



### Edinburgh Research Explorer

## **Current Legal Developments - The International Convention for the Safe and Environmentally Sound Recycling of Ships**

Citation for published version:

Harrison, J 2009, 'Current Legal Developments - The International Convention for the Safe and Environmentally Sound Recycling of Ships' The International Journal of Marine and Coastal Law, vol 24, no. 4, pp. 727-736., 10.1163/092735209X12499043518340

#### **Digital Object Identifier (DOI):**

10.1163/092735209X12499043518340

#### Link:

Link to publication record in Edinburgh Research Explorer

#### **Document Version:**

Publisher final version (usually the publisher pdf)

#### Published In:

The International Journal of Marine and Coastal Law

#### **Publisher Rights Statement:**

© Harrison, J. (2009). Current Legal Developments - The International Convention for the Safe and Environmentally Sound Recycling of Ships. The International Journal of Marine and Coastal Law, 24(4), 727-736. 10.1163/092735209X12499043518340

#### **General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Édinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Download date: 20. Feb. 2015



## The International Journal of Marine and Coastal Law 24 (2009) 727–736



# Current Legal Developments International Maritime Organization

## The International Convention for the Safe and Environmentally Sound Recycling of Ships

When they reach the end of their working life, many ships wind up being dismantled for scrap.<sup>1</sup> This can be a notoriously dangerous and polluting process.<sup>2</sup> The International Convention for the Safe and Environmentally Sound Recycling of Ships (the Convention) was developed in order to address the variety of environmental and occupational health and safety risks that arise from ship dismantling. The Convention was adopted on 15 May 2009 by a diplomatic conference convened by the International Maritime Organization (IMO) in Hong Kong.<sup>3</sup> Its conclusion marked the culmination of a number of years of work on the part of the IMO, in close co-operation with the International Labour Organization (ILO) and the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes (Basel COP). This note aims to set out the drafting history of the Convention, to describe its main features, and to identify what still needs to be done in order to successfully implement it.

#### Drafting History of the Convention

The Convention is the first international treaty to deal exclusively with the subject of ship dismantling. However, prior to its adoption, this issue was

<sup>&</sup>lt;sup>1</sup> The European Union (EU) estimates that between 200 and 600 large ships are dismantled for scrap each year; see http://ec.europa.eu/environment/waste/ships/index.htm (checked 13 July 2009).

<sup>&</sup>lt;sup>2</sup> The International Labour Organization ranks it as one of the most hazardous occupations for workers; see International Labour Organization, *Safety and health in shipbreaking: Guidelines for Asian countries and Turkey*, ILO Document MESHS/2003/1, October 2003.

<sup>&</sup>lt;sup>3</sup> The text of the Convention, as adopted by the Hong Kong Conference, is available at http://ec.europa.eu/environment/waste/ships/pdf/Convention.pdf (checked 13 July 2009).

already regulated by a number of international instruments, both binding and non-binding.

The Basel Convention on the Transboundary Shipment of Hazardous Waste<sup>4</sup> (the Basel Convention) requires parties to minimize, as far as possible, the transboundary movement of hazardous wastes.<sup>5</sup> More specifically, parties to the Basel Convention must prohibit the export of hazardous wastes unless the state of import has consented<sup>6</sup> and it is satisfied that the wastes will be managed in an "environmentally sound manner." Although it is difficult to say precisely when a ship which is destined for dismantling becomes "waste" within the meaning of the Basel Convention,<sup>8</sup> the Basel COP did adopt Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships in December 2002.<sup>9</sup> The purpose of the Technical Guidelines is to provide further information and recommendations to states on procedures, processes and practices that should be implemented to attain environmentally sound management of hazardous waste materials at ship dismantling facilities in accordance with the Basel Convention.

The second organization with an interest in ship dismantling issues is the ILO. Occupational health and safety of workers are generally governed by the 1981 ILO Convention on Occupational Health and Safety. Further to this, the ILO Governing Body adopted Guidelines on Safety and Health in Ship-Breaking in March 2004. The Guidelines are designed to supplement the 1981 ILO Convention by providing specific guidance for the ship dismantling industry.

Aspects of ship dismantling have also been on the agenda of the IMO Marine Environment Protection Committee (MEPC) since 1998. 12 Discus-

<sup>&</sup>lt;sup>4</sup> Basel Convention (1989) 28 ILM 657.

<sup>&</sup>lt;sup>5</sup> *Ibid.*, Article 4(2)(d).

<sup>&</sup>lt;sup>6</sup> *Ibid.*, Article 4(1)(c).

<sup>&</sup>lt;sup>7</sup> *Ibid.*, Article 4(2)(e) and (g).

<sup>&</sup>lt;sup>8</sup> For the purposes of the Basel Convention, "wastes" are defined as "substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law"; Basel Convention Article 2(1). In Decision OEWG-II/4, the Open-Ended Working Group of the Basel COP requested Parties to the Basel Convention and others to submit comments on the question, *inter alia*, of when a ship becomes waste. The replies are found in document UNEP/CHW/OEWG/3/INF/5.

<sup>&</sup>lt;sup>9</sup> Decision VI/24 of the Basel COP. The text of the Technical Guidelines is available at http://www.basel.int/ships/techguid.html (checked 13 July 2009).

<sup>&</sup>lt;sup>10</sup> ILO Convention C155, available at http://www.ilo.org/ilolex/cgi-lex/convde.pl?C155 (checked 13 July 2009).

<sup>&</sup>lt;sup>11</sup> *Supra* note 2. The Guidelines are also available at http://www.ilo.org/public/english/standards/relm/gb/docs/gb289/pdf/meshs-1.pdf (checked 13 July 2009).

<sup>&</sup>lt;sup>12</sup> See IMO Document MEPC 44/20, at para. 16.1.

sions in the MEPC led to the adoption of Guidelines on Ship Recycling by the IMO Assembly in 2003.<sup>13</sup> The IMO Guidelines address a wide range of issues, including the identification of hazardous materials on-board a ship,<sup>14</sup> the carrying of a "Green Passport",<sup>15</sup> and the preparation of a ship for recycling.<sup>16</sup> Although the Guidelines are non-binding, IMO Members were invited to "take urgent action to apply the... Guidelines" and to "report to the [MEPC] on any experience gained in their implementation."<sup>17</sup> Moreover, the MEPC was instructed to keep the matter under review in co-operation with other interested international organizations.<sup>18</sup>

The involvement of three organizations in the regulation of ship dismantling led to some concerns being expressed about the fragmented nature of the approach to the issue. For instance, it was argued by the Basel Action Network and Greenpeace International that the IMO Guidelines were in conflict with the requirements of the Basel Convention and the principles and guidelines subsequently developed pursuant to that treaty. However, a Joint Working Group on Ship Scrapping formed by the IMO, the ILO and the Basel COP to investigate the interrelationship between the different instruments concluded that there were "no significant conflicts between the three sets of guidelines and cross references are made with frequency between the guidelines." Nevertheless, the Working Group did note that there were some significant differences between the relevant instruments<sup>21</sup> and it was also suggested that terminology and concepts relating to certain issues could be harmonised to make the instruments more coherent.<sup>22</sup>

<sup>&</sup>lt;sup>13</sup> *IMO Guidelines on Ship Recycling*, IMO Assembly Resolution A.962(23), later amended by IMO Assembly Resolution A.980(24). The text of the original IMO Guidelines is available at http://www.imo.org/includes/blastDataOnly.asp/data\_id%3D11404/ResShiprecycling962. pdf (checked 13 July 2009).

<sup>&</sup>lt;sup>14</sup> IMO Guidelines on Ship Recycling, Annex, at paras. 4.1–4.3.

<sup>&</sup>lt;sup>15</sup> *Ibid.*, Annex, at paras. 5.1–5.8.

<sup>&</sup>lt;sup>16</sup> *Ibid.*, Annex, at paras. 8.1–8.3.

<sup>&</sup>lt;sup>17</sup> *Ibid.*, at para. 3.

<sup>&</sup>lt;sup>18</sup> *Ibid.*, at paras. 4–5.

<sup>&</sup>lt;sup>19</sup> See Report of the First Session of the Joint Working Group on Ship Scrapping, Document ILO/IMO/BC WG 1/8, at para. 3.8. The two NGOs argued there were three main areas where the instruments were inconsistent: prior decontamination, ships as waste, and the obligations of exporting states; see *The IMO Guidelines on ship recycling (Annotated)*, Submitted by Greenpeace International and the Basel Action Network (BAN), Document ILO/IMO/BC WG1/7/3, at para. 1.10.

<sup>&</sup>lt;sup>20</sup> Report of the Second Session of the Joint Working Group on Ship Scrapping, Document ILO/IMO/BC WG 2/11, Annex 2, at para. 1.

<sup>&</sup>lt;sup>21</sup> *Ibid.*, at paras. 31, 55, 79, 83.

<sup>&</sup>lt;sup>22</sup> *Ibid.*, at paras. 28, 35, 45, 74.

Another concern arising from the fragmented approach to the regulation of ship recycling was that there were gaps in the regulatory framework. Many states were of the view that a new legally binding instrument was needed to address ship dismantling. Although there was some discussion of the most appropriate forum for the negotiation of a new instrument, the IMO was ultimately selected. In December 2005, the IMO Assembly authorised the negotiation of a new legally binding instrument on ship recycling that would provide regulations for:

- the design, construction, operation and preparation of ships so as to facilitate safe and environmentally sound recycling, without compromising the safety and operational efficiency of ships;
- the operation of ship recycling facilities in a safe and environmentally sound manner; and
- the establishment of an appropriate enforcement mechanism for ship recycling.<sup>23</sup>

As can been seen, these issues go beyond the usual matters that fall within the mandate of the IMO<sup>24</sup> to include the operation of land-based facilities. However, the benefits of a coordinated approach were recognised from the outset and the IMO worked closely with both the ILO and the Basel Convention secretariat<sup>25</sup> in the development of the new treaty. Representatives of both the ILO and the Basel Convention secretariat attended the negotiations in the MEPC and later.<sup>26</sup> Although the Joint Working Group mentioned above was not directly involved in the negotiation of the new treaty, it did have an opportunity to comment on an early draft of the new treaty on ship recycling and it made certain recommendations on aspects which it considered should be included.<sup>27</sup> The contribution of these organizations to the law-making process

<sup>&</sup>lt;sup>23</sup> New Legally Binding Instrument on Ship Recycling, IMO Assembly Resolution A.981(24) adopted on 1 December 2005.

The IMO Convention defines the mandate of the IMO as covering issues relating to "technical matters of all kinds affecting shipping engaged in international trade" including "matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships"; IMO Convention (1948) 289 *UNTS* 4, Article 1(a).

<sup>&</sup>lt;sup>25</sup> The Basel Convention Secretariat is provided by UNEP; see http://www.basel.int/convention/secretariat.html (checked 13 July 2009).

<sup>&</sup>lt;sup>26</sup> See the Final Act of the International Conference on the Safe and Environmentally Sound Recycling of Ships, Document SR/CONF/46, 19 May 2009, at para. 5.

<sup>&</sup>lt;sup>27</sup> Report of the Second Session of the Joint Working Group on Ship Scrapping, supra note 20, at paras. 4.10–4.12.

is recognised in the preamble to the Convention.<sup>28</sup> Moreover, as will be seen below, these institutions will continue to be involved in the implementation of the Convention.

#### Contents of the Convention

There are two principal ways in which the Convention seeks to address the risks raised by ship dismantling. First, it sets technical standards for the construction and operation of ships prior to recycling. Second, it creates a regulatory framework for ship recycling facilities.

"Ship" is broadly defined by the Convention as "a vessel of any type whatsoever operating or having operated in the marine environment." However, the scope of the Convention is limited by the fact that it only applies to ships of 500 GT or more. Moreover, warships, naval auxiliaries, and non-commercial state ships are excluded. "State of the Convention of the Convention of Source of So

Contracting Parties are required to prohibit and/or restrict the installation or use of the Hazardous Materials listed in an Appendix to the Convention on ships flying their flag.<sup>32</sup> In addition, a Contracting Party is required to prohibit and/or restrict the installation or use of such materials on all ships in its ports, shipyards, ship repair yards and offshore terminals.<sup>33</sup> Thus, the Convention can be applied to ships of non-parties which are within the territory of a Contracting Party. The list of hazardous materials in Appendix 1 includes asbestos, ozone-depleting substances, PCBs, and anti-fouling compounds and systems.<sup>34</sup>

All new ships are required to carry an Inventory of Hazardous Materials which are contained in the ship's structure or equipment.<sup>35</sup> Existing ships are required to comply with this obligation within 5 years of the entry into force of the Convention to the extent that it is practicable.<sup>36</sup> The Inventory must

<sup>&</sup>lt;sup>28</sup> See also Resolution 2, attached to the *Final Act of the International Conference on the Safe and Environmentally Sound Recycling of Ships, supra* note 26.

<sup>&</sup>lt;sup>29</sup> Ship Recycling Convention, Article 2(7). An illustrative list of vessels includes floating platforms, vessels stripped of equipment, and vessels being towed.

<sup>30</sup> Ibid., Article 3.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid., Annex, Regulation 4.

<sup>33</sup> Ihid

<sup>&</sup>lt;sup>34</sup> In relation to the latter, the Convention overlaps with existing regulations on hazardous materials which have been banned by the 2001 International Convention on the Control of Harmful Anti-fouling Systems on Ships, Document AFS/CONF/26, in force 17 September 2008, text available at www.imo.org.

<sup>&</sup>lt;sup>35</sup> Ship Recycling Convention, Annex, Regulation 5.

<sup>&</sup>lt;sup>36</sup> *Ibid*.

include all those materials in Appendix 1, as well as a further list of materials contained in Appendix 2. Ships are subject to a survey by the administration of the flag state who will issue a Certificate on Inventory of Hazardous Materials.<sup>37</sup> Throughout the operational life of the ship, the Inventory must be properly maintained and updated by the ship-owner in order to reflect any new installations or other relevant changes.<sup>38</sup> To ensure that this obligation is met, renewal surveys should take place at least every five years.<sup>39</sup> In addition, the Certificate may be subject to port state control by any other Contracting Party to the Convention.<sup>40</sup> Once it has been decided that a ship will be sent for recycling, any hazardous wastes which are on-board the ship, either as cargo or stores, must be added to the Hazardous Materials Inventory.<sup>41</sup>

The purpose of the Inventory is to identify all those materials which are potentially dangerous so that they can be handled in a safe and environmentally sound manner during the recycling process. The information contained in the Inventory, as well as further information provided by the ship-owner, 42 is used by the ship recycling facility to develop a ship-specific Ship Recycling Plan. This plan must specify how the materials in the Inventory will be managed.<sup>43</sup> It must also say how safe working conditions will be established and maintained during the period when the ship is being dismantled. The shipspecific Ship Recycling Plan must be approved by the competent authorities of the recycling state. 44 This requirement mirrors the prior informed consent procedures found in the Basel Convention.<sup>45</sup> However, consent under the Convention can take two forms. When a state consents to be bound by the Convention, it must specify whether or not it requires explicit or tacit approval of a Ship Recycling Plan. 46 In the latter case, the recycling state has a 14-day period from the receipt of the Plan to make any objections, otherwise the Plan is deemed to have been approved.<sup>47</sup>

Ships which fall within the scope of the Convention may only be sent for recycling at a ship recycling facility which has been authorised in accordance

<sup>&</sup>lt;sup>37</sup> *Ibid.*, Regulations 10, 11(1).

<sup>&</sup>lt;sup>38</sup> *Ibid.*, Regulation 5(3).

<sup>&</sup>lt;sup>39</sup> *Ibid.*, Regulation 10(5). The Convention makes clear that, as far as possible, surveys should be harmonized with surveys required by other applicable IMO Conventions.

<sup>40</sup> *Ibid.*, Annex, Regulation 8.

<sup>41</sup> Ibid., Regulation (4).

<sup>42</sup> Ibid., Regulation 8(4).

<sup>43</sup> Ibid., Regulation 9(3).

<sup>44</sup> *Ibid.*, Regulation 9(4).

<sup>&</sup>lt;sup>45</sup> Basel Convention, Article 6.

<sup>&</sup>lt;sup>46</sup> Ship Recycling Convention, Article 16(6).

<sup>&</sup>lt;sup>47</sup> *Ibid.*, Annex, Regulations 9(4)(2).

with the regulations contained in the Convention.<sup>48</sup> In order to be authorised under the Convention, a ship recycling facility must establish management systems, procedures and techniques which do not pose health risks to workers at the facility or to the local population, as well as minimizing adverse effects on the environment. 49 Furthermore, any ship recycling facility must have a Ship Recycling Facility Plan. 50 This Plan must include details on workers' safety and training,<sup>51</sup> accident monitoring and reporting systems,<sup>52</sup> and an emergency preparedness and response plan.<sup>53</sup> When dismantling the ship, the recycling company is required to identify, label, package and remove all hazardous materials listed in the Inventory in accordance with guidelines to be adopted by the IMO.54 It is the duty of all Contracting Parties to ensure that any ship recycling facilities operating within their jurisdiction are designed, constructed and operated in a safe and environmentally sound manner.<sup>55</sup> "Safe and environmentally sound manner" is not explicitly defined in the Convention. However, the identical phrase is used and defined in the Basel Convention<sup>56</sup> and in light of the drafting history of the Convention and the close co-operation between the organizations throughout, it is arguable that the two treaties should be interpreted in a compatible way.

Before the ship is received at the recycling facility, the flag state is required to conduct a final survey in order to ensure that the Hazardous Materials Inventory is up-to-date, the Ship Recycling Plan contains all the relevant information, and the ship recycling facility has been authorised to carry out the necessary work.<sup>57</sup> Once these conditions are satisfied, the flag state can issue a Ready for Recycling Certificate and the ship can be sent for recycling. Prior to recycling, the ship-owner is required to minimize the amount of cargo residues, remaining fuel oil and wastes remaining on-board the vessel.<sup>58</sup>

The recycling of a ship is to be monitored at all stages under the Convention. First of all, a ship recycling facility must notify in writing the competent authorities of the recycling state when it is preparing to receive a ship to recycle. The notification shall include, inter alia, the name of the ship, the flag

<sup>48</sup> *Ibid.*, Regulations 8(1), 16.

<sup>49</sup> *Ibid.*, Regulation 17(1).

<sup>50</sup> Ibid., Regulation 18.

<sup>&</sup>lt;sup>51</sup> *Ibid.*, Regulation 22.

<sup>52</sup> *Ibid.*, Regulation 23.

<sup>53</sup> Ibid., Regulation 21.

<sup>&</sup>lt;sup>54</sup> *Ibid.*, Regulation 20(2).

<sup>55</sup> Ibid., Regulation 15(1).

<sup>&</sup>lt;sup>56</sup> Basel Convention, Article 2(8). See also the Technical Guidelines, *supra* note 9.

<sup>&</sup>lt;sup>57</sup> Ship Recycling Convention, Annex, Regulation 10(4).

<sup>&</sup>lt;sup>58</sup> *Ibid.*, Regulation 8(2).

state, and the contact information for the ship owner.<sup>59</sup> Once a ship has been recycled, the ship recycling facility must issue a Statement of Completion to the competent authority which will in turn send the statement to the administration of the flag state.<sup>60</sup>

#### Implementation of the Convention

The Convention is open for signature from 1 September 2009 until 31 August 2010.<sup>61</sup> It will enter into force 24 months after it has been accepted by 15 states which together represent not less than 40 per cent of the gross tonnage of the world merchant fleet and which have a combined maximum annual ship recycling volume which is not less than 3 per cent of the gross tonnage of their combined merchant shipping. These conditions set quite a high threshold for the entry into force of the Convention. With this in mind, the Hong Kong Conference adopted a resolution which called on IMO Members to "consider applying the technical standards contained in the Annex to the Convention on a voluntary basis... as soon as operationally feasible." However, in many cases, early implementation is impossible in the absence of the requisite guidelines that must be developed. To this end, the Hong Kong Conference also called upon the IMO to develop as a matter of urgency a number of guidelines which are central to the application of the Convention.<sup>63</sup>

Although the adoption of the Convention places the issue of ship recycling squarely within the mandate of the IMO, it does not replace the role of the other organizations which have an interest in this topic. Article 15 states that the Convention shall not prejudice the rights and obligations of Parties under other international agreements. This would include the Basel Convention and relevant ILO Conventions. More specifically, the Annex to the Convention expressly says that "Parties shall take measures to implement the requirements of the regulations of this Annex taking into account relevant and applicable international rules and standards, recommendations and guidance developed by the International Labour Organization and the relevant and applicable

<sup>&</sup>lt;sup>59</sup> *Ibid.*, Regulation 24.

<sup>60</sup> Ibid., Regulation 25.

<sup>61</sup> *Ibid.*, Article 16(1).

<sup>&</sup>lt;sup>62</sup> Resolution 5 on the Early Implementation of the Technical Standards of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009. Implementation of this resolution, however, could override the distinction between new ships and existing ships found throughout the Regulations.

<sup>&</sup>lt;sup>63</sup> See Resolution 4 attached to the Final Act of the International Conference on the Safe and Environmentally Sound Recycling of Ships, supra note 26.

technical standards, recommendations and guidance developed under the Basel Convention..."<sup>64</sup>

Nor will the adoption of the Convention on Ship Recycling be the end of the co-operation between the three institutions on this issue. A resolution adopted by the Hong Kong Conference explicitly calls on the IMO to "continue co-operation on ship recycling with the Basel Convention and the International Labour Organization following the adoption of the Convention."65 Special provision is also made for the involvement of other institutions in the adoption of amendments to the appendices which contain lists of hazardous substances. Regulation 6(2) provides that when the IMO receives a proposed amendment, it shall bring the proposal to the attention of the United Nations and its Specialized Agencies, inter-governmental organizations having agreements with the IMO and non-governmental organizations in consultative status with the IMO. Any proposal must also, prior to adoption by the IMO, be considered by a technical group which may include, inter alia, representatives of the United Nations and its Specialized Agencies and other inter-governmental organizations with expertise in the risks posed by such substances to the environment or to human life and health.66

Another way in which the three organizations are co-operating on the issue of ship recycling is through the development of a Global Programme for Sustainable Ship Recycling.<sup>67</sup> The purpose of this programme is to promote a co-ordinated approach to technical assistance activities undertaken by the three organizations, as well as other relevant international institutions. Such technical assistance activities are vital if the threats posed by ship dismantling are to be effectively addressed, particularly in developing countries which have scarce resources to dedicate to this issue. The development of this programme was encouraged by the third session of the Joint Working Group on Ship Scrapping in October 2008 which called on the secretariats to report to their respective governing bodies on their progress.<sup>68</sup>

<sup>&</sup>lt;sup>64</sup> Ship Recycling Convention, Annex, Regulation 3. See also the discussion of this point in the *Report of the Third Session of the Joint Working Group on Ship Scrapping*, Document ILO/IMO/BC WG 3/6, at para. 117.

<sup>&</sup>lt;sup>65</sup> Resolution 2, attached to the Final Act of the International Conference on the Safe and Environmentally Sound Recycling of Ships, supra note 26.

<sup>&</sup>lt;sup>66</sup> Ship Recycling Convention, Annex, Regulation 7(1). Note, however, that only representatives of the Parties may participate in formulating any recommendations to the committee; see *ibid.*, Regulation 7(3).

<sup>&</sup>lt;sup>67</sup> See *Global Programme for Sustainable Ship Recycling*, Note by the Secretariats of the Basel Convention, IMO and ILO, Document ILO/IMO/BC WG 3/3/1, 9 September 2008.

<sup>&</sup>lt;sup>68</sup> Report of the Third Session of the Joint ILO/IMO/BC Working Group on Ship Scrapping, Document ILO/IMO/BC WG 3/6, at para. 90.

In sum, even though the Convention was adopted under the auspices of the IMO, it was the product of inter-institutional co-operation. Indeed, the regulation of ship dismantling is likely to be an issue which continues to be developed in an integrated manner through the co-operation of all the interested international institutions.

**James Harrison\*** Lecturer, School of Law University of Edinburgh UK

<sup>\*</sup> Email: james.harrison@ed.ac.uk