



Department of Political Science

Chair of International Law

**Environmental Crimes: A Focus on the Illegal
Transfer of Hazardous Waste**

SUPERVISOR

Prof. Roberto Virzo

CANDIDATE

Silvia Chioggia

078122

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Table of Contents

Chapter 1 - The Challenge of Environmental Crimes

- 1.1 Stockholm Declaration: the link between human rights, health and environmental protection and the challenge posed by Environmental Crimes
- 1.2 The most accepted definition of Environmental Crime
 - 1.2.1 Illegal trade in wildlife*
 - 1.2.2 Illegal, unreported and unregulated fishing*
 - 1.2.3 Illegal trade in ozone-depleting substances*
 - 1.2.4 Illegal logging and trade in timber*
- 1.3 A focus on the illegal transfer of hazardous waste
 - 1.3.1 The prohibition of transboundary pollution in international law*
 - 1.3.2 The categories of hazardous wastes*
 - 1.3.3 The movement of hazardous wastes along the path of least resistance*
 - 1.3.4 Agenda 21 and the self-sufficiency principle*

Chapter 2 - International legislation on the illegal transfer of hazardous waste

- 2.1 The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
 - 2.1.1 The path leading to the adoption of the Convention*
 - 2.1.2 Restrictive and preventive measures under the Convention*
 - 2.1.3 The Ban Amendment*
- 2.2 Regional agreements on the basis of article 11 of the Basel Convention
 - 2.2.1 The 1991 Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa*
 - 2.2.3 The 1995 Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region*
 - 2.2.4 The 1996 Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal*
- 2.3 The role of enforcement networks: the World Customs Organization and INTERPOL Pollution Crime Working Group

2.3.1 The World Customs Organization

2.3.2 INTERPOL – Pollution Crime Working Group

Chapter 3 - The participation of the European Union to the Basel Convention

3.1 The competence of the EU in environmental matters

3.2 Past and present of Regulation 1013/2006/EC on shipments of waste

3.2.1 Control procedures and enforcement measures

3.2.2 Regulations and Directives improving enforcement of the Waste Shipment Regulation

3.2.3 The case of illegal shipments of e-waste from the EU to China

3.3 Enforcement of the Waste Shipment Regulation and final considerations

3.3.1 “Transfrontier Shipment of waste” cluster of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL)

3.3.2 Final considerations

Chapter 1 - The Challenge of Environmental Crimes

1.1 Stockholm Declaration: the link between human rights, health and environmental protection and the challenge posed by Environmental Crimes

Environmental protection entered the international agenda in the 1960s, at the same time as it became a concern of law and policy within many States. In 1968, the government of Sweden proposed that the United Nations convene an international conference on the human environment, and such proposal was accepted by the UN General Assembly, which decided to organise it in order to focus attention on environmental problems. The conference, held in Stockholm from 5 to 16 June 1972, had the objective to develop principles that would preserve and enhance the human environment. Most importantly, the Stockholm Declaration, adopted on June 16, 1972, was the first document in international environmental law to recognize the link between human rights, health and environmental protection, where health seems to be the subject bridging the other two fields¹. As a matter of fact, Principle 1 of the Stockholm Declaration declares that “Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being”², thus establishing the foundation for linking human rights, health and environmental protection. Moreover, Principle 2 asserts that all the natural resources of the earth, including water, air, land, flora and fauna, must be preserved and safeguarded in the interest of present and future generations³. The fundamental basis of all the principles contained in the Declaration is the Preamble’s statement that “Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth (...). Both aspects of man’s environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights and the right to life itself”⁴.

More than 250 international and regional environmental agreements have been adopted since the first landmark represented by the Stockholm Conference and Declaration, and they have moved beyond the simple appeals to cooperation in order to incorporate substantive rules and restrictions. However, the paradoxical result has been that the more regulations were introduced, the more evasion increased. The implication is that the very existence of national and international controls may encourage

¹ D. SHELTON, *Human Rights, Health & Environmental Protection: Linkages in Law & Practice*, in *Health and Human Rights Working Paper Series* No 1, 2002.

² Principle 1, Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972.

³ Principle 2, Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972.

⁴ Preamble, par. 1, Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972.

companies and individuals to circumvent such rules and evade environmental laws in order to gain financial benefits. This type of behaviour has been defined as constituting an *environmental crime*, or even *green crime* or *eco-crime*. In particular, although the definition of environmental crime is not yet universally agreed, it is often understood as a term to designate “illegal activities harming the environment and aimed at benefitting individuals or groups or companies from the exploitation of, damage to, trade or theft of natural resources, including, but not limited to serious crimes and transnational organized crime”⁵.

According to the UN Convention Against Transnational Organised Crime adopted in Palermo in 2000, a criminal activity is transnational when (i) it is committed in more than one state; (ii) it is committed in one state but a substantial part of its preparation, planning, direction or control takes place in another state; (iii) it is committed in one state but has substantial effects in another state⁶. Environmental crimes have become increasingly transnational in nature, as the effects of globalization and economic liberalization, such as fewer border controls and the ease of communication, have provided opportunities to increase the frequency and volume of shipments. The Palermo Convention specifically defines a transnational organised crime as “any serious transnational offence undertaken by three or more people with the aim of material gain”⁷, where “serious crime” is defined as an offence punishable by a prison sentence of at least four years⁸. Most environmental crimes transnational in nature will involve for organizational reasons more than three individuals working for the common purpose to obtain financial benefits. Moreover, crimes punished by more than four-year sentences are common, as apart from focusing on environmental laws, also health violations and revenue evasions, treated as serious crimes, are considered when prosecuting environmental criminals. Generally, most of environmental crimes are *series crimes*, committed repeatedly following the same *modus operandi* and routes, and as such they may cause more harm than *one-off crimes*. The main motive for environmental crime is financial gain, and today this type of crime represents one of the most lucrative forms of criminal activity. The value of environmental crime is 26 per cent larger than previous estimates, at \$91-258 billion in 2016 compared to \$70-213 billion in 2014, according to the United Nations Environment Programme (UNEP) and the

⁵S. BARRAT, R. HENRIKSEN, M. KOTSOVOU, A. KREILHUBER, E. MREMA, C. NELLEMAN, P. RAXTER, D. STEWART (eds.), *The Rise of Environmental Crimes - A Growing Threat to Natural Resources, Peace, Development and Security*, UNEP-INTERPOL Rapid Response Assessment, 2016, p.17.

⁶ Art.3, par.2, Convention Against Transnational Organised Crime, adopted in Palermo on 15 November 2000.

⁷ THE GLOBAL INITIATIVE AGAINST TRANSNATIONAL ORGANIZED CRIME, *The Global Response to Transnational Organized Environmental Crime*, 2014, p. 3.

⁸ Art.2, lett. b), Convention Against Transnational Organised Crime, adopted in Palermo on 15 November 2000.

International Criminal Police Organization (INTERPOL)⁹. Therefore, it is not surprising that organised criminal groups are appealed by it. By corrupting officials, all the transnational criminal operations are facilitated, and the activity results extremely profitable thanks to the precise combination of high profits and low risk of detection. At the same time, individuals holding official positions and power tend to view environmental crime as an opportunity to gain by becoming corrupted. Overall, because of its illegal and clandestine features, environmental crimes are based on a cash economy that avoids traditional banking systems.

1.2 The most accepted definition of Environmental Crime

The term *environmental crime* refers to a wide range of specific offences where criminals engage in trading environmental commodities or in damaging the environment itself. Such activities impact not only the natural habitat, but also pose a threat to human health and security, or they may cause material loss to an individual or a group. While a universal and consensual definition of environmental crime does not exist, a precise classification has been endorsed by important bodies such as the G8, INTERPOL, the EU, UNEP and the UN Interregional Crime and Justice Research Institute (UNICRI), which have recognized five areas of offences¹⁰:

- Illegal trade in wildlife in contravention to the 1973 Washington Convention on International Trade in Endangered Species of Fauna and Flora (CITES);
- Illegal trade in ozone-depleting substances (ODS) in contravention to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer;
- Dumping and illegal transport of various kinds of hazardous waste in contravention to the 1989 Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Other Wastes and Their Disposal;
- Illegal, unregulated and unreported (IUU) fishing in contravention to controls imposed by various regional fisheries management organisations (RMFOs);
- Illegal logging and trade in timber when timber is harvested, transported, bought or sold in violation of national laws.

⁹ S. BARRAT, R. HENRIKSEN, M. KOTSOVOU, A. KREILHUBER, E. MREMA, C. NELLEMAN, P. RAXTER, D. STEWART (eds.), *The Rise of Environmental Crimes - A Growing Threat to Natural Resources, Peace, Development and Security*, UNEP -INTERPOL Rapid Response Assessment, 2016, p.7.

¹⁰ D. BANKS, C. DAVIES, J. GOSLING, J. NEWMAN, M. RICE, J. WADLEY, F. WALRAVENS (eds.), *Environmental Crime – A Threat to Our Future*, Environmental Investigation Agency, 2008.

In the sections below, I will briefly cover the implications of these environmental crimes, before analysing in depth the crime consisting in the illegal transfer of hazardous waste, which will be the focus of my research, both from an international and regional point of view.

1.2.1 Illegal trade in wildlife

The illegal trade in wildlife involves live wildlife – like gorillas –, wildlife products – like ivory and rhino horns –, and their derivatives. Trade in wildlife is restricted under the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹¹, which aims at ensuring that international trade in wild animals and plants does not threaten the survival of selected species and provides different degrees of protection to more than thirty-four thousand species of animals and plants. In particular, the Convention bans international trade in more than 900 animal and plant species in danger of extinction, such as tigers and sea turtles, and many species of elephants and orchids. It also limits trade in more than 29,000 additional species threatened by commerce, like for instance parrots and some hummingbirds. However, despite the binding international restrictions and the requirement that State Parties adopt national legislation in order to implement some of CITES's provisions, the trafficking continues. Most of the demand for illegal wildlife comes from collectors and other consumers living in Europe, North America, Asia and the Middle East, who seek animals and products for food and medicine, or to use them for clothing and embellishment also in zoos, and to treat them as pets. On the other hand, most of the traded wildlife comes from developing countries, which have the fortune to host the world's most precious biological diversity.

1.2.2. Illegal trade in ozone-depleting substances

The ozone layer protects the Earth's surface from harmful ultraviolet radiations and is therefore vital to survival on our planet. In 1985, scientists discovered that the ozone layer is thinning because of the introduction in the upper atmosphere of chemical substances that destroy ozone molecules. Such substances are especially chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), which were normally used for purposes of refrigeration and spray can propellants. In 1989, the Montreal Protocol on Substances that Deplete the Ozone Layer¹² was adopted, and it called for the phasing out of use and production of CFCs by 2010 and of HCFCs by 2030. The Protocol has been

¹¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, adopted in Washington, D.C on 3 March 1973.

¹² Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Montreal on 16 September 1987.

considered as the most successful environmental treaty ever adopted¹³, but unfortunately, the legislators drafting the treaty did not expect the possibility of illegal trade in ozone-depleting substances (ODS). After the phase-out of CFCs production began in the US and the EU in 1995, smuggling started in the US, which had a high import tax on CFCs to reduce consumption, but that would be lucrative for smugglers, who used a loophole in the Montreal Protocol allowing free trade in recycled CFCs. At the same time, production continued in the EU, Russia and China. With the beginning of the phase-out of production of HCFCs, some developing countries, particularly Asia, started smuggling HCFCs in the US and Europe. The Montreal Protocol has been accordingly amended to tackle these issues, and several efforts have been undertaken also at the regional and national level where, while significant progress has been made against the trade in ODS, authorities still need to remain vigilant.

1.2.3 Illegal, unreported and unregulated fishing

A definition of illegal, unreported and unregulated (IUU) fishing has been developed by the Food and Agriculture Organization of the United Nations (FAO):

“Illegal fishing refers to fishing activities:

- (1) conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations;
- (2) conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organization and by which the States are bound, or relevant provisions of the applicable international law; or
- (3) in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization.

Unreported fishing refers to fishing activities:

- (1) which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or

¹³ D. BANKS, C. DAVIES, J. GOSLING, J. NEWMAN, M. RICE, J. WADLEY, F. WALRAVENS (eds.), *Environmental Crime – A Threat to Our Future*, Environmental Investigation Agency, 2008, p. 15.

(2) undertaken in the area of competence of a relevant regional fisheries management organization which have not been reported or have been misreported, in contravention of the reporting procedures of that organization.

Unregulated fishing refers to fishing activities:

(1) in the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; or

(2) in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law”¹⁴.

IUU fishing is a serious crime that endangers the maintenance of global fishery resources. As such, it can threaten food security and compromise the life of communities that depend on the fishing industry for employment. Developing countries are the most implied in IUU fishing, as they lack sufficient resources, both political and material, to monitor and implement fishing regulations, so that vessels tend to target ports with weak surveillance. Involved species have often high market values, such as tuna, crab, and shrimps, along with particular specimens coming from specific regions, like the Patagonian toothfish, and this explains the large illicit profits coming from this activity.

1.2.4 Illegal logging and trade in timber

Forests are depleted and destroyed in order to respond to a global demand for logs, and to create space for new infrastructures or agricultural use. However, the practice of illegal logging and trade in timber is ever-growing, resulting in mass-deforestation, destruction of natural habitats and killing of endangered species. Currently, illegal logging is threatening the survival of the world’s remaining tracts of forest, such as those in the Amazon basin, Central Africa and Southeast Asia. It also endangers biodiversity and is directly linked to climate change issues, as about one fifth of global green-house gas emissions are related to forest loss¹⁵, since high levels of carbon dioxide are released when trees are demolished. Moreover, targeted forests provide the necessary livelihood to indigenous

¹⁴ Implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing, adopted by the FAO Committee on Fisheries at its 24th session, in Rome, 2002, p. 4-5.

¹⁵ D. BANKS, C. DAVIES, J. GOSLING, J. NEWMAN, M. RICE, J. WADLEY, F. WALRAVENS (eds.), *op.cit.*, p. 6.

communities, whose future is dependent on the behaviour of illegal logging industries. The timber trade is associated with a set of serious crimes, such as the illegal acquisition of logging rights, illegal transportation, corruption and bribery of officials, transshipment and use of forged documents¹⁶. Therefore, illegal logging, like the other transnational environmental crimes, is facilitated by permissive environments, where law-enforcement is weak and levels of corruption high. Tackling this type of crime has proved extremely difficult, especially because no global regulatory framework or international treaty exists on the topic, apart from CITES, that only covers a specific set of endangered species of timber.

1.3 A focus on the illegal transfer of hazardous waste

The illegal transfer of hazardous waste is internationally regulated by the 1989 Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Other Wastes and Their Disposal¹⁷. In particular, the transboundary movement of hazardous wastes refers to the international transfer of specific categories of potentially toxic substances from a country to another for the purpose of disposing of them. It represents a globally relevant phenomenon, as it has ecological, political and economic implications. From an ecological point of view, the associated risks are linked to an environmentally unsound management of hazardous wastes and to the potentially inadequate standards for their transport. The main political implication resides in the so-called *ecological imperialism*¹⁸, perpetrated by industrialised countries to the detriment of developing countries. The first steps towards the regulation of the transboundary movements of wastes occurred within a conflictual context, where developing countries started to call for a total ban on hazardous wastes coming from industrialised countries to safeguard their territories, that were increasingly used as dumping sites, as well as the health of their inhabitants. However, at the same time, an inversion of tendency has emerged, as some of the same developing countries involved in the ecological battles to stop the transfer of hazardous wastes, have recently started to consider the possibility to economically exploit the trade in such substances coming from foreign countries. Nevertheless, the most important ground of research on the transboundary movement of hazardous wastes is the juridical one, which allows to investigate the phenomenon as a global one, specifically a “global

¹⁶ P. PATHAL, *International Environmental Crime: A Growing Concern of International Environmental Governance*, in *US-China Law Review*, 2016, n.13, p. 389.

¹⁷ Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Other Wastes and Their Disposal, adopted by the Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes in Basel, on 22 March 1989, UNEP/IG.80/3. Hereinafter: Basel Convention.

¹⁸ A. FODELLA, *Il Movimento Transfrontaliero di Rifiuti Pericolosi nel Diritto Internazionale*, Giappichelli, 2004.

problem demanding global solutions”¹⁹. As a matter of fact, the issue of transfrontier shipment of waste is necessarily global, as the concept of movement itself involves more territories, borders and States through which such substances pass.

1.3.1. The prohibition of transboundary pollution in international law

The first conceptualization of the principle that States have a duty to prevent transboundary harm emerged in the *Trail Smelter Case*, which saw the government of the United States against the government of Canada. The Canadian smelter company operated in Trail, British Columbia, along the Columbia river flowing from Canada across the border to Washington State in the United States. A community of American farmers claimed damages, as the smelter was emitting sulphur dioxide which caused injury to plant life, forest trees, soil, and crop yields in Washington State. In solving the case, the arbitration tribunal adopted the general principle of international law *sic utere tuo ut alienum non laedas*, which means to use your own property in such a way that you do not injure other people, and with the 1941 sentence, it recognized the responsibility of the Canadian government. In the case, it was established that “under the principles of international law (...) no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the property of persons therein, when the cause is of serious consequences and the injury is established by clear and convincing evidence”²⁰.

The full establishment of the prohibition of transboundary pollution in international law was achieved in the 1978 Stockholm Declaration with Principle 21 and the 1992 Rio Declaration on Environment and Development with Principle 2²¹. According to Principle 21, “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction”²².

It can be generally agreed that such principle constitutes a customary norm of international environmental law, as it has been confirmed by the Advisory Opinion of the International Court of

¹⁹ UNEP, *The Basel Convention: A Global Solution for Controlling Hazardous Wastes*, United Nations, 1997.

²⁰ Decisions of the Trail Smelter Arbitral Tribunal of 16th April 1938 & 11th March 1941, *Trail Smelter Arbitration, USA v. Canada*, from UNRIAA, III, p.1965.

²¹ Principle 2, Declaration on Environment and Development adopted in Rio de Janeiro on 14 June 1992.

²² Principle 21, Declaration of the United Nations Conference on the Human Environment, adopted in Stockholm on 16 June 1972.

Justice (ICJ) on the legality of the threat or use of nuclear weapons: “The environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment”²³.

1.3.2 The categories of hazardous wastes

To better understand what is meant by *hazardous wastes*, it is fundamental to start from the definition of *waste*. According to the Basel Convention, “wastes are 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”²⁴. On the other hand, hazardous wastes are those wastes included in the list of Annex I²⁵ to the Convention and that present at least one of the dangerous characteristics contained in Annex III²⁶, along with those wastes defined as hazardous by the national legislations of the States of export, import or transit Parties to the Convention. Annex I lists 45 categories of hazardous wastes on the basis of their origin or *waste stream* – like clinical and pharmaceutical wastes and wastes coming from the production and use of inks – and on the basis of the substances present in the wastes themselves, like arsenic, mercury and acids. Annex III, on the other hand, indicates the features that wastes must possess in order to be considered hazardous, such as explosives, corrosive or infectious substances and inflammable liquids and solids. Moreover, the Basel Convention also includes the category of “other wastes”²⁷, which are contained in Annex II and are defined as “wastes requiring special consideration”²⁸, such as wastes collected from households and residues from the incineration of household wastes.

The role of the Technical Working Group of the Fourth Meeting²⁹ of the Conference of Parties to the Basel Convention was fundamental in further specifying the hazardous wastes to be covered by the

²³ Advisory Opinion of the ICJ of 8th July 1996, *Legality of the Threat or Use of Nuclear Weapons*, in ICJ Reports 1996, par. 29, p.241-242.

²⁴ Art.2, par.1, Basel Convention.

²⁵ Annex I – CATEGORIES OF WASTES TO BE CONTROLLED.

²⁶ Annex III – LIST OF HAZARDOUS CHARACTERISTICS.

²⁷ Art.1, par.2, Basel Convention.

²⁸ Annex II – CATEGORIES OF WASTES REQUIRING SPECIAL CONSIDERATION.

²⁹ The Fourth Meeting of the Conference of Parties to the Basel Convention (COP4) was held in Kuching, Malaysia, from 23 to 27 February 1998. The Technical Working Group of the Basel Convention, a subsidiary body to the Conference of the Parties, was established to assist every meeting of the COP in the technical matters. It was replaced by the Open-ended Working Group from COP6.

Convention, by developing three detailed, scientific and definitive lists. List A contains wastes characterized as hazardous under article 1, paragraph 1 (a) of the Basel convention. List B comprises wastes that are not considered hazardous unless they contain some of the substances of Annex I to an extent that attributes them one of the features of Annex III. Finally, List C contains wastes awaiting to be included in one of the two aforementioned lists. Both lists A and B have been adopted by the State Parties and recorded in the two new Annexes VIII and IX.

Two categories of wastes are excluded from the scope of application of the Basel Convention, as they are disciplined by other specific international instruments: radioactive wastes³⁰ and those deriving from the normal operations of a ship³¹. The purpose of this exclusion is to avoid the overlap with, respectively, the International Atomic Energy Agency (IAEA) agreements and the International Convention for the Prevention of Pollution from Ships (MARPOL)³².

1.3.3 The movement of hazardous wastes along the path of least resistance

The transboundary movement of hazardous wastes became a mass phenomenon in the 1960s and 1970s. The reasons were due to a variety of factors, including political and economic ones. Since the beginning of the 20th century, the world has experienced an industrial explosion, accompanied by a proportional increase in the production of waste. Scientific discoveries and new technologies have positively contributed to global development, but at the same time, they have increased the total mass of produced wastes and introduced new and more dangerous ones. The volume of hazardous waste generated worldwide each year increased from about 5 million metric tons in 1947 to more than 300 million metric tons in 1988³³, showing that the amount of hazardous waste produced in the world grows unceasingly. Industrialised States, aware of the risks to human health and life implied in the management of hazardous wastes, started to impose more stringent environmental regulations and requirements regarding the structures and plants involved in the disposal activity. The existence of an appropriate plan for waste disposal in a country is fundamental in order to be compliant with the national and international standards, but it is undeniable that being equipped with the necessary technologies and instruments is more expensive than using inadequate, or even absent, structures. Therefore, companies in industrialised countries started to ship hazardous wastes to developing

³⁰ Art. 1, par.3, Basel Convention.

³¹ Art.1, par.4, Basel Convention.

³² International Convention for the Prevention of Pollution from Ships adopted at the International Maritime Organization on 2 November 1973.

³³ M.G. AMLAK, *African Countries and the Conventions on the Control of Transboundary Movements of Hazardous Wastes*, Montreal, 1992, p.6.

countries, where the disposal costs were much cheaper. As a matter of fact, the average disposal costs for one ton of hazardous wastes in industrialised countries ranged from \$100 to \$2.000, while in developing countries they were between \$2.50 and \$50³⁴. Moreover, parts of the population in industrialised countries, becoming aware of the harmful effects caused by hazardous wastes, started to be affected by the *NIMBY-syndrome*³⁵, and wanted to keep the disposal sites away from their immediate vicinity.

Therefore, waste transfers were directed to African countries, Eastern Europe and, more generally, to developing countries. These destinations, apart from being characterized by lower costs of disposal, had more permissive and incomplete environmental regulations, the institutionalized corruption of political leaders, as well as a disinformed public opinion, lacking the means to accurately be updated on these illegal practices. This facilitated path of transfer was denominated *path of least resistance*³⁶. The *path of least resistance* refers to the partial or total absence of normative, political and social obstacles to a given – and potentially hazardous – phenomenon, in front of which a State should have the task to place restrictions. The first usage of this expression in the context of the transboundary movement of hazardous wastes was by Representative Jim Florio, a Democrat from New Jersey that stated that “like water running downhill, hazardous wastes invariably will be disposed of along the path of least resistance and least expense”³⁷, confirming the hazardous waste policy of the biggest industrialised country, the US. Thus, since the 1980s, this expression was used in international law to describe the massive export flow of highly harmful substances from the Global North to the Global South, facilitated by the cooperation of the authorities from the import countries, clearly corrupted and in search of easy earnings.

Any kind of toxic waste was imported in developing countries by industrialised countries, which had to get rid of them, and they were extremely dangerous both for the human health and for the environment as a whole. This happened in spite of national and non-national norms, and notwithstanding the absence in these countries of the proper resources, instruments and infrastructures for their disposal. As a consequence, because of this practice, several accidents involving the

³⁴ J. ALBERS, *Responsibility and Liability in the Context of Transboundary Movements of Hazardous Wastes by Sea. Existing Rules and the 1999 Liability Protocol to the Basel Convention*, 2015, p. 20.

³⁵ “NIMBY” is the acronym of “not in my backyard”, cfr. M.G. AMLAK, *op.cit.*, p.10.

³⁶ C. U. GWAM, *Toxic Waste and Human Rights*, in *The Brown Journal of World Affairs*, n.7, 2000, p. 186.

³⁷ R.S. PARK, *An Examination of International Environmental Racism Through the Lens of Transboundary Movement of Hazardous Wastes*, in *Indiana Journal of Global Legal Studies*, Volume 5, n.2, 1998, p. 669.

shipment of waste started to occur, jeopardizing local populations and their environment. To recall three famous cases, I will cite those of the ships *Khian Sea*³⁸, *Koko*³⁹ and *Lynx*⁴⁰.

- In 1986, the ship *Khian Sea* tried to dump in Panama more than 14.000 tons of ash coming from waste incinerators in Philadelphia. However, when it was demonstrated that the cargo contained high levels of dioxin, the Panamanian authorities rejected the ship. The *Khian Sea* came back to the United States to return the ash to its place of production, but the US government rejected the request and ordered them to remain anchored. Nonetheless, the *Khian Sea* sailed in the middle of the night and, for 18 months, it tried to dump the ash in several countries, like Haiti, Bahamas, Guinea-Bissau and Honduras, but they all refused to accept its toxic cargo. Finally, *en route* from Singapore to Sri Lanka, the cargo disappeared. Eventually, the ship's captain admitted that they had dumped the ash into the Indian Ocean.

- In 1987, the ship *Lynx* sailed from the port of Marina di Carrara with a load of 2.200 tons of toxic wastes, mainly polychlorinated biphenyls (PCBs), a highly carcinogenic by-product. Directed to Djibouti, a country located in the Horn of Africa, the shipment was organised by the Swiss firm "Intercontract SA" and the Italian waste management firm "Jelly Wax". Rejected the entrance into the African port, the cargo was diverted to the coasts of Puerto Cabello, Venezuela, where the barrels were dumped and left open for more than six months, until some kids playing on the beach were poisoned by the substances. Thus, Venezuela obliged Jelly Wax to take back the barrels, which were then loaded on the ship *Makiri* and transferred to Syria, where the local company *Samin* offered to dispose of the wastes for \$200.000. However, the Syrian authorities obliged the company to return the cargo to its country of origin. Despite this, even the port of Marina di Carrara rejected the entrance of the ship carrying the barrels, Zanoobia. The companies involved in the operations blamed each other, until even Italy itself, which had started the shipment in the first place, abandoned the ship, that continued to sail until track of it was lost in September 1988.

- In the same year, 3.800 tons of toxic wastes were illicitly dumped in the city of *Koko*, Nigeria, on the private property of Mr. Sunday Nana, a poor farmer. He was paid \$100 a month by the

³⁸ A. FODELLA, *op.cit.*

³⁹ US AGENCY FOR INTERNATIONAL DEVELOPMENT, *Nigeria Accident (Toxic Waste Incident) FY 1988*, in *Disaster Case Report*, Washington D.C., available online.

⁴⁰ GREENPEACE ITALY, *The toxic ships. The Italian hub, the Mediterranean area and Africa*, June 2010.

Italian businessman Gianfranco Raffaelli to store the poisonous waste. Mr. Raffaelli, director of “Irukep Construction Company” based in Nigeria, contracted with some European companies to dispose of various toxic industrial by-products and then forged papers and bribed Nigerian port officials to obtain entry for the ships carrying the waste. The illegal dumping was discovered in June 1988, and the Nigerian government seized an Italian ship not connected to the waste trade to pressure the Italian government to admit complicity and pay for cleaning the dump site. Nigerian scientists, along with an international team, assessed the composition of the toxic wastes and determined that they contained PCBs and various poisons, acids, and flammable liquids, thus posing serious threats to the health of the local population. After an agreement with the Italian government, 150 men began to repackage and load the waste into containers subsequently shipped back to Italy, where it was disposed of according to Italian environmental protection standards. Even during the clean-up phase, some workers were affected by chemical burns or vomited blood, and one man was temporarily paralysed.

As a result of these and other several well-publicized cases, toxic waste dumping received the most public attention in Africa and other developing countries. The realization that Western companies paid low sums for land to be used as a dumping site for hazardous wastes incited developing countries to campaign on the issue. In this context, in a Resolution of May 1988, the Council of Ministers of the Organisation of African Unity (OAU) condemned such dumping as “a crime against Africa and the African populations”⁴¹. Such Resolution partly prompted the adoption of the Basel Convention and it was taken into account during the drafting of the text of the treaty, as I will more deeply analyse in the next chapter.

1.3.4 Agenda 21 and the self-sufficiency principle

The aim to discourage the transboundary movement of hazardous wastes in order to reduce the harmful consequences described above, is present in a series of international instruments, such as Agenda 21. Agenda 21 is an action plan of the United Nations issued by the 1992 Rio Conference on Environment and Development⁴², and that can be considered as a handbook for pursuing the

⁴¹Resolution of the Council of Ministers of Organization of the African Unity on Dumping of Nuclear and Industrial Waste in Africa, 25 May 1988, CM/Res.1153(L).

⁴²The 1992 UN Conference on Environment and Development (UNCED) was a major United Nations conference held in Rio de Janeiro from 3 to 14 June 1992. It was created as a response for Member States to cooperate internationally on

sustainable development of the planet in the 21th century. Paragraph 7a of Chapter 20 contains the definition of the principle of self-sufficiency, which is at the basis of the entire safeguarding system for the environment and of the conventions on the transboundary movement of hazardous wastes, *in primis* the Basel Convention: “Preventing or minimizing the generation of hazardous wastes as part of an overall integrated cleaner production approach; eliminating or reducing to a minimum transboundary movements of hazardous wastes, consistent with the environmentally sound and efficient management of those wastes; and ensuring that environmentally sound hazardous waste management options are pursued to the maximum extent possible within the country of origin”⁴³.

The self-sufficiency principle here quoted consists of three distinct but integrated normative elements⁴⁴:

- **Proximity principle:** it implies the preference towards a national disposal of wastes, avoiding the crossing of a border, and it can also be applied in the choice of a disposal site as close as possible to the source generating the waste.

The Preamble to the Basel Convention enounces it in paragraph 8: “Convinced that hazardous wastes and other wastes should, as far as is compatible with environmentally sound and efficient management, be disposed of in the State where they were generated”⁴⁵.

- **Principle of infrastructural adaptation:** it aims to create the starting ground so that the proximity principle can be correctly applied without causing environmental harm, and so that the human health as well as that of the national territory producing the waste be safeguarded. As a matter of fact, if a State has to internally dispose of its own wastes, it must be equipped with the necessary infrastructures.

In the Basel Convention, the principle is present at paragraph 2b of article 4: “Each Party shall take the appropriate measures to (...) ensure the availability of adequate disposal facilities, for

development issues after the Cold War, as conflict relating to sustainability was too big for individual member states to handle. It led to the adoption of Agenda 21, a wide-ranging action agenda to achieve sustainable development worldwide and conceived for the UN, other multilateral organizations, and individual governments around the world, which can execute it at local, national, and global levels.

⁴³ Chapter 20, par.7, lett. a), Agenda Item 21, adopted by the U.N.G.A at its 46th Session in Rio de Janeiro at the 1992 UNCED, UN Doc A/Conf.151/26 (1992).

⁴⁴ L. GONELLA, *La partecipazione dell’Unione Europea alla Convenzione di Basilea sul movimento transfrontaliero di rifiuti pericolosi*, Roma, 2013.

⁴⁵ Preamble, par.8, Basel Convention.

the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal”⁴⁶.

Similar rules are present in the Bamako⁴⁷ and Waigani⁴⁸ Conventions, regional agreements on the transboundary movement of hazardous wastes that I will examine more in depth in the next chapter. However, the main difference of the Waigani Convention is that the enunciated principle has to be achieved by considering the social, technological and economic development of the countries involved in the transfrontier shipment of waste, along with the geographic, social and economic circumstances that may impede an adequate disposal activity⁴⁹. Nevertheless, if States Parties to the Convention find themselves in such circumstances, they are still obliged to cooperate with the other Parties to correctly manage hazardous wastes and equip themselves with the necessary infrastructures.

Even the Organisation for Economic Cooperation and Development (OECD) has included such obligation to cooperate in the text of its Decision on the Reduction of Transfrontier Movements of Wastes⁵⁰. Member States have to identify those wastes that cannot be appropriately managed internally and consequently encourage the building of new infrastructures, as well as cooperate at the governmental level to guarantee the final disposal of the toxic substances.

- **Principle of reduction of the transboundary movement:** it can be defined as the closing norm of the self-sufficiency principle and it is contained in paragraph 2d of article 4 of the Basel Convention: “Each Party must ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement”⁵¹.

A similar norm is contained in the Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal, another regional agreement, but it is possible to see a more stringent imposition. As a matter of fact, this agreement

⁴⁶ Art.4, par.2, lett. b), Basel Convention.

⁴⁷ Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, adopted in Bamako on 30 January 1991. Hereinafter: Bamako Convention.

⁴⁸ Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region, adopted in Waigani on 16 September 1995. Hereinafter: Waigani Convention.

⁴⁹ Art.4, par.4, lett. c), Waigani Convention.

⁵⁰ Decision-Recommendation of the Council of the Organisation for Economic Co-operation and Development, of 31 January 1991, on the Reduction of Transfrontier Movements of Wastes, C(90)178/FINAL.

⁵¹ Art.4, par.2, lett. d), Basel Convention.

demands that the parties take all appropriate measures to reduce the transboundary movement of hazardous wastes so as to ultimately eliminate it in the Mediterranean⁵². Such aims are absolute and not conditioned by the achievement of “an environmentally sound and efficient management of such wastes”.

The self-sufficiency principle has been affirmed also in the context of the European Union, especially under the form of its first corollary – the proximity principle – intended as an integrated management of wastes at the European level⁵³. Member States have to dispose of the substances resulting from the national industrial production within their territory and, to such purpose, they have to be equipped with all the necessary instruments and infrastructures.

Being a Party to the Basel Convention, the European Union has adopted directives and regulations in order to appropriately follow the norms established by the Convention and implement them at the European level, which will be examined in the third chapter. In any case, the self-sufficiency principle must not be interpreted as an absolute and severe closure of national boundaries to avoid the export of wastes. As a matter of fact, all international instruments contain parameters of flexibility that allow the movement of wastes when it is justified by environmental rational reasons and supported by international cooperation, especially at the regional level.

⁵² Art.5, par.3, Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal, adopted in Izmir on 1 October 1996. Hereinafter: Protocol on the Mediterranean.

⁵³ Article 5, Directive 75/442/EEC of the Council, of 15 July 1975, on waste:

“1. Member States shall take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of disposal installations, taking account of the best available technology not involving excessive costs. The network must enable the Community as a whole to become self-sufficient in waste disposal and the Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialized installations for certain types of waste

2. The network must also enable waste to be disposed of in one of the nearest appropriate installations, by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health”.

Chapter 2 - International legislation on the illegal transfer of hazardous waste

2.1 The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

2.1.1 *The path leading to the adoption of the Convention*

The search for a solution to the problems caused by the transboundary movement of hazardous wastes began as a reaction to episodes of irresponsible management of wastes that caught the attention of the general public and highlighted both the dangerousness of the phenomenon and the absence of a specific regulation on it. Paradoxically, the first countries to react were the industrialised ones, after the Seveso disaster⁵⁴ in 1976: the OECD adopted a Decision/Recommendation⁵⁵ and the European Economic Community a Council Directive⁵⁶, the so-called “Seveso Directive”, regulating the transboundary movement of hazardous wastes within the Community.

The Seveso disaster was one of the most serious accidents that occurred since the end of WWII, and provoked severe damages on an area of more than 1.800 hectares. A problem to a valve of a chemical plant in Meda (the *ICMESA*) caused the release of a toxic cloud of dioxin which spread over a widely populated area. The contaminated soil, extracted after the clean-up of the whole territory, was closed in several drums and exported abroad. In 1982, 41 of these drums crossed the French border and then disappeared. They were subsequently found in a small village, and transferred to Basel, in Switzerland, in order to be incinerated in 1984. Experts claim that part of the contaminated soil was dumped in a mine of Former East Germany.

Nevertheless, also the developing countries started to oppose the transfer and dumping of hazardous wastes into their territories perpetrated by the industrialised countries. Apart from the 1988 Council of Ministers Resolution of the Organisation of African Unity⁵⁷ which condemned the use of Africa as the world’s landfill, the Economic Community of West African States (ECOWAS) adopted a

⁵⁴ J. SAMBETH, *The Seveso Accident*, in *Chemosphere*, Volume 12, Issues 4–5, 1983, p.681-686.

⁵⁵ Decision-Recommendation of the Council of the OECD, of 1 February 1984, on Transfrontier Movements of Hazardous Waste, C(83)180/FINAL.

⁵⁶ Directive 84/631/EEC of the Council, of 6 December 1984, on the supervision and control within the European Community of the transfrontier shipment of hazardous waste.

⁵⁷ See *supra* n.41.

resolution promoting the establishment of a total and permanent ban on the import of hazardous wastes⁵⁸.

Since then, the problem acquired the features of an international crisis, until it caught the attention of the United Nations: the UN General Assembly, in two resolutions of 1987⁵⁹ and 1988⁶⁰, expressed its concern for the illicit movement of toxic and hazardous wastes, which had intensified in the direction of developing countries, and it appealed to all the States so that they started to cooperate to find a solution. For the first time, it highlighted the responsibility of industrialised countries for the matter in question, and the necessity to stop the illegal transfer of hazardous wastes and allow their transport only with the authorization of the countries of import and transit.

Two opposing ideologies emerged on the scene of the global debate to find a solution. On the one hand, the industrialised countries were not in favour of an excessive restriction to the shipments of hazardous wastes, fearing disadvantageous consequences in economic and social terms. At the same time, they were aware that it was absolutely necessary to define acceptable norms regulating such fluxes of transport, as several accidents had occurred and the pressure from the international community and the national public opinion continued to increase. Therefore, these states were willing to regulate the mechanisms underlying the transboundary movement of wastes, so long as such movements were not excessively restricted. On the other hand, developing countries were firmly convinced that the only way to safeguard themselves from an invasion of hazardous wastes coming from the Global North was the adoption on the international level of a total ban on the transboundary movement of such substances. Nevertheless, both opposing blocks agreed on a common point: the need to adopt a globally binding regulation on the phenomenon.

Already since the beginning of the 1980s, UNEP had started to work in order to achieve such ambitious result. In 1981 and 1982, the Governing Council of UNEP charged two Groups of experts with the task of identifying those environmental problems requiring the urgent adoption of international norms and the intensification of the cooperation between States. The conclusions of the Groups resulted in, respectively, the Montevideo Programme for the Development and Periodic

⁵⁸ Resolution of the Authority of Heads of States and Government Relating to the Dumping of Nuclear and Industrial Waste of ECOWAS, 25 June 1988, A/RES. 1/6/88.

⁵⁹ Resolution of U.N.G.A. on Traffic in Toxic and Dangerous Products and Waste, 11 December 1987, UN Doc. A/RES/42/183.

⁶⁰ Resolution of U.N.G.A. on the Responsibility of States for the Protection of the Environment: Prevention of the Illegal International Traffic in, and the Dumping and Resulting Accumulation of, Toxic and Dangerous Products and Wastes Affecting the Developing Countries in Particular, 20 December 1988, UN Doc. A/Res/43/212.

Review of Environmental Law⁶¹ and the Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes⁶².

The Montevideo Programme identified among the matters worthy of attention also the transfer, management and disposal of hazardous wastes, and started to delineate the possible guidelines and principles for a conventional instrument aimed at contrasting the illegal movement of toxic wastes. The Cairo Guidelines contained principles aimed at directing the national authorities towards the adoption of correct policies in every phase of the waste cycle, from their production to their final disposal, assigning a paramount role to inter-state cooperation. As a matter of fact, the main dispositions of the Cairo Guidelines provide the obligation for States to adopt the necessary measures to guarantee the protection of the environment and of human health from the damages caused by hazardous wastes, and the obligation to reduce to the minimum their production⁶³ and transboundary movement⁶⁴, also through the use of new technologies⁶⁵. The generated wastes must be appropriately treated from an ecological point of view and to the best of the possibilities of the State in question⁶⁶, until the disposal phase is reached⁶⁷, even by making recourse to cooperation with other States⁶⁸. As far as transport is concerned, the Cairo Guidelines establish some fundamental criteria, such as the necessity to send a prior notification to the States of import and transit, and the obligation to obtain their consent to the transboundary movement. Every state involved in the shipment must be adequately informed in advance to evaluate the details of the proposed transfer, and the State of export must provide every additional information that may be requested⁶⁹.

Although these documents were not binding for the States that undersigned them, all the principles on the management of hazardous wastes contained in them would be further developed in the Basel Convention.

In 1987, UNEP Governing Council authorized the Executive Director to create an Ad Hoc Working Group⁷⁰, composed of scientific and juridical experts, to prepare a global convention on the control

⁶¹ Decision 10/21 of UNEP Governing Council on Montevideo Programme for the Development and Periodic Review of Environmental Law, of 31 May 1982. Hereinafter: Montevideo Programme.

⁶² Decision 14/30 of UNEP Governing Council on Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes, of 17 June 1987, UNEP/GC.14/17, Annex II. Hereinafter: Cairo Guidelines.

⁶³ Art. 7, par. a, Cairo Guidelines.

⁶⁴ Artt. 2, par. a; 7, par. b, Cairo Guidelines.

⁶⁵ Artt. 4, par. b ; 7 par. c, *ibidem*.

⁶⁶ Art. 13, *ibidem*.

⁶⁷ Art. 12, *ibidem*.

⁶⁸ Art. 28, *ibidem*.

⁶⁹ Art. 26, par. a, b, *ibidem*.

⁷⁰ Experts of 96 States and observers of more than 50 organizations participated to the Ad Hoc Working Group. They ended their work in March 1989, at the same time as the Conference of Plenipotentiaries started in Basel.

of the transboundary movement of hazardous wastes. In the entire phase of discussion, the opposition between developing and industrialised countries emerged again. The former, under the guiding leadership of the OAU, aspired to obtain an efficient means to definitely stop any possible export of hazardous wastes in their territories from industrialised countries, promoting the adoption of an explicit total ban in the treaty. The latter, on the other hand, were not willing to accept excessive limitations and were thus against a total ban. UNEP, even though from its neutral position, emphasised that a total ban could be counterproductive from an environmental point of view, by not allowing the export of wastes from a State incapable of disposing of them in an environmentally sound way, to another State endowed with the necessary infrastructures. Despite the serious difficulties encountered during the negotiations, a compromise was eventually reached: the ban was not included in the Convention, but it would be subsequently reconsidered by the Conference of the Parties (COP). Ultimately, a draft treaty⁷¹ was approved and submitted to the attention of the Conference of Plenipotentiaries, which began on 20 March 1989 in Basel.

Representatives of 116 States took part in the Conference, where the apparently suppressed contrasts emerged again, and led to last-minute compromises and agreements that justify the complex, and sometimes ambiguous, language of the Convention's dispositions, that makes its interpretation difficult. The final act of the Conference⁷², which included the final text of the Convention, was unanimously adopted on 22 March 1989. Most of the industrialised countries, such as Japan and the UK, and of the developing countries did not ratify the Basel Convention immediately: for the former, the treaty was too restrictive, for the latter, too permissive. The Convention entered into force only three years later, when the twentieth ratification was achieved. Some of the African States, whose participation to the Convention was fundamental from the political point of view for its success, even though initially unsatisfied, eventually ratified it. On the contrary, the US never ratified it: even today, the lack of adhesion from the biggest global producers of industrial waste still impacts the efficacy of the Convention, which is considered by them as excessively restrictive of international trade.

The Basel Convention managed to become the first instrument for the global discipline on the transboundary movement of hazardous wastes, which the international community had tried to adopt for a long time, and also the environmental treaty with the widest participation ever⁷³. As it emerges

⁷¹ Final Report of the Ad Hoc Working Group of Legal and Technical Experts with a Mandate to Prepare a Global Convention on the Control of Transboundary Movements of Hazardous Wastes, adopted in Basel on 22 March 1989, UNEP/IG.80/4.

⁷² Final Act of the Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes, adopted by the Conference of Plenipotentiaries in Basel, on 22 March 1989.

⁷³ In 2018, 186 States are Parties to the Basel Convention.

from its Preamble⁷⁴, its aim is to protect the environment and the human health from the harmful effects caused by the production and transboundary movement of hazardous wastes. Although such goal is not pursued through a block of exports towards developing countries, the treaty establishes a normative regime formed by a series of basic principles on the production and management of hazardous wastes, along with a detailed mechanism of control for their transboundary movement, which will be explained in the next section.

2.1.2 Restrictive and preventive measures under the Convention

The normative regime of the Basel Convention limits transboundary movements of hazardous wastes by prohibiting certain transfers while allowing others under specific conditions. For the purpose of the Convention, transboundary movement is specifically defined as “any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement”⁷⁵. Prohibitions regard the export of waste to the Antarctic region by parties of the Convention⁷⁶, export to or import from States which are not parties to the Convention⁷⁷, export to States which have prohibited all imports of hazardous wastes by national legislation⁷⁸, or to States which the exporting country has “reason to believe” will not manage the waste in an environmentally sound manner⁷⁹. Under paragraph 10 of article 4 of the Convention, only the exporting country bears the responsibility of ensuring that its wastes are managed in an environmentally sound manner, and it may not transfer this responsibility to the State of import or transit under any circumstances⁸⁰.

On the other hand, the Convention allows transboundary movements of hazardous wastes under the following situations:

a) The State of export does not have the necessary infrastructures in order to dispose of the wastes in an environmentally sound manner⁸¹;

⁷⁴ Preamble, par.1, Basel Convention.

⁷⁵ Art. 2, par. 3, *ibidem*.

⁷⁶ Art. 4, par. 6, *ibidem*.

⁷⁷ Art. 4, par. 5, *ibidem*.

⁷⁸ Art. 4, par. 1, lett. b), *ibidem*.

⁷⁹ Art. 4, par. 2, lett. e), *ibidem*.

⁸⁰ Art. 4, par 10, *ibidem*.

⁸¹ Art. 4, par 9, let. a), *ibidem*.

b) The wastes are required as a raw material for recycling or recovery industries in the State of import⁸²;

c) The transboundary movement in question is in accordance with other criteria decided by the Parties⁸³. Such criteria will normally be found in the decisions adopted by the Conference of the Parties.

Once one of the above requirements for transboundary movements is fulfilled, a proposed shipment is subject to a detailed Prior Informed Consent (PIC) procedure, which constitutes the core of the Basel Convention control system and is placed upon the exporter prior to export. It is based on four key steps: (i) notification; (ii) consent and issuance of movement document; (iii) transboundary movement; and (iv) confirmation of disposal.

First of all, the State of export must submit written notification of the proposed transboundary movement of wastes to all States involved in the transfer: the importing State and all the possible States of transit⁸⁴. The information to be provided are listed in Annex V of the Convention and include the reason for the transfer, full identification of the involved parties, and technical specifications of the waste, in order to clearly indicate the effects of the proposed movement on human health and the environment⁸⁵. Once the notification phase is completed, the transfer cannot start until the State of export has received written consent from the State of import⁸⁶. The consent of the State of transit is also required, unless such State has waived this right⁸⁷. Moreover, it must be ensured that a contract between the exporter and the disposer specifies that the waste will be managed in an environmentally sound manner. Specifically, the Convention defines the environmentally sound management of hazardous wastes as “taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes”⁸⁸. After the consent requirements have been fulfilled, the shipment may begin, but subject to additional labelling and documentation requirements. Each shipment

⁸² Art.4, par. 9, lett. b), *ibidem*.

⁸³ Art. 4, par. 9, lett. c), *ibidem*.

⁸⁴ Art. 6, par. 1, *ibidem*.

⁸⁵ Art 4, par. 2, lett. f), *ibidem*.

⁸⁶ Art. 4, par. 1, lett. c), *ibidem*.

⁸⁷ Art. 6, par. 4, *ibidem*.

⁸⁸ Art. 2, par. 8, *ibidem*.

must “be packaged, labelled, and transported in conformity with generally accepted and recognized international rules and standards”⁸⁹. A movement document with certain necessary explanations must accompany each shipment from where the transboundary movement begins to where it is disposed⁹⁰. Once the waste is delivered to the disposer, both the State of export and the State of import must be informed of the receipt and ultimate disposal⁹¹.

The PIC procedure provides the basis to finally define what is meant by illegal traffic of hazardous wastes. According to paragraph 1 of article 9 of the Convention, any transboundary movement of hazardous wastes:

- (a) without notification pursuant to the provisions of this Convention to all States concerned; or
 - (b) without the consent pursuant to the provisions of this Convention of a State concerned; or
 - (c) with consent obtained from States concerned through falsification, misrepresentation or fraud; or
 - (d) that does not conform in a material way with the documents; or
 - (e) that results in deliberate disposal (e.g. dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law,
- shall be deemed to be illegal traffic⁹².

2.1.3 The Ban Amendment

As agreed during the negotiations of the Basel Convention, the Conference of Parties would deal with the issue of a total ban on all the exports of hazardous wastes. In December 1992, the first Conference of the Parties (COP1) invited the industrialised countries to stop all the shipments of hazardous wastes destined for disposal in developing countries and invited the latter to impede all imports⁹³. On the other hand, the transboundary movement of wastes subject to recycling or other recovery procedures remained covered by the Basel discipline. Soon, such solution was revealed to be insufficient, as shipments of highly toxic wastes started to be hidden behind the label of transfers of re-usable

⁸⁹ Art. 4, par. 7, lett. b), *ibidem*.

⁹⁰ Art. 4, par. 7, lett. c), *ibidem*.

⁹¹ Art. 6, par. 9, *ibidem*.

⁹² Art. 9, par. 1, *ibidem*.

⁹³ Decision I/22 of the First Meeting of the Conference of the Parties to the Basel Convention, adopted in Piriapolis, Uruguay on 3-4 December 1992, UNEP/CHW.1/24.

materials. As a consequence, the developing countries requested that the ban be extended also to recyclable wastes.

In COP2, held in Geneva from 21 to 25 March 1994, despite the opposition of Canada, Japan and the EU, Decision II/12⁹⁴, the so-called *Ban-decision*, was adopted, prohibiting the transfer of hazardous wastes destined for disposal from OECD countries to non-OECD countries, and extending such prohibition to recyclable wastes starting from 31 December 1997. However, the Decision was not binding. Therefore, it was proposed to adopt a formal amendment to the Basel Convention

During COP3, held in Geneva from 18 to 22 September 1995, the Amendment to the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal⁹⁵, also known as the Ban Amendment or Basel Ban, was adopted. The Ban Amendment provides for the prohibition of exports of all hazardous wastes covered by the Convention that are intended for final disposal, reuse, recycling and recovery from countries listed in the newly proposed annex VII to the Convention - Parties and other States which are members of the OECD, EU, Liechtenstein - to all other countries. Unfortunately, the Amendment has not yet entered into force. So far, 93 Parties to the Basel Convention have ratified it, but Parties have been unable to reach consensus on an agreed interpretation of paragraph 5 of Article 17⁹⁶ of the Convention, which governs the number of ratifications required for the entry into force of amendments. There have been persistent diverging views amongst Parties on how many Parties need to ratify the Ban Amendment before it can enter into force. Amendments to the Convention enter into force after ratification of three-fourths of the Parties who accepted them, but so far, the Parties to the Convention could not agree whether this would be three fourth of the Parties that were Party to the Basel Convention when the Ban was adopted, or three fourth of the current Parties.

2.2 Regional agreements on the basis of article 11 of the Basel Convention

In the international regulating system of the transboundary movement of hazardous wastes, the Basel Convention is at the centre of a network of regional instruments. The configuration of the Convention

⁹⁴ Decision II/12 of the Second Meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, adopted in Geneva, Switzerland, on 21-25 March 1994, UNEP/CHW.2/30.

⁹⁵ Decision III/1 of the Third Meeting of the Conference of the Parties to the Basel Convention, adopted in Geneva, Switzerland, on 18-22 September 1995, UNEP/CHW.3/35.

⁹⁶Art. 17, par.5, Basel Convention: Instruments of ratification, approval, formal confirmation or acceptance of amendments shall be deposited with the Depositary. Amendments adopted in accordance with paragraphs 3 or 4 above shall enter into force between Parties having accepted them on the ninetieth day after the receipt by the Depositary of their instrument of ratification, approval, formal confirmation or acceptance by at least three-fourths of the Parties who accepted them or by at least two third of the Parties to the protocol concerned who accepted them, except as may otherwise be provided in such protocol. The amendments shall enter into force for any other Party on the ninetieth day after that Party deposits its instrument of ratification, approval, formal confirmation or acceptance of the amendments.

as a global point of reference for a series of treaties with a more restricted scope of application – especially from a geographical point of view – was conceived as soon as it appeared clear that a globally binding instrument could not foresee, on its own, the wide variety of particular situations at the regional and local level on the matter.

Therefore, article 11 of the Convention was designated as the one that would establish a *Basel System* following a pyramidal scheme, which places the Convention at the top, hierarchically superior to the other international instruments, whether global, regional or restricted to a certain number of States. According to article 11, “Parties may enter into bilateral, multilateral, or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by the Convention. These agreements or arrangements shall stipulate provisions which are not less environmentally sound than those provided for by the Convention in particular taking into account the interests of developing countries”⁹⁷. This provision thus sets the Basel Convention as the minimum standard for the international traffic of hazardous wastes.

2.2.1 The 1991 Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa

The Bamako Convention represents the clearest example of the function performed by article 11. The negotiations of the Basel Convention had left the African countries disappointed, as they had unsuccessfully fought for the adoption of an international total ban on the export of hazardous wastes to developing countries, that would only be achieved subsequently with the adoption of the Ban Amendment, which still has to enter into force as mentioned above. The complex mechanisms of control established by the Basel Convention required the employment of administrative, institutional and economic resources that the African countries could not afford. On the other hand, a total ban would have completely resolved the issue. Therefore, the African countries, under the guiding leadership of the OAU, decided to give shape to a Convention that would totally prohibit the import of hazardous wastes into the African continent, and that would discipline their transboundary movement within Africa, following the structure of the Basel Convention. The Secretary-General of the OAU emphasised that “the need for such a Convention was occasioned by the fact that Member States of the OAU which had attended all the relevant meetings that culminated in the adoption of

⁹⁷ Art. 11, par. 1, Basel Convention.

the Basel Convention felt that the so-called Global Convention for the Control of Transboundary Movements of Wastes had not adequately reflected the concerns and interests of Africa. Hence, the need for the adoption of an African Convention which would take care of the control of the movement of hazardous wastes in all forms in Africa”⁹⁸. Thus, on 29 January 1991, the Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa was adopted.

The scope of application of the Bamako Convention is wider than that of the Basel Convention, though following its scheme. Hazardous wastes are those listed in Annex I or those having the features contained in Annex II of the Convention⁹⁹. The belonging to the two Annexes in alternative way – while the Basel Convention requires that the wastes belong to both categories – makes sure that the Bamako Convention applies to a higher number of wastes. Secondly, it also applies to radioactive wastes¹⁰⁰, despite the Basel Convention does not include them so as to avoid the overlap with the activity of the IAEA. Moreover, the scope of application is extended to those substances – not necessarily catalogued as wastes – that have been banned in the country of production¹⁰¹ for the protection of human health and the environment. This provision thus refers to those substances whose employment is prohibited in the industrialised countries, but which are still produced because they will be exported to poorer and more disadvantaged countries.

The Bamako Convention imposes a total ban on the import of hazardous wastes, both intended for recycling and final disposal, coming from any non-African State. Such import will be deemed illegal and a criminal act under paragraph 1 of article 4 of the Convention. Similarly to the Basel Convention, the Bamako Convention provides the possibility for the Parties to establish agreements or arrangements with other Parties or non-Parties on the transboundary movement of hazardous wastes between them¹⁰². From the procedural point of view, the transboundary movement between the Parties is regulated by the obligation of a prior notification and consent of the State of import and transit¹⁰³, as in the Basel Convention.

⁹⁸ M.G. AMLAK, *op.cit.*, p. 85.

⁹⁹ Art. 2, par. 1, lett. a) and c), Bamako Convention.

¹⁰⁰ Art.2, par. 2, *ibidem*.

¹⁰¹ Art. 2, par. 1, lett. d), *ibidem*.

¹⁰² Art. 11, par. 1, *ibidem*.

¹⁰³ Art. 6, par. 1, Bamako Convention.

2.2.3 The 1995 Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region

The Waigani Convention is the regional agreement for the South Pacific zone. It was created to integrate the Basel Convention in order to respond to the demands of the Pacific Islands Forum's countries¹⁰⁴: protect the fragile ecosystems of the South Pacific islands from becoming landfills for hazardous wastes, and manage directly and regionally a problem that such small countries were not able to face efficiently, both in the global context and with respect to the most developed countries of the region, Australia and New Zealand.

Its definition of hazardous wastes is similar to the one provided by the Basel Convention, except for radioactive wastes, which in principle are excluded from the scope of the Convention but covered in specific dispositions¹⁰⁵. The main aim of the Waigani Convention is to control the traffic of hazardous wastes in the South Pacific area by imposing a differential ban according to the category of the Member States. Hazardous wastes coming from outside the area covered by the Convention are banned in the category of *Pacific Islands Developing Parties*¹⁰⁶, while a limited ban prevents Australia and New Zealand, defined as *Other Parties* in Annex IV, from exporting wastes to the other countries of the *Forum Islands*¹⁰⁷. Moreover, the Parties must prohibit, within the areas under their jurisdiction, the transboundary movement of hazardous wastes with non-Parties¹⁰⁸. However, this prohibition can be circumvented through article 11, by establishing an agreement or arrangement with non-Parties, provided that such agreements or arrangements do not derogate from the ban expressed in Article 4.1 or from the environmentally sound management of wastes as required by the Convention¹⁰⁹. The procedure by which the transboundary movement of wastes must be undertaken is similar to the one provided by the Basel Convention, including the notification and consent of the involved States and the detailed conditions to start the shipment in the first place¹¹⁰. Great importance

¹⁰⁴ The Pacific Islands Forum (PIF) is an inter-governmental organization that aims to enhance cooperation between the independent countries of the Pacific Ocean. It was founded in 1971 as the South Pacific Forum. In 1999, the name was changed. Its mission is "to work in support of Forum member governments, to enhance the economic and social well-being of the people of the South Pacific by fostering cooperation between governments and between international agencies, and by representing the interests of Forum members in ways agreed by the Forum.

¹⁰⁵ Art. 2, par. 2, Waigani Convention.

¹⁰⁶ Art. 4, par. 1, lett. a), *ibidem*. The Pacific Island Developing Parties are listed in Annex III, and include among the others: Fiji, Papua New Guinea, Solomon Islands and Tuvalu.

¹⁰⁷ Art. 4, par. 1, lett. b), *ibidem*.

¹⁰⁸ Art 4, par. 4, lett. g), *ibidem*.

¹⁰⁹ Art. 11, par. 1, *ibidem*.

¹¹⁰ Art. 6, Waigani Convention.

is placed on cooperation, which is aimed at reducing, and where possible eliminating, the production of wastes, even by using clean technologies, and at rationally managing the wastes until their final disposal, especially by helping less developed countries with the transfer of information and know-how¹¹¹. Relevant innovations with respect to the Basel Convention are article 7, which incorporates the principle of informing the other Parties in the case of an accident during a transboundary movement that may pose risks to the human health or environment¹¹², and a norm that imposes on every Party the obligation to adopt the necessary measures to forbid any vessels flying their flag or planes registered in their territories, to act in contravention of the Convention itself.

2.2.4 The 1996 Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal

The Protocol to the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, adopted in Ismir on 1 October 1996 and which hereinafter will be referred to as Mediterranean Protocol, is placed within a complex process of modernization of the normative system of the Barcelona Convention¹¹³. It can be considered as an agreement between developing countries and industrialised countries, to guarantee the protection of a geographic area at risk and of common interest. Its main principle, as a matter of fact, is the cooperation between the State Parties, particularly with the aim to help the most backward countries of the area.

Article 3 of the Protocol defines hazardous wastes those listed in Annex I or those having one of the features contained in Annex II – as in the Bamako Convention. It also applies to those wastes banned by the national legislation of the State of export or import, or whose registration is forbidden for the protection of the human health and environment, as well as to radioactive wastes and to hazardous wastes defined as such by national legislations¹¹⁴.

Article 5 of the Protocol contains all the obligations imposed on the State Parties, similar to those expressed in the Basel and Bamako Conventions, particularly reducing to a minimum, or possibly eliminate, the generation of hazardous wastes and their transboundary movement¹¹⁵. A provision that

¹¹¹ Art. 10, *ibidem*.

¹¹² Art. 7, *ibidem*.

¹¹³ Convention for the Protection of the Mediterranean Sea Against Pollution, adopted in Barcelona, on 15 February 1976. The Convention is a framework Convention whose discipline has been specified by the adoption of five Protocols that form together the “Barcelona – system”

¹¹⁴ Art.3, par. 1, Mediterranean Protocol.

¹¹⁵ Art. 5, par. 2 and 3, Mediterranean Protocol.

constitutes an absolute novelty with respect to the other Conventions, requires that the Parties “take all appropriate measures to prevent, abate and eliminate pollution of the Protocol area which can be caused by transboundary movements and disposal of hazardous wastes”¹¹⁶. For this purpose, a precautionary approach must be adopted, preventing the risks of pollution also through cooperation in the development of clean technologies¹¹⁷.

The Protocol imposes a ban whose final result is to allow only the transboundary movement of hazardous wastes between industrialised countries and the export from developing to industrialised countries. As a matter of fact, paragraph 4 of article 5 of the Protocol establishes a mechanism forbidding any export and transit of hazardous wastes to developing countries¹¹⁸.

2.3 The role of enforcement networks: the World Customs Organization and INTERPOL Pollution Crime Working Group

Several intergovernmental and non-governmental organizations, as well as formal and informal networks, focus their work on preventing and combating the illegal traffic in hazardous and other wastes. The Secretariat of the Basel Convention, administered by UNEP, promotes cooperation with such bodies in order to enhance enforcement of the Convention regime. In particular, the World Customs Organization (WCO) and INTERPOL are involved in enforcement monitoring and operations.

2.3.1 The World Customs Organization

The World Customs Organization, established in 1952 as the Customs Co-operation Council (CCC)¹¹⁹, is an independent intergovernmental body whose task is to improve the effectiveness and efficiency of Customs administrations. As the only international organization with competence in Customs matters, and by representing 182 Customs administrations across the globe that collectively process approximately 98% of world trade, it can rightly call itself the voice of the international Customs community. Its governing body – the Council – relies on the skills of a Secretariat and a

¹¹⁶ Art. 5, par. 1, *ibidem*.

¹¹⁷ Art. 8, par. 1 and 3, *ibidem*.

¹¹⁸ Art. 5 par. 4, *ibidem*.

¹¹⁹ Convention establishing a Customs Co-operation Council (CCC), adopted in Brussels on 15 December 1950. In 1994 the Council agreed to adopt the working name ‘World Customs Organization’ to better reflect the growth in its worldwide membership.

range of technical and advisory committees to accomplish its mission. Besides the vital role played by the WCO in stimulating the increase in legitimate international trade, its efforts to combat illegal activities are also recognized internationally.

In March 2012, the WCO launched the Environment Programme to contribute to the fight against environmental crime, in particular with regard to illegal trade in wildlife, illegal trade in hazardous and other wastes, ozone depleting substances and illegal trade in timber.

Within the framework of the Environment Programme, the WCO constantly works on broadening the scope of partnerships with other organizations working in the area of fighting against environmental crime. The WCO Action Plan for Combating Cross-Border Environmental Offences¹²⁰ adopted in February 2008 encourages Customs to organize or participate in joint operations against environmental crimes and advise each other of potential trafficking. As far as the illegal traffic in hazardous wastes is concerned, the WCO conducted two relevant operations: Operation Demeter I¹²¹ and Operation Demeter III¹²².

➤ After the WCO decided to dedicate 2009 to environmental issues under the theme: “Customs and the environment: Protecting our natural heritage”, the WCO Secretariat began to make preparations for the first joint global operation focusing on the trade in waste – Operation Demeter. Between 23 March and 11 May 2009, the Customs administrations of 65 countries were engaged in the Operation, which targeted the illicit cross-border shipments of hazardous and other wastes coming from Europe to Asia-Pacific and African countries. A set of operational mechanisms were involved: intensified control; monitoring; notification; feedback; and seizure. A broad set of risk indicators prepared by the WCO Secretariat was installed in national risk assessment systems, to be combined with national and local indicators. In collaboration with their national counterparts, Customs officers at more than 300 seaports and other specific locations strengthened their risk assessment strategies and conducted more than 2000 physical controls to identify high risk shipments. Participating Customs administrations notified each other of any suspicious shipments across continents and were supported by their national environmental

¹²⁰ WCO Action Plan for Combating Cross-Border Environmental Offences, adopted by the WCO Enforcement Committee in February 2008.

¹²¹ WCO, *Operation Demeter Executive Summary. Customs Joint Operation to Combat Illegal Transboundary Movement of Waste between Europe, Asia/Pacific and Africa*, 2010.

¹²² WCO, *Tons of Illegal Waste Seized under Operation Demeter III*, 20 January 2014, available online.

agencies, police forces, the Secretariat of the Basel Convention and the seven WCO Regional Intelligence Liaison Offices (RILO)¹²³.

During the Operation, 516 messages were exchanged via CENcomm¹²⁴, the WCO's secure communication tool, comprising pre-arrival notifications, feedback and seizure messages. The Operation led to 56 reported seizures of more than 36.714.275 kg and of 1.830 pieces of waste. The seized waste ranged from household waste and end-of-life vehicles, to non-functioning or "used" electrical and electronic equipment, the so-called *e-waste*, and metal scrap. Most of the seizures took place in European countries. Shipments of waste departed from the Netherlands in 17 of the 56 seizures, followed by Belgium (11 seizures), Italy (10), Portugal (3) and the United States (3). China, Pakistan and India were the main destinations for shipments of iron scrap, while Nigeria, Senegal and Guinea were the main destinations for e-waste and end-of-life vehicles.

Apart from the success of the Operation measured in terms of its seizures of illegal hazardous waste, also the high number of participating countries, the scale of deployment and the unprecedented volume of information exchanged should be considered. Ms. Katharina Kummer Peiry, head of the Secretariat of the Basel Convention at the time, affirmed that "Operation Demeter has confirmed the critical role of Customs authorities, the crucial importance of effective information sharing systems and the necessity for international cooperation to combat the illegal traffic of hazardous wastes"¹²⁵. In response, WCO Secretary General, Kunio Mikuriya said that "The success of Operation Demeter can be attributed to our desire to protect the environment for future generations, the strong political will and commitment of WCO Member Customs administrations, and excellent cooperation with our partners at the national, regional and international level. In fact, the WCO is now even more determined to bolster the partnership further as coordination, cooperation and communication are the enemies of those who profit from this trade"¹²⁶.

¹²³The Regional Intelligence Liaison Office (RILO) is a regional centre for collecting, analysing and supplementing data, as well as disseminating information on trends, modus operandi, routes and significant cases of fraud. The first RILO was established in 1987 with the intent of creating a Global Intelligence Network. Today the RILO network has grown to 11 offices providing effective coverage throughout all six WCO regions, comprising all the world.

¹²⁴ The CENcomm is the Customs Enforcement Network Communication Platform. It was conceived as a web-based communication system permitting a closed group of officers to exchange messages via specific channels in real time for the duration of an operation or project.

¹²⁵ WCO, *Operation Demeter Executive Summary. Customs Joint Operation to Combat Illegal Transboundary Movement of Waste between Europe, Asia/Pacific and Africa*, 2010, p. 4.

¹²⁶ *Ibidem*, p. 5.

- Operation Demeter III was another successful joint global Customs initiative across Europe and the Asia Pacific organized by the WCO. It was launched because of the growing concern that cross-border movement of hazardous waste is often being carried out in contravention of international instruments and national laws, causing damage to the environment and the public health of all nations, particularly developing countries. It was conducted for five weeks, from October to November 2013, with the support of the Secretariat of the Basel Convention and UNEP's Regional Office for Asia and the Pacific. It targeted illicit maritime shipments of hazardous waste transported from Europe and other waste-generating regions to the Asia-Pacific region. The WCO RILO for the Asia-Pacific region – based in Seoul, Korea played an important role during the Operation as a focal point for information exchange. Customs officers of 44 countries risk assessment, profiling and targeting techniques to identify and monitor high-risk shipments.

The Operation led to the seizure of more than 7.000 metric tons of waste transported illegally. Almost all of the total 48 interceptions took place in European countries, such as Italy, the Netherlands and Portugal, although the largest seizure, namely 5,700 metric tons of textile waste, was realized in China.

Operation Demeter III confirmed again the importance of the involvement of the Customs Community in preventing and combating the trafficking of waste. As affirmed by Jim Willis, current Executive Secretary of the Basel Convention, "Protecting human health and the environment from the negative impacts associated with the illegal traffic of hazardous and other waste cannot be achieved without the commitment and active involvement of the Customs community"¹²⁷.

2.3.2 INTERPOL – Pollution Crime Working Group

INTERPOL is the world's largest international police organization, with 192 Member States. Its task is to facilitate cross-border police co-operation and support all those organizations, authorities and services whose mission is to prevent or combat international crime. Among such crimes, INTERPOL is committed to combat environmental crimes. To this end, at its 61st meeting in 1992, INTERPOL General Assembly decided, by way of a resolution¹²⁸, to establish a working party known as the Environmental Crime Committee. The Committee is composed of investigators and decision-makers from the various Member States, and its work is to find the problems arising with environmental

¹²⁷ WCO, *Tons of illegal waste seized under Operation Demeter III*, 20 January 2014, available online.

¹²⁸ Resolution of the INTERPOL G.A. establishing the Environmental Crime Committee, adopted at the 61th General Assembly Session in Dakar, in November 1992, AGN/61/RES/12.

crime investigations and their related possible solutions. The logic underlying the establishment of the Environmental Crime Committee is that INTERPOL is aware that there are several issues of coordination and cooperation in investigations of international cases on environmental crimes, as the legislations and departments dealing with this type of crime are different from country to country. Every two years, INTERPOL held the Conference of the Environmental Crime Committee, also called the Environmental Crime Working Party. Then, in 2012, the Environmental Compliance and Enforcement Committee (ECEC) replaced the Environmental Crime Committee but kept the same functions. The third and last ECEC Meeting was held on 28 and 29 November 2017 in Edinburgh, United Kingdom. To better focus on specific environmental crimes, the Committee has formed four working groups: the Fisheries Crime Working Group, the Forestry Crime Working Group, the Wildlife Crime Working Group and the Pollution Crime Working Group.

According to INTERPOL, pollution crime is the “handling, transport, trading, possessing and disposal of wastes, including hazardous wastes or resources, in contravention of national and international laws and treaties which may cause significant environmental harm”¹²⁹. As a network of experts for assistance, advice and information on oil discharges, garbage pollution and waste trafficking investigations, INTERPOL Pollution Crime Working Group leads several projects to combat the transport, trade and disposal of hazardous wastes and substances in contravention of national and international laws.

The General Secretariat of INTERPOL has also signed a Memorandum of Understanding¹³⁰ with the Secretariat of the Basel Convention in order to strengthen the cooperation between them. The mutual commitment consists in i) sending each other information of common interest; ii) inviting each other to meetings of common interest that they organize; iii) jointly devising publications and other promotional materials to raise the awareness of the services responsible for combating the illegal traffic in hazardous waste; iv) organizing joint training activities for Police and other enforcement officers; v) assisting in the collection and transmission of data specific relating to specific areas of illegal traffic in hazardous waste.

¹²⁹ Environmental Crime Programme Strategic Plan 2009-2010 of INTERPOL, p.4

¹³⁰ Memorandum of Understanding between the International Criminal Police Organization – INTERPOL and the Secretariat of the Basel Convention, adopted in 1999 by the Secretariat of INTERPOL and of the Basel Convention.

The most famous and successful project undertaken by INTERPOL Pollution Crime Working Group is Project Eden¹³¹.

- Project Eden was launched during the first Environmental Compliance and Enforcement Meeting held in Nairobi, Kenya in November 2013. Working closely with INTERPOL Pollution Crime Working Group, its tasks are to i) raise awareness of the illegal transboundary movement of hazardous wastes and the environmental and health consequences related to it; ii) develop sustainable institutional capacity of government agencies responsible for the enforcement of environmental legislation; iii) promote an intelligence-led approach in the conduct of operations to suppress criminal activity and trafficking.

Project Eden also provides support to Member States in the exchange of criminal intelligence information to identify criminal networks and in the conduct of regional and global operations.

Within Project Eden, INTERPOL conducted the first operation targeting the illegal traffic of electronic waste: Operation Enigma¹³². Held in November and December 2012, it aimed to identify and interrupt the illegal collection, recycling, export, import and shipping of discarded electronic products such as computers, televisions and other electronic devices, before they are dumped in landfills or other sites. Major ports in Belgium, Germany, the Netherlands and the United Kingdom were checked, a European region considered to be a source of electronic waste shipped internationally, as well as ports in Ghana, Guinea and Nigeria in Africa, a region considered to be a destination for this waste. More than 240 tonnes of electronic equipment and electrical goods were seized, and criminal investigations were undertaken against 40 companies involved in the illicit traffic.

The most recent global operation conducted within Project Eden was “30 Days of Action”¹³³, which lasted from 1 to 30 June 2017 and involved 43 participating countries from every region of the world. Its scope included all types of illegal waste, such as electronic, industrial, construction, household and medical waste.

Most of the illegal waste discovered during the operation was metal or electronic waste related to the car industry. In total, 226 waste crimes were reported. 141 shipments carrying 14,000 tonnes

¹³¹ INTERPOL, *Project Eden*, January 2014, available online.

¹³² INTERPOL, *INTERPOL operation targets illegal trade of e-waste in Europe, Africa*, 25 February 2013, available online.

¹³³ INTERPOL, *Hazardous materials seized in largest global operation against illegal waste*, 8 August 2017, available online.

of illegal waste were identified, and more than 1 million tonnes of waste was illegally disposed in 85 sites.

The results of the operation confirmed that Asia and Africa were the main destinations for hazardous waste illegally exported from Europe and North America. Therefore, notwithstanding the several improvements achieved since the discovery of the *path of least resistance* in the 1980s, still much effort is needed to overcome the export and dumping of illegal waste in developing countries.

As sustained by Dechen Tsering, Regional Director and Representative at UN Environment Asia and the Pacific, this global operation shows that more can be achieved by working together, as waste crimes need the collective efforts of all involved parties, from policy-makers to legislators and consumers.

Chapter 3 - The participation of the European Union to the Basel Convention

3.1 The competence of the EU in environmental matters

The European Union is the only international organization party to the Basel Convention¹³⁴. However, since its early beginnings, it did not have any competence in environmental matters. The Treaty of Rome¹³⁵, signed on 25 March 1957, established the European Economic Community (EEC), and the intention of the six founding States – Belgium, France, Italy, Luxembourg, the Netherlands and Federal Republic of Germany – was to create a common space to cooperate in order to reach ambitious economic and commercial aims, so that the Community was not eventually endowed with any environmental competence. As a matter of fact, the awareness of themes like the safeguard of the ecosystem and of the potential role that international law could exercise as an instrument of transnational protection emerged only after the 1960s. This explains also why the establishing treaties of the other two European Communities created by the aforementioned States between 1954 and 1957 – the European Coal and Steel Community (ECSC) and the European Atomic Energy Community (EURATOM) – also remained silent on the topic, despite being called to discipline the exploitation of specific natural resources with undoubtable environmental impact. They were years where the categorical imperative was to grow and not certainly care about the environment, especially for States that had just come out of a World War. A strong scepticism remained for those themes not perceived as urgent and that could obstacle the industrial recovery and productive growth.

The first decisions of the Heads of State and Government of the EEC Member States on the protection of the ecosystem and human health were taken at the Paris European Summit¹³⁶, held between 19 and 21 October 1972, not surprisingly in concomitance with the adoption of the Stockholm Declaration¹³⁷, which gave important impetus for the development of international environmental law. In Europe, it coincided with the adoption of the First Programme of Action of the European Communities on the Environment for 1973-76¹³⁸. The Programme formally placed the environment on the European

¹³⁴ The European Union – then the European Community - adhered to the Basel Convention on 7 February 1994.

¹³⁵ Treaty establishing the European Economic Community, signed in Rome on 5 March 1957. Hereinafter: EEC Treaty or Rome Treaty.

¹³⁶ The Heads of State or Government of the nine Member States of the enlarged European Community meet for the first time at the Paris European Summit, held from 19 to 21 October 1972. During this meeting, the Heads of State or Government confirmed their wish to strengthen political cooperation.

¹³⁷ See *supra* n. 2.

¹³⁸ Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States, meeting in the Council of 22 November 1973, on the programme of action of the European Communities on the environment.

political agenda. Its main aims were the constant improvement of life conditions and the harmonious development of economic activities within the whole Community.

Since then, while the competence of the EEC in the area of environmental policy remained a matter of controversy in the absence of explicit treaty articles, several directives and regulations were adopted under articles 100¹³⁹ and 235¹⁴⁰ of the EEC Treaty. Article 100 referred to situations where differences in national environmental legislation had detrimental effect on the common market, while Article 235 covered instances where Community action is necessary to attain, in the course of the operation of the common market, one of the Community's objectives, and the Treaty has not provided the necessary powers. One of the first directives adopted to combat pollution was Directive 70/157/EEC¹⁴¹ concerning the permissible sound level and the exhaust system of motor vehicles. In 1985, the European Court of Justice (ECJ) in the case *Waste oils*¹⁴² concerning the validity of a directive on the disposal of waste oils¹⁴³ confirmed environmental protection as one of the objectives of the Community. Such affirmation has allowed to establish that the system of prior approval on the disposal of waste oils foreseen by the directive, despite having a potential restrictive effect on the freedom of trade and competition, if applied proportionately and in a non-discriminatory way, "pursues an aim which is of general interest, by seeking to ensure that the disposal of waste oils is carried out in a way which avoids harm to the environment"¹⁴⁴.

The 1986 Single European Act¹⁴⁵, which entered into force in June 1987, finally included in the founding Treaty specific competences on environmental matters and introduced the new Title VII on the Environment in articles 130R, 130S and 130T. Following these reforms, Article 235 of the EEC Treaty was no longer invoked as a legal basis for environmental measures, as the new Title provided explicit powers.

¹³⁹ Art. 100, EEC Treaty: The Council, acting by means of a unanimous vote on a proposal of the Commission, shall issue directives for the approximation of such legislative and administrative provisions of the Member States as have a direct incidence on the establishment or functioning of the Common Market.

¹⁴⁰ Art. 235, EEC Treaty: If any action by the Community appears necessary to achieve, in the functioning of the Common Market, one of the aims of the Community in cases where this Treaty has not provided for the requisite powers of action, the Council, acting by means of a unanimous vote on a proposal of the Commission and after the Assembly has been consulted, shall enact the appropriate provisions.

¹⁴¹ Directive 70/157/EEC of the Council, of 6 February 1970, on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles.

¹⁴² Decision of the ECJ, of 7 February 1970, case C-240/83, *Procureur de la République v. Association de Défense des bruleurs des Huiles Usagés*.

¹⁴³ Directive 75/439/EEC of the Council, of 16 June 1975, on the disposal of waste oils.

¹⁴⁴ Decision of the ECJ, of 7 February 1970, case C-240/83, *Procureur de la République v. Association de Défense des bruleurs des Huiles Usagés*, par. 11 on Validity of the Directive.

¹⁴⁵ Single European Act, signed in Luxembourg on 17 February 1986.

With the 1992 Treaty of Maastricht, or Treaty on European Union (TEU)¹⁴⁶, which created the European Union with a three-pillar structure and turned the name of the EEC into European Community (EC), environmental protection was formally included among the objectives of Community. The 1997 Treaty of Amsterdam¹⁴⁷ further strengthened the status of environmental protection as a constitutional objective, by introducing a new task to promote “a high level of protection and improvement of the quality of the environment”¹⁴⁸. It also reinforced the role of the European Parliament (EP) by introducing the co-decision procedure as the general decision-making procedure in environmental matters. The decision-making procedure thus evolved from the original unanimous decision-making by the Council to majority voting and participation by the Parliament. Finally, the Treaty of Lisbon¹⁴⁹, which incorporates the Treaty on the European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU) – the former but amended Treaty of Rome –, largely maintained the status quo in terms of its environmental provisions. The main novelty was the explicit mention of climate change among the objectives of EU environmental policy.

Currently, environmental policy is a shared competence¹⁵⁰ of the EU, articulated in article 4 TFEU and articles 191-193 TFEU. EU law sets minimum rules for the protection of the environment and Member States have the right to establish higher levels of protection for their country than the EU provides on the basis of Article 193 TFEU¹⁵¹. Most common environmental rules are decided by qualified majority voting in the Council and co-decision with the European Parliament.

¹⁴⁶ Treaty on European Union, signed in Maastricht on 7 February 1992. Hereinafter: TEU or Treaty of Maastricht.

¹⁴⁷ Treaty of Amsterdam Amending the Treaty on European Union, The Treaties Establishing the European Communities and Related Acts, signed in Amsterdam on 10 November 1997.

¹⁴⁸ Art.2, Treaty establishing the European Community. Hereinafter: EC Treaty. The Treaty of Maastricht renamed the Treaty establishing the European Economic Community as Treaty establishing the European Community.

¹⁴⁹ Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, signed in Lisbon on 13 December 2007.

¹⁵⁰ Art. 2, par. 2, Treaty on the Functioning of the European Union: When the Treaties confer on the Union a competence shared with the Member States in a specific area, the Union and the Member States may legislate and adopt legally binding acts in that area. The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence. Hereinafter: TFEU.

¹⁵¹ Art. 193, TFEU.

3.2 Past and present of Regulation 1013/2006/EC on shipments of waste

The first normative instrument of the EEC to discipline the movement of highly dangerous wastes was Council Directive 84/631/EEC¹⁵² of 6 December 1984: it contained precise rules on surveillance and control of transboundary shipments of hazardous wastes within the territory of the Community. It was adopted on the basis of article 100 and 235 TFEU, when the Community did not have explicit treaty powers on environmental policy.

Immediately after the Treaty of Maastricht, which posed the safeguard of the environment among the objectives of the European Community, and before the Treaty of Amsterdam, which added another programmatic objective – sustainable development –, there was the adhesion to the Basel Convention. On 7 February 1994, the European Community officially adhered to the international agreement on the transboundary movement of hazardous wastes, but it had already introduced all its provisions the previous year through the adoption of Regulation 259/93/EEC¹⁵³ on the supervision and control of shipments of waste within, into and out of the European Community: it applied the Basel Convention and harmonised Community law with OECD Decision C(92)39¹⁵⁴ on the Control of Transfrontier Movements of Wastes Destined for Recovery Operations. Two different regimes were established on the basis of whether the wastes are destined to disposal or recovery and recycling, distinguishing the procedures on the basis of the destination or origin within or without the Community.

On 14 June 2006, Regulation 1013/2006/EC on shipments of waste¹⁵⁵ - or Waste Shipment Regulation (WSR) - was adopted, in order to substitute the former 1993 Regulation and transfer the amendments made to the Basel Convention and the new OECD Decision C(2001)107 concerning the Control of Transboundary Movements of Wastes destined for Recovery Operations¹⁵⁶. Since its entry into force in July 2007, Regulation 1013/2006/EC has disciplined the shipments of wastes between EU Member States and all the fluxes of import and export between them and third Countries. The ultimate aim of such regulation is the protection of the environment¹⁵⁷, and to such end, regimes and

¹⁵² Directive 84/631/EEC of the Council, of 6 December 1984, on the supervision and control within the European Community of the transfrontier shipment of hazardous waste.

¹⁵³ Regulation 259/93/EEC of the Council, of 1 February 1993, on the supervision and control of shipments of waste within, into and out of the European Community.

¹⁵⁴ Decision of the Council of the OECD, of 30 March 1992, on the Control of Transfrontier Movements of Wastes Destined for Recovery Operations, C(92)39/FINAL. It provided a framework for Adherents to control transboundary movements of recoverable wastes within the OECD area in an environmentally sound and economically efficient manner.

¹⁵⁵ Regulation 1013/2006/EC of the European Parliament and of the Council, of 14 June 2006, on shipments of waste. Hereinafter: Waste Shipment Regulation

¹⁵⁶ Decision of the Council of the OECD concerning the Control of Transboundary Movements of Wastes destined for Recovery Operations, C(2001)107/FINAL.

¹⁵⁷ Preamble, par. 1, Waste Shipment Regulation.

procedures are established. The procedures of control on the transfer of waste within the Community are based on the origin, the destination, the shipment route, the type of treatment and the type of waste.

The scope of application of the WSR, enunciated at article 1 paragraph 2, covers shipments of waste: i) between Member States, within the Community or with transit through third countries; ii) imported into the Community from third countries; iii) exported from the Community to third countries; iv) in transit through the Community, on the way from and to third countries¹⁵⁸. Cases not covered by the Regulation include radioactive wastes, wastes generated on board of ships, planes and trains, shipments of waste from the Antarctic into the Community, imports into the Community of waste generated by armed forces or relief organisations in situations of crisis, peacemaking or peacekeeping operations¹⁵⁹. The general obligations, listed in Title III, can be summarised as the prohibition on mixing waste during shipment, the conservation of documents and information on the movement of wastes, the requirement to take back the waste when a shipment cannot be completed as planned, and the imposition on the part of the producer, the notifier and all the involved companies to adopt all the necessary measures to guarantee an environmentally sound management of the wastes. A long series of prohibitions is established. All exports of hazardous wastes towards non-OECD countries and non-Member States destined for disposal are forbidden¹⁶⁰, except for the EFTA countries¹⁶¹ – Iceland, Liechtenstein, Norway and Switzerland – which are subject to a precise procedure for export, enunciated in article 35. Moreover, exports of wastes destined for disposal from the Community towards the Antarctic¹⁶² or overseas countries or territories¹⁶³ are prohibited. However, the strict regime of prohibitions includes some derogations. For instance, some hazardous wastes destined for recovery can be exported to non-OECD countries, as long as they are managed in an environmentally sound way, in respect of EU norms.

¹⁵⁸ Art. 1, par. 2, *ibidem*.

¹⁵⁹ Art. 1, par. 3, *ibidem*.

¹⁶⁰ Art. 34, par. 1, *ibidem*.

¹⁶¹ Art. 34, par. 2, *ibidem*. The European Free Trade Association (EFTA) is an intergovernmental organisation set up for the promotion of free trade and economic integration to the benefit of its four Member States – Iceland, Liechtenstein, Norway and Switzerland – and the benefit of their trading partners around the globe. The four EFTA States are all open, competitive economies committed to the progressive liberalization of trade in the multinational arena as well as in free trade agreements.

¹⁶² Art. 39, *ibidem*.

¹⁶³ Art. 40, *ibidem*.

3.2.1 Control procedures and enforcement measures

Following the scheme established by the Basel Convention, the WSR transposes but at the same time adapts the Prior Informed Consent Procedure of the Convention to the European Union. The procedure of prior written notification and consent applies to the following shipments of wastes¹⁶⁴:

- All shipments of wastes destined for disposal;
- Shipments of wastes destined for recovery if listed in Annex IV¹⁶⁵, Annex IVA¹⁶⁶, of wastes not classified under one single entry in Annex III¹⁶⁷, IIIB¹⁶⁸, IV or IVA, and of mixtures of wastes not classified under one single entry in Annex III, IIIB, IV or IVA unless listed in Annex IIIA¹⁶⁹.

The notifier must transmit, within three working days, a written notification to the competent authority, which will send it to the competent authority of destination, sending a copy also to the authority of transit and the notifier. The competent authority receiving the notification will send, within three working days, the original copy to the notifier and a copy to the concerned authorities¹⁷⁰. If the notification is not properly carried out, the competent authority of shipment can request information from the notifier, within three working days from the receipt of notification¹⁷¹. The notifier will have to provide the requested information, to allow the competent authority of shipment to send the notification to the concerned subjects. The competent authorities of destination, shipment and transit have thirty days following the date of transmission of notification to express in writing: i) consent without conditions; ii) consent with conditions; iii) objections¹⁷². When the written authorization arrives, the notifier must send a copy of it to the authority of destination. Every shipment must be accompanied by the movement document and by the copy of the written notification, which contains the authorizations. Within three days following the arrival of the wastes, the final recipient will send the compiled and signed movement document to the notifier, confirming the arrival of the

¹⁶⁴ Art. 3, par.1, Waste Shipment Regulation.

¹⁶⁵ ANNEX IV - LIST OF WASTES SUBJECT TO THE PROCEDURE OF PRIOR WRITTEN NOTIFICATION AND CONSENT ('AMBER' LISTED WASTE).

¹⁶⁶ ANNEX IVA - WASTE LISTED IN ANNEX III BUT SUBJECT TO THE PROCEDURE OF PRIOR WRITTEN NOTIFICATION AND CONSENT (ARTICLE 3(3)).

¹⁶⁷ ANNEX III - LIST OF WASTES SUBJECT TO THE GENERAL INFORMATION REQUIREMENTS LAID DOWN IN ARTICLE 18 ('GREEN' LISTED WASTE).

¹⁶⁸ ANNEX IIIB - ADDITIONAL GREEN LISTED WASTE AWAITING INCLUSION IN THE RELEVANT ANNEXES TO THE BASEL CONVENTION OR THE OECD DECISION AS REFERRED TO IN ARTICLE 58(1)(B).

¹⁶⁹ ANNEX IIIA - MIXTURES OF TWO OR MORE WASTES LISTED IN ANNEX III AND NOT CLASSIFIED UNDER ONE SINGLE ENTRY AS REFERRED TO IN ARTICLE 3(2).

¹⁷⁰ Art.8, Waste Shipment Regulation.

¹⁷¹ Art. 7, *ibidem*.

¹⁷² Art. 9, par. 1, *ibidem*.

wastes. Within a year from the date of arrival, it will have to certificate the final disposal of the waste or its recovery.

The WSR authorizes the competent authority of shipment to deny the possibility of shipment whenever the structures for recovery in the country of destination do not correspond, for that particular waste, to the standards existing in the country of origin¹⁷³. Such ecological objection is not completely new, as the ECJ had already embraced it in the case *Eu-Wood-Trading*¹⁷⁴, but its explicit mention helps clarify the legal situation and makes it easier for the Member States with a high environmental standard to stop the shipment of wastes towards other countries.

For shipments of wastes destined for recovery not covered by the application of the prior written notification and consent procedure, the general information requirements of Article 18 apply. In order to assist the tracking of shipments of such waste, the person under the jurisdiction of the country of dispatch who arranges the shipment shall ensure that the waste is accompanied by the document contained in Annex VII. Such document must be signed by the person who arranges the shipment before the shipment takes place and subsequently signed by the recovery facility or the laboratory and the consignee when the waste in question is received¹⁷⁵. The contract referred between the person who arranges the shipment and the consignee for recovery will be effective once the shipment begins, and it includes an obligation on the person who arranges the shipment or on the consignee, when the shipment of waste or its recovery cannot be completed as intended or where it has been effected as an illegal shipment, to take the waste back or ensure its recovery in an alternative way, and provide, if necessary, for its storage in the meantime¹⁷⁶.

The WSR also focuses on enforcement measures in article 50. Member States must lay down the rules on penalties in the case of infringement of the provisions of the Regulation, and promptly inform the Commission on the national laws relating to prevention and detection of illegal shipments and their related penalties. Such penalties must be “effective, proportionate and dissuasive”¹⁷⁷. Article 50 highlights the sanctions, inspections of establishments and undertakings and spot checks on shipments of wastes or their related recovery or disposal as appropriate measures. Checks on shipments may take place: i) at the point of origin, carried out with the producer, holder or notifier;

¹⁷³ Art. 12 par.1, lett. c), Waste Shipment Regulation.

¹⁷⁴ Sentence of the ECJ, of 16 December 2004, case C-277/02, *EU-Wood-Trading GmbH v Sonderabfall-Management-Gesellschaft Rheinland-Pfalz mbH*.

¹⁷⁵ Art. 18, par. 1, Waste Shipment Regulation.

¹⁷⁶ Art. 18, par. 2, *ibidem*.

¹⁷⁷ Art. 50, par. 1, *ibidem*.

ii) at the destination, carried out with the consignee or the facility; iii) at the frontiers of the Community; and or iv) during the shipment within the Community¹⁷⁸. Checks on shipments can involve the inspection of documents, the confirmation of identity and physical checking of waste. A more severe proposal by the EP, consisting in the prescription of a minimum quota of physical checks of wastes, was rejected during the legislative procedure. Bilateral and multilateral cooperation was established as a general obligation for Member States to facilitate the prevention and detection of illegal shipments. They must also designate among their permanent staff those persons responsible for the cooperation and identify the focal points for the physical checks.

The EU-system for the control of hazardous waste shipments may seem organic and well-defined, but it is not exempt from elements of structural weakness. In particular, Member States apply the WSR by using different control instruments, with a different intensity, because they are left with such discretion. No sanctioning system exists in the case of breach of the procedures described above, which makes the rigidity of the regulatory system formal, mining the efficacy and the deterrent effect of the inspections. The absence of a sanctioning formula along with the discretion of the repressive action, exacerbated by the lack of uniform protocols to be followed in the inspections, have led to a non-harmonised control and monitoring system in the EU. As a matter of fact, some Member States have adopted extended and efficient inspection systems, while others have kept inefficient structures, investing inadequate resources to control the fluxes of wastes.

3.2.2 Regulations and Directives improving enforcement of the Waste Shipment Regulation

In the face of the lack of a uniform implementation of the WSR, other significant Regulations and Directives have been adopted to further develop the legislation on the topic within the EU context.

- Regulation 1907/2006/EC of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)¹⁷⁹ restricts the perimeter of use of specific and particularly toxic chemical products. It introduces uniform and integrated processes of execution in terms of the registration, evaluation, authorization and restriction of chemical substances. Specifically, it provides the registration of all chemical substances produced or

¹⁷⁸ Art. 50 par. 3, Waste Shipment Regulation.

¹⁷⁹ Regulation 1907/2006/EC of the European Parliament and of the Council, of 18 December 2006, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation 793/93/EEC and Commission Regulation 1488/94/EC as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

imported within EU territory in quantities totalling over one tonne per producer or importer per year and it establishes the European Chemicals Agency (ECHA), seated in Helsinki. The Agency is the reference point for the chemical and pharmaceutical industry: it has a filter function in the management of risks related to hazardous chemical substances, and it is depositary of all the information on security, of which it manages the publication. The most significant aspect of the Regulation is that it endows EU citizens with the right to access the information on chemical substances to which they may be exposed. It is possible to access for free the Agency's database containing data divided on the basis of the hazardousness of chemical substances, the labelling obligations and the norms of reference, including the authorized uses and the norms on risk management.

- Regulation 660/2014/EU¹⁸⁰ of 15 May 2014 amends the WSR and introduces some specifications on the norms disciplined by it on inspections of wastes. With this new legislation, inspection plans (IPs) include risk assessment strategies. Inspections have the obligation to evaluate a series of fundamental elements for the process: the aims to be reached, the geographic area to be covered, the priorities, the tasks assigned to the competent authorities involved in the inspection, the cooperation agreements between the inspection authorities and the Member State where the operation takes place, and finally the information relating to the training of the inspectors, and to the human and financial resources for the implementation of the inspection plans. Such modifications are disciplined in the new paragraph 2a of article 50 of the WSR¹⁸¹. The proposed aim is to establish the obligation to conduct inspections with minimum standards in all the EU. The implementation of the modifications is supported by IMPEL, the European Union Network for the Implementation and Enforcement of Environmental, which will be discussed in the next section and last section.

- Directive 2012/19/EU¹⁸² of 4 July 2012 on waste electrical and electronic equipment (WEEE), which revised the first WEEE Directive - Directive 2002/96/EC¹⁸³ – was adopted in order to tackle WEEE, currently considered the fastest increasing waste stream in the EU, and to better specify

¹⁸⁰ Regulation 660/2014/EU of the European Parliament and of the Council, of 15 May 2014, amending Regulation 1013/2006/EC on shipments of waste.

¹⁸¹ Art.50, par. 2, lett. a) (2a), Waste Shipment Regulation.

¹⁸² Directive 2012/19/EU of the European Parliament and of the Council, of 4 July 2012, on waste electrical and electronic equipment (WEEE). Hereinafter: WEEE Directive.

¹⁸³ Directive 2002/96/EC of the European Parliament and of the Council, of 27 January 2003, on waste electrical and electronic equipment (WEEE).

its management and shipment within and without the EU with respect to the WSR. According to the Directive, the treatment operations for the disposal of WEEE may also be undertaken outside the respective Member State of production or the Union, provided that the shipment of WEEE is in compliance with Regulation 1013/2006/EC¹⁸⁴. Therefore, shipments of WEEE towards non-OECD countries are forbidden in any case. Nevertheless, the illegal shipment of e-waste from the EU to third countries continues to provide an example of a serious and complex environmental crime, as cross-border transfer of e-waste has increased significantly over the past decade. In the subsection below, I will analyse the case of illegal shipment of e-waste from the EU to China, which currently represents the main destination for e-waste.

3.2.3 The case of illegal shipments of e-waste from the EU to China

According to the UN Office on Drugs and Crime (UNODC), about 80 per cent of the total global amount of e-waste is destined to Asia, with around 90 per cent shipped to China¹⁸⁵. Notwithstanding the import of e-waste into China has been officially prohibited since 2000, the UNODC estimates that around 8 million tonnes of e-waste are imported illegally into China each year, with towns like Guiyu and Taizhou representing the most famous destinations. The impacts of e-waste trade are serious in the sites of e-waste management in China, where contamination of air, soil and water is inevitable. Environmental implications have thus produced a considerable threat to public health, and the employment of local and migrant workers in the management of WEEE shipments has reinforced social inequalities in terms of gender, race, class and age.

The extent of the illegal activity is difficult to establish, as illegal shipment by definition is not tracked explicitly for its very nature, and therefore the overall statistical data can be questioned. Nevertheless, even though empirical data suffer from uncertainty, the scale of e-waste trade, its impact on the environment and its links to organised crime are difficult to contest. Inaccuracies are particularly due to the lack of differentiation in statistical databases between new and used EEE exported from the EU. As a matter of fact, the EU WSR does not prohibit the export of used and second-hand EEE to non-OECD countries, and this loophole is often used by exporters to ship used EEE to developing countries, which eventually turns out to be non-functioning and considered as WEEE.

China's regulations relating to e-waste go back to the 1990s. In 1996, in order to respond to the Basel Convention's requirements, the Chinese State Environmental Protection Administration (SEPA)

¹⁸⁴ Art.10, par.1, WEEE Directive.

¹⁸⁵ UNODC, *Transnational Organized Crime in East Asia and the Pacific – A Threat Assessment*, 2013.

passed the Prevention and Mitigation of Environmental Pollution by Solid Wastes Act¹⁸⁶. This act aimed to regulate the disposal of industrial and municipal solid waste by forbidding the import of those solid wastes that cannot be used as raw materials and strictly regulating the import of solid materials that can be reused. In 2000, a key item in China's legislation on e-waste was introduced: the Notification on the Import of the Seventh Category of Solid Waste¹⁸⁷. It included a list of wastes which were forbidden to be imported into China, among which there was e-waste. After the adoption of this official ban on the import of e-waste into China, a series of other policies on the management of e-waste were introduced. The 2006 Technical Policy on Pollution, Prevention and Control of WEEE aimed to reduce the volume of e-waste and to establish the "polluter pays principle"¹⁸⁸. An Ordinance on Management of Prevention and Control of Pollution from Electronic and Information Products¹⁸⁹ was implemented in 2007, with the aim to reduce the employment of hazardous and toxic substances in electronic equipment and to make it mandatory for producers to provide sufficient information about their products to customers. This ordinance is partly similar to the European Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment¹⁹⁰, amended by Directive 2011/65/EU¹⁹¹. Finally, in January 2011, the Regulation on Management of Recycling and Disposal of Waste Electrical and Electronic Equipment¹⁹² was adopted, which represents the equivalent of EU WEEE Directive, and it makes e-waste collection and recycling mandatory.

The recent amendments to the WSR have the opportunity to better counter the import of e-waste from the EU into China, in respect of China's policies and laws, as the introduction of more specific guidelines on inspection plans may reduce the illegal shipments. Also China has developed enforcement plans, such as the Operation Green Fence Campaign, launched in 2013 by the Chinese government and lasting 10 months. This initiative had the aim to more closely manage the activities

¹⁸⁶ Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, adopted at the 16th Meeting of the Standing Committee of the Eighth National People's Congress, on 30 October 1995.

¹⁸⁷ Notification 19/2000 of the People's Republic of China on the Import of the Seventh Category of Solid Waste.

¹⁸⁸ The Polluter Pays Principle was first introduced in 1972 by the OECD Guiding Principles concerning International Economic Aspects of Environmental policies, under which the polluter was held responsible for the environmental damage and pollution. Subsequently, the Rio Declaration laid down the guidelines for sustainable development, in furtherance of which Principle 16 of the Declaration enshrined the Polluter Pays principle stating that the polluter should bear the cost of pollution.

¹⁸⁹ Ordinance of the People's Republic of China on Management of Prevention and Control of Pollution from Electronic and Information Products, of 2007.

¹⁹⁰ Directive 2002/95/EC of the European Parliament and of the Council, of 27 January 2003, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

¹⁹¹ Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

¹⁹² Regulation on Management of Recycling and Disposal of Waste Electrical and Electronic Equipment, of 2011.

of waste imports, including e-waste imports. Part of the campaign included that customs officials were sent to Chinese ports to conduct rigorous inspections and physical checks on containers. Shipping companies were told to send illegal shipments back to the country of origin and the import licences of many companies were suspended. According to the International Solid Waste Association (ISWA)¹⁹³, in the first three months of the campaign 55 shipments were stopped and 7,600 tonnes of recyclable materials rejected¹⁹⁴.

3.3 Enforcement of the Waste Shipment Regulation and final considerations

The state of enforcement of the WSR is studied by the Environment Directorate-General of the European Commission, which in September 2017 has reminded that a review of the Regulation will have to be carried out by the end of 2020. Before such review begins, an evaluation of the Regulation will be the first step in the process. A fundamental actor in the evaluation of the state of enforcement of the Regulation is the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), recognized by the Secretariat of the Basel Convention, and with which it has signed a Memorandum of Understanding¹⁹⁵.

3.3.1 “Transfrontier Shipment of waste” cluster of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL)

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the European Union Member States, acceding and candidate countries of the EU, the European Economic Area (EEA) and EFTA countries. The association is registered in Belgium and its legal seat is in Brussels. Currently, IMPEL’s members amount to 53 from 36 countries, including all EU Member States, the former Yugoslav Republic of Macedonia, Serbia, Turkey, Iceland, Kosovo, Albania, Switzerland and Norway. IMPEL was established in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law and only in

¹⁹³ The International Solid Waste Association (ISWA) is a non-governmental, independent and non-profit association which follows the mission to promote and develop professional waste management worldwide as a contribution to sustainable development.

¹⁹⁴ K., EARLEY, *Could China's 'green fence' prompt a global recycling innovation?*, in *The Guardian*, 27 August 2013, available online.

¹⁹⁵ Memorandum of Understanding between the Secretariat of the Basel Convention and the European Union Network for the Implementation and Enforcement of Environmental Law, adopted in Geneva on 5 February 2009.

2008 was it transformed into an international non-profit association under Belgian law. Its objective is to create the necessary impetus in the European Union to ensure a more effective application of environmental legislation. The core of IMPEL's activities is organized within a project structure and regards awareness raising, capacity building, peer review, exchange of information and experiences on implementation, international enforcement collaboration as well as promoting and supporting the enforcement of European environmental legislation.

IMPEL organises its work into five thematic areas: industry regulation, waste and transfrontier shipment (TFS), water and land, nature protection, cross-cutting tools and approaches. For each thematic area, an Expert Team is responsible for organising activities that address implementation gaps, control the delivery of those activities and the quality of their results.

The scope of the Waste and TFS Expert Team covers the practical implementation and enforcement of international and European Waste Shipment and Waste Management rules. The aim of the network is to promote compliance with the European Waste Shipment Regulation and Waste Management Directives through enforcement, to carry out joint enforcement projects, to promote exchange of knowledge and best practices, and to stimulate a uniform enforcement regime. Members of the cluster represent environmental authorities, but also customs, police services and other authorities that play a role in the enforcement of the transfrontier shipments and management of waste.

A relevant project conducted under the umbrella of IMPEL-TFS cluster is the Enforcement Actions project, which was set up because competent authorities expressed the necessity for a formal project framework to integrate enforcement inspections in their countries. The main objectives of the project are: i) work for an adequate level of inspections in all Member States; ii) promote inspections at points of loading to minimise illegal shipments; iii) verify waste destination and the handling at their destination within or outside Europe; iv) provide an accessible European enforcement project for all to facilitate cooperation also with other regulatory authorities, like Police and Customs; v) detect illegal shipments and prevent future ones through communication and guidance.

The eighth inspection project was Enforcement Actions Project 2014-2015¹⁹⁶ – Enforcement Actions IV or EA IV –, aiming to promote and improve inspections and enforcement of waste shipments through and out of the European Union. The project objectives included carrying out inspections on waste shipments, knowledge exchange and capacity building in order to harmonise the level of enforcement within the participating countries, which were precisely thirty-one. The coordinator of

¹⁹⁶ Report 2014-2015 of IMPEL on IMPEL - TFS Enforcement Actions, Enforcement of the European Waste Shipment Regulation.

the project has been the Scottish Environment Protection Agency (SEPA) under the umbrella of IMPEL-TFS cluster. Funding for meetings, exchanges and inspection tools was provided by IMPEL, while participants contributed financially and with their time and expertise. Communications between the participating countries has been carried out through exchange of inspectors, Basecamp – TFS cluster’s online communication platform –, case studies, webinars, best practice meetings and online surveys. A total of 4,787 administrative and 12,396 physical transport inspections were conducted during EA IV, with the majority undertaken on roads, ports, waste producers and waste management companies’ sites, combining a mix of random, on site and targeted inspections. Waste shipments accounted for 28.7% of these inspections, of which 16.6% (815) were in violation of the WSR.

As mentioned above¹⁹⁷, the new Art. 50 (2a) of the WSR lays down that by 1 January 2017, EU Member States shall establish one or more inspection plans (IPs) covering their entire geographical territory. These plans refer to inspections under Art. 50(2) of the WSR, for instance of establishments, undertakings, brokers and dealers, and of shipments of waste and of the related recovery or disposal. During the IMPEL-TFS conference of 2014, participants expressed the need to develop a standard template or at least a guideline for an inspection plan in line with the requirements of the WSR, and which should render IPs more comparable.

Following the conference, IMPEL’s General Assembly in December 2014 established a two-year project for the elaboration of a guidance document on Waste Shipment Inspection Planning (WSIP)¹⁹⁸. The WSIP project - led by Germany, with project team members from Belgium, the Netherlands, Norway, Slovenia and the United Kingdom, and active participants from 20 IMPEL member countries - started with a survey of existing inspection practices and the needs for guidance. The final version of the guidance document was submitted for adoption to the IMPEL General Assembly in late 2016. The guideline aims to help inspection authorities with the drafting of inspection plans and with the necessary risk assessment, especially by presenting best practices and useful tools to achieve this task.

3.3.2 Final considerations

The existing legislation both at EU and international level highlights that several significant steps have been made since the emergence of the issue of the illicit transfer of hazardous waste.

¹⁹⁷ See *supra* n.181.

¹⁹⁸ Report 2015/04-2016/05 of IMPEL of 9 November 2016 on IMPEL Project “Waste Shipment Inspection Planning” (WSIP). Guidance on Effective Waste Shipment Inspection Planning.

Assessments, reviews and amendments are continuously made in order to counter such urgent phenomenon, which causes serious impacts on the environment and the human health, with political and economic implications for the involved countries.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal represents a landmark for the better management and sound environmental disposal of hazardous wastes in order to progressively reduce and ultimately eliminate the necessity to illegally ship such wastes to foreign countries with lower costs but weaker capacity disposal. The pyramidal structure that has developed around the Basel Convention, with regional agreements covering almost all parts of the world, and with the formalised participation of the European Union through the recently amended Waste Shipment Regulation transposing the provisions of the Basel Convention into EU law, contributes to raise awareness on the transboundary movement of hazardous waste and better specify the provisions according to the respective regional necessities.

Such international engagement – if long-lasting and despite the complete absence of a strategic actor such as the US in any international agreement on the transboundary movement of hazardous waste – is necessary to avoid the occurrence of environmental disasters in the future and to repeat the same mistakes. As a matter of fact, environmental disasters inevitably pose a direct threat to public human health, possibly causing even death and thus infringing international human rights. The last largest environmental disaster caused by the illegal dumping of hazardous wastes was the 2006 Ivory Coast toxic waste dump¹⁹⁹, which has been recognized to be in direct violation of human rights.

In the night of 19 August 2006, 500 tonnes of waste were discharged from the Probo Koala ship in the port of Abidjan in Ivory Coast and taken to local landfills in densely populated urban areas. In the next days, almost 100.000 Ivorians manifested breathing problems, headaches, skin irritations, and demanded medical treatment. People that had been in indirect or direct contact with the substances discharged from the ship died. The Probo Koala was a ship registered in Panama, rented by the Dutch multinational company Trafigura, active in the transport of hydrocarbons. The ship had tried to dump the cargo in the port of Amsterdam, which the captain sustained to be water resulting from the washing of the ship – the so-called *slops*. The Dutch authorities confirmed the cargo consisted of highly toxic substances, and required more expensive treatments for disposal, which increased from 20 euros per cubic meter to 900 euros per cubic meter. Trafigura refused to pay such high costs, and ordered Probo Koala to depart, which after passing through Estonia and Nigeria, arrived in Ivory

¹⁹⁹ F., ROMANIN JACUR, *Violazioni di diritti umani dovute allo smaltimento di rifiuti tossici in Costa d'Avorio: il caso della nave Probo Koala*, in *Diritti umani e diritto internazionale*, 4, 2010, p. 169-173.

Coast. The management of the disposal was given to a local company, Tommy Ltd, which only asked 30-35 dollars per cubic meter of material.

The Trafigura insisted on denying any responsibility and sustaining that they were not aware of the toxic levels of the substances transported. In 2007, it reached an agreement with Ivory Coast and paid 198 million of dollars to clean up the contaminated territories. However, the case did not stop, as victims continues to ask for damages and international commissions and independent experts decided to more deeply analyse the case. The UN Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights wrote a report²⁰⁰ after visiting the Ivory Coast and the Netherlands. He has identified the violation of the right to life²⁰¹ and the right to health²⁰², and he has recalled other important principles of the human rights system, such as the right to an effective remedy²⁰³ and the right to freedom of expression²⁰⁴.

The serious violations of human rights in Ivory Coast show the lack of effective application of those international norms that have been precisely developed to avoid similar tragedies and that have been the focus of this research, and they thus become an ever-lasting warning that must kept in mind by current and future generations and decision-makers, so as not to repeat the mistakes of the past.

²⁰⁰ Report of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Okechukwu Ibeanu, 3 September 2009, UN Doc. A/HRC/12/26/Add.2.

²⁰¹ Art. 3 Universal Declaration of Human Rights adopted in Paris on 10 December 1948. Hereinafter: UDHR; art. 6 International Covenant on Civil and Political Rights. Hereinafter: ICCPR.

²⁰² Article 25, par. a, UDHR; art. 12 International Covenant on Economic, Social and Cultural Rights, adopted on 16 December 1966.

²⁰³ Art. 2, par. 3, ICCPR.

²⁰⁴ Art. 19, ICCPR.

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SOMMARIO

Il presente elaborato si prefigge lo scopo di analizzare il fenomeno dei crimini ambientali, con una particolare attenzione rivolta al traffico illecito di rifiuti pericolosi. La scelta di tale tematica è stata dettata dal continuo rischio di disastri ambientali causati dall'attività dell'uomo nell'ecosistema, che nonostante l'esistenza di normative a livello sia internazionale che nazionale continua ad evaderle con lo scopo di trarre profitto, a discapito della preservazione dell'ambiente e della salute umana.

L'introduzione dell'ambiente sull'agenda internazionale avvenne negli anni '60, quando divenne una tematica di rilievo all'interno delle politiche nazionali degli Stati, e crebbe di importanza quando le Nazioni Unite convocarono la Conferenza di Stoccolma sull'ambiente umano nel 1972. La conseguente Dichiarazione di Stoccolma fu il primo documento nel diritto internazionale dell'ambiente a stabilire il collegamento tra diritti umani, salute e protezione ambientale, evidenziando come tutte le risorse naturali debbano essere preservate nell'interesse delle presenti e future generazioni. A seguito della Dichiarazione di Stoccolma, più di 250 accordi internazionali e regionali sull'ambiente sono stati adottati, ma con il risultato paradossale che più regole venivano introdotte, più l'evasione delle stesse aumentava, soprattutto da parte di individui o compagnie con la volontà di trarre benefici finanziari. Da qui, l'emergere dei crimini ambientali, di cui ad oggi non esiste una singola né universalmente accettata definizione, ma che si possono generalmente definire come quelle attività illegali perpetrate contro l'ambiente che vanno a vantaggio di individui, gruppi o compagnie tramite lo sfruttamento, il danno, il commercio o il furto di risorse naturali. Per la loro stessa natura, i crimini ambientali sono spesso transnazionali, coinvolgendo per effetti e organizzazione più di uno Stato. Nonostante l'assenza di una definizione consensuale, una classificazione di crimini ambientali è stata adottata da importanti organi internazionali quali l'INTERPOL, l'UE, il Programma delle Nazioni Unite per l'ambiente (UNEP) e l'Istituto internazionale delle Nazioni Unite per la ricerca sul crimine e la giustizia (UNICRI), che hanno identificato cinque tipologie di offese:

- Il traffico illecito di specie selvatiche, in contravvenzione alla Convenzione di Washington del 1973 sul commercio internazionale delle specie minacciate di estinzione;
- Il traffico di sostanze danneggianti lo strato di ozono, in contravvenzione al Protocollo di Montreal del 1987 sulle sostanze che impoveriscono lo strato di ozono;
- Lo scarico e il trasporto illecito di rifiuti pericolosi in contravvenzione alla Convenzione di Basilea del 1989 sul controllo dei movimenti transfrontalieri di rifiuti pericolosi e del loro smaltimento;

- La pesca illegale non dichiarata e non regolamentata in contravvenzione ai controlli imposti dalle organizzazioni regionali di gestione della pesca;
- La deforestazione illegale e il commercio in legname in contravvenzione alle leggi nazionali.

Il traffico illecito di rifiuti pericolosi è quindi regolato dal punto di vista internazionale dalla Convenzione di Basilea, e si riferisce al trasferimento di categorie specifiche di sostanze potenzialmente tossiche da un Paese ad un altro con lo scopo di smaltirle. È diventato un fenomeno di massa negli anni '60 e '70, quando gli Stati industrializzati hanno cominciato a introdurre regole più stringenti per lo smaltimento di rifiuti pericolosi riguardo in particolare il processo e le strutture di tale attività, implicando quindi costi più elevati. Molte compagnie di Paesi industrializzati hanno intrapreso la spedizione dei rifiuti verso Paesi in via di sviluppo in Africa ed Asia, dove i costi di smaltimento erano notevolmente più bassi. Queste destinazioni erano anche caratterizzate da regolamentazioni ambientali più permissive, dalla corruzione dei leader politici e da un'opinione pubblica disinformata perché mancante dei mezzi per essere aggiornata su tali pratiche illegali. Di conseguenza, i rifiuti tossici si muovevano lungo il cosiddetto percorso di minor resistenza, il *path of least resistance*, facilitato dall'assenza di ostacoli legali, sociali e politici, e nonostante la mancanza di strutture di smaltimento adeguate che potessero smaltire i rifiuti senza rischi per l'ambiente e la salute umana. Una serie di incidenti accaduti negli anni '80 a seguito della spedizione e lo sversamento di rifiuti in luoghi non adeguati hanno reso il fenomeno del movimento transfrontaliero di rifiuti pericolosi di rilevanza politica e globale, arrivando all'attenzione delle Nazioni Unite grazie alle proteste dei Paesi in via di sviluppo, e in particolare dell'Africa, che in una Risoluzione del 1988 dell'Organizzazione dell'Unità Africana ha dichiarato lo sversamento di rifiuti tossici un crimine contro l'Africa e le popolazioni Africane.

L'Assemblea Generale delle Nazioni in due Risoluzioni del 1987 e 1988 ha riconosciuto la responsabilità degli Stati industrializzati nel movimento e sversamento illecito di rifiuti tossici, e si è appellata a tutti gli Stati affinché trovassero una soluzione comune globale, evidenziando la necessità di fermare il trasporto illegale e permetterlo solo con l'autorizzazione da parte dei Paesi di importo e transito. Le negoziazioni per l'adozione di una Convenzione globale sul controllo del movimento transfrontaliero di rifiuti pericolosi si sono tenute nell'ambito del Programma delle Nazioni Unite per l'ambiente, dove è stato creato un Gruppo di Lavoro Ad Hoc, all'interno del quale sono subito emerse contrapposizioni ideologiche tra Paesi industrializzati e in via di sviluppo. I Paesi in via di sviluppo richiedevano un divieto totale e generalizzato al movimento transfrontaliero di rifiuti, mentre i Paesi industrializzati si opponevano a eccessive restrizioni che portassero a svantaggi in termini economici

e sociali. La Convenzione, che alla fine non ha incluso il divieto generalizzato, è stata adottata a Basilea il 22 marzo 1989, ed ha subito assunto il ruolo del primo strumento globale per la regolamentazione del movimento transfrontaliero di rifiuti pericolosi, nonché del trattato ambientale a più ampia partecipazione di sempre, con ad oggi 186 Stati aderenti, oltre alla partecipazione dell'Unione Europea.

Come enunciato nel Preambolo della Convenzione di Basilea, il suo obiettivo è proteggere l'ambiente e la salute umana dagli effetti nocivi della produzione e del trasporto di rifiuti tossici. Pur non imponendo un divieto generalizzato alle esportazioni di rifiuti pericolosi, la Convenzione stabilisce un regime normativo basato su misure preventive e restrittive. Lo scopo è permettere le spedizioni transfrontaliere di rifiuti pericolosi, ma riducendo i rischi derivanti dalla loro produzione e dal loro movimento transfrontaliero, predisponendo una procedura di controllo per le spedizioni, e garantendo la gestione ecocompatibile dei rifiuti, l'*environmentally sound management*. Da qui, il principio di autosufficienza, principio base della Convenzione di Basilea e di ogni convenzione sul movimento transfrontaliero di rifiuti pericolosi, che consiste di tre elementi normativi distinti ma integrati: il principio di prossimità – la preferenza per uno smaltimento a livello nazionale –, il principio di adattamento infrastrutturale – l'obbligo di dotarsi degli impianti necessari allo smaltimento interno – e il principio di riduzione al minimo del movimento transfrontaliero.

I movimenti transfrontalieri di rifiuti pericolosi vengono autorizzati dalle parti coinvolte solo se: a) lo Stato di esportazione non dispone dei mezzi tecnici e degli impianti necessari o dei siti di eliminazione richiesti per eliminare i rifiuti in questione secondo metodi ecologicamente razionali ed efficaci; b) i rifiuti in questione sono necessari come materia prima per l'industria del riciclaggio o del recupero dello Stato di importazione; c) il movimento oltre frontiera in questione è conforme ad altri criteri che saranno stabiliti dalle Parti purché tali criteri non siano in contraddizione con gli obiettivi della Convenzione. Una volta raggiunto uno dei suddetti criteri, ogni possibile spedizione transfrontaliera viene sottoposta alla procedura di previo consenso informato, enunciata all'articolo 6 della Convenzione, che rappresenta il cuore del suo sistema preventivo ed ha come obiettivo finale l'autorizzazione scritta per la spedizione da parte dello Stato di importazione e di transito. Viene quindi definito traffico illecito qualsiasi movimento transfrontaliero di rifiuti pericolosi o di altri rifiuti che non rispetti la procedura di previo consenso informato o che comporti una loro eliminazione deliberata, in violazione delle disposizioni della Convenzione e dei principi generali del diritto internazionale, quale il divieto di inquinamento transfrontaliero.

Nel sistema internazionale di regolamentazione del movimento oltre frontiera di rifiuti pericolosi, la Convenzione di Basilea è posta al centro di una rete di strumenti regionali. La necessità di configurare la Convenzione come il punto di riferimento globale per una serie di trattati a campo di applicazione più ristretto è nata sin dal momento delle negoziazioni, in quanto era chiaro che un singolo strumento vincolante globale non potesse prevedere la grande varietà di situazioni particolari esistenti a livello regionale e locale. L'articolo 11 è stato designato come quello che avrebbe stabilito un *Sistema Basilea*, seguendo uno schema piramidale, con la Convenzione di Basilea gerarchicamente superiore agli altri strumenti. Le Parti alla Convenzione possono quindi concludere accordi o altre convenzioni bilaterali, multilaterali e regionali concernenti i movimenti oltre frontiera di rifiuti pericolosi o di altri rifiuti con Parti o non Parti a condizione che tali accordi o convenzioni non compromettano la gestione ecologicamente razionale dei rifiuti pericolosi e degli altri rifiuti prescritta dalla Convenzione. Esempi di convenzioni adottate sulla base dell'articolo 11 sono la Convenzione di Bamako del 1991 sul bando dell'importazione in Africa e il controllo del movimento transfrontaliero di rifiuti pericolosi all'interno dell'Africa, la Convenzione di Waigani del 1995 per bandire l'importazione nei Paesi delle *Forum Islands* di rifiuti pericolosi e radioattivi e per controllare il movimento transfrontaliero e la gestione di rifiuti pericolosi all'interno della regione del Sud Pacifico, e il Protocollo del 1996 sulla prevenzione dell'inquinamento del Mar Mediterraneo da movimenti transfrontalieri di rifiuti pericolosi e la loro eliminazione.

La Convenzione di Bamako è nata dall'esigenza di rimediare all'assenza di un divieto generalizzato alle esportazioni di rifiuti pericolosi, immediatamente a seguito dell'adozione della Convenzione di Basilea. I Paesi Africani hanno quindi imposto un bando totale all'importazione di rifiuti pericolosi provenienti da Paesi non Africani, intesa sia per scopi di smaltimento che di riciclaggio. La Convenzione di Waigani è stata adottata per proteggere i fragili ecosistemi delle isole del Sud Pacifico ed evitare che diventino discariche per rifiuti tossici, un problema che Paesi così piccoli non potevano gestire efficacemente a livello globale e rispetto ai Paesi industrializzati della zona, Australia e Nuova Zelanda. Il Protocollo sul Mediterraneo è un accordo tra Paesi industrializzati e Paesi in via di sviluppo per garantire la protezione di un'area geografica a rischio e di comune interesse quale quella del Mar Mediterraneo, ed il cui principio base è la cooperazione tra Stati aderenti.

Molteplici organizzazioni governative e non governative, assieme a network formali e informali, contribuiscono alla lotta contro il traffico illecito di rifiuti pericolosi, e il Segretariato della Convenzione di Basilea promuove la cooperazione con esse per intensificare l'applicazione del regime della Convenzione. Tra queste, figurano l'Organizzazione mondiale delle dogane (OMD) e l'Organizzazione internazionale della polizia criminale (INTERPOL). L'OMD è l'unica

organizzazione internazionale con competenza in materia di dogane, e nel 2008 ha adottato un Piano di Azione per combattere i crimini ambientali transnazionali, che incoraggia le dogane a organizzare o partecipare in operazioni congiunte. Tra queste le più rilevanti a partire dal 2009 sono state le Operazioni Demeter, che si sono focalizzate sulle spedizioni di rifiuti tossici destinate ai Paesi africani e del Pacifico, ed hanno contribuito al sequestro di ingenti quantità di rifiuti trasportati illegalmente. L'INTERPOL, in quanto la più grande organizzazione internazionale di polizia, si impegna a combattere i crimini ambientali grazie al lavoro dell'*Environmental Compliance and Enforcement Committee*, che ha creato quattro gruppi di lavoro, tra cui il *Pollution Crime Working Group*. Il progetto più celebre e di successo intrapreso dal *Pollution Crime Working Group* è il Progetto Eden, in cui è stata lanciata nel 2012 l'Operazione Enigma, con l'obiettivo di identificare e bloccare la raccolta, l'importazione, l'esportazione e la spedizione di rifiuti di apparecchiature elettriche ed elettroniche.

L'Unione Europea è l'unica organizzazione internazionale aderente alla Convenzione di Basilea. Tuttavia, ai suoi albori, non possedeva alcuna competenza in materia ambientale. La Comunità Economica Europea (CEE) istituita dal Trattato di Roma del 1957 aveva lo scopo di creare uno spazio comune per cooperare e raggiungere obiettivi commerciali ed economici, e in un periodo tale come quello del dopoguerra l'imperativo categorico era crescere industrialmente e non concentrarsi su tematiche di salvaguardia ambientale. Solo a seguito della Dichiarazione di Stoccolma e del vertice europeo di Parigi del 1972 sono state prese le prime decisioni sulla protezione dell'ecosistema da parte dei Capi di Stato e di Governo della CEE, e nel 1973 è stato adottato il primo Programma di Azione delle Comunità Europee sull'Ambiente per gli anni 1973-1976, che ha formalmente posizionato la tematica ambientale sull'agenda politica. A causa della mancanza di articoli espliciti nell'area della politica ambientale, numerosi regolamenti e direttive sono stati adottati sulla base degli articoli 100 e 235 del Trattato di Roma, dove l'articolo 100 si riferiva a situazioni dove differenze in legislazioni ambientali nazionali avevano effetti nocivi per il mercato comune, e l'articolo 235 alle situazioni in cui l'azione comunitaria era necessaria per raggiungere, nel corso delle operazioni del mercato comune, uno degli obiettivi della Comunità. Solo con l'Atto Unico Europeo del 1986 sono state introdotte competenze specifiche negli articoli 130R, 130S e 130T nel nuovo Titolo VII sull'ambiente, e il Trattato di Maastricht del 1992 ha formalmente incluso la protezione ambientale tra gli obiettivi dell'Unione Europea, allora costituita da una struttura a 3 pilastri, poi eliminata dal Trattato di Lisbona. Attualmente, la politica ambientale è una competenza condivisa dell'Unione Europea, articolata negli articoli 4 e dal 191 al 193 del Trattato sul Funzionamento dell'Unione Europea (TFUE), dove l'articolo 193 enuncia che il diritto europeo stabilisce degli standard minimi

di protezione dell'ambiente e gli Stati Membri possono introdurre regole di protezione più stringenti rispetto a quelle europee.

Il primo strumento normativo adottato dalla CEE per disciplinare il movimento di rifiuti pericolosi è stato la Direttiva del Consiglio 84/631/CEE del 6 dicembre 1984, che conteneva regole precise sul controllo del movimento transfrontaliero di rifiuti tossici all'interno della Comunità ed è stato adottato sulla base degli articoli 100 e 235 del Trattato di Roma. Tuttavia, il 7 febbraio 1994 la Comunità Europea ha aderito alla Convenzione di Basilea, avendo introdotto l'anno precedente tutte le sue disposizioni adottando il Regolamento 259/93/CEE relativo alla sorveglianza e al controllo delle spedizioni di rifiuti all'interno della Comunità Europea, nonché in entrata e in uscita dal suo territorio. Integrando sia la Convenzione di Basilea che la Decisione dell'OCSE C(92)39 sul controllo dei movimenti transfrontalieri di rifiuti destinati a operazioni di recupero, ha stabilito due procedure a seconda che i rifiuti fossero destinati allo smaltimento o al recupero e riciclaggio, distinguendole sulla base della destinazione od origine dei rifiuti all'interno o al di fuori della Comunità.

Il 14 giugno 2006 è stato adottato il Regolamento 1013/2006/CE relativo alle spedizioni di rifiuti per sostituire il Regolamento del 1993 e integrare gli emendamenti apportati alla Convenzione di Basilea e la nuova Decisione dell'OCSE C(2001)107 sul controllo dei movimenti transfrontalieri di rifiuti destinati a operazioni di recupero. Dalla sua entrata in forza nel 2007, il Regolamento ha disciplinato le spedizioni di rifiuti tra gli Stati Membri dell'UE e tutti i flussi di esportazione tra loro e i Paesi non membri dell'UE. Lo scopo ultimo di tale Regolamento è la protezione dell'ambiente, e a questo fine sono istituiti regimi e procedure di controllo e applicazione.

Esattamente come nella Convenzione di Basilea, la procedura di controllo più rilevante del Regolamento europeo è quella di previo consenso informato che si applica a tutte le spedizioni di rifiuti destinati allo smaltimento, e ai casi specifici di spedizioni di rifiuti destinati al recupero indicati dal Regolamento. Per tutte le altre tipologie di spedizioni, si applicano i requisiti di ordine generale contenuti nell'articolo 18. Il Regolamento autorizza l'autorità competente di spedizione a negare e bloccare la spedizione qualora le strutture di recupero e smaltimento nel Paese di destinazione non corrispondano per il tipo di rifiuto in questione agli standard esistenti nel Paese di origine, così da rendere più facile fermare le spedizioni verso altri Stati per gli Stati membri con standard di protezione ambientali più elevati. L'articolo 50 si focalizza sulle misure di applicazione, secondo cui gli Stati Membri devono istituire pene nel caso di violazione delle disposizioni, e informare la Commissione sulle leggi nazionali relative alla prevenzione e individuazione di spedizioni di rifiuti e sulle loro relative pene, che secondo il Regolamento devono essere effettive, proporzionate e dissuasive. Tra le

misure dell'articolo 50 rientrano le ispezioni di stabilimenti e compagnie coinvolte nelle spedizioni di rifiuti transfrontaliere. Il Regolamento 660/2014/UE del 15 maggio 2014 emenda il Regolamento del 2006 e introduce delle specifiche sulle ispezioni, obbligando gli Stati Membri a sviluppare dei piani di ispezione, con l'obiettivo di condurle in tutta l'Unione Europea sulla base di standard minimi concordati.

Nel supporto all'implementazione delle modifiche apportate dal Regolamento 660/2014/UE ha un ruolo fondamentale l'IMPEL, la rete dell'Unione europea per l'attuazione e il controllo del rispetto del diritto dell'ambiente. L'IMPEL è un'associazione internazionale no-profit che riunisce le autorità ambientali degli Stati Membri dell'Unione Europea, istituita nel 1992 con l'obiettivo di assicurare un'applicazione più effettiva del diritto ambientale europeo. Una delle aree tematiche su cui lavora è quella del *transfrontier waste shipment* (TFS), che promuove l'implementazione e l'applicazione delle norme del Regolamento Europeo relativo alle spedizioni di rifiuti, intraprende progetti di *enforcement* comuni che tendano ad un'applicazione uniforme a livello europeo. Un progetto condotto nell'ambito delle spedizioni di rifiuti è l'*Enforcement Actions*, che tra il 2014 e il 2015 ha portato all'organizzazione di più di 17.000 ispezioni per rilevare spedizioni illegali. Inoltre, a fine 2016 l'IMPEL ha adottato delle linee guida per supportare gli enti di ispezione degli Stati Membri ad elaborare dei piani di ispezione uniformi a livello europeo in vista dell'implementazione del Regolamento 660/2014.

Se molteplici sviluppi in termini legislativi sono stati intrapresi sia a livello globale che europeo da quando è emerso il problema del movimento transfrontaliero di rifiuti pericolosi, permane la necessità nel proseguire con valutazioni, revisioni e modifiche della legge, insieme alla sua rispettiva applicazione, così da affrontare una tematica così urgente ed in continua espansione che ha il potere di causare gravi danni all'ambiente e alla salute umana, con implicazioni politiche ed economiche per i Paesi coinvolti. La Convenzione di Basilea, le sue reti organizzative di applicazione, gli accordi regionali e la partecipazione dell'UE al regime normativo contribuiscono ad aumentare la consapevolezza e l'impegno a livello internazionale, con l'obiettivo di evitare il ripetersi di disastri ambientali ad alto impatto sulla salute ed in violazione dei diritti umani. Un esempio è il caso della Costa d'Avorio dell'agosto 2006, in cui la nave Probo Koala ha sversato 500 tonnellate di rifiuti tossici nel porto di Abidjan, e circa 100.000 abitanti hanno manifestato nei giorni successivi problemi respiratori, mal di testa e irritazioni dermatologiche, mentre le persone entrate in contatto con i rifiuti sono decedute. Le Nazioni Unite hanno riconosciuto che tale sversamento ha violato il diritto alla vita e alla salute delle persone, violazioni che dimostrano la completa inadempienza rispetto alla normativa esistente, sviluppata proprio per evitare tragedie di questo genere.