Cartagena Protocol

A New Hot Spot in the Trade-Environment Conflict

by Veit Koester*

Introduction

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity regulates international trade in Living Modified Organisms (LMOs). As the Protocol concerns trade in commodities, *e.g.* genetically modified seeds and vegetables, it concerns a trade which is of major importance to the world's economy. The relationship between the Protocol and the World Trade Organization (WTO) is therefore of primary importance. The central point in the Protocol is the Precautionary Principle (PP). This principle is in itself of crucial importance when discussing the relationship between the Protocol and the WTO. Therefore the Protocol must, in more than one sense, be considered a milestone in the discussion about the relationship between trade and environment. The issue of the extent to which the provisions of the Protocol will be respected by the WTO's dispute settlement mechanism (DSM) might therefore be regarded as decisive for whether it is at all possible to unite trade and environmental interests under the present WTO system. The purpose of this article is to discuss this problem and based upon all the facts, to seek some conclusions.

The 1992 Convention on Biological Diversity (CBD)[1] is the first international legally binding instrument containing provisions on biotechnology. These provisions reflect the potential benefits and risks that modern biotechnology entails.

One of the provisions, Art. 19(3) contains an obligation for the Parties to the Convention 'to consider the need for and modalities of a Protocol setting out appropriate procedures, including, in particular, advance informed agreement, in the field of the safe transfer, handling and use of any LMOs[2] resulting from biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity.' The term 'transfer' is meant to cover transboundary movements, *i.e.* export and import, including non-deliberate movements,[3] while the notion 'transboundary movement' was introduced in the Jakarta Mandate (see section titled 'The start of the negotiations', below).

This provision was the result of a compromise that was only made during the last hours of negotiation[4] and the history of the negotiation reflects the fact that modern biotechnology was a topical issue some ten years ago. This also appears in Agenda 21, the global action plan for environment and development, which was adopted at UNCED in 1992. A whole chapter (16) in this action plan is devoted to the 'environmentally sound management of biotechnology'.

Article 19(3) in CBD resulted in what became the first global environmental agreement in the new millennium, namely the adoption[5] in Montreal of the Cartagena Protocol on Biosafety to the Convention of Biological Diversity[6] on 29 January 2000.

The negotiations of the Protocol

The start of the negotiations

Before the adoption of the Protocol there was a long complicated negotiation process that ended in resounding failure at Cartagena in February 1999, where the Working Group had originally planned to complete the negotiations and then adopt the Protocol. It was doubtful whether it would ever be possible to come to an agreement.[7]

In the period between the adoption of the CBD and the first Conference of the Parties (COP), a panel consisting of 15-20 countries and international organizations, set up by the Executive Director of UNEP with a view to preparing for the entry into force of the CBD, had examined the problems with regard to Art. 19(3). The panel almost unanimously (the Organization for Economic Co-operation and Development (OECD) and the United States dissenting) concluded that a Protocol should be developed and indicated the rough content of such a Protocol.[8]

The first Conference of the Parties (COP1) in November/December 1994 decided to establish an Open Ended Ad-Hoc Group of Experts on Biosafety which on the basis of input from the Cairo panel (which consisted of 15 experts designated by governments) was to recommend whether or not a Protocol should be elaborated, and if so, the possible content of such a Protocol. Most countries participating in the working group backed calls for a Protocol although there was disagreement on whether this should contain provisions on liability and redress and social economic considerations.

At COP2 (in November 1995) the Open-Ended Ad Hoc Group was established, which had a mandate to elaborate the Protocol. The mandate ('the Jakarta Mandate') was detailed, marked by subtleties and items for clarification reflecting the disagreement on the necessity and content of Protocol.[9]

The Working Group had its first meeting in Aarhus, Denmark, in July 1996 and thereafter held four meetings

* National Forest and Nature Agency, Denmark. This article was originally written in Danish. An abridged version was published in the Danish periodical *Juristen* (The Lawyer) in November 2000 under the title 'Cartagena – protokollen om 'biosafety' – en international aftale i brændpunktet mellem handel og miljoe' (*Juristen* 2000 pp. 335-348). This article has been translated and updated by the author, and edited by Yaw Osafo at the IUCN Environmental Law Centre. The author chaired the Open-Ended Ad Hoc Group on Biosefety to elaborate the Protocol, which is mentioned in the article.

0378-777X/01/$12.00 © 2001 IOS Press

(in May and October 1997, and February and August 1998) until its final meeting in January 1999 in Cartagena which, in one week, had to reach agreement on a Protocol based on a 'negotiating text' which still contained over 600 square brackets, reflecting the extent to which disagreement still existed. The meeting of the Working Group finished with a compromise text,[10] elaborated by the Chair, on which the Working Group did not succeed in reaching agreement. The Extraordinary COP that followed immediately thereafter was also unable to agree. The Extraordinary COP was therefore suspended.[11]

Following informal consultations in meetings in July and September 1999,[12] the Extraordinary COP resumed on 24 January 2000 after four days of informal consultations, and concluded at around 5 a.m. on 29 January with the adoption of the Protocol.

General environmental law problems

The background to the difficulties in reaching an agreement on the Protocol was related to general environmental law problems to do with the Precautionary Principle (PP) and the relationship between trade and the environment. These problems are coupled with the fact that the Protocol almost exclusively operates via trade regulatory measures. Furthermore, the scope of the Protocol has enormous implications for economic interests.[13]

It is possible only to guess the reasons why the negotiations failed in 1999, but succeeded one year later. A group of countries, the so-called 'Miami Group', consisting of Argentina, Australia, Canada, Chile, the US and Uruguay, blocked the finalization of the negotiations in 1999. At the WTO meeting in Seattle at the end of 1999, Canada and the US tried to further a decision on the creation of a working group on biotechnology. This attempt, which was regarded by a number of other countries as an attempt to 'kill' the suspended negotiation on the Biosafety Protocol, failed because of resistance from EU countries. Over 1999, growing scepticism towards products derived from gene technology and biotechnology had also been seen in countries such as Australia, Canada and the US.

Finally the biotechnology industry wanted the debate to be brought to a conclusion, to ensure that there were industry rules in place and there would therefore be predictability with regard to biotechnology practices and the sale of products.

The content of the Protocol: overview

The scope of the Protocol

The provisions in Articles 1, 2, 3 and 4 contain the objective, general provisions, use of terms and the scope of the Protocol. These will be discussed in more detail below.

The formal scope of the Protocol (Art. 4)[14] is 'transboundary movement, transit, handling and use of all modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health.'

With regard to 'handling and use' of domestic LMOs, the scope of the Protocol is limited to a general obligation in Art. 2(2) to 'ensure that the development, handling, transport, use and release [of LMOs] are undertaken in a manner that prevents or reduces the risks' as well as to some provisions on 'risk management' in Art. 16. However, the scope of the Protocol includes domestic LMOs in Art. 4, and a number of other provisions do not deal exclusively with transboundary movements, thus covering the full scope of the Protocol, *e.g.* Articles 20 (Information Sharing and the Biosafety Clearing-House), 22 (Capacity-Building) and 23 (Public Awareness and Participation).

The Protocol does not include pharmaceuticals for humans to the extent to which pharmaceuticals are regulated by other international agreements or organizations, but the Parties have the right to subject such LMOs to risk assessment prior to the making of decisions on import (Art. 5). Furthermore, transit and contained use are not included in the provisions of the Protocol on the Advanced Informed Agreement (AIA) procedure, but other measures are permissible (Art. 6).

An LMO is defined as 'any living organism that possesses a new combination of genetic material obtained through the use of modern biotechnology'. Article 3 also includes definitions of 'living organism' and 'modern biotechnology'. The definition is not much different from the concept of a (living) 'genetically modified organism' in the EC legislation.[15]

Procedures

Articles 7–13 contain provisions on procedures. Articles 7–10 deal with LMOs for intentional introduction into the environment. They ensure that the Party of Import will be notified (Art. 8 and Annex I) in order to be in a position to make an informed decision on import prior to the intentional transboundary movement, with possibilities to deviate from the procedure, *e.g.* for certain categories of LMOs (Art. 13) or for subsequent imports (Art. 12.4). This procedure is known as the AIA procedure ('Advance Informed Agreement').

With regard to LMOs which are intended for direct use as food, feed or processing (FFP) and may be subject to transboundary movements for that purpose, the provisions on the AIA procedure do not apply. These LMOs are covered by Art. 11, according to which potential exporting countries shall provide, within 15 days after their final decision regarding domestic use, all relevant information (re. Annex II which includes a risk assessment in conformity with Annex III) to potential importing countries (which are Parties to the Protocol) via the Biosafety Clearing-House or by direct communication to Parties, having informed the Secretariat in advance that they do not have access to the Clearing-House.

A Party taking a decision on import may take such a decision either under its national legislation which should be consistent with the objective of the Protocol (Art. 11(4)) or, if the Party is a developing country or a country with an economy in transition without a domestic regulatory

0378-777X/01/$12.00 © 2001 IOS Press

framework, according to a risk assessment under Annex III of the Protocol and within a predictable time frame not exceeding 270 days (Art. 11(6)). Contrary to what applies under the AIA procedure (Art. 15(1) and (2)), the Party of Import cannot demand that the Party of Export undertakes a risk assessment (other than that included in its submission to the Clearing-House) or pays the costs of such an assessment (Art. 15(2) and (3)). With regard to industrialized countries and other countries with a domestic regulatory framework, the provisions do not include an explicit obligation for the Party of Export to wait for the decision of the Party of Import.

Both sets of rules explicitly accept the application of the PP as a basis for the decision on import (see 'The PP in the Protocol', below).

Risk assessment and risk management

The provisions are contained in Art. 15 and 16. Attached to them is a detailed annex, Annex III, on risk assessment. The main principle of Art. 15 is that risk assessment shall be carried out in a 'scientifically sound manner', and that risk assessment is obligatory with regard to LMOs destined for introduction into the environment. The Parties shall, according to Art. 16(1), regulate, manage and control risks that are identified under the Protocol. Article 16(4) includes a provision which is applicable for both imported and for domestically produced LMOs, namely that these must undergo 'an appropriate period of observation… before [they are] put to use'.

Courtesy: Neue Zürcher Zeitung

Unintentional and illegal transboundary movements

The provisions in Art. 17 on unintentional transboundary movements are to a large extent based on general international principles on significant danger or damage originating under the jurisdiction or control of one State to the environment, which is under the jurisdiction of other States.

Article 25 contains obligations for the Parties to adopt domestic measures aimed at preventing and penalizing transboundary movements of LMOs carried out in contravention of domestic measures in order to implement the Protocol.

Identification *etc.*

Article 18 contain provisions on handling, transport, packaging and identification. The identification obligations, which do not concern purely domestic identification, vary according to the character of LMOs. While for LMOs destined for introduction into the environment there is an obligation for the accompanying documentation to identify them clearly as LMOs (Art. 18(2c)), the obligation concerning LMOs for food, feed or processing is restricted to a requirement that the accompanying documentation 'clearly identifies that they may contain LMOs and are not intended for intentional introduction into the environment' (Art. 18(2a)). However, no later than two years after the date of entry into force of the Protocol, the Conference of the Parties serving as a Meeting of the Parties to the Protocol (MOP) shall take a decision 'on the detailed requirements for this purpose including specification of their identity and any unique identification' (Art. 18(2c)).

Bilateral, regional and multilateral agreements and the relationship with non-Parties (Art. 14)

Parties may enter into agreements with other Parties regarding transboundary movements of LMOs consistent with the objective of the Protocol provided that such agreements do not result in a lower level of protection.

According to Art. 24, trade in LMOs with non-Parties shall be consistent with the objective of the Protocol.[16] Parties may also enter into agreements with non-Parties regarding such trade.

Liability, redress and socio-economic considerations

Article 27 on liability and redress is limited to an obligation for the Parties to adopt at their first MOP a process with respect to the appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of LMOs. This will not be easy in spite of the recently adopted Protocol on the same subject issue within the framework of the Basel Convention. With regard to Art. 25, which legitimates to a certain extent socio-economic considerations in decision-making under the Protocol, see 'Other relevant provisions', below.

Other provisions

In Art. 19–23 and 28 there are provisions on the designation of competent national authorities, national focal point(s), information sharing, the Biosafety Clearing-House, confidential information, capacity building and public participation as well as financial resources for the implementation of the Protocol to developing Parties and Parties with economies in transitions.

It is striking that Art. 23 on public awareness and participation contains a more unconditional and wider obligation to consult the public in decision-making processes regarding LMOs than the provision dealing with the same subject in the Aarhus Convention on civil rights with regard to environmental matters.[17]

0378-777X/01/$12.00 © 2001 IOS Press

Traditional provisions

Articles 29–40 mainly contain traditional provisions on Meetings of the Parties, the Secretariat, reporting, entry into force *etc*. One of the provisions, namely Art. 34 on compliance, will be discussed in 'The DSM of the Protocol and compliance', below, in connection with the provisions in the Protocol on dispute settlement (Art. 32).

Main problems during the negotiations

Some of the provisions of the Protocol reflect issues of general international environmental law and will therefore be analysed and discussed in a more detailed manner below. This is particularly relevant with regard to the relationship between international regulations on trade and environment, including the issue of the legitimacy of socio-economic considerations. Closely connected to this are the provisions on dispute settlement, compliance, and the Precautionary Principle (PP).

Included in the main problems which were of a more political nature and will therefore not be discussed here, despite the fact that some of them accentuate the problems with regard to trade and environment, is the issue of the scope of the Protocol, *inter alia* to which extent the Protocol should regulate LMO commodities. In this regard also the questions of identification of LMO commodities, and 'products thereof', as well as the issue of whether human health should be taken into consideration in risk assessments, were extremely controversial.

As it appears from the sections above on 'Procedures' and 'Identification, *etc*.', LMO commodities are included in the Protocol although they are not included in the provisions on the AIA procedure, while products of LMOs, as defined in more detail in Art. 20(3), are subject only to the Clearing-House Mechanism (CHM). Human health aspects are included in all the provisions of the Protocol regarding risk assessments *etc*. in the format of the standard formula 'taking also into account risks to human health'.[18]

Trade and environment

The starting point of the theory

Discussions on the legal relationship between international environmental agreements and other international rules, especially with regard to trade, have continued for several years, not least since the creation of the WTO (and thereby the entry into force of its legal system) on 1 January 1995. The relationship between unilateral environmental measures with trade implications (including such EC measures), and the WTO legal system, has been focused on. The issue of trade and the environment is included as an important element in Agenda 21 (the global environmental action plan from 1992) especially in chapter 2 on international co-operation in order to promote sustainable development.

Discussions and analysis in extensive legal literature has been stimulated by a series of decisions from the 1990s by the dispute settlement mechanism of GATT, respectively WTO, regarding unilateral trade restrictions based on environmental considerations. This is due to the fact that these decisions raised doubts[19] about the extent to which the existing international environmental agreements including trade regulatory measures[20] would be respected in a conflict between trade and the environment.[21]

Regarding the relationship between the WTO's legal system and multilateral environmental agreements (MEAs) the discussions so far have been academic[22] because no conflict of this nature has been decided upon by the dispute settlement bodies of WTO or other institutions of a judicial character.[23] At the same time, WTO has had this problem on its agenda for several years, *inter alia* in ministerial conferences[24] without any indication that a general solution is foreseeable.[25] Some of the discussions have, after the introduction of the notion of sustainable development, also included a politically dominated dimension on whether the liberalization of the international trade is damaging or benefiting the environment[26] as well as whether it is legitimate or desirable that MEAs utilize trade regulatory measures[27] and, if so, what one should demand from agreements of this nature or from the WTO.[28]

When reading the existing literature one cannot avoid coming to the conclusion that the literature is influenced by whether the starting point is environmental or WTO law, or perhaps whether the author is a WTO lawyer or an environmental lawyer. To illustrate this, the starting point for this article is environmental law and the conclusions reached in this article are probably not free from influence of that factor.

Important questions

Important questions to ask are:

– to what extent is it possible for the WTO dispute settlement mechanism (DSM) to take environmental considerations into account, and
– to what extent can the WTO DSM take into considerations MEAs in its decision making?

These questions will be discussed below, using the existing WTO decisions and the literature as a starting point, with an effort being made to draw some conclusions. The WTO legal system and its provisions dealing with the environment and its dispute settlement mechanism will also be touched upon. Furthermore, an effort will be made to answer the following questions:

– when is a conflict relevant from a theoretical point of view, and
– does a conflict have to be resolved in the WTO framework or by the dispute settlement mechanism of the MEA?

At the centre of the discussion below will be environmentally founded trade regulations, not individual, concrete decisions under MEAs, although it is obvious that it will be the individual decisions that will cause the conflicts and not the regulations. In 'The Biosafety Protocol and WTO', the results of the discussion in 'The WTO legal system, including its provisions with regard to environmental considerations and the WTO DSM: overview' and 'When is a conflict relevant and does it have to be

0378-777X/01/$12.00 © 2001 IOS Press

resolved within the framework of WTO or by the DSM of the MEA'? will be considered with regard to trade regulatory measures in the Biosafety Protocol. The section, 'The Biosafety Protocol and the Precautionary Principle', will focus on the provisions of the Protocol regarding the PP including whether these provisions are likely to create problems in relation to WTO.

The WTO legal system including its provisions with regard to environmental considerations and the WTO dispute settlement mechanism (DSM): overview

The DSM includes a 'Panel' and an 'Appellate Body' serving as an appeal mechanism for elements concerning 'issues of law' and 'legal interpretations'. The WTO mechanism is obligatory for WTO member countries and the mechanism can only apply to the WTO agreements and 'clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law'.[29] Compared to the DSM in *e.g.* MEAs, the WTO system is very efficient, because it is fast, its decisions are respected and to a certain extent there are possibilities for sanctions in the case of non-compliance. However, this does not mean that the system is beyond criticism.[30]

With regard to trade regulatory measures, the relevant principles in GATT 1994 are those referring to the 'most-favoured-nation treatment' (Art. I), the prohibitions against discriminating between domestic and foreign 'like products' in Art. III[31] and against quantitative import restrictions with the exception of some defined categories of prohibitions or restrictions (Art. XI) as well as the obligation of a non-discriminatory administration of import and export licences and quotas with regard to 'like products' (Art. XIII).[32]

Some of the most disputed cases are related to the interpretation of 'like products'. They refer to the GATT Panel decisions (1991 and 1994), the Tuna/Dolphin Dispute as well as the Appellate Body decision (1998) in the Shrimp/Turtle Dispute on the US embargo for environmental reasons against, respectively, certain tuna fish products and certain shrimp products. These embargoes were found to violate GATT/WTO provisions.[33]

The special agreements on Technical Barriers to Trade ('TBT Agreement') and on the Application of Sanitary and Phytosanitary Measures ('SPS Agreement') are also important in this respect.[34]

With regard to the problem of trade *vis-à-vis* the environment, it has to be mentioned from the outset that, although it was the Agreement of 1994 which established WTO, with 'the objective of sustainable development, seeking both to protect and preserve the environment', the body of WTO-related rules does not contain general exemptions of an environmental nature, nor does it provide a special status for MEAs. This is why the provision on general exceptions in GATT 1994 (Art. XX) is of crucial importance. Article XX contains exceptions for measures *i.e.* 'necessary to protect human, animal and plant life and health' and for measures 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption'. However, the measures must not, according to the article, imply 'arbitrary or unjustified discrimination between countries where the same conditions prevail or there is a disguised restriction on international trade'.[35]

Article XX and its interpretation has been at the centre of the decisions mentioned above even though these decisions have only dealt with unilateral trade regulatory measures. This is why Art. XX and the decisions referred to therein have been the subject of a vast theory on the relationship between WTO rules and MEAs.

The theory concerns the relationship between the WTO rules and MEAs (with trade provisions). What is essential for this article and which can probably be concluded on the basis of rules, decisions, and theory on trade measures is that:

- there is probably no disagreement that the objectives and the subject of MEAs include considerations that can be taken into account under Art. XX of GATT 1994;
- the nucleus of the problem is to what extent the measures of MEAs are, or will be assessed, as being legitimate within the framework of Art. XX by the WTO dispute settlement mechanism if a conflict occurs on the application of such measures, and this conflict is being brought before a Panel, and thereafter perhaps before the Appellate Body;
- the dispute settlement mechanism as a consequence of the provisions governing the mechanism must interpret WTO rules in accordance with 'customary rules of interpretation of public international law', which in accordance with practice is also assumed to include customary rules of public international law;
- Article 30 of the Vienna Convention on the Law of Treaties (which reflects customary international law) is applicable, including its provision that if two international agreements dealing with the same subject do not include provisions regulating this problem and there is a conflict then the conflict shall, generally speaking, be decided on the basis of the latest agreement if the concerned countries are Parties to both agreements,[36] while there is no rule provided if one country only is a party to one of the agreements;
- the dispute settlement mechanism in principle only has to clarify rights and obligations under WTO rules, and is not competent to apply all international rules which are theoretically applicable under the circumstances;
- the mechanism up to now has carefully avoided any expression of opinion about how it will react in the case where environmental measures have been taken in accordance with an MEA,[37] although it has included this question in its considerations;[38] and
- the mechanism has to seek to interpret the WTO rules in a way that will prevent them from being in conflict with an MEA.[39]

Disagreement on the theory ranges from the one extreme in Art. XX in GATT 1994 and similar rules where the interpretation of this article is very important since

0378-777X/01/$12.00 © 2001 IOS Press

the WTO dispute settlement mechanism (DSM) is likely to prioritize WTO rules, at least with regard to an earlier MEA,[40] to the other extreme where it is doubtful if the mechanism will address the issue of whether measures according to an MEA are in accordance with Art. XX[41] at all.

When is a conflict relevant, and when does it have to be resolved within the framework of the WTO or by the DSM of the MEA?

It is a precondition for the relevance of the above question that both sides in conflict are members of WTO. If only one country is Party to WTO it is not possible for that country to refer to the WTO provisions or to be met with an allegation from the other country that it has violated WTO provisions. Therefore the WTO DSM is not competent and the conflict has to be resolved within the framework of the relevant MEA or by other means. The likelihood of both sides not being WTO Parties is however not significant taking into consideration that the WTO had 135 Parties in mid-2000, although some major countries, such as China, are still not Parties, and furthermore, some MEAs have more than 135 Contracting Parties.

When both sides being Parties to WTO are Parties to an MEA, it is difficult to imagine a conflict about trade regulatory measures being applied in accordance with the MEA which is violating WTO provisions. In principle, this applies irrespectively of whether the MEA originated before or after GATT 1994.

If, in spite of this, a conflict occurs which concerns the domain of WTO, *i.e.* a conflict where a country maintains that measures applied are in conflict with GATT 1994, the DSM of WTO from a theoretical point of view will be competent.[42] However, in spite of the fact that the Mechanism is obligatory for WTO Parties,[43] the WTO has recommended that an effort be made to resolve such conflicts within the framework of the MEA.[44] The DSM under MEAs are and will almost always be weaker and less efficient than the WTO mechanism, which might tempt a country to use the WTO mechanism although this would be contentious from a political point of view.[45]

If the conflict was to be presented to the WTO DSM, opinions about how the mechanism would consider the conflict are divided, especially if an old MEA is involved. Considering the interest shown by the DSM in MEAs and in the light of recent development, it is likely that the mechanism would consider it important that the measures are applied in accordance with an MEA, perhaps even as measures being necessary under or demanded by the MEA.

The WTO DSM would probably respect measures which were applied in accordance with a younger MEA if the MEA did not contain provisions about the relationship with regard to existing international agreements. However, this situation is hypothetical because there are no MEAs of this nature and it is unlikely that such agreements will come into existence in the future.

The likelihood of the future development and adoption of an MEA (where trade regulatory measures play an important role) which is explicitly subordinate to existing agreements in the format of a provision to the effect that the MEA respects rights and obligations under existing agreements is improbable. Regardless of this, it is far from certain that the WTO DSM would discard an MEA of this nature. This is because countries that have participated in the negotiations of such an MEA would have considered the trade regulatory measures of the agreement to be in accordance with GATT 1994. Otherwise, it would have been unreasonable to adopt the agreement and to adhere to it later. If such an agreement obtains many ratifications it is difficult to see why important that agreement in a conflict presented to the WTO DSM should be less than important the old MEAs.[46]

Because there is no likelihood of a relationship between the WTO rules and a younger MEA, the only possible realistic relationship seems to be the establishment of some sort of overlapping treaty regime.

This is doubtful when considering that a conflict concerning measures which are not demanded by the MEA is permissible under the agreement, *e.g.* because it permits the application of stricter domestic measures than those reflected in the agreement. It is probable that those measures will undergo a stricter examination by the WTO DSM, along with a younger agreement, which in principle is not subordinate to existing agreements. This is particularly true if the basis for stricter measures in the agreement, which is often the case, demands that those measures be applied in accordance with existing international obligations.

If both Parties to the conflict are Parties to WTO but only one of them is a Contracting Party to the MEA, the WTO DSM is not only competent but also the only possible DSM.

With regard to relevant MEAs originating before GATT 1994, conflicts are unlikely because the majority of the world's countries are Parties to both sets of rules[47] and very few of the countries which trade extensively are not Parties to both regimes.[48] Speaking in practical terms, such a conflict is hypothetical and should therefore not be subject to further analysis in this article.

With regard to younger MEAs, problems are only relevant when they are established with a view to arranging them on the same level as WTO rules. However, problems might in this regard be particularly relevant because those MEAs, simply because they are 'younger', for a certain period of time will have far fewer Parties than the number of WTO Parties. This applies irrespective of whether 50 Parties are needed before an agreement enters into force, which is the case in the Biosafety Protocol and the (only) other existing international agreement of the same nature.[49]

The fact that a younger MEA for a certain period of time may or will have a far more limited number of Parties than WTO is probably not troublesome as long as it is clear that the period is likely to be transitional. This is because MEAs:

- are normally adopted by consensus;[50]
- are adopted by a considerable number of countries;[51]
- represent an international consensus[52] based on an international scientific, technical, economic and political assessment of what is needed to achieve the environmental goal in question; ➨

0378-777X/01/$12.00 © 2001 IOS Press

– normally reflect global interests (*erga omnes*), at least if their aims are of a global nature; and
– often demand a considerable number of ratifications to enter into force.

An important element is probably also whether the agreement has been signed by many States, or at least that there is no evident disproportion between the number of countries having signed the agreement and the number of countries participating in the consensus adoption of the agreement.

If these conditions are fulfilled and the measures under consideration are applied in accordance with the MEA it is unlikely that the measures will be assessed in a considerably different way by the WTO DSM than if both sides in the conflict had been Parties to the MEA. This applies if the MEA allows trade with non-Parties in accordance with its provisions and if it is possible to enter into bilateral or regional agreements with non-Parties (see 'Bilateral, regional and multilateral agreements and the relationship with non-Parties (Art. 14)' above). This implies that the WTO DSM probably will accept measures applied within the broad framework of Art. XX of GATT 1994 (or respectively TBT or SPS).

The conclusion of the analysis is that the likelihood of trade regulatory instruments of an MEA being presented to the WTO dispute settlement mechanism for its consideration and decision, realistically speaking, is relatively limited. In practice the possibility is probably limited to situations involving an MEA (1) which is younger than the WTO rules; (2) to which only one of the two WTO members is a party; (3) which is ranged on the same level as GATT 1994, and (4) which is so young that it still does not have a significant number of Contracting Parties. If this conclusion is correct, one could ask whether the problem of the relationship between WTO and MEAs is as great as it has been considered to be up to now.

The Biosafety Protocol and WTO

Proposals during the negotiations and the outcome. During the negotiations, three different proposals were considered:

– a provision subordinating the Protocol to existing agreements, thereby including GATT 1994, referred to as 'a saving's clause' because it 'saves previous agreements';
– a modified saving's clause which, to a limited extent, did not respect existing agreements; and
– a 'ranging on the same level clause', which was adopted.[53]

The fourth theoretical possibility, namely no provision at all, was not proposed seriously, probably because such a provision, irrespective of the sympathy some countries may have for such a clause, was regarded as having no chance of being agreed upon. All industrialized countries and developing countries would, because of trade considerations, dismiss this option, which would have implied either that GATT 1994 was subordinate to the Protocol or create a dubious legal precedent, because Art. 30 of the Vienna Convention does not always provide clear and unambiguous solutions for all cases of conflict between provisions of different treaties.

The provisions adopted

The clause adopted, consisting of the three last paragraphs in the Preamble, has the following content:

'*Recognizing* that trade and environment agreements should be mutually supportive with a view to achieving sustainable development,

Emphasizing that this Protocol *shall not* (author's emphasis) be interpreted as implying a change in the rights and obligations of a Party under any existing international agreements,

Understanding the above recital *is not* (author's emphasis) intended to subordinate this Protocol to other international agreements…'.[54]

The first recital[55] does not differ from what is typical in a Preamble, while the two other clauses differ from normal preamble language by using the words, respectively 'shall not be interpreted' as well as 'is not intended'. Because of that and the provisions in the Vienna Convention on the interpretation of treaties,[56] it is possible that GATT 1994 (see also the reference to trade and environment agreements in the first clause) and the Biosafety Protocol will be considered as ranging at the same level. An effort has been made to establish a 'co-habitation'[57] because the third preambular clause neutralizes the effect of the second one. The purpose is to interpret, in a conflict situation, what is in conflict with rights or obligations under the Protocol (or under WTO).

Of course it is possible to envisage conflicts where WTO provisions have been violated by the application of measures which *stricto sensu* are not violating provisions of the Protocol, *e.g.* if import of LMOs identical to those being produced and marketed in a country is refused by the same particular country. On the other hand, it is also possible to violate Protocol provisions without this violation being in conflict with WTO provisions, *e.g.* if the notification procedures of the Protocol are not complied with. However, if a breach of the obligations in the Protocol results in a real obstacle to trade, this might contribute to a violation of WTO provisions and thereby a temptation to use the WTO DSM, especially if there is no efficient Protocol compliance mechanism available. In this connection, Art. 10(5) and 11(7) of the Protocol are particularly interesting. Article 10(5) states that a failure by the Party of import to communicate its decision within the period of time prescribed (270 days) 'shall not imply its consent' and Art. 11(7) that it 'shall not imply its consent or refusal'. However, this problem falls outside the scope of the present analysis.

The WTO DSM is, as mentioned above, only entitled to apply GATT 1994, and not substantive provisions of other international agreements. Due to the reference in the mandate of the dispute settlement mechanism to 'customary rules of public international law', the dispute settlement mechanism should, under all circumstances, seek

0378-777X/01/$12.00 © 2001 IOS Press

to interpret GATT 1994 in a manner avoiding as far as possible conflicts with other international agreements.[58] However, due to the preambular provisions of the Biosafety Protocol, the discretion involved in deciding that there is a conflict will be narrower.[59]

Considering that the rule of exception in GATT 1994 Art. XX refers to measures being 'necessary to protect…', under the TBT agreement (Art. 2(2.)) exceptions for 'protection of human health…or the environment' are legitimate and that the SPS agreement contain provisions of a similar nature, it is likely to be assumed that the measures being taken under the Biosafety Protocol without further consideration must be respected as conforming with these exceptions, and therefore not in conflict with WTO rules, unless the measures are applied as 'a means of unjustifiable discrimination'.[60]

The measures that might be taken under national legislation in accordance with Art. 11 of the Protocol on 'FFP (food, feed and processing) commodities' (see 'Procedures' above) will probably constitute such an integral element of the Protocol that they also are covered by the above-mentioned conclusion. This applies regardless of the fact that the provisions of the Protocol to a large degree are built on precautionary considerations. With regard to this problem and that of the relationship to the provisions on precaution in the SPS agreement, see 'The Biosafety Protocol and the Precautionary Principle' below.

Other relevant provisions

On the other hand, it is – regardless of the co-habitation clause – not likely that stricter national measures under Art. 2(4) of the Protocol (permitting 'action that is more protective of the conservation… of biological diversity than that called for in this Protocol') will avoid a more detailed examination by the WTO dispute settlement mechanism, because Art. 2(4) explicitly indicates that such actions must be in accordance with that country's other obligations under international law. This is probably also true with regard to Art. 26, which allows Parties in reaching a decision on import under the Protocol to 'take into account consistent with their international obligations, socio-economic considerations arising from ….' Socio-economic considerations are broadly speaking[61] not legitimate under the WTO rules, the aim of which is more or less to get rid of such considerations. On the other hand, the scope of the provision and the scope of its probable application is so narrow that it is not likely to cause many conflicts.

The DSM of the Protocol and compliance

As mentioned above, the DSM of the Protocol is also relevant in connection with WTO, because the WTO DSM should only be utilized when both Parties to the dispute are members of WTO but only one of them is a Party to the Protocol.

The DSM of the Protocol is not worse nor better than similar systems in other MEAs. Because of the general reference made in Art. 32 of the Protocol to CBD, the mechanism is the same as that in that convention. This implies, in case of failure to reach peaceful settlement and dependent on what the Parties to the dispute have accepted in connection with their adherence to the CBD, either arbitration in accordance with Annex II of the Convention or the use of the Permanent International Court of Justice, or action according Annex II, part 2. The compliance mechanism of the Protocol has to be considered and approved at the first MOP (Art. 34). However, the question is whether an agreement can be reached on a strong and efficient compliance mechanism.

Conclusion

There is no reason to expect that the Protocol will result in many disputes, or that measures having been taken in accordance with the essential provisions of the Protocol will not be accepted if they are put before the WTO DSM. This also applies when a party to a dispute is not a Party to the Protocol, under the precondition mentioned above.

The starting point for the considerations above is the general trade regulatory measures of the Protocol, setting aside its provisions on the Precautionary Principle, which will be analysed in 'The Biosafety Protocol and the Precautionary Principle' below, including in relation to the WTO rules. However, the fact that WTO and the Protocol do not overridr each other also implies that an analysis of the WTO rules with regard to the Protocol could be made, *i.e.* an analysis seen from the WTO angle.

The Biosafety Protocol and the Precautionary Principle

The Precautionary Principle in general

The issue of the Precautionary Principle was one of the most problematic during the negotiations. It was therefore, as was the case with the relationship with WTO, only resolved at the very last moment. Likewise, the solution is as remarkable as the solution to the WTO problem, to which it is closely related.

The most important element of the PP is that uncertainty about the potential risks to the environment and/or human health of a product or an activity does not prevent the authorities from taking a decision.[62] The decision may be to interfere and how to interfere (in the format of a prohibition or a licence under certain conditions or long-term measures such as strategies, programmes, action plans and the like). The decision, which is of a political nature, should normally be based on several different factors, but always – and foremost – on a scientific assessment of the possible risks involved, their character, size, and the implications for the environment. The PP, which is closely connected with both the Principle of Prevention and AIA and also includes public participation aspects, is therefore action- or decision-oriented, which is often overlooked in the debate.

The PP has, in the same way as the relationship between trade and environment, caused an extensive debate. However, the PP has also been the reason for vast numbers of provisions in national law, EC legislation and MEAs as well as soft law instruments on global environ-

0378-777X/01/$12.00 © 2001 IOS Press

mental problems and instruments regulating environmental problems in a transboundary context.[63] Finally, the PP has also been addressed in some international judicial decisions, including decisions from the Permanent International Court of Justice and decisions by the WTO DSM.[64] The principle has also resulted in rules for international institutions, such as the World Bank.

The principle appears when it is defined or described, which is not the case in the EC Treaty (Art. 174), in many different formulations. This is especially the case with regard to MEAs, meaning that the precise content of the notion differs, *e.g.* with regard to the extend to which cost–benefit considerations are acceptable and who carries the burden of proof. That has also influenced the interpretation of the principle in the theory. The opinions here vary with regard to the content, both *de lege lata* and *de lege ferenda*.

In the literature on international environmental law, there is disagreement on whether the PP can be considered as customary international law. Some authors maintain that this is the case,[65] while others refute this.[66]

Due to the arguments launched by the last mentioned group, it is probably doubtful whether the PP can be considered as customary international law yet. The incorporation of the principle in the Biosafety Protocol has probably advanced or will advance considerably the recognition of the principle as a customary international law because the principle is a central element of the Protocol and furthermore it has already been applied with regard to major international trades where products play a considerable economic role.

The PP in the Protocol

The Protocol reflects the PP in several provisions:

- in the Preamble, the 'precautionary approach contained in Rio Declaration Principle 15'[67] is confirmed;
- the provision on the objective of the Protocol is introduced by the words 'In accordance with the precautionary approach in Principle 15 of the Rio Declaration, the objective of this Protocol is to…';[68]
- Art. 10(6) and Art. 11(8) in the provisions on procedures (see 'Risk assessment and risk management' above) contain, up to now, in any internationally binding instrument, the strongest and most unequivocal formulation of the PP, the wording of which is the following:
  'Lack of scientific certainty due to insufficient information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of the living modified organism in question as referred to in… above, in order to avoid or minimize such potential adverse effects'.
- In Annex II of the Protocol, the section dealing with general principles, (3), contains the provision to the effect that 'lack of scientific knowledge or scientific consensus should not necessarily be interpreted as indicating a particular level of risk, and absence of risk, or an acceptable risk' while other provisions in the Annex in a more indirect manner are reflecting the PP.

WTO, the Precautionary Principle and the Protocol

GATT 1994 and the TBT Agreement

The PP is neither included in GATT 1994 nor in the TBT agreement. The question is, therefore, in the first instance whether a decision under the Protocol that is brought before the WTO DSM and which falls under GATT 1994 or the TBT agreement will be questioned by the WTO DSM because the decision has been made on the basis of the PP. This is not likely to happen because, speaking in practical terms, it would undermine the Biosafety Protocol and void the preambular provisions of the Protocol (see 'Proposals during the negotiation and the outcome' above) of any real meaning. In this respect, the conclusions in 'The provisions adopted' and 'The DSM of the Protocol and compliance' above are therefore still valid without modifications in the situation discussed here.

It is therefore not entirely necessary to build on the assumption that the PP now belongs to international customary law and that the GATT 1994/TBT agreement will have to be interpreted in accordance with that assumption. However, it has to be acknowledged that such an assumption has its merit and that it would be reasonable to use this argument when dealing with a concrete dispute.

It would, of course, be different if, in the dispute at hand, the PP has been misused. If this were to be the case, and the provisions of the Biosafety Protocol were violated, those provisions must be interpreted and applied in accordance with the provisions of the Vienna Convention, at the least, those based on international customary law.

Between the two extremes, there exists a grey zone. The future will decide the precise demarcation of this zone.

The SPS agreement

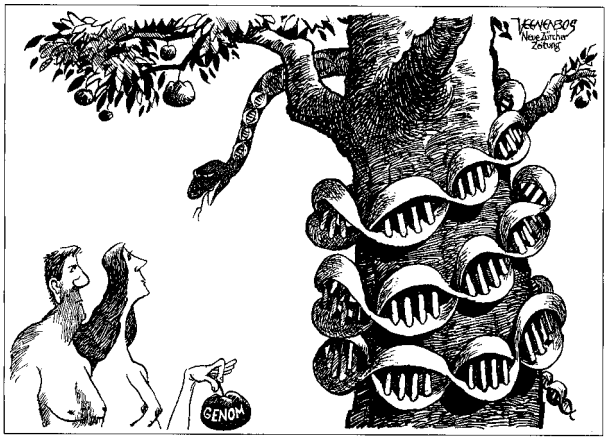
This agreement contains certain provisions reflecting a sort of PP. However, as mentioned earlier,[69] the scope of the agreement is limited, although a clear common field for the Protocol and the SPS agreement is that the Protocol also concerns food and that human health should be taken into account in decision-making under the Protocol.

This implies that decisions under the PP in the Protocol might be made which, at the same time, are falling under the PP in the SPS agreement.

Art. 5(7) of the SPS agreement includes circumstances where 'relevant scientific evidence is insufficient' but at the same time contains the precondition that the uncertainty can be cleared up within 'a reasonable period of time'. In accordance with the decision from 1998 of the Appellate Body of WTO with regard to meat treated with hormones (USA/Canada versus EU),[70] the PP is reflected *inter alia* in the SPS agreement 3(3). However, in the case mentioned, the Appellate Body refused to apply the PP outside the framework of provisions explicitly referring to the PP irrespective of whether the PP might be consid-

0378-777X/01/$12.00 © 2001 IOS Press

ered as belonging to international customary law and, therefore, theoretically speaking, could be applied when interpreting the SPS agreement. The Appellate Body noted furthermore that it is 'less than clear' whether WTO Members had accepted the principle as 'general or customary law' but noted also that the principle is regarded by some …as having crystallized into a general principle of customary international law'.[71] This differentiation, mildly speaking, seems to be bizarre and the question is whether it has a basis in the literature. It is one matter that there might be doubts about the precise content of the principle, and doubts about the extent to which it can be applied, *e.g.* whether it is applicable in connection with human health. But if one reaches the conclusion that a principle with a reasonably, clearly defined content and extension belongs to international environmental customary law, then it must of course also belong to international



Courtesy: Neue Zürcher Zeitung

customary law. It is international customary law, which is the general notion and the part of international customary law applicable to environmental protection which is the sub-notion.

It is, however, possible to argue that the PP of the Protocol is not conflicting with Art. 5(7) of the SPS agreement, but is supplementing this provision. That means that the Protocol 'fills in some of the gaps'.[72]

Outside the area where the SPS agreement itself is referring to the PP, and where the Appellate Body as mentioned above has refused to utilize the principle, even if it was considered to belong to international customary law, it will be difficult for the WTO DSM (see the conclusions in 'GATT 1994 and the TBT Agreement') to disregard decisions made in good faith in accordance with the objectives of the Protocol, although the DSM in such cases will be forced to make 'a tactical withdrawal'. It will be interesting to see whether, and when, this happens.

Concluding remarks

There is no doubt that the adoption of the Biosafety Protocol is to be considered as a success in the political and juridical sense. In spite of the fact that the Protocol had all the odds stacked against it, the end result was a reality, and a reasonably strong result seen from an environmental perspective, which might also influence the development of international environmental law in other fields.

At the same time, there is little reason to fear that the trade-regulating measures of the Protocol combined with the PP in themselves will cause conflicts with the WTO rules, or that these measures will be disregarded in the case of a dispute.[73] Perhaps the Biosafety Protocol together with the Rotterdam Convention[74] can contribute to the establishment of a reasonable balance between international trade interests and environmental considerations.

Implementing the Biosafety Protocol in practice will not be easy.[75] A huge effort has to be carried out at the international level. Also with regard to the national system, a lot will be demanded. Many developing countries lack the most elementary rules and even in most industrialized countries, new enactments will probably be necessary because most of the current legislation in these countries only provides protection for the countries themselves, *i.e.* legislation governing the importation, the domestic production, and marketing of LMOs. This also applies to EC legislation. This is why it will take some time before the Protocol will enter into force and even more time before the Protocol will function as a well-oiled mechanism.

Notes:

1 The Convention entered into force 29 December 1993. At the beginning of 2001, the Convention had been ratified by around 175 States and the EC.

2 The Convention uses the notion of 'Living Modified Organism resulting from Biotechnology' (LMO) which is a wider notion than 'Genetically Modified Organisms' (GMO). This is mainly a result of opposition from the US, which did not wish to 'expose' GMOs because they, according to the US, did not differ from organisms modified by the means of traditional biotechnology. See also P. Sands (1995): *Principles of International Environmental Law*, Manchester University, p. 479, about the American statement on biotechnology in connection with Agenda 21 and the section in this article on 'The scope of the Protocol' on how the notion is formulated by the Biosafety Protocol.

3 Neither the CBD nor the Biosafety Protocol covers the transfer of LMOs to areas outside national jurisdiction, *i.e.* especially the high seas. Setting aside that transfers of this nature will hardly be relevant, it is therefore in this connection necessary to rely on the obligations of the Law of the Sea, *i.e.* to protect and preserve the marine environment (Art. 192) and to prevent, reduce or control pollution resulting from the introduction of alien or new species which may cause significant and harmful changes thereto (Art. 196). Other relevant provisions are found in the CBD, *e.g.* Art. 14(1c) on notification, exchange of information and consultation with regard to activities that may have major negative impacts on biodiversity in areas outside national jurisdiction.

4 Veit Koester (1997): The Biodiversity Convention Negotiation Process and some Comments on the Outcome, in *Environmental Law-from International to National Law* (ed. E. M. Basse), GAD JURA, Copenhagen, p. 222, and in *Environmental Policy and Law (EPL)*, p. 181.

5 The Protocol was opened for signature and signed by 67 countries at the CBD COP6 in Nairobi on 15 May 2000. It will enter into force 90 days after the fiftieth ratification. This means that the Protocol will probably not enter into force before 2002. As of 1 December 2000 the Protocol had been ratified by Bulgaria and Trinidad and Tobago and had been signed by 78 countries including the EC.

6 The title of the Protocol is wider than its content because the Protocol only contains a few provisions dealing with purely domestic affairs (see the section in this article on 'Risk assessment and risk management' on Art. 16). The Protocol can be found at www.biodiv.org.

7 For a more complete account of the negotiation process, including the meeting in Cartagena, the informal consultations thereafter and the final meeting in Montreal in January 2000, see Francoise Burhenne-Guilmin: The Biosafety Protocol is adopted in Montreal, in *EPL* 2000 p. 46; On the Protocol, see also. Louise Gale (2000): Application of the Precautionary Principle to Biosafety, in *IUCN Newsletter*, January-April 2000, p. 7; Frances B. Smith (2000): The Biosafety Protocol: The Real Losers Are Developing Countries, National Legal Center for the

0378-777X/01/$12.00 © 2001 IOS Press

Public Interest, Vol. 4, No. 3 (ed. James E. DeLong), p. 8; Robert Falkner (2000): Regulating biotech trade: The Cartagena Protocol on Biosafety, in *International Affairs*, Vol. 76, No. 2, p. 302; Barbara Eggers and Ruth Mackenzie (2000): The Caratagena Protocol on Biosafety, in *Journal of International Economic Law* p. 252 and Pamela S. Chasek (2001): *Earth Negotiations: Analyzing Thirty Years of Environmental Diplomacy*, United Nations University Press, p. 206. The two last mentioned references were published after the manuscript of the present article was finished.

8 UNEP/Bio.Div/Panels/Inf.4 (1993). The Executive Director at that time was Dr. M. Tolba. It is probably not a coincidence that the Panel's report was never officially distributed, neither at the first COP of the CBD during autumn 1994, nor at the intergovernmental meeting in June 1994, which prepared the COP (Secretariat Paper on Art. 19(3), and UNEP/CBD/IC/12 of 29 April 1994, which does not mention the Panel Report), nor at the meeting of the Open-Ended Expert Group mentioned below. In the meantime UNEP, which was responsible for the Secretariat of the CBD, had a new Executive Director, Elizabeth Dowdeswell of Canada.

9 On the Cairo Panel, the Open-Ended Expert Group and the two COPs references are made to the documents UNEP/CBD/COP/2/7/; UNEP/CBD/COP/1/I/9 and UNEP/CBD/COP/2/Dec./II/5 as well as to Susanne Bragdon (1995): International Hazard Management Other than Nuclear, in *Yearbook of International Environmental Law*, Vol. 6, p. 275 as well as Birthe Ivars (1998): Observations related to a Biosafety Protocol under the Convention on Biological Diversity, in *Trade and the Environment: Bridging the Gap* (eds Cameron and Fijalkowsli), Cameron, p. 88. The COP reconsidered the Working Group at COP3 (November 1996). In its decision, UNEP/CBD/COP/3/III/20, COP3 authorized additional meetings of the Working Group and welcomed 'UNEP International Technical Guidelines for Safety in Biotechnology' which had been adopted in December 1995. At COP4 (in May 1998), after four meetings of the Working Group, it was decided to hold two further meetings of the Working Group. The last meeting in 1999 was followed by an Extraordinary COP with a view to adopting the Protocol (decision UNEP/CBD/COP/4/IV/3).

10 The full text can be found in *EPL*, 1999, p. 138.

11 UNEP/CBD/ExCop1/2 and UNEP/CBD/ExCOP/1/L.Rev.1 and *EPL*, 1999, p. 84.

12 UNEP/CBD/ExCop/1/INF/3. See also Francoise Burhenne-Guilmin: *supra* note 7, p. 46.

13 Important examples of instruments which are comparable to the Protocol are CITES 1973, the Montreal Protocol (1987) on Substances that deplete the Ozone Layer, the Basel Convention (1989) on the Control of Transboundary Movements of Harzadous Wastes and Their Disposal, the Rotterdam Convention (1998) on PIC-Procedure (prior informed consent procedure) for Certain Hazardous Chemicals and Pesticides in International Trade, as well as the Convention on Persistent Organic Pollutants (POPs), to be signed in Stockholm in May 2001. There are, however, more multilateral environmental agreements (MEAs), among them the Climate Change Framework Convention (1992), containing possibilities for utilizing trade-related measures. Seventeen MEAs appear in the compilation of relevant MEAs in O.K. Fauchald (1997): The World Trade Organization and Multilateral Environment Agreements, in *Environmental Law – from International to National Law* (ed. E. M. Basse), GAD JURA, Copenhagen, p. 116. With regard to the different types of trade regulatory instruments, see O.K. Fauchald, p. 74.

14 See Francoise Burhenne-Guilmin, *supra* note 7, p. 47 for a more detailed discussion of the scope of the Protocol, as well as Ruth Mackenzie (2000): Cartagena Protocol on Biosafety: Overview, in *IUCN* Newsletter, January-April 2000, p. 1, 4; and Robert Falkner, *supra* note 7, p. 306.

15 The definitions are in line with the content of the notion of GMO in Art. 3 in the Lugano Convention (1993) on Civil Liability for Damage Resulting from Activities Dangerous to the Environment which, for other reasons, in spite of the fact that only three ratifications are needed, has not yet entered into force. For references to this Convention and on liability and redress for damage resulting from GMOs, see the European Commission *White Paper on Environmental Liability* (COM (2000) 66 final) of 9 February 2000, sections 4.2 and 5.1, as well Alfonso Ascencio (1997): The Transboundary Movement of Living Modified Organisms: Issues Relating to Liability and Compensation, in *RECIEL*, Vol.6, p. 293, and Gurdial Singh Nijar (2000): *Developing a Liability and Redress Regime under the Cartagena Protocol on Biosafety* (eds K. Dawkins and N. Sommsen), Institute for Agriculture and Trade Policy, USA. Because of EC competence in the area covered by the Protocol and because several of the provisions of the Protocol either differ from the present EC legislation or do not appear in the legislation, EC legislation will have to be amended**,** perhaps by means of a regulation, and subsequently adopted into national legislation, before the EC and its Member States will be able to adhere to the Protocol.

16 During the negotiations, several countries insisted on a prohibition of trade with non-Parties, more or less in accordance with the principle of the Montreal Protocol (*supra* note 13). Such a provision would especially have affected the US, which is one of the very few big countries to be a non-Party to the CBD, and therefore – at least for the time being – cannot become a Party to the Protocol. On the other hand the 'Miami Group' advocated for the weaker provision, that trade with non-Parties should be 'compatible with' instead of what became the final result, 'consistent with' the objectives of the Protocol.

17 Veit Koester (1999): Aarhus konventionen om 'borgerlige rettigheder' på miljøområdet (The Aarhus Convention on 'civil rights' with regard to environmental matters), in *Juristen* (The Lawyer) Copenhagen, p. 88.

18 Whether this notion includes human health considerations going beyond the effect on human health of adverse impacts on biological diversity is open to interpretation.

19 *E.g.* S. Charnovitz (1997): The World Trade Organization and the Environment, in *Yearbook of International Environmental Law*, Vol. 8, p. 105, on the reactions in environmental circles to the first decision in the Tuna/Dolphin Dispute in 1991 which is referred to below.

20 *Supra* note 13.

21 Under Art. XVI(1) in WTA (Marrakech Agreement Establishing the World Trade Organization) the WTO shall be guided by former decisions and practices. Decisions of the WTO dispute settlement mechanism are made on a case by case basis, and thus are not binding outside the framework of the concrete dispute, re K. P. Ewing and R. G. Tarasofsky (1997): *The 'Trade and Environment' Agenda*, IUCN, p. 7.

22 Re. J. P. Trachtman (1999): The Domain of WTO Dispute Resolution, in *Harvard International Law Journal*, Vol. 40, p. 368 about 'the relative infrequency, indeed the speculative nature of possible conflict between MEA obligations and WTO Law'.

23 OECD (1999): *Trade Measures in Multilateral Environmental Agreements*, p. 192, according to which 'clear political reasons explaining that situation, including the undesirability of calling into question a multilateral treaty signed by many national Governments'.

24 S. Charnovitz, *supra* note 19, p. 106. and D. Hunter, J. Salzman and D. Zaelke (1998): *International Environmental Law and Policy*, Foundation Press, p. 1216. See also WTO's website (pr. 16/4 1997) at http://www.wto.org/wto/environ/backgrou.htm.

25 According to OECD, *supra* note 23, p. 197, the difficulties are centred around the elaboration of provisions which 'precisely qualify the conditions under which trade provisions in MEAs and the multilateral trading system can comfortably coexist'. An effort in this direction is found in O.K. Fauchald, *supra* note 13, p. 83.

26 *E.g.* D. Hunter *et al.*, *supra* note 24, pp. 1167, highlighting the arguments for and against.

27 *E.g.* D. Hunter *et al.*, *supra* note 24, pp. 1124 and O.K. Fauchald, *supra* note 13, p. 77, both advocate such agreements, as well as OECD, *supra* note 23, p. 1198. It is more important that the WTO system itself, and has both directly and indirectly recommended such environmental agreements. See OECD, p. 192 and J.P. Trachtman, *supra* note 22, p. 363 and p. 367 about the recommendation from the Appellate Body of WTO in the Shrimp/Turtle Dispute (J.P. Trachtman, p. 359) on environmental measures which are not unilateral as well as the support from the WTO Committee on Trade and Environment (CTE) on multilateral solutions and co-operation with regard to transboundary environmental problems.

28 *E.g.* M. Lennard (1996): The World Trade Organization and Disputes Involving Multilateral Environment Agreements, in *European Environmental Law Review*, p. 314 as well as K. P. Ewing and R.G. Tarasofsky, *supra* note 21, p. 13.

29 J.P. Trachtman, *supra* note 22, p. 342

30 D. Hunter *et al.*, *supra* note 24, p. 1212.

31 A provision in the Draft Negotiating Text of the Biosafety Protocol on its application with a view of avoiding unjustifiable discrimination between foreign and domestic products was deleted at the last negotiation meeting as part of the solution of the issue of the relationship between the Protocol and other international agreements (see the section below on 'The Biosafety Protocol and WTO').

32 D. Hunter *et al.*, *supra* note 24, p. 1182; OECD, *supra* note 23, p. 193; and, especially with regard to 'like products', M. Lennard, *supra* note 28, p. 312.

33 With regard to the Tuna/Dolphin Dispute, K. P. Ewing and R. G. Tarasofsky, *supra* note 21, p. 9; J. P. Trachtman, *supra* note 22, p. 356; S. Charnovitz, *supra* note 19, p. 105; and D. Hunter *et al.*, *supra* note 24, p. 1184; and about the Shrimp/Turtle Dispute, J.P. Trachtman, p. 356 and James Cameron (1998): Dispute Settlement and Conflicting Trade and Environment Regimes, in *Trade and Environment: Bridging the Gap* (eds. A. Fijalkowsky and J. Cameron), Cameron, pp. 19, 21.

34 D. R. Downes (1999): *Integrating Implementation of the Convention of Biological Diversity and the Rules of the World Trade Organization*, IUCN, p. 11, and OECD, *supra* note 23, p. 89 about the Montreal Protocol *supra* note 13). According to D. R. Downes it is, because of the definition of the SPS Agreement of the measures it concerns, more likely that the TBT Agreement will be relevant with regard to the Protocol, in spite of the fact that the objective of the SPS Agreement corresponds with the objective of the Biosafety Protocol. This might be true. However, the Interim Commission for Phytosanitary Measures under the International Plant Protection Convention is a standard setting body *vis-à-vis* the SPS Agreement. So, the role of SPS *vis-à-vis* the Protocol will to a large degree depend on the division of competence between the Protocol and the IPPC. See A. Cosbey and Stas Burgiel (2000): *The Cartagena Protocol on Biosafety: An Analysis of Results* (International Institute for Sustainable Development Briefing Note), for an analysis of the relationship between WTO rules and the Biosafety Protocol on the SPS Agreement.

35 The TBT Agreement also contains (in the format of preambular provisions)

0378-777X/01/$12.00 © 2001 IOS Press

exemptions of a similar character. Furthermore, Art. 2(2.2) of the Agreement acknowledges that legitimate objectives of rules and standards of a technical nature include considerations corresponding to Art. XX in GATT 1994. Art. 2(2) in the SPS Agreement contains an obligation for member countries to ensure that any sanitary or phytosanitary measure being applied to the extent necessary to protect human, animal or plant life or health 'is based on scientific principles [and] sufficient scientific evidence'.

36 On the problems connected with the application of this provision of the Vienna Convention, see M. Lennard, *supra* note 28, p. 308, whose conclusion is that there is 'ultimately no rule giving a clear precedence to either MEAs or the GATT even where the Vienna Convention applies as a treaty, much less where the issue remains one of customary law'. S. Suikkari (1996): The GATT/WTO System and Trade Provisions in Multilateral Environmental Treaties, in *The Effectiveness of Environmental Agreements*, Tema Nord (1996: 513), p. 108, has the interesting viewpoint that agreements 'made in the global public interest, so-called *erga omnes* agreements, seem to have priority over other agreements'.

37 J.P. Trachtman, *supra* note 22, p. 359.

38 J.P. Trachtman, *supra* note 22, pp. 364, 367.

39 J.P. Trachtman, *supra* note 22, p. 343.

40 M. Lennard, *supra* note 28, p. 308.

41 OECD, *supra* note 23, p. 159.

42 International Public Law does not include a general rule about which dispute settlement mechanism should be applied in order to resolve the dispute if the dispute concerns several international agreements, each of them having their own dispute settlement mechanism; see J. Cameron, *supra* note 33, p. 17.

43 J. Cameron, *supra* note 33, p. 18 (at note 44).

44 J.P. Trachtman, *supra* note 22, p. 366 and OECD, *supra* note 23, p. 193.

45 J. Cameron, *supra* note 33, p. 19. O.K. Fauchald, *supra* note 13, p. 75 is of the opinion that the risk of a country giving in to this temptation is not totally unrealistic. See also the section on 'The provisions adopted'.

46 D. R. Downes, *supra* note 34, p. 29, noting with regard to a Protocol on biosafety that '[R]egardless of where the Protocol includes a savings clause, another mechanism for reconciliation is to recognize the Protocol as an international standard which is presumed to be consistent with trade principles', and that 'particularly if a large percentage of the Parties to the CBD become Parties to the Protocol, the measures included, as a ratification of the consensus of a large and diverse segment of the international community, should be likely to obtain a differential review at the WTO'.

47 Re the table in OECD, *supra* note 23, p. 202.

48 One of the exemptions concerns the US not being Party to the Basel Convention (*supra* note 13). See also OECD, *supra* note 23, p. 127.

49 *E.g.* the Rotterdam Convention, *supra* note 13.

50 The tradition has existed for such a long time that it might be relevant to raise the question of whether it would be correct to rely on Art. 9 of the Vienna Convention (setting out that international agreements are to be adopted with a two-thirds majority) in a situation where no rule on how to adopt the result of the negotiation process exists and where it has not been possible to achieve a consensus in this respect. This observation applies irrespectively of whether Art. 9 of the Vienna Convention is considered to be international customary law, thereby is also applicable for countries which are not Parties to the Vienna Convention. Francoise Burhenne-Guilmin is the author of this observation. See also Patrick Széll (1996): Decision-Making under Multilateral Environmental Agreements, in *Environmental Policy and Law*, Vol. 26, No. 5, p. 211.

51 In the final round of the negotiations of the Biosafety Protocol more than 130 States participated.

52 D.H. Hunter *et al.*, *supra* note 24, p. 1207.

53 The first mentioned clause had the following content: 'The provisions of this Protocol shall not affect the rights and obligations of any Party to the Protocol deriving from any existing international agreement to which it is also a Party except where the exercise of those rights and obligations would cause serious damage or threat to biological diversity', similar to Art. 22(1) in the CBD.

54 The solution which was chosen is with regard to the first consideration fully in line with the solution adopted with regard to the Rotterdam Convention (*supra* note 13). The second consideration is at the same time both stronger and weaker than the preambular provision of the Rotterdam Convention, which corresponds with the consideration of the Biosafety Protocol. It is stronger because the Protocol uses the wording 'a change' while the Rotterdam Convention refers to 'in any way a change', and weaker because the Protocol refers to 'any existing international agreements' while the Rotterdam Convention only refers to 'any existing international agreement applying to chemicals in international trade and to environmental protection'. With regard to the third consideration the difference between the wording of the Protocol 'subordinate... to other' and the wording of the Convention 'create a hierarchy between this… and other' is probably only semantic. The Convention on POPs (*supra* note 13) only contains one preambular paragraph on the issue of trade and environment, namely: 'Recognizing that this Convention and other agreements in the field of trade and the environment are mutually supportive' – the 'should' in the Biosafety Protocol has been replaced by 'are', *i.e.* a statement of fact.

55 About 'mutually supportive' see OECD, *supra* note 23, p. 192, translating the idea into 'due respect must be afforded to both'.

56 P. Sands, *supra* note 2, p. 118.

57 M. Lennard, *supra* note 28, p. 314 utilizes the notion of a 'co-habitation clause' as an 'ideal clause' in order to resolve conflicts between GATT 1994 and MEAs. In the Note for the attention of the 113 Committee of 13 June 2000 (MD 248/00), the European Commission observes that the effect of neutralizing the second consideration is that it 'is now assumed that interpreters should normally fall back on the 'later in time' rule in Art. 30(3) of the Vienna Convention, allowing the Protocol to have full legal effect'. Depending to a certain degree on what the Commission understands by 'normally', the conclusion of the Commission seems to be (at least at a first glance) too wide. *Inter alia* the conclusion seems to overlook the importance of the first consideration. Frances B. Smith, *supra* note 7, concludes (at p. 22) 'that the three statements taken as a whole are open to the inference that the ... Protocol should take precedence in the future'. This conclusion is based on the argument that the absence in the first clause of a phrase such as 'and facilitating trade… seem to point to the precedence of the biodiversity goal over the trade goal'. However, this interpretation seems to overlook the fact that the notion of 'sustainable development', although nobody knows definitively what it should mean, includes economic, *i.e.* trade, considerations, as well as environmental considerations.

58 Art. 3(2) in 'Understanding on Rules and Procedures Governing the Settlement of Dispute'. The provisions of the mandate of the dispute settlement mechanism are not in themselves modified because of the preamble of the Biosafety Protocol.

59 In J.P. Trachtman, *supra* note 22, p. 364, the conclusion of the examination of the Shrimp/Turtle Dispute, referred to above is that '…the Appellate Body has retained jurisdiction to address [the relationships between international environmental law and international trade law] and has articulated a standard, balancing test that gives the Appellate Body itself wide flexibility in responding to these problems'.

60 The question of which of the provisions and agreements mentioned might be most relevant in a dispute will not be pursued further in this article.

61 On provisions in the SPS Agreements and GATT 1999 on permissible socio-economic considerations that might be relevant with regard to the Biosafety Protocol, see the analysis *Relationship of the Biosafety Protocol with WTO Agreements* prepared by the Australian Department of Foreign Affaires and Trade, with the assistance of advice from the Australian Government Solicitor. The analysis was published by the BioSafety Working Group, Policy and Science Updates #40 Part 1 and 2, November 20, 2000 (see genetics@acfonline.org.au), *i.e.* after the present article was finished. However, many of the conclusions and observations in this article correspond with those in the Australian paper.

62 *E.g.* Rio Principle 15: 'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation'.

63 Overviews of MEAs incorporating the PP and discussions of the content, implications and status of the principle in public international law are found in P. Sands, *supra* note 2, p. 208; D. Hunter *et. al.*, *supra* note 24, p. 360; O. McIntyre and T. Mosedale (1997): The Precautionary Principle as a Norm of Customary International Law, in *Journal of Environmental Law*, p. 221; C. W. Backes and J. M. Verschuren (1998): The Precautionary Principle in International, European and Dutch Wildlife Law, in *Colorado Journal of International Environmental. Law and Policy*, Vol. 9, No. 1, p. 43; and in P. Martin-Bidou (1999): Le Principe de Précaution en Droit International Public, in *Revue Général dû Droit International Public*, p. 631; as well as in the Annex to the European Commission Communication on the Precautionary *Principle* of 2 February 2000 (COM 2000 1 final). To this can now be added the reflection on the precautionary principle in the Convention on POPs (*supra* note 13) where the PP is referred to in the preambular paragraph: 'that precaution underlies the concerns of all Parties to this Convention and is embedded within it' (*i.e.* neither as a principle nor as an approach, corresponding to the reference to the PP in Annex C, Part II A(2) as 'consideration of precaution') as well as to the objective of the Convention with its reference to the 'precautionary approach as set forth in Principle 15 of the Rio Declaration…'.

64 Jurisprudence, especially of the Permanent International Court of Justice in the Dispute on the French Nuclear Tests in the Pacific and in the Danube Dams Dispute (see also in this regard *EPL* 1998, p. 12) is examined in O. McIntyre and T. Mosedale, *supra* note 63, p. 231. With regard to the Appellate Body's decision in the Hormone Beef Dispute, see the section on 'WTO, the precautionary principle, and the Protocol'.

65 P. Sands, *supra* note 2, p. 212 is doubtful about whether a PP based on a reversed burden of proof, *i.e.* that the State wishing to carry out a certain activity either has to prove that the activity will not result in serious damage or has to take preventive action if there is a possibility of causing serious damage, can be regarded as 'a rule of general application'. However at the same time, he concludes with regard to the PP that there is 'a good argument to be made that it reflects a principle of customary law'. O. McIntyre and T. Mosedale, *supra* note 63, p. 235 observe that it 'would appear to conclusively endorse the principle status as a norm of customary international law'. The Commission Communication, *supra*

0378-777X/01/$12.00 © 2001 IOS Press

note 63, section 4(26), refers to the PP as a 'full-fledged and general principle of international law' (The Commission has almost bitten off more that it can chew, quite natural perhaps in the light of the Hormone Beef Dispute!) About the Commission Communication, see also Frances B. Smith, *supra* note 7, p. 23. C. Backes and J.M. Verschuren, *supra* note 63, p. 57, conclude that the principle 'seems to have gradually evolved into a legal norm', which corresponds more or less to operative paragraph 3 in the European Council Resolution (Nice, 7-9 December 2000): '…notes that the precautionary principle is gradually asserting itself as a principle of international law in the fields of environmental and health protection'.

66 P. Martin-Bidou, *supra* note 63, p. 664 refers to *inter alia* the lack of precision and clarity with regard to the extent of the obligations as well as doubt about whether the application of the principle has a basis in an *opinio juris*. P.M. Dupuy (1997): Ou en est le droit internationale de l'environment à la fin du siècle, in *Revue Général dû Droit International Public*, p. 889 has by and large the same opinion. It looks almost as if there is an Anglo-Saxon and a French school, the former being for and the latter being against! See also Arron Cosbey (2000): *A Forced Evolution? The Codex Alimentarius Commission, Scientific Uncertainty and the Precautionary Principle*, IISD, Canada, p. 10.

67 Quoted in the Annex to the Commission Communication, *supra* note 63.

68 It is difficult to imagine that the fact that the notion of 'approach' is utilized instead of 'principle' has a major importance, re Per Mickwitz: *Implementation of Key Environmental Principles*, Nord 1998: 2, p. 74. The formulation can be regarded as a minor concession to the 'Miami Group' (re 'General environmental law problems' above) which, as an element in the fight against the acceptance in international environmental law of the PP, advocated 'noting' instead of 'in accordance with'.

69 *Supra* note 34.

70 Cameron, *supra* note 33, p. 20; O. Spiermann (1998): WTO og Verdenshandlens nye vilkaar – om folkeretten, en ny tvistbilaeggelsesmekanisme og traktatfortolkninger (WTO and New Conditions for the World Trade: On International Public Law, a New Dispute Settlement Mechanism and Interpretation of Treaties), in *Juristen* (The Lawyer), Copenhagen, p. 345, and Aaron Cosbey, *supra* note 66, pp. 11.

71 The conclusions of the Appellate Body with regard to the status of PPs in international law are to some extent similar to the vocabulary used by P. Sands (see note 65) and could therefore build on a misinterpretation of what this author is saying. I have not read the whole literature about the PP, but in the latest literature (re notes 63, 65 and 66) there are no authors applying the same differentiation as the Appellate Body although, as mentioned in note 66, Francophone authors are generally sceptical with regard to the PP having the status of international customary law.

72 A. Cospey and S. Burgiel, *supra* note 34. Frances B. Smith, *supra* note 7, p. 22 seems to be of the view that there is a conflict between the SPS provisions and the Protocol which is characterized as an example of the 'movement away from science-based decisions' (p. 26), noting also that there 'is no guarantee that the WTO and Codex policies relating to the use of scientific principles in resolving trade disputes relating to food safety and human health will remain sacrosanct.' The author of this article agrees with the conclusion but certainly not with its premises. The PP is also science-based and science within the framework of the PP cannot and should not be distinguished from science within the framework of the SPS.

73 Robert Falkner, *supra* note 7 holds a somewhat different view, arguing that the 'agreement is unlikely to prevent future tension over some important issues that remain unresolved' (PPs are 'defined only insufficiently' and provisions on trade and the environment leave considerable room in interpretation'), p. 300, as well as the Protocol 'does not prevent GMO-exporting countries from using WTO… to clarify existing obligations under the trade regime', p. 317.

74 *Supra* note 13.

75 See also Thomas Yongo (2000): Towards Implementation of the Biosafety Protocol, in *IUCN Newsletter*, January-April 2000, p. 12, and Robert Falkner, *supra* note 7, p. 311. An Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP) in order to prepare for the first Meeting of the Parties (MOP) to the Protocol focusing *inter alia* on the CHM, capacity building and compliance (re *Earth Negotiations Bulletin*, Vol. 9, No. 173) met in Montpellier 11-15 December 2000. The next meeting of the ICCP will take place in October 2001.