

## The Implementation of the Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft

Gerd Winter, Bremen\*

### I. Introduction

In 1970, a freighter called "Stella Maris" sailed from Rotterdam heading for Paris. There was something mysterious about her, for she had repeatedly done this before, and had returned already 4 hours later - without the barrels she had loaded when sailing off. The port captain had become suspicious and discovered that the barrels contained chlorinated hydrocarbons, i.e. highly poisonous and carcinogenic substances. This time, he warned the Ministry of Transport in Holland. The Ministry could find no legal basis upon which to intervene, but had the shrewd idea to send a boat which was used for abating oil catastrophes to follow the "Stella Maris". The boat heeled the "Stella Maris" in an embarrassingly short distance, such that the latter's captain abandoned the plan to dump the barrels within the Dutch territorial zone. While the convoy was sailing northwards, the officials at the Ministry of Transport discovered that the barrels originated from Akzo, a Dutch chemical company. They called Akzo and were told that a new position 300 miles southwards of Norway had been determined for dumping. This information was passed on to the Norwegian Government, whereby a mistake in the telegraphic transmission occurred in that 30 miles were quoted instead of 300. The mistake was not intended, but it was not entirely unintentional that the mistake was not corrected. This led to an uprise of public protest in Norway, which spread to the international press. The journey of the

\* Professor of Law, University of Bremen. I want to thank Mr. Peter Hayward of the Secretariat of the Oslo Commission for his kindness in proof reading the English text. The views expressed are my own.

A grant of the Stiftung Volkswagenwerk allowed me to travel around for gathering information.

I have also to thank my interview partners in Bremen, Hamburg, London, Paris, and Den Haag as well as my correspondents in Antwerp, Copenhagen and Stockholm for their interest in this study.

"Stella Maris" now became a veritable odyssey, again and again chased off as she was by diplomatic interventions of the states she approached. Fishing boats blockaded a Scottish harbour when the "Stella Maris" wanted to refuel there. Great Britain intervened with the Dutch Government when it became known that dumping was planned westwards of Scotland. Ireland und Iceland protested against a dumping position westwards of Ireland. Finally, the vessel carried the cargo back to the port of Rotterdam. The trail of the barrels was lost in Belgium.

The erratic voyage of the "Stella Maris" is not the only affair which attracted attention of the general public to water pollution during the late sixties and early seventies. But it drew attention particularly to pollution of the sea. Marine pollution caused by oil had already been dealt with by various international treaties, but marine pollution by dumping had not yet been regarded an urgent problem. The Stella Maris-affair had its merits not only by creating public attention in general. It happened also at a crucial moment. During those days, representatives of some of the North Sea states were meeting in Paris. Norway and Great Britain had initiated talks about an international convention against dumping. The initiative was part of the preparations for the Stockholm Conference. The delegates were conferring at Quai d'Orsay. One after another had expressed the opinion that marine pollution by dumping was a problem - but was still not too alarming. The initiative was about to wither away. The turn then was the representative's of the Netherlands. He rose and, mentioning the Stella Maris odyssey, concluded dryly that obviously everyone agreed - that in the future a ship like the "Stella Maris" could dump everywhere it wanted to<sup>1</sup>. This brought about a shift of opinions. The matter was handed to a Working Group of administrative technicians for further elaboration. A text was prepared and, after further negotiations, signed by 22 states at Oslo in 1972<sup>2</sup>.

The Convention came into force in 1974. By now it has been ratified by all of the signatory states<sup>3</sup>.

In 1974 a secretariat of the Convention was established in London. The Commission, i.e. the "legislating body" of the Convention, has held annual conferences since the same year. The sessions are prepared by the "Standing Advisory Committee for Scientific Advice". SACSA has subgroups on problems of incineration and monitoring.

<sup>1</sup> It may be noted that from 1963 to 1969 about 38.000 barrels containing chlorinated hydrocarbons had been dumped into the North Sea. See H.U. Roll in: *Umweltschutz I: Wasserhaushalt, Binnengewässer, Hohe See und Küstengewässer*. - Zur Sache 3/71 p. 157-162

<sup>2</sup> Belgium, Denmark, Finland, France, FRG, Iceland, Netherlands, Norway, Portugal, Spain, Sweden, UK.

For further conventions against marine pollution see the surveys given by H. Steiger, B. Dehmel, *Schutz der Küsten vor der Verschmutzung vom Meer aus*, Deutsches Verwaltungsblatt 1979, 205-221; P. Fotheringham, P.W. Birnie, *Regulation of North Sea marine pollution*, in: C.M. Mason, *The effective management of resources*, London 1979; *Der Rat von Sachverständigen für Umweltfragen, Umweltprobleme der Nordsee*, 4. Sondergutachten 1980, sec. 10.2

<sup>3</sup> The last one to sign was Finland (1979).

It would be interesting to study how the international bodies of the Convention work and what they have accomplished<sup>4</sup>. But this is not the object of this paper. Rather, I shall deal with the question how what has been reached on the international level is being implemented on the national level.

Before going into details a short look at the substantive problem which is being tackled by regulation and administration seems appropriate.

In comparison with the total amount of waste which flows into the North-East Atlantic via rivers, the atmosphere, pipelines etc. waste dumped from ships or platforms does not represent a very significant quota. Still it is a quota to be taken seriously because most of this kind of pollution comes in a very concentrated form<sup>5</sup>. What kinds of waste is concerned?<sup>6</sup>

First of all the so-called Annex I - substances are worth mentioning, above all *chlorinated hydrocarbons*, *mercury* and *cadmium*. These are particularly dangerous substances. They are not permitted to be dumped, and in fact are no longer being dumped (except as trace contaminants). Today, chlorinated hydrocarbons are burnt at land or at sea, in the latter case by special incineration vessels. At present, there are ships with an incineration capacity of up to 200.000 t per year. 100.000 t are actually incinerated. However, incineration is not yet a

4 My impression from an analysis of the files at the secretariat and from interviews is that initiatives towards more environmental protection usually are borne in the technical groups. The more an initiative approaches the agenda of the Commission it is being politicized, and that means in general, it is smoothed most often for economic considerations. SACSAs, though having originally mere technical functions, has more and more become an intermediate body where political regards are not unimportant. But on the whole - not the least thanks to an active secretariat - the international bodies have been rather constructive which - alas - does not mean that every step has been implemented on the national level (- quod erit demonstrandum).

5 No exact figures exist. A rough estimate is available from an inquiry which was made by the International Council for the Exploration of the Sea (ICES). The data refer to the Oslo Convention area and the years 1974/5. According to this inquiry the annual waste freight flowing into the sea amounts to 5.7 billion t from households and 3.4 billion t from industry (see ICES Cooperative Research Report No. 77 p. 17). On the other hand, the signatory states reported 1977 to the Oslo Convention secretariat a total amount of "only" 46.7 Mio t of licensed dumping (SACSA VI/2/1), a figure which may have to be augmented by up to 100 Mio t of unlicensed or non-reported dumping. But the picture is somewhat modified if one looks at quantities of dangerous substances (ICES op.cit.p. 17):

(t)	mercury	cadmium	lead	phosphorus	copper
Sewage from households	17	43	248	29759	98
Sewage from industry	6	38	785	25042	890
Dumping	35	89	4248	13048 2	426

The figures for heavy metals in the sewage appear to be heavily underestimated. (For somewhat higher estimates see *Umweltprobleme der Nordsee*, op. cit., sec. 4.5.1.) But the high concentration of dangerous substances in dumped waste remains evident.

6 The figures given in the following passages are my own estimate. They differ in some respect from those given in *Umweltprobleme der Nordsee*, op. cit., sec. 4.6., because they are based not only on published materials but also on files and interviews.

perfect solution, as there are still incineration *residues* of up to 0.1%, and there are also incineration *products* in the form of hydrochloric acid. These are introduced into the atmosphere and can be blown onto the land. Also, they can be washed out by rain and drop into the sea. Chlorinated hydrocarbons originate from all member states, but are largely loaded via the Netherlands and Belgium.

The second kind consists of other *industrial wastes*, especially acids, salts and alkalis from the chemical industry. The principal item here is waste from Titaniumdioxide production (sulphuric acid and ferric sulphate). Industrial waste amounts to about 6 Mio t per year. It comes from all of the member states besides Spain and Portugal, about which I have no exact knowledge.

The third kind of waste consists of *sewage sludge*. Sewage sludge is not acutely toxic, but, remaining suspended in the water, it reduces the water's transparency for light. Also, sewage sludge contains trace metals. About 9 Mio t per year are dumped. The bulk stems from the Federal Republic of Germany and from Great Britain. This does not mean that all of the other countries store their sludge away on land. Some of them, like the Netherlands and France, use pipelines through which the sludge is pumped out into the sea.

The fourth kind of waste is *dredge spoil*. Dredge spoil occurs in enormous quantities. It can be estimated at 30-150 Mio t per year, depending on whether one counts only dredgings from harbours or includes those from river works. Again, there is no acute toxicity. But dredge spoil covers over plants and animals on the sea bottom, and contains mercury and cadmium which only occur as traces, but are considerable when viewed in absolute terms. Dredge spoil is dumped by all member states.

*Bulky waste* like scrap metal from platforms or sealed-off well-heads may be mentioned as a fifth category.

## II. A Model National Legislation

The national legislation analysed in this paper includes not only legal rules but also governmental and administrative rules.

"Legal rules" are rules which are promulgated by the national parliament<sup>7</sup>. By "governmental rules" I understand rules which in legal terms have the value of legal rules but for the sake of greater flexibility are made by the executive

<sup>7</sup> Gesetz (FRG), Loi (Belgium, France), Act (Sweden, UK), Wet (The Netherlands). For Portugal and Spain, during the time of their non-democratic constitution, the corresponding terms were Decreto (by the cabinet) and Ley (by the Cortes).

branch (a minister, the cabinet, the crown)<sup>8</sup>. "Administrative rules" are rules which address themselves only to administrators and do not create legal obligations or rights for citizens<sup>9</sup>. They are made by a minister.

For comparing national rule-making under the Oslo Convention a *tertium comparationis* is needed. For this purpose an outline of a model national legislation which optimally fulfils the requirements of the Convention may be helpful. By "requirements of the Convention" I understand not only those which are part of the written text of the Convention but also those which have been developed subsequently by the Commission of the Convention.

The model legislation drawn up below leaves open the question of whether promulgation should be in the form of legal, governmental or administrative rules. In this respect constitutional differences in the member states advise against harmonisation. The same is true for whether the Convention should be transformed into just one Act or a number of Acts, each dealing with a different part of the Convention.

The national legislation should not merely approve and incorporate the Convention *in toto* (as, e.g. it was done by Portugal). Rather, it should provide specifications such as precise criteria for licensing dumping, and it should add rules e.g. about licensing procedure, supervision of dumping activities and penal prosecution of offences.

The national rules should apply

- as to the technique of marine pollution: to dumping and to incineration<sup>10</sup>, if undertaken deliberately<sup>11</sup>
- as to the substances disposed of: to all matters other than oil and radioactive materials<sup>12</sup>
- as to the sources of disposal: to ships, aircraft as well as platforms<sup>13</sup> which are registered in the Signatory's territory or, if not, are loaded in the Signatory's territory or are believed to be engaged in dumping within the Signatory's territorial sea<sup>14</sup>

8 Décret (Belgium, France), Verordnung (FRG), Order (UK), Besluit (The Netherlands).

9 Arrêté (France), Verwaltungsrichtlinie (FRG), Guidelines (UK), Voorschriften (The Netherlands).

10 Incineration is not explicitly mentioned by the Convention, but the Commission has agreed that it is included. See "Code of Practice for the Incineration of Wastes at Sea" approved by the Commission at its Fourth Meeting, December 1977. The Code refers the term "dumping" to incineration products and unburnt residues which may contaminate the water.

11 Article 19 (1).

12 Article 14.

13 Article 19 (2).

14 Article 15 (1).

- as to the medium which receives the waste: to the "sea", be it the territorial zone of a Signatory, the area of the Convention's jurisdiction (Art. 2), or seas outside this area (see Art. 3).

The national rules should distinguish three categories of substances the dumping or incineration of which is either

- (a) forbidden, or
- (b) may take place upon (specific) permit, or
- (c) may take place upon (general) approval.

As the Convention does not, of course, prevent national legislation from providing more environmental protection than the Convention does, national legislation may do without the third category if every waste falls under the other two.

The first category of substances consists of those which are listed in Annex I of the Oslo Convention. It includes e.g. organohalogen and organosilicon compounds, mercury, cadmium and persistent plastics. Member states of the Oslo Convention which have signed and ratified the London Convention as well - in fact, this is true for all of them except Ireland - should also include oil, matter designed for chemical or biological warfare, and highly radioactive waste<sup>15</sup>.

To the ban on dumping Annex I substances 3 exceptions may be made by the model legislation: the ban may be lifted if the substances:

- occur as "trace contaminants in waste"<sup>16</sup>, or
- "cannot be disposed of on land without unacceptable danger or damage"<sup>17</sup>, or
- (in the case of organohalogen and organosilicon compounds) are "non-toxic" or "rapidly converted in the sea into substances which are biologically harmless"<sup>18</sup>.

The second group of substances consists of those which contain trace contaminants of Annex I substances as well as of those listed in Annex II. Annex II includes a number of heavy metals, pesticides, bulky wastes and large quantities

15 See London Dumping Convention, Annex I. It may be noted that some of the member states handle the problem of radioactive waste in connection with their legislation on nuclear energy so that the legislation on dumping does not touch the matter.

16 Article 8 (2). According to a definition agreed upon by the Commission at its First Meeting in October 1974 "trace contaminants are substances which, when present in otherwise acceptable wastes, do not occur in such amounts that the dumping of wastes causes significant undesirable effects, including the possibility of danger associated with their bio-accumulation in marine organisms and especially in food species".

17 Article 9.

18 Annex I (1) and (2). The Commission's decision from October 1974 is: "nontoxic" describes a substance which, after discharge to the marine environment, is not expected to be biologically harmful either immediately or in the longer term on the basis of existing scientific knowledge. All synthetic organohalogen and organosilicon compounds which on the basis of established scientific knowledge have been shown to be bio-accumulated should, for the time being, be regarded as potentially harmful". What "rapidly converted" means has not yet been defined.

of otherwise non-toxic substances. It also refers to large quantities of acids and alkalis, and SACSA has proposed that sewage sludge and harbour dredgings should also be implied<sup>19</sup>. Again, a reservation may be made. A permit is not needed if the substances do not occur in "significant quantities"<sup>20</sup>. This group of substances "requires special care"<sup>21</sup>. Therefore, a "specific" permit, i.e. a permit which specifies the quantity and time-period for dumping must be obtained.

The third group which only requires an "approval", i.e. a general permission, covers those substances which are not listed in Annexes I or II, as well as those Annex II substances which are insignificant, i.e. less than 0.1% by weight (Art. 6, 7).

There is one reservation which applies to all three groups of substances: dumping is neither prohibited nor is its licensing required in the case of *force majeure*<sup>22</sup>.

National legislation should *specify the preconditions for permits and approvals*. It should attempt to delineate which effects of dumping or incineration will not be tolerated<sup>23</sup>. It should give preference to alternative means of disposal or elimination if these are practically available<sup>24</sup>. It may also give preference to means of avoidance if these are available; but this is not required by the Convention.

The permit, if granted, should be designed to fix the rate of dumping, the dumping or incineration site, the quantity and composition of waste and the method of deposit<sup>25</sup>. Though the Convention leaves this open, the right to alter or revoke licences should be provided, e.g. when circumstances or scientific knowledge have changed.

National legislation may require applicants to pay a fee. The fee may be designed to cover the costs of licensing (costs of collecting information about the waste, of tests about its effects, and of administration), but it could also be shaped as an incentive to avoid dumping.

As far as administrative procedure is concerned the model legislation will ensure that the licensing authority receives from the applicant detailed information

19 See 6th Meeting of SACSA, Sept. 1978, § 38-51. This is important because dumping of dredgings is being practised in almost all of the member states, and dumping of sewage sludge in at least three of them.

20 Article 6. The Commission estimates a quantity to be significant if it "constitutes more than 0.1 per cent of the weight of the quantity of waste for disposal" (agreed in October 1974).

21 See Annex II, para. 1.

22 Article 8 (1).

23 Compare Article 6 and Annex III (3) a.

24 Compare Annex III (3) (b).

25 See Annex III (1), (2).

about the composition and prospectively damaging consequences of the waste. Information about alternative means of disposal, elimination<sup>26</sup> and - possibly - avoidance should be furnished as well. The licensing authority should be empowered (and adequately staffed) to undertake independent analyses and tests. The tests should discover oxygen demand, acute and chronic toxicity, degradability, bio-accumulation, and growth-inhibition<sup>27</sup> whenever a "prior consultation procedure" is required, but possibly also in other cases.

The "prior consultation procedure" which gives the Commission and the member states the opportunity to comment on an application for dumping in one of the states is required in three cases: when a substance listed in Annex I cannot be disposed of on land without unacceptable danger<sup>28</sup>; when a substance listed in Annex I is assumed to be non-toxic or rapidly converted or to appear only as a trace contaminant<sup>29</sup>; and when a Contracting Party "considers incineration at sea of a certain waste with a lower efficiency than  $99.95\% \pm .05\%$ "<sup>30</sup>.

There is no provision as to *national consultation procedures*, but it seems appropriate to determine how and which different administrative agencies should be involved. Also, a kind of participation of *interested parties* or of the *public at large* may be envisaged and would seem to be fair but is not required by the Convention.

The model legislation will organise appropriate supervisory measures to ensure compliance<sup>31</sup>. Though the Convention does not specify what should be provided, the measures should include the right to take probes, to accede to storing and loading facilities, and to check with log-books and other documents related to dumping. Supervision should not be restricted to circumstances which give rise to suspicion of illegal behaviour but should concern any activity connected with dumping.

<sup>26</sup> See Article 10 and Annex III.

<sup>27</sup> These tests have been envisaged by SACS (Standing Advisory Committee for Scientific Advice) at its 4th Meeting (see Summary Record, SACS 76 - 5 to 13) and have been concluded by the Oslo Commission at its 3rd Meeting, October 1976 (see Summary Record, § 25).

<sup>28</sup> Article 9.

<sup>29</sup> Though the Convention does not require consultation in this case, the Commission has agreed to do so. See First Meeting of the Commission, October 1974, Summary Record, Annex X. Consultation is dispensable with regard to trace contaminants of mercury and cadmium in harbour dredgings and sewage sludge (see First Meeting of the Commission, Summary Record) as well as in waste from the titanium dioxide industry (see Fifth Meeting of the Commission, Summary Record, § 70, 71). The reason for these exceptions was said to be sufficient knowledge about the impact of Hg and Cd (see Sixth Meeting of SACS, Summary Record) but the political delicacy of the waste concerned may have played its part.

<sup>30</sup> This again is not required by the Convention, but has been agreed by the Commission (See Summary Record of the 5th Meeting of the Commission, November 1978, Annex IV).

<sup>31</sup> Article 15 (1).



The model legislation should provide for an appropriate penal prosecution capability.

Finally, there should be rules about the relations between national and international law and about conflict of laws of different member states.

The Commission of the Oslo Convention is empowered to propose modifications of the Annexes and to define Annex II substances as significant for the purposes of Article 6 of the Convention<sup>32</sup>. These decisions must be taken unanimously<sup>33</sup>. They enter into force after unanimous approval by the governments of the Contracting Parties<sup>34</sup>. Decisions of the Commission which merely interpret provisions of the Convention (such as "trace contaminants", "non-toxic" or "rapidly converted") or set up consultation procedures or prescribe methods of testing may be taken by a two-thirds majority of the Commission<sup>35</sup>. These decisions do not need to be transformed into national law, they are to be applied directly by national authorities<sup>36</sup>. A model national law will determine which governmental body (most probably a minister or the cabinet) is responsible for the approval of decisions of the first kind mentioned above; and an order or administrative guidelines will clarify that e.g. the licensing authority has to abide by the decisions of the Commission of the second kind mentioned.

With regard to conflict of national laws the model national legislation will determine whether and which licences issued by foreign authorities are recognised, and it will design consultation procedures when a dumping activity requires licences from more than one member state.

### III. National Legislation and Administration

#### 1. Belgium

Belgium approved the Oslo Convention by an Act of February 1978<sup>37</sup>. The Act states that the Convention and its Annexes "shall find their full application"<sup>38</sup>. This means more than mere approval. The provisions of the Convention shall be

<sup>32</sup> Article 17 (d) and (e).

<sup>33</sup> Article 18 (2) and Rules of Procedure of the Commission, Rule 11 (3).

<sup>34</sup> Article 18 (2).

<sup>35</sup> Rules of Procedure of the Commission, Rule 11 (2). The rule is compatible with the Convention as Art. 18 (2) requires unanimity only for decisions under Art. 17 (d).

<sup>36</sup> This interpretation has given rise to doubts within the member states.

<sup>37</sup> Loi portant approbation de la Convention ... from February 8th, 1978, *Moniteur belge* from May 4th, 1978.

<sup>38</sup> Article 1.

applied as national law. In particular, the realm and preconditions of licensing as provided by the Convention have become national law. The King, who is in charge of executing the Convention<sup>39</sup>, is empowered to extend and specify the number of substances forbidden for dumping by Article 5 and Annex I of the Convention<sup>40</sup>. The King may also specify the preconditions for issuing and for terminating a permit or an approval<sup>41</sup>. However, until now no such regulations have been promulgated. In fact, Belgium has only recently determined which administrative agency shall be responsible for licensing, and it seems that dumping is still going on unlicensed.

The Belgian authorities do not apparently regard incineration as being covered by the provisions of the Convention.

According to the Act, the applicant has to pay a fee for the licence, the amount of which is fixed by the King<sup>42</sup>. The fee, being named "rétribution", seemingly shall compensate for the costs of administration. But it seems not to be excluded to use it as an incentive towards the avoidance of pollution. More obvious is the motivational purpose of another fee: if the King so provides, the licensee has to pay a guarantee sum in advance which ensures that the conditions attached to the licence are met. The sum is reimbursed if there is no offence<sup>43</sup>.

The rest of the Act - its major part in fact - is committed to supervision and penal prosecution. The supervising authorities are equipped with sufficient powers to act efficiently. A system of different punishments is developed to react to different kinds of offences. It should be mentioned that besides individual persons the company for which they may have acted is equally liable to pay the fines.

It is possibly due to the underdeveloped dumping law and administration that most of the waste which shall be incinerated goes via Belgium. In 1978 51.500 t of organohalogenes were loaded by incineration vessels at Antwerp<sup>44</sup>. I do not know about dumping of other kinds of waste (nor has the Oslo Commission been informed about anymore) but it must be suspected (and at least Dutch officials think to have reasons to believe) that a good deal of industrial waste takes its way through Belgian ports even without notice of Belgian authorities.

---

39 Article 2, § 1.

40 Article 3, § 1.

41 Article 4, § 1.

42 Article 4, § 2.

43 Article 3.

44 Information from a Belgian official. The waste comes from Belgium, the Netherlands, the Federal Republic, France, Italy, the United Kingdom and Austria.

## 2. Denmark

Denmark promulgated an Act which enacted the provisions of the Oslo Convention as early as 1972<sup>45</sup>. Prompt as it was the Act is not, however, very precise and even contradicts some provisions of the Convention.

The Act applies to dumping "by discharge, emptying or sinking from or together with ships"<sup>46</sup> which means that incineration does not seem to be covered. As to the means of disposal, the Act refers to ships, aircraft and platforms which either unload in Danish territorial waters<sup>47</sup>, have loaded in Danish harbours or are Danish-owned<sup>48</sup>.

The Act states a general prohibition of dumping<sup>49</sup>. A general approval may be granted for substances not mentioned in Annexes I or II. A specific permit is available for Annex II substances and trace contaminants of Annex I substances not mentioned in Annexes I or II. A specific permit is available for Annex II substances and trace contaminants of Annex I substances "only in specific individual instances", and for Annex I substances "only in very special circumstances"<sup>50</sup>. Both of the latter criteria for licensing are rather vague. The provision for Annex I substances even violates the Convention which allows licensing solely in emergency cases.

Annexes I and II to the Act contain all the substances listed in Annexes I and II of the Convention. However, Annex II has been amended by substances which may, through causing disagreeable taste, reduce the commercial value of fish<sup>51</sup>.

Owners, users and operators of ships and platforms are obliged to report any dumping carried out for any reason to the Minister<sup>52</sup>.

The public is not involved in the licensing procedure.

The Act furnishes various officials with "police authority" which in the context of the Dumping Act seems to allow investigations if a ship is expected to dump (and not only if there is a suspicion of illegal behaviour).

Illegal dumping is subject to various penalties.

45 Lov om foranstaltninger mod forurening af havet med andet end olie, lov nr. 290 of June 7th, 1972. The Act became valid at April 7th, 1974 (see Bekendtgørelse nr. 156 of March 25th, 1974). The Convention was ratified by royal resolution of July 13th, 1972.

46 Sec. 1.

47 In fact, sec. 3 covers the whole area of the Convention and prohibits dumping within this area. In this respect the Act goes beyond Danish sovereignty as it is recognised by general international law.

48 Sec. 2.

49 Sec. 3 and 4.

50 Sec. 4 (2) and (3).

51 Annex II sub 2.

52 Sec. 8.

Corresponding to a general Scandinavian attitude Denmark seems to be extremely restrictive in granting licenses. One license, concerning 11.000 t of waste from  $T_1O_2$ -industry, was issued in 1975, and none in 1976 and 1977<sup>53</sup>. No incineration at sea is allowed<sup>54</sup>.

### 3. Federal Republic of Germany

The Federal Republic of Germany approved the Oslo Convention as well as the London Convention by an Act of 1977<sup>55</sup>. The Act also contains the national legislation required by the Convention. In combination with very detailed governmental<sup>56</sup> and administrative rules<sup>57</sup> it is a good example of the German passion for making rules.

The Act applies to dumping and - as is clearly stated - to incineration at sea<sup>58</sup>. As for the means of disposal, ships, aircraft and platforms are covered by the Act, but ships and aircraft only if they are German or load in German harbours and do not belong to the navy, and platforms as far as they are sited in the coastal zone<sup>59</sup>. Dumping and incineration by ship which takes place within the coastal zone is covered by inland water law<sup>60</sup>.

The Dumping Act empowers the Minister of Transport to promulgate regulations about the recognition of foreign licences. But up to now no such regulation exists. Therefore, a firm which wishes to incinerate waste on a German ship but load it at Rotterdam needs a German as well as a Dutch licence. (In practice, Dutch and German authorities would co-operate in such cases).

Like the English Dumping Act, the German Act does not pronounce a clear verdict against dumping of Annex I substances. Dumping and incineration may be licensed if two conditions are fulfilled:

- the substances cannot be disposed of on land without damaging the "public benefit" or resulting in "disproportionate costs";

53 SACSA VI/2/1 Table IV.

54 Chlorinated hydrocarbons are burnt at land, but some apparently are shipped to Antwerp or Rotterdam from where they are proceeded for incineration.

55 Hohe-See-Einbringungsgesetz (Dumping at Sea Act) of Feb. 2nd, 1977, Bundesgesetzblatt II 1977 no. 8, p. 165.

56 Hohe-See-Einbringungsverordnung (Dumping at Sea Order) of Dec. 7th, 1977, Bundesgesetzblatt I 1977 p. 2478.

57 Hohe-See-Einbringungsverwaltungsvorschrift (Dumping at Sea Guidelines) of Dec. 22nd, 1977, Verkehrsblatt 1978, p. 28.

58 Art. 2 and 3.

59 Art. 2 (1) See P. Ehlers, P. Kunig, Abfallbeseitigung auf Hoher See, Hamburg 1978, p. 57.

60 Wasserhaushaltsgesetz (Water Act) of Oct. 16th, 1978, Bundesgesetzblatt I p. 3017 sec. 1. This Act does not place a strict ban on Annex I substances and thereby contradicts the Convention.

- the substance is not likely to have detrimental consequences for human health, living resources, amenities or other legitimate use of the sea<sup>61</sup>.

It is legally assumed that Annex I substances do have such detrimental consequences<sup>62</sup>.

To regard unfeasibility of land disposal as a precondition of licensing rather than as a circumstance which is to be taken into account is somewhat stricter than Annex III (3)b of the Convention.

However, even if one or both of the requirements for a licence are not given a licence may be granted nevertheless if there is a "compelling public interest" to do so<sup>63</sup>. This clause is broader than the "emergency" mentioned in Art. 9 of the Convention and therefore violates Art. 5. Fortunately, it has not yet been applied.

The Act and the administrative regulations know only (specific) permits and no approvals in the sense of the Convention. A permit shall specify the amount, site, time etc. of discharge. Moreover, it can be amended by conditions which in various ways facilitate the authorities' supervision of the dumping operations. The licensing authority may charge fees but these are restricted to the costs of the licensing procedure.

The information required for an application includes a description of the production process as far as this is necessary for understanding the chemical composition of the waste. Hence, unlike in Dutch law, the authority is not to be enabled to judge whether the production of waste could be avoided, reduced or replaced.

In principle, information about the chemical composition of the waste has to be submitted by the applicant. Other than in the UK (where the authority makes the analysis) and in the Netherlands (where an independent institute has to do it), it is enough to present the signature of an expert who has given the oath for objective expertise. But the licensing authority is entitled to obtain additional independent expert opinions at the applicant's expense.

The licensing authority is the Deutsches Hydrographisches Institut (DHI) at Hamburg. DHI has to take advice from the Umweltbundesamt (UBA) as to questions of disposal on land and is bound by the opinion of this agency. UBA in its turn has to ask the Länder (all of them!) for comment. As for questions of

61 Dumping at Sea Art. 2 (2). It is noteworthy that a licence must be refused not only if detrimental consequences are probable or certain but also if there is reasonable doubt ("Besorgnis").

62 Art. 2 (3).

63 Art. 2 (4). It is understood that financial reasons cannot constitute a "compelling public interest" because they could only consist of "proportionate costs". See Ehlers/Kunig op. cit. p. 79.

detrimental consequences, DHI has to contact a number of federal agencies (e.g. the federal research institute of fisheries) and the Länder which border the sea. If DHI wants to apply the "compelling public interest" clause it has to obtain the consent of the Ministry for the Interior and the Ministry of Transport. It seems that this complicated way to handle the matter constitutes a veritable third hurdle before licensing: that of getting through massive bureaucracy. Though this would not be the worst way to protect the environment it may as well lead to its very opposite, i.e. a frequent issuing of inadequately checked preliminary licences when a case is pressing and high economic costs are at stake<sup>64</sup>. Also an attitude among officials may emerge where each looks only at a particular aspect and none investigates the case as a whole<sup>65</sup>.

There is no provision for participation of affected parties or the public at large. Only the interests of fishermen are represented insofar as the federal research institute of fisheries may give comments.

The Dumping Act does not give enforcement officers special supervisory rights in regard to unlicensed dumping. In this respect the general rules are applicable<sup>66</sup>. They confer investigatory powers only in the case where there is reasonable cause to believe that someone is acting illegally. In this respect the Dutch Marine Pollution Act is less restrictive by providing officers with investigatory powers "in so far as this may reasonably be deemed necessary for the performance of their duties"<sup>67</sup>. On the other hand, once the authority has granted a licence it disposes of full powers to supervise the actual operations. These powers are conferred partly by governmental regulations<sup>68</sup>, partly by conditions which are attached to the licence<sup>69</sup>.

Unlawful dumping is subject to various criminal sanctions.

Until June 1979 the DHI had issued 7 licenses, 3 of them being preliminary and the rest covering a period of 2 years. The most important ones are a license to dump 750.000 t of waste per year from  $T_1O_2$ -industry, a license to dump 2 Mio t of sewage sludge per year originating from Hamburg, and a license to incinerate 22.000 t of chlorinated hydrocarbons per year which stem from chemical industry.

64 My interview partners at the DHI denied that this may occur.

65 This effect was observed by an official of the Wasser- und Schifffahrtsdirektion at Bremen.

66 Dumping at Sea Act, Art. 11, sec. 94, 102 Strafgesetzbuch (penal code), sec. 46 Ordnungswidrigkeitengesetz (misdemeanour code).

67 Dutch Marine Pollution Act, Art. 12, 13.

68 Hohe-See-Einbringungsverordnung, loc. cit. sec. 1.

69 Hohe-See-Einbringungsverwaltungsvorschrift, loc. cit. sec. 5.3.

The administrative process which led to these decisions shows a characteristic difference if compared with decision-making in the Netherlands<sup>70</sup>. The German agencies involved did not formally require precise information about avoidability of the waste. In fact they had no legal power to check whether alternative methods of production or recycling of the waste were feasible. Thus, they confined their research to possible detrimental effects if such waste were disposed of at land, or if it were to be dumped. Consequently, the licences do not require measures towards avoidance. This does not mean, however, that German authorities were disinterested in avoidance. On the contrary, the Umweltbundesamt in particular, but also the DHI made efforts in this respect. But these efforts were made more informally, i.e. they were separated from the formal licensing procedure and were pursued through correspondence and negotiations.

Dutch authorities, on the other hand, use the licensing procedure as a means to investigate not only detrimental effects but also avoidability of waste. Also, they use limited duration of a license as an incentive or rather affliction which shall urge the industry to alter their production methods. In some instances, it is stated that the license will not be prolonged if specified measures towards avoidance will not be taken in the meantime<sup>71</sup>.

It is not easy to assess whether the informal or the authoritative approach is more effective in stimulating avoidance of waste. Recent empirical research on enforcement of environmental law is sceptical about informal proceedings. Environmental protection tends to be delayed and assimilated by economic interest<sup>72</sup>.

With regard to the German licence which allows dumping of waste of  $\text{TiO}_2$ -industry it may be added that a fisherman recently has filed a suit against DHI. He is claiming detrimental effects to fish. The lower administrative court at Hamburg affirmed that the fisherman has standing, but the final decision is still to be expected.

70 The following impression is based on interviews and a look at files in the German DHI and the Dutch Rijkswaterstaat.

71 The German and Dutch approaches intermingled in an interesting way when applications for incineration of waste from a big chemical company had been filed both at Rijkswaterstaat and DHI. DHI searched contact with Rijkswaterstaat in order to harmonize the decisions. Whereas DHI had confined its investigations to feasibility of disposal at land and to adverse effects in the sea, Rijkswaterstaat was still examining ways of recycling the waste.

72 See Bohne, Hesse, Hucke, Mayntz, Müller, Vollzugsprobleme der Umweltpolitik, 1978, p. 452; G. Winter, Das Vollzugsdefizit im Wasserrecht, Berlin 1975, p. 35. Disadvantages for the side of the applicant are stressed by J. Jowell, The Limits of Law in Urban Planning, Current Legal Problems 1977, Vol. 30, P. 75-82.

#### 4. France

France has promulgated two Acts about marine pollution<sup>73</sup>. The first refers to dumping, the second to incineration. France is the only member state of the Oslo Convention to have a separate Act on incineration.

As for the means of disposal, both Acts cover dumping by national ships, aircraft and platforms as well as loading by foreign vessels in French harbours and dumping by foreign vessels within the French territorial zone<sup>74</sup>.

The Acts forbid dumping of Annex I substances and require specific permits for incineration of Annex I substances<sup>75</sup> or dumping of Annex II substances<sup>76</sup>. By referring to Art. 7 of the Oslo Convention the Dumping Act seems to also provide general licensing for substances not covered by Annex II. By mentioning Annexes I and II the Acts incorporate the lists of substances designated by the Oslo Convention. This implies that amendments to these lists which are agreed on by the Oslo Commission and approved by the French government<sup>77</sup> will automatically become part of French law. In addition, French law may go further and amend the Annexes by decree of the Conseil d'Etat<sup>78</sup>.

The Acts do not specify criteria and conditions for licensing. This shall be done by decree of the Conseil d'Etat<sup>79</sup>. But to date no decree has been issued.

As far as administrative procedure is concerned the Dumping Act leaves everything to decrees, whereas the Incineration Act at least requires information about the appropriateness and efficacy of the incineration machinery.

Supervision of dumping is restricted to investigation of offences. Supervision of incineration is extended to free access to incineration vessels for control of the efficacy of incineration.

Illegal dumping or incineration is subject to various penalties.

By July 1979 the Ministère de l'Environnement, which is responsible for licensing dumping beyond the territorial sea, had issued only one license. The license allows dumping of 3.4 Mio t per year of T<sub>1</sub>O<sub>2</sub>-waste. Dredge spoil is still being dumped unlicensed, but a decree will soon institute a licensing procedure.

73 Loi no. 76-599 du 7 juillet 1976 relative à la prévention et à la répression de la pollution marine ... Journal Officiel 1976, p. 4107. Loi no. 76-600 du 7 juillet 1976 relative à la prévention et à la répression de la pollution de la mer par les opérations d'incinération.

74 Loi no. 76-599 Art. 5, 14 (2); Loi 76-600 Art. 3, 8.

75 Loi no. 76-600 Art. 2, 4.

76 Loi no. 76-599 Art. 4, 5.

77 See Oslo Convention Art. 18 (2).

78 Loi 76-599 Art. 4 (3).

79 Loi 76-599 Art. 4(2); Loi 76-600 Art. 20.



The license for  $T_1O_2$ -waste has been challenged by a fisherman. It will be interesting to see how the French court will decide as compared to the German one.

### 5. The Netherlands

The Oslo Convention was approved by an Act of 1975<sup>80</sup> and transferred into Dutch law by another Act of 1975<sup>81</sup>.

The Marine Pollution Act applies to "lozing" (dumping) which is understood to include incineration<sup>82</sup>. As for its jurisdiction the Act refers to any discharge, to the loading of any vessel or aircraft with the intention of dumping, and to delivering waste with the same intention<sup>83</sup>. "Vessel" includes platforms within the limits of the territorial sea. Literally, the Act thus applies to foreign ships and to dumping by foreign ships into the high sea. But this contradicts international law of sovereignty and is void. More important is the fact that Dutch ships do not need a Dutch licence if loaded in foreign harbours and are dumping in foreign waters.

With regard to the definition of waste, the Act adopts the distinction which the Convention makes between Annex I and Annex II substances<sup>84</sup>. However, the Act knows only specific permits and not general approvals. The substances themselves are defined by general administrative order<sup>85</sup>.

The sources of disposal are the same as those of the Convention.

The Act does not specify criteria for licensing nor does it empower a minister to draw up a formal order which narrows the broad administrative discretion. The only restriction is procedural in that the Minister of Transport and Public Works who is responsible for licensing has to obtain the agreement of the Minister of Health and Environmental Protection if he wants to issue a permit (but not if he does not want to)<sup>86</sup>.

It can be concluded from the kind of information which the applicant for a permit has to submit that the discretion shall be used in favour of strict

80 Rijkswet (Act) of June 5th, 1975, Staatsblad 1975, no. 307.

81 Wet verontreiniging zeewater (Marine Pollution Act) of June 5th, Staatsblad 1975, no. 352.

82 This will soon be made explicit by a reformulation of the Act. See Wijziging van enkele bepalingen van de Wet verontreiniging zeewater. Tweede Kamer der Staten generaal 1978-79, no. 15564.

83 Marine Pollution Act Art. 3 (1).

84 Art. 3 and 4.

85 See Art. 3 (1) of the Act and Besluit van 5 juli 1975, Staatsblad 1975 No. 419.

86 Art. 7 (1) of the Act.

environmental protection: according to an administrative order<sup>87</sup>, this information must not only reveal the chemical compounds, the characteristics and effects of the waste but must also include details about the production process, which sets the waste free, and on feasible ways to retain detrimental substances<sup>88</sup>.

As far as chemical waste is concerned, charges are used as an auxiliary instrument besides licensing. They may be imposed according to a separate Act about chemical waste of 1976<sup>89</sup>. It is not clear from the Act if, in determining the amount of charges, it may be disregarded that dumping to date has not caused social costs in the sense of actual expenditure. The Act refers to the "costs of removal" as criterion of charges<sup>90</sup>.

Regarding the administrative procedure of licensing, Dutch law enables more third party participation than the other member states' legislation. According to a new Act about administrative proceedings in environmental matters<sup>91</sup> the Ministry has to inform the public about any application for licensing it has received. The public has the right to inspect the application and to comment on it<sup>92</sup>. Here, the Act distinguishes between 2 categories of commentators: advisors ("adviseur") and any other caring person ("ieder gemotiveerde"). The same procedure applies to the draft permit<sup>93</sup>. The final permit has to be kept available for public inspection for one month<sup>94</sup>. The right to invoke the courts against the permit is granted not only to the applicant, but also to those who commented on the application or the draft permit as well as those who - though not having commented - are affected by the permit<sup>95</sup>. This, again, constitutes a progressive element in Dutch law as compared with the other legal systems.

If one takes May 1979 as a month of reference, the following licences were valid in the Netherlands: 7 licences for incineration of 26.000 t of organohalogenes, 9 licences for dumping of 32.000 t of acids, salts etc., 1 licence for dumping of

87 Voorschriften voor verzoeken om ontheffing van bepalingen in de Wet verontreiniging zee water, Nederlandse Staatscourant 13 juli 1977 No. 134.

88 See Voorschriften loc. cit. Nr. 4.

89 Wet chemische afvalstoffen (Chemical Waste Act), Staatsblad 1976 No. 214. According to a royal order (Antwerp-Heffingenbesluit chemische afvalstoffen of Oct. 26th, 1978, Nederlandse Staatscourant No. 209, 1978) loading of chemical substances for the purpose of dumping costs f 2.00 per ton.

90 See Art. 37 (1) of the Act. The actual practice (f 200 per ton) seems to start from the administrative costs for licensing and supervision.

91 Wet algemene bepalingen milieuhygiene, Staatsblad 1979 No. 442.

92 Art. 19, 20 of the Act.

93 Art. 28 of the Act.

94 Art. 32 of the Act.

95 Art. 44 of the Act.

500.000 t of  $T_1O_2$ -waste, 2 licences for dumping of 6,6 Mio t of dredge spoil (mainly from harbours, in particular from Rotterdam). 16 applications were still pending. The figures refer to maximum amounts per year. The licences usually have a duration of 1 or 2 years. As sewage sludge is disposed of at land or through pipes - there is for example a 10 miles pipe off Den Haag - no licence for sewage sludge has been issued.

Not all of the waste mentioned above stems from Dutch sources. The  $T_1O_2$ -waste comes from Belgium, and much of the organohalogenes is of German origin. This is due to the Netherlands' geographical situation near to German industrial centers, which keeps transport costs low.

The Netherlands have experienced 3 major remonstrations against dumping: There was public protest against incineration in the vicinity of Scheveningen. The incineration site then was displaced to an area further off the coast. - There is a suit pending against dumping of dredge spoil from Rotterdam harbours which is severely polluted by heavy metals. - Only recently there was a blockade by sporting and fishing boats against dumping of  $T_1O_2$ -waste.

#### 6. Norway

In Norway dumping from ships was already prohibited, though licensable, before the Oslo Convention was signed. But being just one among a whole range of water polluting activities covered by the Water Pollution Act of 1970<sup>96</sup>, dumping did not enjoy special treatment. More detailed provisions regarding dumping have been laid down in royal regulations of 1975<sup>97</sup>. These regulations copy most of the provisions of the Convention which concern prohibition and licensing of dumping.

The provisions of the Act and the royal regulations by adopting the Convention's definition of dumping implicitly include incineration at sea<sup>98</sup>. They are somewhat elusive as to the means of disposal. If taken literally they prohibit dumping by ships, aircraft and platforms within the whole area of the Oslo Convention as well as the high seas in general, and require dumping in these areas to be licensed by Norwegian authorities<sup>99</sup>. Obviously this goes beyond Norwegian sovereignty. As the penal provisions refer only to Norwegian citizens and enterprises<sup>100</sup> the best way to delimit the realm of these regulations seems to be to refer to dumping

<sup>96</sup> Act. No. 75 of 26 June 1970 relating to Protection against Water Pollution, with amendments of 31 May 1974.

<sup>97</sup> Regulations on Dumping of Substances of 4 February 1975.

<sup>98</sup> See supra fn. 10. I do not know about the Norwegian interpretation of the term. The question is of no practical importance because there is no incineration by Norwegian ships or from Norwegian harbours.

<sup>99</sup> See Regulations § 1.

<sup>100</sup> See Regulations § 5.

by Norwegian citizens and enterprises at any place on the high seas as well as to dumping by any foreign ship in Norwegian territorial waters.

In accordance with the Convention, the Norwegian provisions prohibit the dumping of Annex I substances, whereas Annex II substances can be licensed. The criteria of issuing permits are those of the Convention's Annex III, having regard to alternative means of disposal or elimination. It is interesting to note that the King is empowered to establish water quality objectives<sup>101</sup>. No other member state's legislation mentions this tool. The permit has to be specific. It may be amended or revoked if the damage from pollution, on the basis of subsequent experience or altered conditions, is greater than anticipated or when improvement is feasible without unreasonable expense<sup>102</sup>.

Dumping of any other substances seems to be allowed if it is obvious that it does not cause harm to human health or the water<sup>103</sup>. This contradicts the Convention which requires general approval for all substances not covered by Annex II.

With regard to administrative procedure Norwegian law empowers the Ministry to require from the applicant "whatever ... information it deems necessary"<sup>104</sup>. This seems to include information not only about the compound and characteristics of the substances to be dumped but also about alternative methods of disposal and the feasibility of alternative production techniques.

The application shall normally be kept open for inspection by affected parties<sup>105</sup>.

The Act contains far-reaching rights of supervision. The supervisory authorities may require anyone pursuing an activity which can lead to water pollution to provide the information they deem necessary. They have unrestricted access to installations which may lead to water pollution<sup>106</sup>.

Illegal dumping is subject to various penalties.

I have no information about licensing practice in Norway, neither has Norway reported to the secretariat of the Oslo Convention.

## 7. Portugal

Portugal approved the Convention by a Decreto of 1972<sup>107</sup>. No further legislation has been made about the matter since then. A Portuguese official declared in a

101 Water Pollution Act sec. 8 (4).

102 Water Pollution Act § 12 (1).

103 Water Pollution Act § 4.

104 Water Pollution Act § 9 (1).

105 Water Pollution Act § 9 (2).

106 § 14 of the Act.

107 Decreto no. 491/72 of Dec. 6th, 1972, Diário do Governo I Série No. 283.

letter to the Secretary of the Convention that according to Portuguese law the approval has made the Convention part of Portuguese national law. This interpretation contradicts general international law which holds that the act of ratification makes an international treaty binding for the Signatory state but does not *ipso facto* transform the treaty into national law. To produce this effect national law has to state clearly that the transformation is wanted. In fact, the Oslo Convention is elaborate enough to be transformed literally (if one disregards the need for provisions as to supervision and prosecution of offences). But no such provision exists<sup>108</sup>.

I do not know whether a licensing administration has been instituted in Portugal. By July 1979 no report about licensing had been made to the secretariat of the Oslo Convention.

#### 8. Spain

Spain has approved and transformed the Convention by an Act of 1977<sup>109</sup>. The Act adopts the most important provisions of the Convention almost literally. In translating the Convention's definition of dumping, the Act<sup>110</sup> is as unclear as the Convention as to whether incineration at sea is included. The means of disposal covered by the Act refer to Spanish ships, aircraft and platforms as well as foreign vessels which discharge within Spanish territorial waters. Foreign vessels which load in Spanish harbours in order to dump in the high seas or foreign waters are not covered - which contradicts Art. 15(1)b of the Convention.

The Act adopts the concept of prohibiting the dumping of Annex I substances, requiring specific permits for dumping Annex II substances and requiring general approval for dumping other substances. But it goes further than the Oslo Convention by adding oil, highly radioactive substances and materials designed for chemical or biological warfare to the catalogue of Annex I substances<sup>111</sup>. Thereby it follows the list of the London Convention<sup>112</sup> and goes further than all other Signatories of both the Oslo and London Convention.

The Act does not provide criteria for licensing<sup>113</sup>. Hence, licensing is up to the authority's unlimited discretion. Similarly, nothing is said about licensing

108 The Decreto, saying "E aprovada, par ratificação, a Convenção ..." (The Convention is approved by ratification ...), uses the terminology which is usual for mere ratification.

109 Ley 21/1972, de 1 de abril, sobre aplicación de sanciones en los casos de contaminación marina provocada por vertidos desde buques y aeronaves (Marine Pollution Penal Act). Boletín Oficial del Estado Num. 80/1977, p. 7511.

110 Art. 1 (2) uses the expression "evacuación deliberada en el mar de substancias ... por medio de buques ...".

111 Annex I no. 7-9 to the Act.

112 See London Convention, Annex I, no. 5-7.

113 Annex III of the Oslo Convention is not cited or incorporated.

procedure and supervision. However, a system of fines is set up for unallowed dumping<sup>114</sup>.

The Minister of Commerce is empowered to regulate details of licensing by decrees. I have no information whether such decrees exist, and whether licensing has already been established. Spain has not yet reported to the Secretariat of the Oslo Convention as to whether any licences have been issued.

### 9. Sweden

Sweden had promulgated a Dumping Act even before the Oslo Convention was signed<sup>115</sup>.

The Act refers to "dumping". Incineration is not mentioned, but it seems to be understood that it is covered by the term "dumping"<sup>116</sup>. The Act is applicable to dumping of any waste<sup>117</sup>. Dredge spoil does not seem to be waste but is regulated by the Environment Protection Act<sup>118</sup> (which contains much the same provisions as the Dumping Act). In respect of its spatial jurisdiction the Act concerns dumping within Swedish territorial waters, dumping elsewhere by Swedish ships, aircraft or other means of transport, and transport of waste from Sweden with the intention of dumping in the high seas<sup>119</sup>.

The Act forbids any of the activities aforementioned whether they lead to detrimental effects or not<sup>120</sup>. Thus it goes further than the Convention which requires only a verdict against Annex I substances. On the other hand, the government may grant exemption from the prohibition if the dumping does not cause an environmental nuisance<sup>121</sup>. This means that, in contradiction to Art. 5 of the Convention, even Annex I substances may be licensed for dumping<sup>122</sup>.

Since the criterion for granting an exemption is the absence of environmental nuisance, the Act adopts the philosophy of water quality objectives. The philosophy of emission control is visible within the Environment Protection Act which requires any measures against emission which are technically feasible<sup>123</sup>.

114 Art. 3, 10, 11 of the Act.

115 Marine Dumping Prohibition Act of 1971, Swedish Code of Statutes 1971, No. 1154.

116 The question is of no practical importance as Sweden does not practice incineration from ships.

117 Except waste deriving from the operation of ships.

118 Environment Protection Act of 1969, Swedish Code of Statutes 1969, No. 382.

119 Dumping Act § 1.

120 Dumping Act § 1.

121 Dumping Act § 3.

122 In practice no such exemption has been and is foreseen to be ever granted.

123 See National Swedish Environment Protection Board, Environment Protection in Sweden, p. 6.

The Environment Protection Board, an independent administrative agency<sup>124</sup>, is responsible for issuing exemptions. The Board may require from an applicant any information it regards as appropriate<sup>125</sup>. The public is not involved in the licensing procedure. However, the Board consults the Fishery Board, another administrative agency<sup>126</sup>.

The exemption applies to a specific type and quantity of waste and regulates time, site and means of disposal<sup>127</sup>. It may be altered or revoked if a nuisance is caused<sup>128</sup>. Seemingly it does not matter if the nuisance was foreseeable or is due to refined scientific insight.

Other instruments besides prohibition and exemption, e.g. charges, are not used against dumping by Swedish law.

Both the Dumping Act and Ordinance give broad supervisory powers to the Environment Protection Board. The Board may obtain information and documents, and is entitled to board any means of transport or enter any premises used in connection with dumping<sup>129</sup>. The exercise of these powers does not presuppose suspicion of illegal behaviour.

The Act provides various penalties for unlawful dumping.

Sweden is more restrictive in licensing than any other signatory state. Since 1971, when the dumping legislation came into force, no licence for industrial waste or sewage sludge has been granted. Only dumping of smaller amounts of dredgings has been permitted<sup>130</sup>.

#### 10. United Kingdom

The UK has transferred the Oslo Convention as well as the London Convention (which is cited in sec. 6) into national law by the "Dumping At Sea Act 1974". There are no formal governmental or administrative rules which elaborate the Act besides a number of unpublished "notes for guidance". These notes have been written by the Ministry of Agriculture, Fisheries and Food (MAFF) mainly to structure the Ministry's own licensing policy and to inform applicants about their auspices.

124 Op. cit. p. 20.

125 Dumping Prohibition Ordinance, Swedish Code of Statutes 1971 no. 1156 sec. 2.

126 Loc. cit. sec. 1.

127 Loc. cit. sec. 1.

128 Dumping Act § 3.

129 Dumping Act § 4 Dumping Ordinance sec. 3.

130 Information by a Swedish official.

The Act applies to "dumping" which in the eyes of the practitioners includes incineration<sup>131</sup>. In respect of sources of disposal the Act refers to loading in British harbours, dumping from foreign ships and aircraft in British territorial waters and dumping from British ships, aircraft or platforms elsewhere. The Act goes beyond the Convention by including land-based sources<sup>132</sup>. Equally, it refers not only to the sea but also to rivers so far as the tide flows<sup>133</sup>. Therefore it could also be called the "Dumping at Sea and Coastal Waters Act".

The Act does not state a clear verdict against Annex I substances. Instead, the dumping of Annex I substances can, in principle, be licensed, and it is up to the authority to impede dumping of those substances by denying applications. This contradicts Art. 5 of the Convention<sup>134</sup> which requires a clear verdict, but corresponds to the English approach to pollution, namely to prefer water quality standards rather than uniform emission standards<sup>135</sup>. This preference also explains why, in determining whether to grant a licence, no reference is made to alternative means of disposal, elimination or even avoidance. The criteria which govern the licensing authority refer to water quality: the authority "shall have regard to the need to protect the marine environment and the living resources which it supports from any adverse consequences of dumping"<sup>136</sup>. Terms used by the Convention like "non-toxic", "rapidly converted", "trace contaminants" or "significant quantities" which reduce the complexity of decision-making are not mentioned (which does not exclude their use in practice). Instead, the "Notes for guidance", notably one from Dec. 1975, in the English case-law manner reduce discretion by giving examples of wastes for which permits may be issued. For instance, harbour dredgings, munitions and discharge from land-based conveyor belts are given permits, but not so discharges from pipelines.

The licence shall, according to the Act, be specific<sup>137</sup>, and it shall include conditions as to the site and mode of discharge<sup>138</sup>. It is subject to variation and

131 See Marine Pollution Branch Information Paper No. 1 sub "incinerator vessels".

132 Sec. 1 (2).

133 Sec. 12 (1) sub "sea". Tidal waters are at the same time protected by the Control of Pollution Act 1974.

134 A British official whom I interviewed believed that Art. 5 of the Convention is directly applicable as British law. I doubt that this interpretation is correct. The "Dumping at Sea Act" would have to have openly referred to Art. 5.

135 The UK approach has been formulated in a MAFF note of March 1977 as follows: "Although we realise that the oceans ought not to be used as a limitless sink for the world's wastes we must keep the problem in perspective. The sea has a capacity to accept some wastes without causing pollution and United Kingdom policy is based on the principle that provided the areas and conditions of disposal are selected carefully it is possible to use the marine environment for the rational, controlled and proper use of dumping".

136 Sec. 2 (1).

137 Sec. 2 (7). It follows that the Act does not know mere "approval" of dumping.

138 Sec. 2 (1) and Note of the MAFF of March 1977.



revocation, if there is a change of circumstances or a change in scientific knowledge relating to the marine environment<sup>139</sup>.

The Act empowers the licensing authority to require the applicant to bear the costs of tests and of any monitoring about the effects of dumping<sup>140</sup>, and "to pay such fee ... as may be determined ..." <sup>141</sup>. Whereas the first kind of fee represents the regular type of administrative fee, the two latter, and notably the last, seem to be used as an incentive to avoid pollution.

The Act is tacit about administrative procedure. But an application form ensures that the applicant provides detailed information about the waste to be dumped, and a note of MAFF from March 1977 says that the application and probes of the waste shall be sent to the scientific branch and be tested before consideration by the administrative branch. Participation by affected parties (e.g. fishermen's association) or the public is not instituted. Similarly, the right to make representations about the refusal of a licence or restrictive conditions attached to it has been reserved to the applicant<sup>142</sup>. It is also unlikely that e.g. a fisherman would have a right to judicial review.

*Certiorari* presupposes firstly that licensing of dumping is a "quasi-judicial" decision - which may be conceded - and, secondly, that the claimant is a "person aggrieved" - which under the leading definition of that term in Buxton's case<sup>143</sup> is highly questionable.

It corresponds to English tradition that judicial review of administrative action is restricted, but it is also typical that administrative action is open to *public criticism*. The Dumping at Sea Act is, besides the Dutch law, the only law among the Signatories' laws to state that the "licensing authority shall compile and keep available for public inspection ... the notifiable particulars of any dumping licensed by them"<sup>144</sup>.

The British Act is thorough in organising adequate supervision. Enforcement officers are given far-reaching powers of access to and inspection of places and

139 Sec. 2 (3).

140 Sec. 2 (6).

141 Sec. 2 (4).

142 Sec. 3 (1) and (3).

143 See Salmon, J. in *Buxton v. Minister of Housing and Local Government* (1960) 3 All E.R. 408: "the words 'person aggrieved' in a statute connote the person with a legal grievance, that is to say, someone whose legal rights have been infringed". The term has been broadened by Lord Denning in *A.G. of Gambia v. N'Jie* (1961) All E.R. 504 at p. 511: "The words 'person aggrieved' ... do include a person who has a genuine grievance because an order has been made which prejudicially affects his interests". But this concept has not yet reversed Buxton's case (see J.F. Garner, *Administrative Law*, 4th edition, Butterworth, 1974 p. 177, 181).

144 Sec. 4 (1).

things in which they have "reasonable cause to believe that any substances ... intended to be dumped in the sea are or have been present"<sup>145</sup>.

There are detailed provisions about *criminal prosecution* of illegal dumping<sup>146</sup>. It deserves to be mentioned that also a body corporate or an officer of the body corporate can be convicted<sup>147</sup>.

Finally, the Act is the only example among member states' legislation which takes account of conflict of laws and of legal development by the bodies of the Convention. It is recognised to be lawful if dumping outside UK waters from a British ship etc. was authorised by a licence issued by the State of loading<sup>148</sup>. The Minister and the Secretary of State are empowered to declare that any procedure which has been developed by the bodies of the Convention (e.g. the prior consultation procedure) is applicable in the UK, and that British ships etc. may be checked by foreign enforcement officers as well as foreign ships being checked by a UK enforcement officer.

By Juli 1979 MAFF had issued no licence for incineration. Like in the Scandinavian countries organohalogens are being burnt at land. Neither have licences been granted for dumping of  $T_1O_2$ -waste. All the more seems licensing of other industrial waste, sludge and dredgings to be extremely generous. In 1977, 133 licences had been granted, most of them for one year, but on the understanding that they may be repeated<sup>149</sup>. The number is much higher than it is with the other signatories, but the quantities permitted in each instance are on the average lower. So - called umbrella licences, i.e. licences for entrepreneurs who collect the waste from different sources, are rare as compared to, e.g., Dutch practice. In sum the licences issued in 1977 covered 830.000 t of various industrial wastes, 8,7 t of sewage sludge, and an unspecified amount of dredge spoil<sup>150</sup>. These high quantities reflect an exploitative attitude vis à vis the sea which relies on the abundant resource of the water around the British isles and the dispersing effects of the high tides.

Any substance is carefully investigated as to its acute toxicity (but rarely as to its degradability, bio-accumulation and long-term toxicity as it is done in the Netherlands). However, the role the results of the tests play in the final taking of the decision shows that the philosophy of water quality objectives is insufficient. Licences were issued when the test (mortality of 50% of brown shrimps exposed

145 Sec. 5 (5).

146 Sec. 1 (6) - (9).

147 Sec. 9.

148 Sec. 1 (9).

149 69 were repeat licences. The figures are from the list which is open to public inspection at MAFF.

150 Figures from SACSA VI/2/1 Table IV.

for 96 hours to a certain concentration of the waste) revealed mortal concentration at up to 10 ppm (66 cases), but also when the mortal concentration was given already at between 1.000 and 100.000 ppm (8 cases)<sup>151</sup>. To know toxicity is not to know whether a certain toxicity is tolerable. Here, quality standards for the seawater are needed. The UK has not determined alike standards (and it is probably impossible to find them on any rational ground). Rather, one confines itself to choosing dumping sites which lie far enough from beaches and to prescribe methods of dumping which allow immediate dispersion of the waste. It seems the bare difference of licensed quantities in the UK and in the continental states show that the water quality-philosophy should be completed by the philosophy of emission control.

The UK is the only signatory where a criminal prosecution for illegal dumping has been displayed. The case concerned dumping of unlicensed quantities at a site which was not declared dumping site.

#### IV. Conclusions

1. Legally seen the Oslo Convention has been rather effective. The times of the *Stella Maris* are over. The signatories of the Convention have adopted a threefold approach to dumping: licensing, supervision and penal prosecution of unlicensed dumping. Further instruments, though, are not being used besides, perhaps, of the Belgian "rétribution" which could be shaped as pollution charges. The major success of the Convention is the ban on dumping of Annex I substances, in particular of organohalogenes which are now being disposed of by incineration. Some of the signatories (Denmark, Great Britain, Federal Republic, Sweden) have left this verdict somewhat elusive but this is probably not of practical importance. More important is that significant amounts of Annex I substances may be licensed for dumping if they appear as trace contaminants in great quantities of waste. However, this is not a problem of implementing the Convention but of developing it further.

Most of the national legislations are not at all precise about the criteria to be used for granting or denying a licence though this is required by the Convention. No signatory has declared emission standards or water quality objectives. Only Norway at least mentions a power to do so, and the Federal Republic gives disposal on land a clear priority to dumping (which could be seen as a form of emission principle).

<sup>151</sup> Figures taken from the list cited above.

A striking phenomenon is the lack of public participation. With the exception of the Netherlands and, to a certain extent, Great Britain and Norway licensing is not open to public scrutiny.

2. The actual enforcement of the law offers a quite different view. Very roughly a Roman, a British, a Dutch/German, and a Scandinavian approach can be distinguished. The Roman approach which applies to Portugal, Spain, Belgium and, somewhat less, France, is straightforward as far as law-making is concerned but rather idle as to the enforcement of the law. The British practice seems to have dumping under public control but it is rather generous in granting licences (and frank in admitting this). The Dutch/German approach is to take much care in rulemaking (though not to promise more than can be held) and to be reluctant in issuing licences, which does not mean that this can easily subdue high pressures from the side of the pollutants. The Scandinavian approach is the strictest: though precise rule making seems not to be of great importance almost any dumping or incineration at sea is prohibited in practice.

These differences seem to be to a certain extent due to differences in attitudes towards law-enforcement. Further reasons are differences in environmental ideologies. Great Britain has often been criticized for adopting a water quality principle instead of an orientation towards reducing emission of waste. Indeed, this seems to be fair if compared to the Dutch and German practice where disposal at land is given priority and polluters are urged or stimulated to reduce or recycle waste. But it is not quite fair if compared to idle enforcement or to countries where waste reaches the high sea via rivers instead of being dumped. More important than attitudes and ideologies are probably natural resources, the geographical location of polluters, the level of industrial development, and the degree of modernization of industries. Great Britain is surrounded by water with high tidal flow which disperses waste, British industry is situated nearby the coast, and it is not highly modernized - hence, dumping is the least costly way to dispose of waste. Many French and German industries are located far off the coast. For them it may be cheaper to treat their waste or to pollute rivers and pay a charge. Denmark does not have much chemical industry. Hence, it is not too remarkable if incineration at sea is prohibited. And if dumping of sewage sludge has not yet been licensed this may be due to the simple fact that treatment of sewage is well behind in Denmark<sup>152</sup>. To answer questions like these would however require a new study.

### Summary

The Oslo Convention is dealing with dumping of wastes into the North East Atlantic and the North Sea. After some remarks on the history of the Convention

<sup>152</sup> See *Umweltprobleme der Nordsee*, sec. 4.5.3.

and a survey of the most important kinds of wastes a national model legislation is designed which corresponds to the regulations of the Convention and the subsequent decisions of the institutions of the Convention. To this model rule the regulations and the licensing practice of the member states are compared. It can be shown that there are considerable deviations from the state reached on the international level. These deviations can presumably be explained by different national attitudes towards the functions of the sea and towards the importance of international legal norms. Furthermore, differences in the availability of national resources, in the degree of industrialization and the state of development with regard to abatement technologies and recycling technologies can contribute to these deviations.

### Zusammenfassung

Gegenstand der Oslo-Konvention ist das Einbringen von Abfallstoffen in den Nordost-Atlantik und die Nordsee. Nach Bemerkungen zur Entstehungsgeschichte und einem Überblick über die wichtigsten Abfallstoffe, die eingebracht werden, wird eine nationale Modellregelung entworfen, die den Bestimmungen der Konvention und späteren Beschlüssen der Organe der Konvention entspricht. Der Modellregelung werden einerseits die Regelungen, andererseits die Genehmigungspraxis der Mitgliedstaaten gegenübergestellt. Dabei zeigen sich erhebliche Abweichungen von dem auf der internationalen Ebene erreichten Stand. Sie erklären sich vermutlich aus unterschiedlichen nationalen Haltungen zur Funktion des Meeres und zur Bedeutung von – zumal internationalen – Rechtsnormen, weiterhin aus Unterschieden der Verfügbarkeit natürlicher Ressourcen, des Industrialisierungsgrades und des Entwicklungsstandes hinsichtlich Vermeidungs- und Kreislauftechnologie.

### Résumé

La convention d'Oslo s'occupe de l'immersion de matériaux nocives dans l'Atlantique du Nord-Est et la mer du Nord, immersion effectuée par des navires ou des plateformes. Cet article présente une législation nationale du caractère exemplaire qui correspond aux provisions de la convention et aux résolutions prises par les organes de la convention. Les législations des parties contractantes et la pratique en délivrant des permis d'immersion sont décrites et confrontées à la législation exemplaire. Les déviations sont remarquables. Comme causes pour cet état imperfect d'implémentation de la convention on peut mentionner: les différences nationales de voir la fonction économique de la mer, les différences en habitude vis à vis des règles écrites et leur valeur obligatoire, les différences en disposition sur des ressources naturelles, les différences en degré d'industrialisation et en développement d'une technologie de recycling.