sup>

### Third Resolution

3.35 AMSA estimates that the type of stability instruments required will cost between \$5000 and \$10000 which AMSA does not consider a substantial

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34 NIA, para 39.

35 NIA, para 40.

36 NIA, para 41.

37 NIA, para 42.

38 NIA, paragraphs 43–46.

39 NIA, para 44.

40 NIA, para 47.

cost in the context of a ship. The NIA suggests that, as stability instruments will be required on all oil tankers, it will not create a competitive disadvantage for Australian vessels. The NIA points out that there are only four Australian registered oil tankers operating.<sup>41</sup>

## Fourth Resolution

- 3.36 According to the NIA the proposed EEDI amendments will impose minimal or no cost on Australia as the EEDI regulations will only apply to new ships engaged in international trade.<sup>42</sup>
- 3.37 The NIA also expects that the amendments to the application of the NO<sub>x</sub> Tier III emission limits will incur minimal to no cost, as they only apply to ships with marine diesel engines constructed on or after 1 January 2016 operating in a designated ECA.<sup>43</sup>

## Conclusion

- 3.38 The Committee supports Australia's ratification of the amendments to the Annex of the Protocol of 1997 relating to the *International Convention for the Prevention of Pollution from Ships, 1973*, as modified by the Protocol of 1978 and recommends that binding treaty action be taken.

### Recommendation 2

- 3.39 **The Committee supports the amendments to the Annex of the Protocol of 1997 relating to the *International Convention for the Prevention of Pollution from Ships, 1973*, as modified by the Protocol of 1978 relating thereto and recommends that binding treaty action be taken.**

Mr Wyatt Roy MP  
Chair

41 NIA, para 50.

42 NIA, para 52.

43 NIA, para 53.