

## **Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended**

### **Introduction**

- 3.1 The proposed treaty action is to bring into force changes to the *International Convention for the Safety of Life at Sea, 1974 (SOLAS)*. These amendments were adopted by the Maritime Safety Committee (MSC) by Resolution on 21 November 2014 and tabled in the Parliament on 8 September 2015.

### **Background**

- 3.2 The primary objective of SOLAS is to specify minimum safety standards for ship construction, equipment and operation.<sup>1</sup>
- 3.3 SOLAS is administered by the International Maritime Organisation (IMO), a specialised agency of the United Nations. The IMO has 171 member states, including Australia. A number of non-government organisations – such as shipping industry representatives – have consultative status. Within the IMO the MSC has responsibility for maritime safety.<sup>2</sup>

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1 Mr Michael Sutton, General Manager, Maritime and Shipping Branch, Department of Infrastructure and Regional Development (DIRD), *Committee Hansard*, Canberra, 12 October 2015, p. 1.

2 National Interest Analysis [2015] ATNIA 14, *Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended* [2015] ATNIF 14 and 24 (hereafter referred to as the NIA), para 24.

- 3.4 The MSC adopted the amendments at its 94<sup>th</sup> session under IMO Resolution MSC.380. The National Interest Analysis (NIA) advises that the amendments will be deemed to be accepted by Australia on 1 January 2016, and come into force on 1 July 2016, unless prevented by objections. To prevent the deemed acceptance, there must be objections by more than one third of the contracting governments, or by contracting governments whose combined merchant fleets are at least 50 per cent of the gross tonnage of the world's merchant fleet.<sup>3</sup>

### **Proposed treaty actions and national interest summary**

- 3.5 The NIA does not recommend any objections to the Resolution.<sup>4</sup> It advises that implementation of the Resolution will ensure that Australia continues to meet its treaty obligations under SOLAS.
- 3.6 Implementation also allows Australia to apply the obligations to foreign ships in Australian ports, ensuring a high safety standard is met by all ships in Australian waters.<sup>5</sup> When asked by the Committee how this differs from current arrangements, a representative from the Australian Maritime Safety Authority (AMSA) explained:
- It would be a slight change, in that we now have a power and there would be an obligation on the ship when they bring the containers in to contain that verified gross mass number. That means that we automatically start at a point where someone has certified that this container weight is accurate – that would be what we verify against should there be any problems.
- 3.7 The Amendments make three main changes to SOLAS and one change to the Appendix. The NIA advises that these amendments will revise and update international safety of life at sea regulations, and that amendments are in Australia's interests to ensure the safety of workers, the safety of cargo and the overall safety of the ship at sea.<sup>6</sup>
- 3.8 Shipping Australia Limited (SAL), Australia's peak shipowner association, is supportive of the amendments and agrees they will 'enhance the safety of personnel on board ships and ashore whilst ensuring the overall safety of the cargo and the ship.'<sup>7</sup>

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3 NIA, para 3.

4 NIA, para 16.

5 NIA, para 9.

6 NIA para 7.

7 Shipping Australia Limited (SAL), *Submission 1*, p. 1.

## **Chapter II-2, Part C, Regulation 10, Paragraph 5.2 (fire safety measures)**

- 3.9 Part C governs fire safety measures for passenger ships carrying not more than 36 passengers. The amendment changes the title of paragraph 5.2 to:
- 5.2 Machinery spaces of Category A containing internal combustion machinery.
- 3.10 The NIA advises that this change is to clarify the application of the paragraph, to reflect the original intent.<sup>8</sup> A Department of Infrastructure and Regional Development (DIRD) representative explained that the change clarifies that the 'existing regulation only applies to specific machinery spaces and not all machinery spaces'.<sup>9</sup>

## **Chapter VI, Part A, Regulation 2, new Paragraphs 4, 5 and 6 (cargo weight verification)**

- 3.11 This Chapter governs the carriage of cargoes and oil fuels. Regulation 2 specifically covers cargo information. The amendment adds three new paragraphs to provide a requirement for the verification of the weight of containers before they are loaded onto a ship.
- 3.12 According to the NIA, incorrectly declared weights may result in a loss of life or property.<sup>10</sup> The departmental representative explained to the Committee the importance of accurate container weights:
- For ships, accurate weight is required so that containers are placed and stowed evenly, both horizontally and vertically, to maintain the ship's stability during the whole voyage. For terminals, accurate weights are required to ensure that lifting equipment and cranes are suitable for the container load.<sup>11</sup>
- The NIA also advises that accurate weights ensure appropriate lashing arrangements are applied and sheer force, bending moments and torsional effects of the cargo on the vessel can be calculated. These have been identified as significant problems that may result in the loss of containers or container vessels.<sup>12</sup>
- 3.13 The NIA advises that current SOLAS regulations require the shipper of the cargo to ensure the weight of cargoes in cargo transport units (such as containers) is in accordance with the weight declared on the shipping documents. The new amendment is intended to ensure:

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8 NIA para 4.

9 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 1.

10 NIA, para 8.

11 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 1.

12 NIA, para 8.

- a consistent approach on how verification of weight is done, providing two options for this process; and
- weight information is provided to the master of the ship and the terminal representative.<sup>13</sup>

3.14 The amendment will offer better assurance to the master of the ship and the terminal representative that the weight of the cargo is consistent with the weight listed in the shipping documents.<sup>14</sup>

### **Chapter XI-1, new Regulation 7 (atmosphere testing instruments)**

3.15 This Chapter contains special measures to enhance maritime safety. The new Regulation 7 will require every cargo ship on an international voyage to carry an 'appropriate portable atmosphere testing instrument or instruments'<sup>15</sup> to test the air of an enclosed space to ensure it is safe to enter. These instruments must, at a minimum, be capable of measuring concentrations of oxygen, flammable gases or vapours, hydrogen sulphide and carbon monoxide.

### **Appendix**

3.16 The Appendix, which governs certificates, will be amended to require certificates carried by ships include an entry for the total number of persons for which lifeboats are provided. This change is editorial and corrects a drafting oversight.<sup>16</sup>

### **Obligations**

3.17 The obligations as set out in the NIA will be:

- the minor amendments to the title of Chapter II-2 Regulation 10 paragraph 5.2;
- the new requirement for mandatory verification of the gross mass weight of containers; and
- the new requirement to carry a portable atmosphere testing instrument.<sup>17</sup>

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13 NIA, para 4.

14 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 1.

15 Annex 1, Resolution MSC.380(94) (adopted on 21 November 2014), Amendments to the *International Convention for the Safety of Life at Sea (SOLAS)*, 1974, as amended, (hereafter referred to as Annex 1), p. 3.

16 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 2.

17 NIA, para 10.

## Implementation

- 3.18 SOLAS is implemented in Australia through a number of Marine Orders, made by the Australian Maritime Safety Authority (AMSA) under the *Navigation Act 2012* (Cth). The NIA advises that the amendments will be delivered through existing resources and will only require minor changes to Australia's Marine Orders.<sup>18</sup>
- 3.19 The amendment relating to fire safety measures requires no implementation action. The amendment relating to atmosphere testing instruments will require minor amendments to Marine Order 21 clarifying the types of vessels to which Chapter XI-1 regulation applies. The amendment relating to certificates will require a minor change to approved forms for two certificates.<sup>19</sup>
- 3.20 The amendment to Chapter VI, Part A, Regulation 2 relating to the weight of cargo transport units may require a minor amendment to regulations or Marine Orders. AMSA is currently evaluating the most appropriate means of implementing the proposed amendment.<sup>20</sup>
- 3.21 According to evidence provided by DIRD, AMSA consulted with industry on each of the amendments and did not receive opposition to the changes, however did raise concerns about how verification of container weights will be enforced. The Committee was told AMSA will continue to consult with the trucking and shipping industries "to determine how container bookings and movements are made to ensure the lowest impact for implementing the SOLAS requirements" in preparation for the resolution entering force on 1 July 2016.<sup>21</sup>
- 3.22 The Committee heard that AMSA are seeking ways to meet the new requirements through existing processes. While some approaches, such as taking weights used by crane operators, have been found unsuitable AMSA referred to other options they are investigating, including using existing weighbridges or weights currently being recorded by shipping consigners.<sup>22</sup>
- 3.23 The Committee asked DIRD and AMSA officials about the process for enforcing accurate weight record requirements. They were told that

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18 NIA, para 11.

19 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 2.

20 NIA, para 12.

21 Mr Sutton, DIRD, *Committee Hansard*, Canberra, 12 October 2015, p. 2.

22 Mr Allan Schwartz, General Manager Ship Safety, Australian Maritime Safety Authority (AMSA), *Committee Hansard*, Canberra, 12 October 2015, p. 1.

monitoring compliance of the treaty requirements would be AMSA's responsibility:

That would be the sort of thing that we would ensure in the drafting of regulations that, where appropriate, the obligations are placed where they should be placed, and that AMSA has the power to ensure compliance. Fundamentally, we would do that through our routine port state control activity of random sampling – when we are onboard the ship we would ask to see the documentation, much as we do now, but that would be something that we would be looking for specifically.<sup>23</sup>

- 3.24 The Committee sought clarification from AMSA on whether routine compliance activities involved checking container weights or checking documentation only:

The first step we would take is to look at the paperwork and we would go from there. As it is now, it is not uncommon for us to get phone calls from stevedores or the port terminals to say that a container seems to be heavier than it should be – in which case, if we so desire, we can then have that container weighed to check its weight.

When asked whether random weight checks were ever conducted, the AMSA representative stated that they were not.<sup>24</sup>

- 3.25 The Committee also enquired whether containers may be subject to random checks through the National Heavy Vehicle Accreditation Scheme implemented by state authorities. A response from DIRD confirmed that transport authorities and police do undertake compliance under the Heavy Vehicle National Law, which includes mass and dimension inspections on heavy vehicles transporting freight containers. This may require the inspection of Container Weight Declaration documentation, which is required to include the weight or purported weight of the container.<sup>25</sup>

## Costs

- 3.26 The cost impact varies across the three amendments.

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23 Mr Schwartz, AMSA, *Committee Hansard*, Canberra, 12 October 2015, p. 2.

24 Mr Schwartz, AMSA, *Committee Hansard*, Canberra, 12 October 2015, p. 3.

25 Department of Infrastructure and Regional Development (DIRD), *Submission 2*.

- 3.27 Amendment to Regulation 5.2 (adjusting the title) is expected to reduce costs, as it is intended to limit the scope of the application of this provision.<sup>26</sup>
- 3.28 Amendment to Chapter VI (cargo weight) will result in additional costs for weighing each container. The NIA advises that current weighing costs are around \$5 plus GST per container; however not all containers will need to be weighed, as some may already be weighed at other points in the transport chain. According to the NIA, given that the majority of shipping containers arrive at port by truck, and AMSA has confirmed that it will accept the National Heavy Vehicle mass management documentation used to verify the cargo weight, the impact to industry is expected to be minimal.
- 3.29 Amendment to Chapter XI (atmosphere testing equipment) is estimated to be \$1300 per ship with ongoing annual maintenance costs of \$450.<sup>27</sup> However the NIA believes that less than five Australian ships will need to obtain new equipment, as ships that are subject to the *Occupational Health and Safety (Maritime Industry) (National Standards) Regulations 2003* are already obliged to carry atmosphere testing equipment.<sup>28</sup>

## Conclusion

- 3.30 If no objections are made, amendments to the SOLAS Convention will take effect automatically for Australia on 1 July 2016. As a result, the Committee is not required to make a recommendation. Nevertheless, the Committee would like to record that it has no objections to the amendments and supports their automatic entry into force.

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26 NIA para 17.

27 NIA para 20.

28 NIA para 15.

